

Building a Dream from the Ground Up:

The inspiring story of Dave Brazelton, Co-Founder of Fall Creek.®

What began as a teenage interest became a journey of pioneering a leading global company. It led to a life defined by bold ideas, deep passion, and a lifelong love for blueberries.

Every truly remarkable story often begins with a simple, unexpected moment – a flash of curiosity that ignites a lifelong pursuit.

For Dave Brazelton, that spark was lit at the age of 14 during a summer job on his cousin's farm in New Hampshire. It wasn't the vast, sweeping fields of wheat that captured his imagination, but rather the humble, low-lying blueberry bushes. "They are approachable. They have immense potential. And it looked like fun!" he fondly recalls, as he describes their immediate allure.

With a deep love for the outdoors, he had a yearning for a farming lifestyle, but the idea of becoming a wheat farmer, with its complexities, felt daunting for "a kid with no land and no farming background".

Blueberries, however, were different. This early fascination was far more than a fleeting summer fancy; it quietly laid the groundwork for what would become his lifelong mission: to grow the world's best blueberries and, in doing so, transform an entire industry.

Taking a Brave Leap of Faith

Dave met Barbara through a close friend just prior to her starting her nursing studies. From the start, they connected over a shared dream – owning a rural property, farming and building a meaningful life.

Early in their relationship, they scraped together \$5,000 and bought what they called a "shack on one acre" to renovate. It was small and rough around the edges, but it was theirs.

Two years after their first date, they got married, and not long after, they sold the shack for ten times what they paid for it.

The timing was perfect. Finally, they had some money to invest in a small farm to grow their own blueberries and build the life they'd imagined.





and nursery were rundown and needed a lot of work.

The owner, Marge, was eager to sell and seemed to recognize something in the young couple. "Honey," she told Barbara, "this farm doesn't cost you money, it makes you money. How do you know you can't afford it until you come out and look?" The phrase stuck. They went up to Oregon that very next weekend.

Marge would go on to become a mentor, a friend, and eventually "Grandma Marge" to the Brazeltons' children.

"As soon as we drove into this place and saw the beautiful farm in full bloom, we said to each other: 'we've just got to figure out how to do this'," Dave remembers.

They weren't afraid. They simply saw potential, and decided to take a leap of faith. Together, Dave and Barbara purchased their first farm – and they were only 27 years old. They named the farm Fall Creek®, after the small stream that ran through the back of the property, a quiet nod to the landscape that had drawn them in.

Learn, Adapt, Repeat

Dave and Barbara's academic backgrounds in biology and nursing might seem an unlikely foundation for farming, but this allowed them to instill a methodical, scientific approach to learning and adapting. "We didn't know anything," Dave admits, recalling how they'd literally walk around their retail nursery with a horticultural book in hand, learning on the fly as customers arrived.

Life on the farm was raw and real. When their baby, Cort, was born, he slept in a room above the garden center, and a "honk for service" sign meant customers would literally wake the baby to get assistance.

This challenging reality, coupled with advice from a beloved mentor, Dr. Douglas, led to a crucial

decision. In the winter of 1981, they closed the retail garden center to focus entirely on blueberries – growing fruit and operating a dedicated blueberry nursery. This strategic pivot laid the foundational groundwork for Fall Creek®'s future.

They quickly learnt by doing, collected data and swiftly adapted to improve their processes. "Our philosophy was simple. Grow the best plants. Source the best varieties. Support every customer." This foundational commitment to "breed, grow, serve" remains largely unchanged 45 years later.

Catalyzing Industry Change

Under their visionary leadership, Fall Creek® quickly became synonymous with innovation.

They recognized early on that blueberries were undergoing a total revolution, a transformation in where they're grown, how they're grown, what varieties are used, and even how they're shipped and consumed. The company's strategic brilliance lay in their innate ability to constantly "skate to where the puck was going", as he calls it.

An early example was their groundbreaking decision to grow blueberry plants in containers, a stark departure from the industry standard of bareroot plants that often led to transplant shock. "We were really the first to do that on a large scale and we changed the industry," he states.

They also embraced tissue culture propagation, scaling it for commercial use, and bravely ventured into new climate regions like California in 1985, enduring a decade of frustrating failures before finally cracking the code. This remarkable tenacity became a defining hallmark of Fall Creek®'s approach.

Championing Blueberry Health

One of Dave's most impactful contributions extended far beyond the nursery. For two decades, he chaired the US Highbush Blueberry Council Health Research Committee, fundamentally altering public perception of blueberries around the world.

His journey into health advocacy began with a phone call from a friend telling him about a new study on antioxidants. "He called me and said, 'Dave, Tufts University is doing a major study measuring the antioxidant levels in fruits and vegetables, and they're not including blueberries. I think they should. What do you think?" Dave responded "Absolutely they should!" But knowing

It couldn't have been a better call. The study revealed that blueberries had the highest level of antioxidants of all the fruit and vegetables tested. The news became mainstream, people started paying attention. Dave chaired the committee that spearheaded a strategic, disciplined approach to commission more health research. The growth in health awareness increased demand for quality blueberries throughout the world and, along with key horticultural breakthroughs, boosted Fall Creek®'s global expansion.

A Global Perspective Takes Root

Beyond health, Dave also pioneered informal international data collection in the late 1990s, gathering insights into the broader global blueberry industry. This early effort reflected their belief that for the industry to truly thrive, it needed a global perspective.

What began as a personal reporting project would eventually lay the foundation for this very IBO report – a responsibility their son, Cort, later took over and formalized into the seminal global publication it is today.

The return of the second generation marked another pivotal moment for Fall Creek®. While developing the company's first formal strategic plan in 2010, they proposed a bold new direction: "Let's go where our customers grow." Until then, Fall Creek® only operated facilities within the United States. Their recommendation to expand internationally set them on a new trajectory as a global company "It was as transformative as buying our first farm," Dave reflects.

Today, that vision continues to guide Fall Creek®'s international presence, leading operations in more than eight countries, including South Africa.

Enduring Values at the Centre

Today, Fall Creek® stands as a global leader in the agricultural sector, its immense growth never overshadowing the core values instilled by Dave and Barbara. "We always wanted to treat everyone the way we wanted to be treated".

As the company grew, their intrinsic values – mutual respect, genuine connection, and relationship-based interactions – were formalized and codified

by the second generation. Now, these core values serve as a compass for difficult decisions, guiding Fall Creek® through complex challenges.

Their enduring passion for blueberries and the industry continues to fuel Fall Creek®, with people always at the heart of what they do.

"We're all in service of the consumer's decision to purchase fruit, eat it, and enjoy it". This unwavering customer and consumer-centricity, combined with a commitment to continuous learning and the highest quality, remains key to Fall Creek®'s long-term success.

A Bright Future for Blueberries

As Dave reflects on the industry's future, he sees tremendous growth opportunities, particularly in expanding household penetration and introducing blueberries to new markets globally. There are always going to be challenges – like the need for more consistent, high-quality fruit; and mechanizing harvesting without sacrificing quality, but the potential is endless.

Dave and Barbara Brazelton's journey is a testament to the power of bold ideas, a willingness to learn, and an unwavering belief in the potential of a simple berry.

His advice to his younger self and aspiring pioneers, echoes his life's philosophy: "Be bold. Trust your instincts. And always make time to fish! A balanced life is just as vital as a successful business."

"Our philosophy was simple. Grow the best plants. Source the best varieties. Support every customer."

- Dave Brazelton



TABLE OF CONTENTS

INTRODUCTION	6
A message from the IBO president	7
Foreword	
What is the IBO?	11
About the Authors	
Industry Trends	
Global Pricing Trends - Imports	
Industry Net Promoter Score (NPS)	
2024 Global Production Survey	
Health Research Update	28
GLOBAL CULTIVATED	30
Global Cultivated Fresh	31
Global Cultivated Processed	35
Global Cultivated TOP 10	
Global Cultivated Production Forecast	44
AMERICAS	50
South America	53
US & Canada	
Mexico / Central America	
ASIA / PACIFIC	128
Asia	131
Pacific	146
Central Asia / India	162
EMEA	170
Southern Europe / North Africa	174
Eastern Europe	
Western / Central Europe	
Africa	236
Special Report South Africa	244
Middle East	257
GLOBAL WILD AND COMBINED PRODUCTION	264
Global Wild Production	265
Global Wild and Cultivated Combined	268
CLOSING COMMENTS FROM THE EDITOR	270
Closing Comments from the Editor	271
Support the IBO	
SUPPORT	274
Acknowledgments	
About This Data	
Production Forecast Methodology	
2025 Cover Design	
2024 Reader Survey	

INTRODUCTION

A MESSAGE FROM THE IBO PRESIDENT

Dear IBO and produce industry members,

Reflecting upon the message for this 13th edition of the IBO Report, I took the time to read once again some of the sections of the 2024 version. While practically all the topics of focus I mentioned in my previous message remain very relevant, no doubt there have been very significant changes in one area, trade risks, and an elevated need to act on environmental and labour challenges.

While no one can deny that the fundamental focus of all blueberry industry members, and indeed for all produce sector participants, has been, is and will be our consumers and customers, the manner in which we meet their needs and expectations becomes more and more important. With expanded and better competition within fresh produce - as can be seen by the evolution of the offer in grapes, mangoes and other berries - delivering a better-quality experience in a reliable and consistent way must be the norm. If you add to this the way other food items are evolving to more healthy messaging, and in many cases a truthfully healthy reality, the need to secure shelf space every week becomes even more urgent.

As reflected within the message a year ago, the IBO's position has always been to strive for free and open trade. But the changes this year induced by the policies, rules, actions and messages of the U.S. government - and other governments in response - are challenging the way global trade is being conducted. The application of tariffs, which will possibly have been modified by the time this report is published, are impacting many economic sectors, including food chains and food production. While in the context of global trade blueberries are a very minor component, we are likely the best example of a produce item with a global reach, with all that this implies. So, with the recent uncertainty which will likely remain in the coming months, it is important that as an industry body we analyze how we not only respond to possible issues and consequences, but actually how we find ways to use these changes for our benefit, and for the benefit of our consumers. To this end, here are some thoughts to consider:

1. First and above all we need to ensure that reliable information is generated and shared. And if this report has been and is likely now the best global reference of industry integration, it is even more important that we support it and enhance its information and use. A year ago Cort mentioned that a producer survey had been introduced with the intent of adding a qualitative dimension to the report. This is an extremely beneficial element that now becomes even more fundamental as a way to understand the impacts, consequences and possible solutions.

- Of all producing countries exporting to the United States and which includes among others Canada, Morocco, Chile, Mexico and Peru, the main impact of the current 10% tariff will likely be to Peru. And while tariffs cannot be only absorbed by the producers, it is clear they also cannot be fully passed to the customers and consumers. Finding the right balance will be essential.
- 3. As the USA likely looks for ways to strengthen its internal production and establishes what it considers a more fair-trade environment, we need to be careful not to think other markets can absorb volumes being diverted. With significant volume increases into 2026 and beyond, North America will remain central to any sales and marketing strategy, and any non-planned and reactive shifts in volume to other markets will have significant impact, particularly on pricing.
- 4. We need to continue to strengthen industry interactions. In this particular case the role of USH-BC and NABC is essential to understand this evolving internal trade environment, but also on how to continue promoting the consumption and presence of blueberries in all possible consumer spaces within the USA and beyond.

In relation to matters of Environmental, Social and Governance (ESG), it is relevant to reflect upon water and labour as we look to the years ahead:

- Unfortunately, climate change continues to be an extremely concerning reality with Europe
 having its warmest June on record and severe weather events in many regions. Reports of
 worker health and safety issues due to extreme heat have again been reported in many areas.
 These are examples of a reality we need to live with
- Enhanced water risk resource maps for most important production regions, prepared by different government and private sector consulting firms, clearly show a continued evolution towards a greater risks around water available and balanced aquifers, to which water quality impacts need to be considered
- 3. The urgency to elevate water use efficiency at all levels, and to ensure that properly designed and well-maintained distribution systems, is no longer an option, even if drought conditions in certain production regions change for the better.
- 4. Labor needs and availability restrictions continue to increase in most of the production regions. For the first time in a significant way, Morocco saw farm labor shortages that follow similar trends in Mexico, parts of Peru and China.

As we present the strategic plan for the IBO that has been generated in the past months, and in which the Industry Report is a central component, the document you have at hand confirms the

expansion of the industry based on the incorporation of new regions, increased production areas and significant volume for the supply being produced. Volumes have increased from 1,800 (000 MT fresh and processed) in 2022 and 2023, to 2,100 in 2024, 2,500 estimated in 2025 and 2,700 Forecasted into 2026; growth that is a reflection of the overall financial health of the industry.

So as you dive deep into the facts, figures, analysis and opinions presented in the 2025 IBO Report, I believe there are some questions we need to ask ourselves and try to respond to, which should be centered around the role each one of us plays in supporting the blueberry and the produce industries. How can we help find solutions, share information, and provide insights about the reality of our production regions or the part of the blueberry value chain we participate in? How can we leave our differences aside to continue to secure a viable and stable industry that can fully respond to our customers' needs? Even more importantly, how do we meet the expectations that we all as consumers have of this very unique fruit?

Finally, I truly hope that I am able to meet many of you in our South Africa Summit this September, an encounter which will no doubt help all of us get a better sense of the reality of the blueberry industry today and into the coming years.

Mario Steta

President & Chairman of the International Blueberry Organization

10 GLOBAL STATE OF THE BLUEBERRY INDUSTRY REPORT | 2025 GLOBAL STATE OF THE BLUEBERRY INDUSTRY REPORT | 2025 11

FOREWORD

This report exists to empower participants throughout the blueberry industry with improved information. We hold a conviction that a more informed industry and market is a healthier one. This project is producer-focused and intended as a tool for producers large and small in making decisions such as how and where to bring their fruit to market, whether to expand their production or invest in their operations, or to change varieties or growing methods. The international nature of this report is also intended to help offer perspective on how the supply and market trends of one region are comparable to and affect others. We thank you for your interest and support.

This report follows an established methodology, combining interviews with experts and industry leaders on the ground with surveys and the most reliable data available. These tools have proved adept at telling the story of the industry as it has grown and continues to evolve as one of the most desirable categories in the produce aisle. Building on the success of last year's introduction of the Producer Survey, the 2025 report takes this initiative further by presenting survey results by country, providing localized insights into the perspectives of producers across diverse geographies. For the first time, we also introduce the Blueberry Industry Net Promoter Score (NPS), offering a benchmark for the industry's collective outlook. Together, these tools add a qualitative dimension to the global industry unavailable in earlier editions.

Using the Report as a Tool

While the report team would love to believe that readers will review this report cover to cover, we have no delusions considering the length. We ask that you give attention to the president's letter, trends section, the global overviews, the data summaries, and the closing comments. The geography sections are intended to be read standalone or reviewed as a whole as needed over the course of the year. As always, we welcome feedback.

Background on this Report

This 2025 IBO Report represents the 13th iteration under the current editor and the 19th year of the project. The project began under the direction of the United States Highbush Blueberry Council and North American Blueberry Council in 2007. Responsibility was transferred to the IBO as the organization came into its own in the early 2010s. The transition from USH-BC oversight to the IBO arena was made in consideration of

the increasingly global nature of the industry and the need for a comprehensive and global perspective.

The scale and scope of the 2007 project was markedly smaller compared to what the endeavor has come to involve in recent years. As the industry grows and expands in both current and new geographies—adding consuming markets and production regions alike—the task of ensuring this project is comprehensive becomes ever more daunting. From 2007 through the 2017/18 report, the project was produced and led by Cort Brazelton. For the 2019 report, Colin Fain of Agronometrics partnered with Cort Brazelton to co-lead the project. At the conclusion of that project, it became clear this effort required a broader team. The IBO Board was in full support and approved the new expanded team and approach in early 2020.

Many thanks to the IBO Board for this opportunity to serve the industry. Also, many thanks to the many contributors who magnanimously and often anonymously gave their time to provide useful insights and information. As always, please forgive the errors and generalizations which fall short of desired precision. They are not intentional. We hope readers can make good use of this year's report and, if they are not members of the IBO, are inspired to join the effort.

We would like to extend a special thanks to Leslie Wada from the USHBC for her continued contribution on the health research update, and to all Country Members for their invaluable input into the country sections.

Blueberries are a truly special crop, bringing a healthy choice to consumers around the globe while presenting an incredible development opportunity to improve the lives of people and their local economies. Those of us who work in service of this wonderful fruit, our many blueberry colleagues around the world, and those who enjoy it are truly blessed.

Until next time, best wishes and happy reading.

Cort Brazelton

IBO Report, Chief Editor

Colin FainIBO Report, Senior Editor

Matt Ogg Narrative and Lead Writer



WHAT IS THE IBO?

Who we are

The IBO is a global voluntary organization bringing together leaders from around the blueberry world in all segments of the industry, including blueberry producers and marketers, affiliated business, social groups, and governmental organizations worldwide.

We come together to learn, share, increase understanding, distribute information, address mutual challenges, coordinate potential solutions and explore opportunities. The organization exists to advance the health and sustainability of the blueberry industry.

The IBO board consists of official industry commissions, guilds, and associations from members' countries.

Associate members consist of companies and other entities who voluntarily support the IBO and access the growing suite of data and services offered to members. Associate members pay an annual fee for access to the expanding library of data and intelligence as well as promotional opportunities created by the platform.

Mission

Our mission is to collect and share blueberry information, fostering a common goal of increased worldwide blueberry consumption in all forms.

The IBO seeks to promote a better understanding of the common interests shared by all participants in the blueberry industry.

The 10 Objectives of the IBO

- 1. To collect and share blueberry information.
- 2. To foster the common goal of increased worldwide consumption of blueberries in all forms.
- To provide the opportunity for a united voice on issues in an international forum.
- To provide representatives of blueberry-producing nations a consultative forum for better mutual understanding of items of common interest.
- 5. To maximize the IBO's sphere of influence within the blueberry industry.
- To promote a better understanding of the common interests of the blueberry producers and marketers and affiliated businesses, social and governmental organizations throughout the world.
- 7. To encourage the compilation and publication of production and non-proprietary marketing information.
- 8. To encourage worldwide free trade of blueberries and associated by-products, and to dissociate itself with the artificial protection of markets.
- To assist countries in mitigating regularity items that can inhibit growth of the industry, e.g., artificial competition barriers and pesticides registration.
- 10. To target assistance in order to maximize the continued success of the international blueberry industry.

ABOUT THE AUTHORS

This report has been elaborated on behalf of the IBO by Agronometrics, with the help, guidance and support of Cort Brazelton.

Report Team



CORT BRAZELTON *Editor in Chief*IBO Board Member & Co-Founder



COLIN FAIN Senior EditorCEO Agronometrics



MATT OGG
Narrative
Journalist Agronometrics



CLAUDIO RIQUELME Digital InfrastructureCTO Agronometrics



VIOLETA RODRIGUEZ

Editorial Design

Chief Digital Officer Agronometrics



SARAH ILYASData Collection/Narrative
Data Scientist Agronometrics

About Agronometrics



Agronometrics operates as a contractor in service of the annual IBO report in conjunction with the chief

Editor. It is a private company providing data services to the industry.

The company's mission is to help the fresh produce industry make data-driven commercial decisions, identify market opportunities and project market trends to help decision makers best position themselves in an ever-changing commercial landscape. Our team has been working as a consulting firm within the industry since 2012, getting our start in Chile working with avocado producers. Since then, our product line has

expanded to 21 different fresh commodities across a global audience including the International Blueberry Organization (IBO), the US National Mango Board and some of the world's most important fresh produce companies.

Our analytics products range from market reports synthesizing global trade data to interactive dashboards automatically updated daily, and everything in between. This wide range of products has honed our skills in data acquisition, management, and interpretation, allowing us to bridge the gap between technical implementation, academic theory and actionable insights for an increasingly demanding industry.

For more information visit the website:

www.agronometrics.com

Special Thanks

Special thanks Cristian Crespo for his support on data collection, as well as Pablo Cortes and Thomas Grandperrin for their help in setting up the sponsorships and advertising that is financing this report.

Charting the Future of Blueberries from Africa to the Americas

As someone who is new to the blueberry industry, it is a privilege to have this opportunity to introduce myself and share my perspective, having joined Fall Creek® as Chief Commercial Officer in April 2024 after a long career as a growth specialist working for such companies as Nike, Monsanto, AgroFresh, and AgReliant Genetics.

Blueberries, to me, are almost the perfect fruit — nutritious, convenient, delicious, and versatile. And yet, much of the world has barely begun to enjoy them. In Canada and the U.S., annual per capita blueberry consumption is around 1 kg per person annually; in Europe, closer to 800g; in China, about 250g; and in most other markets, just a fraction of that. The potential for growth is enormous.

With the IBO Summit taking place in South Africa in September 2025 and considering my origins from Cameroon, it's an ideal moment to shine a light on the opportunities emerging across the continent. Earlier this year, I visited Zimbabwe, where I saw a grower planting hundreds of hectares of blueberries. The farm was powered by solar energy, exporting to the Middle East and Europe, employing hundreds of people, and operating with the technical sophistication I've seen in the best farms in Peru or Chile. Across Zimbabwe, Namibia, and South Africa, growers are combining elite genetics, high yields, and competitive labor costs to produce fruit that can compete with any region in the world during their season.

Africa's potential goes well beyond exports. The continent boasts a \$3 trillion economy and nearly 150 million people with significant disposable income. Countries such as South Africa, Nigeria, Kenya, Ethiopia, and the Maghreb nations are well-positioned to lead in developing domestic consumption. While blueberry awareness in West Africa is still low, I believe the sweet, fresh taste will resonate with consumers who already love tropical fruits like mangoes and pineapples.

Globally, I see Peru as an inspiration. Its scale, efficiency, and consistent quality have set the benchmark for what's possible. Peru is not a threat - it's a model that demonstrates how focus, innovation, and execution can transform a category.

In mature, high-cost production regions, innovation will be the key to competitiveness: machineharvestable varieties to reduce labor dependency, and genetics that deliver outstanding flavor, firmness, shelf life, and disease tolerance to meet increasingly demanding markets.

Finally, I see exciting opportunities in the United States, the birthplace of our industry. We are on the verge of a genetic renewal, replacing older plantings with improved varieties, backed by capital, technology, and a focus on serving domestic demand. From New Jersey and North Carolina to California's Central Valley and the Pacific Northwest, there is real potential to continue to elevate quality and further strengthen domestic US supply.

With respect and optimism,

Paul Nselel

Chief Commercial Officer, Fall Creek Farm and Nursery®



INDUSTRY TRENDS

The following Trends section provides the report team's summary of predominant themes which stood out most consistently in interviews with industry participants around the world, as well as integrating the team's own knowledge and experience. The following trends do not represent the opinion of the IBO, nor that of any individual team member, but rather seek to synthesize and summarize. Any given trend is unlikely to apply to all growing regions or markets, or even all growers or traders in the regions and markets where they have been observed.

Trends snapshot

- Peru: From small non-commercial trials 15 years ago, Peru has fundamentally changed the industry, producing $\frac{1}{2}$ of global fresh exports, stabilizing year-round availability, and setting a new standard in fruit quality and consistency.
- Category Growth Driver: Value growth has outpaced volume growth in most major markets, largely driven by the rise of new categories leveraging larger-sized fruit of new genetics with higher firmness and more desired flavor characteristics.
- Growth Paradox: Sizable portions of the industry meanwhile are experiencing less category value growth relative to volume growth, reflected in price bifurcation by product type
- High Chill and Machine Harvest Fresh: Industry intention to expand High Chill planting of new genetics and leverage machine harvesting for high-quality fresh remain priorities, but have yet to materialize at scale.
- Global Consumption: Blueberry consumption has expanded worldwide and is becoming more evenly distributed across global markets, a far cry from the reliance on North American consumption that characterized the industry for most of its history.
- Institutional Capital Fueling Growth Now Standard: Private and institutional capital continues to flow into large, highly professionalized operations and has become normalized worldwide.

Demand proved resilient in 2024 amidst supply rebound, but needs reinforcement

The most consistent commentary received throughout the course of interviews was the sentiment that global demand held up encouragingly well during a significant rebound in supply from Peru - the world's leading exporter with an outsized impact on global trade relative to other major growing areas - after its volume was short in 2023 due to an El Niño phenomenon. The South American country's 2024 campaign may have been late, but high and sustained volumes

hit the market for an extended period and were still effectively absorbed. Such a rebound, which would have had devastating market consequences had it occurred in years past, was met with a high degree of demand resilience; a theme replicated across markets and seen in relation to other major supply regions as well. Such resilience can be attributed to multiple factors which are seen across the industry globally. An increase in superior genetics, average berry sizing, and fruit quality, together with a strong organic category, have served to lift blueberry sales as well at a time when fresh produce consumption – particularly in the European Union but also elsewhere – is growing at a lower rate.

Market Development & Trade

The marketing spend and collective industry effort to achieve a year like 2024 were years in the making, but cannot be taken for granted as we look to the rest of 2025 and beyond. Further supply growth is a given, and therefore the engine of blueberry demand growth must keep running to avoid an imbalance that would be to the detriment of pricing and profitability for producers globally, where there is a widening gap between the vields of smaller farmers and more consolidated, advanced farming operations. Quality and consumer experience must also remain at the forefront, and as the oft-mentioned industry adage goes, "each clamshell sells the next".

"There's no margin for being sloppy anymore," notes one source. "You can't be shielded by higher pricing you've got to get it right."

Peru is due for a record crop at the same time that it is the first supplier of note to be subjected to 10% tariffs in the U.S. market - its largest market. This adds additional pressure to ensure demand is strong enough to move volume. Regardless of how the situation transpires (the tariff settings are changing so frequently that by the time you are reading this they might be different), the uncertainty appears to have accelerated pre-existing intentions for Peru to further diversify its market mix. As the tariff settings currently stand, the Chilean industry, which is recalibrating to adapt to a new market paradigm of southern highbush genetics impinging on its once-exclusive window, will also have to contend with a 10% tariff in the same market. also its largest. Exemptions under a trade agreement with the U.S. have meant that Canadian and Mexican blueberries are exempt from tariffs, but that cannot be taken for granted either. Concerns have also been

raised about the potential for tariff impacts on blueberry industry inputs, including crates, fertilizers and crop protection products.

Further market development is another critical piece of the demand puzzle, both within mature and emerging markets, where opportunities can be reviewed in greater depth within the sections for Europe and Asia. The Chinese market is an illustrative example of what can be achieved in creating new demand, but it is also undergoing consolidation and amidst much higher production in the province of Yunnan the industry is now playing an important role in developing the South East Asian market, alongside other global partners. South East Asia and the Middle East are frequently referred to as having the highest potential for growth in the near term, while India also cannot be ignored and is a focal point of a growing list of pioneering ventures in an emerging industry.

IP protection remains a major concern

After highlighting an escalation in the seriousness of conversations around alleged intellectual property (IP) infringements in last year's report, there have since been landmark cases won in China by global blueberry breeders. Whilst encouraging, and likely to induce many producers with illegal plant material to go through a legitimization process to make license payments to legal IP owners, the China section of this report takes note of the large scale of illegal propagation that has occurred.

It must be emphasized that it is not only China where some IP holders believe their genetic material, painstakingly bred by passionate and dedicated plant scientists over decades, has been infringed and pirated. At the time of writing, it is difficult to imagine that the pace of litigation in this realm will slow down, although there is a sentiment that the situation in China at least is setting some precedent that may impact the scale and speed of infringement. The experience, nonetheless, has caused trepidation amongst some breeders to enter other parts of the world and to make new genetics available.

This report does not intend to cast aspersions on any particular company or take sides in this issue, but certain corners of the breeding industry have expressed serious grievances of alleged copyright infringements.

The allegations take on two dimensions, targeting growers that have allegedly planted IP-protected material without the right knowingly, and also breeders that have allegedly used IP-protected material in breeding their selections and released those selections to the market. While matters are to be decided by courts and legal proceedings, this issue was mentioned with sufficient frequency to merit mention in these trends section.

Varietal transition enters its stride. market segmentation ongoing

One reason why demand has been so buoyant is undoubtedly the overall improvement in the varietal composition of blueberries on the market, lifting the consistency of blueberry quality on average and allowing for more premium segmentation – a key driver of sales growth in 2024. Attributes seen to represent quality include include firmness (a function of both genetics and post-harvest practices to lengthen shelf life), flavor (either sweetness, achieving a certain sweetness-to-acidity ratio, or triggering the flavor sensations created by certain chemical compounds, 'metabolites'), texture, and eye appeal, which are all essential to encourage repeat purchases. In parallel, in many quarters of the industry and at retail there has been a conflation of premiumization and larger sizes, specifically for jumbo-sized blueberries. This trend in conjunction with the rise of private label in the U.S. has led some sources to grow wary of a potential commoditization of the jumbo category, with one stakeholder forecasting that "premium will reach an identity crisis in the next two to three years".

Throughout this report we reference significant varietal transition around the world. This is coming in the form of virgin plantings with next-gen cultivars, open varieties being transitioned to superior genetics from programs, and also some of the world's top breeders introducing new selections to existing partners, replacing orchards that are often coming toward the end of a 10-year cycle with blueberries that still meet many of the key criteria markets are looking for, but have been improved upon in new selections either in terms of the end product's attributes or field-related matters such as vield. This is occurring across the board, and at the same time as rapid take-up is occurring globally for two breeding programs that operate within less exclusive models. Meanwhile, once-standard open varieties are getting delisted by certain marketers.

The huge varietal shift that has taken place (with 'huge' being the operative word given the role of berry sizing), whilst positive for berry sales overall, has unfortunately had the unintended consequence of creating a stark contrast between the nature of imported blueberries in major northern markets and their own domestic volumes at the height of summer that predominantly come from smaller-sized, often older northern highbush blueberry genetics. The whole theory of 52-week supply in any fresh produce item is predicated on consistency, sales momentum and habit, but what happens if varietal divergence means what's available at certain times is essentially a different product? What does the ramp-on effect of imports mean in that case, and how faithfully do consumers make that switch? To rephrase a saying that has become rather common, when is a blueberry still a blueberry?

Industry perceptions and consumer preferences vary in this regard. Whilst there has emerged a truism that the imported product with southern highbush genetics is often better (and sales figures probably corroborate this opinion), such blueberries can sometimes be lacking in flavor depending on the variety, origin or weather conditions for the season at hand. Some argue that in ideal conditions, and with the best varieties, blueberries grown in climates with cooler nights are able to develop richer, more complex flavors. This is due to the effect of diurnal thermal variance, or the difference in temperatures between day and night. "As soon as you start to get those cooler nights, the plants stop undergoing respiration overnight," notes one source. "Respiration essentially means they're going to be burning up sugars...cooler nights allow those sugars to accumulate in the fruit a bit more."

Nonetheless, the vast majority of northern highbush blueberries grown are still open varieties from decades past that do not have the shelf life strength of their southern highbush counterparts, and many of the aforementioned developments around flavor can be easily discarded by the consumer if fruit goes soft. And if consumers have come to equate size with quality, most northern highbush genetics cannot make the grade.

High chill renewal

To address this summer gap in fruit characteristics. there is currently a concerted drive across several global breeding programs to develop and introduce varieties that replicate or even improve upon some of the desired attributes of successful southern highbush programs. This push to premium northern highbush blueberries is an emerging trend whose impacts may be felt many years from now, and is difficult for various reasons including maintaining cold-hardiness traits which are undermined by cross-breeding with lower chill genetics to transfer fruit quality traits. While a small number of high chill programs have been working at this for decades, historically lower chill focused programs have added programs focused on the longer term breeding effort of mid and high chill.

There is some reticence around this in the grower community about the suitability of cultivars to their specific geographies or the economics of conversion given the lengthy time it takes for this class of blueberries to enter commercial production, but there is a portion of the retail segment that is encouraging this trend in order to lift quality benchmarks for berries grown closer to leading markets such as the USA, Canada, Western & Eastern Europe, and Northern China. Meanwhile, breeders have found and are actively seeking partners to co-develop such genetics to fit the weather conditions in guestion. A handful of companies claim to have suitable cultivars that are being or will be introduced to growers in the near future. It will be a long haul though, and as one stakeholder mentioned, "It's like watching paint dry breeding northern highbush compared with southern highbush."

Field efficiency an imperative as labor becomes more scarce

The trend of varietal improvement and larger-sized blueberries has not only been a boon at retail, but also has a bearing on field economics. If there are the same number of berries on a bush but each one is larger, in the same time a picker can harvest a heavier weight in berries, therefore increasing the level of labor efficiency and their wages. Genetics companies are also focusing on the detachability of berries so they come off the stems more easily (but at the right time when they are at the optimum ripeness and not still green), which makes the job easier for pickers. When labor is

scarce, and as other fruit crops or industries are competing for workers, these considerations matter for the value proposition that blueberry growers offer to their labor force.

The ultimate benefit of this is a lower cost per picked pound or kilogram, and with good genetics and agronomic practices this can tie in well with better marketable pack-outs also. Several sources noted firsthand experience of how switching to newer varieties had translated to visible post-harvest benefits with less wastage on sorting lines.

Growers are continuing to push the limits of yield in the way that they structure their farms (whether that's in open field or substrate farms), how they prune or plant for certain harvest timing windows, how they space out picking to ensure they have enough workers at peak harvest times, how they irrigate to optimise water usage so that every drop counts, what formulas they combine in their pest control programs, and many other considerations. The aforementioned varietal conversion plays into this from an agronomic perspective as well as an eating quality perspective, aiming for superior yields to alleviate margin pressure after years of inflation.

But labor challenges loom large. A Rabobank report published last year forecasts that amidst an aging population the availability of labor will decline over the coming years, which is especially relevant for a labor-intensive crop like blueberries. The report's authors, who were both interviewed for this report, pointed to high labor costs in developed countries like the U.S., Australia and the Netherlands, but noted they were even a concern in perceived low-cost countries like Mexico and Peru. Of the sample of countries analyzed, Australia had the highest cost per pound or kilogram, followed closely by the USA. One quite intriguing point revealed in their estimates was that the indicative picking cost per kilogram in multiple lower-cost producing countries - Mexico, Peru, Poland and Chile - was reported as higher than the indicative cost of machine harvesting. Of the sample, only Morocco was listed as having a lower cost per kilogram than machine harvesting. A necessary provison here though is that this does not mean every grower in such countries can easily shift to such a growing method; in fact, pot-based systems and other field configurations are prohibitive when it comes to machine harvesting for fresh.

Machine harvesting for fresh becomes more widespread and dedicated

For several years now machine picking for fresh has been a common practice in most high-wage countries. most notably for those with northern highbush genetics that tend to be more conducive to concentrated ripening, thus lowering the percentage of green fruit that will be knocked off the bush. This harvesting method is also deployed for southern highbush, but more often in instances where fields are not calibrated for or pruned with extended production seasons in mind, as this heightens the risk of machines damaging flowers on the plants and therefore the following crop. That is not to say that the practice is not used at all on evergreen farms – it most certainly is – but such endeavors are relatively more challenging, requiring greater care and experimentation (although the theme of experimentation applies throughout for this emerging field).

One important caveat to the claim this is widespread is that for many it relates only to their last picks of the season, especially as more competing volume hits the market and prices fall, therefore causing margins to thin. It is almost guaranteed that a portion of machine harvested blueberries will be wasted, but to what degree depends on a multitude of factors including the type of machinery used, bush structure, varieties and how they respond to the climate, and most importantly the level of knowledge and expertise gained by the growers themselves – a process that takes time. More aggressive head and ground speeds for machine harvesters correlate with more green fruit being released when it shakes the bush, while the materials used in the catching tray – as well as its positioning to receive the falling fruit - have implications for fruit quality as well because the berries can experience internal bruising if they bounce. Some experts recommend that plants be trellised and pruned such that the structure stays upright and machines can gently detach berries as they're moving through the row, with open bushes that allow the sun to reach all berries more evenly and improve the synchronization of ripening (particularly as harvesting berries in the middle of the bush is harder for most machines). All of these considerations have ramifications for the efficacy of the practice and the shelf life of fruit, so if a grower hasn't nailed their settings and techniques there is little chance of success if they are not close to their consumer market.

Whilst more sophisticated operators aim for reduced wastage to below the 5% mark, a regular scenario is that growers will be reluctant to risk packable yield reductions at the start of the season when prices tend to be higher, and will therefore opt for hand picking as much of the crop as possible until it becomes uneconomical to continue at lower prices. At this point a grower can decide to either not pick because it's too expensive, or run a machine through the field and hope to see a percentage of the remaining harvest meet fresh-marketable standards, diverting the rest either to processing or waste. Seen for both highbush and rabbiteve blueberries, this kind of salvaging operation can make a difference to a farm's bottom line in a challenging year, but it is not what proponents of this incipient art envisage for its future.

In the most rudimentary sense, machine harvesting for fresh is widespread in close proximity to the main markets of the Northern Hemisphere, but what is striking now is the increasing level of dedication to fine tuning the practice and the adoption of advanced technologies, whose purveyors are witnessing steady orders and growth. Machine harvester developers are seeing interest from the U.S., Canada, Germany, France, the U.K. and Australia, as well as jurisdictions with relatively lower wages such as Poland, Romania and the Republic of Georgia. Further afield, trials have even taken place amongst technology-forward Chilean growers seeking new opportunities, and - to the surprise of some - inquiries for machines have been received from Peru.

The transition to machine harvesting for fresh is not an easy one, not only from a technical standpoint but also at an organisational and cultural level for blueberry production companies, whose farm managers may be overwhelmed if taking responsibility for achieving the most successful harvest possible involving pickers, whilst teaching themselves about machine harvesting techniques at the same time. Stakeholders have also observed protestations from pickers in both North America and Europe who feel threatened by the machines, and there have been isolated reports of sabotage.

Many sources engaged in this field see the technology as complementary to hand-picked operations, but dedicated adopters are aiming towards harvesting the

majority - perhaps all - of their crops this way, attracted by the prospects of drastic reductions in price per picked pound or kilogram of blueberries, and incentivized by labor shortages and costs. As some machinery providers claim to have seen the quality gap narrow with hand-picked fruit, some new plantings are being established specifically with machine harvesting for fresh in mind, deploying various aforementioned techniques, as well as selecting flat fields (uneven or steep surface are not appropriate for most machines), and providing enough space at the end of rows for the machines to manoeuvre correctly. At post-harvest it is useful to have pre-sorter machines to remove the clusters, which can slow down sorting lines, while having spare parts and the right education and training systems in place are also critical to making this work. "You have to make everything as smooth as possible for the machine operation because the machine replaces 50-100 people," says one source. "If the machine stops working, it's like 50-100 people stop working."

Most leading genetics companies are breeding for 'machine-harvestability' and some are reporting encouraging results in this regard. Even if this wasn't the case, key selection criteria of recent times have included firmness and shelf life, which are both traits that lend themselves to machine harvesting. It should be emphasized though that even though breeders can do their best to release cultivars that make the job easier with a potentially better end product, varieties will likely perform differently in machine harvesting conditions depending on the geography and climate, so growers will need to accommodate the time and resources towards experimentation to find what best suits their farms.

Most who are involved in the space believe the technology around machine harvesting will only get better, and some have posited that what machine harvesting looks like could be totally different in a decade to how it looks now. Humanoid robots are not necessarily what the future will look like, but this is one area of automation that has undergone rapid development and is a key investment area for startups around the world to address labor shortages across a range of sectors, including agriculture.

Environment, Social and Governance (ESG)

Sustainability and social license are both key themes in the blueberry industry globally, with matters around Environment, Social and Governance (ESG) led heavily by the demands of retailers, the benefits of certification programs, and initiatives of private companies to better serve their communities, foster biodiversity, and reduce environmental impact. This can be achieved through a variety of means, including investments in renewable energy, community programs, and benefits provided to the families of workers.

Despite the aforementioned rising trend of machine harvesting, the social licence of the blueberry industry in many parts of the world is strengthened by its reputation as a force for job creation, contributing to the economies of surrounding communities where - in certain cases - unemployment rates were higher prior to the sector's development. Schools, health clinics, chemical run-off mitigation schemes, sound environmental planning, and vocational training for local populations are all ways that the blueberry industry is making a positive contribution, illustrating its long-term benefits not just for the health and wellbeing of consumers, but the communities where the fruit is grown as well. Against this backdrop, in the developing world the model of hand-picked fruit is therefore unlikely to change to any great extent.

There are many ways in which blueberries stand to benefit from the impetus around ESG. Yes, there are challenges with the industry's carbon footprint and the food miles associated with global shipping (hence the ongoing trend of preferences around proximity to market, whether that's local or peri-local), and some European retailers are completely rejecting any fruit that is shipped by air. But blueberry bushes themselves have a role to play in carbon capture through the photosynthesis of the plants, and they are not as demanding of water as other crops. That said, in some regions there has been perhaps an overuse of non-renewable underground water resources, and this gives even more reason for farms to attempt to find new ways to find water that can be renewed, such as by using reverse osmosis plants.

Carbon farming is another of the hot-button topics discussed in the industry at the moment, and this could present great opportunities to blueberry farmers wanting to lift their environmental credentials to build soil carbon and also prevent nitrous oxide emissions. Microbial technologies have been developed that maximize carbon sequestration in the soil, often to the benefit of yields, but the companies driving these developments tend to focus much more on larger-scale row crops due to the easily scalable impact that is possible in this space of agriculture.

ESG comprises a nuanced arena of disparate subjects that are difficult to measure, and where relativism

abounds. Therefore, there is no prescriptive action that a grower, marketer, retailer or supplier must undertake in order to best address this responsibility. As a rule of thumb, a proactive approach to assessing the environmental and social impacts of operations — whether it be from packaging, transport, energy supply, agronomic practices, water usage, labor treatment or community engagement — is a good start, and where possible the execution of programs, activities or practices that will engender improvement. ESG is not just another narrative tool for marketing purposes; it requires being ahead of the curve and being transparent about a company or industry's efforts to make a positive difference, and its faults.

GLOBAL PRICING TRENDS - IMPORTS

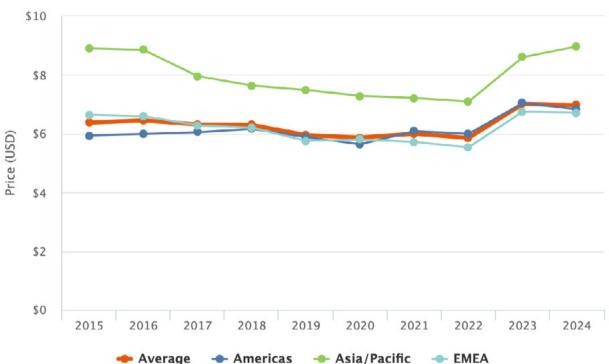
Please note that global border crossing prices for imports are used as a corollary for general pricing trends as the data are more reliable and widely available. At this juncture there is insufficient data on pricing for blueberries produced and sold 'in market' to incorporate into this data.

Global Blueberry Import Volumes and Average Prices



Source: Agronometrics Global Trade Data









From the field straight to your heart: Discover our "Blue Wonder"!

On our fincas, blueberries flourish with the dedication and care of our master growers. That's how they become delicious, flavorful, and crunchy. Sustainable farming methods and strict quality controls ensure that every berry stays perfect



from the field to the supermarket. Now this "Blue Wonder" meets the magic of the Smurfs –

an eye-catcher at the POS that brings pure delight straight from the field to your heart!



Global Blueberry Import Prices by History



Source: Agronometrics Global Trade Data

The 2024 season marked a recovery in global fresh blueberry import volumes following the sharp disruptions of the prior season. Total import volumes rebounded, reaching roughly 1 million metric tonnes, a clear sign of the industry's resilience after the El Niño driven shortfall seen in 2023. Despite this recovery in volume, average global import prices remained high at just above \$7.00 USD/kg. This reflects sustained consumer demand. The price levels seen in 2024 were lower than the exceptional highs of 2023 but still well above the long-term average.

Regional trends reinforced these dynamics. Asia-Pacific continued to register the highest prices globally, above \$9/kg. EMEA and the Americas both recorded moderate declines, settling closer to long-term averages. Despite these decreases, prices across all regions remain structurally higher than in the mid-2010s, underlining the sustained strength of global demand even as volumes recovered.

If we look at global import pricing on a monthly basis for 2024, it offers a clear snapshot of both recovery and ongoing challenges for the blueberry industry. Early in the year, prices remained elevated, reflecting the lingering tightness in supply even as volumes improved. By mid-year, greater availability from Peru and other Southern Hemisphere origins brought

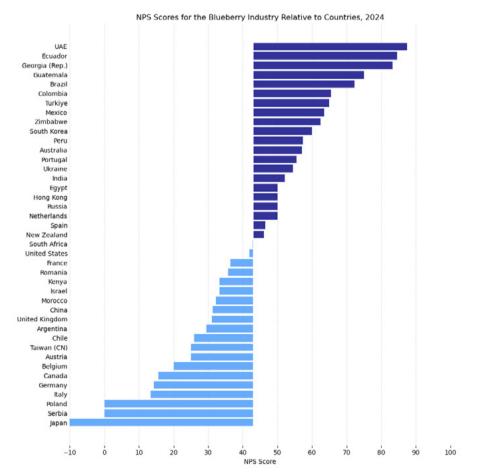
some stabilization. However, in the final quarter, prices surged sharply, with October and November reaching close to \$9/kg, the highest Q3 values recorded to date. This late spike underscored how sensitive the market remains to shifts in supply and timing, even in a year when volumes rebounded.

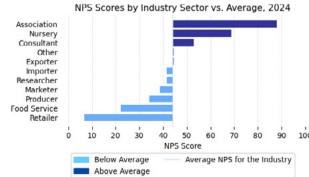
As with past analyses, it is important to note that these figures are based on border crossing prices and thus do not capture in-market retail pricing or internal trade within producing countries. Re-exports from trading hubs such as the Netherlands and Hong Kong are also included, which may lead to some duplication in volumes and values. Nevertheless, this dataset remains the most comprehensive and consistent source available, allowing us to observe pricing dynamics at a global level.

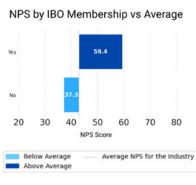
In 2024, available data indicates that although volumes have recovered, supply has not kept pace with the growth in demand, resulting in a temporary elevation in prices. Looking ahead, the industry will need to navigate climatic and regional production risks while also responding to shifting market demands for quality. With Peru, the global export leader expecting a bumper crop in 2025, the sector's resilience could soon be tested, and pricing pressure could increase.

INDUSTRY NET PROMOTER SCORE (NPS)

43.29 NPS Score for the Blueberry Industry in

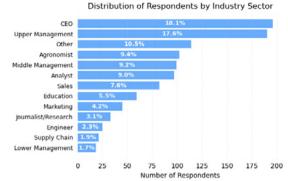






Countries with responses





The 2024–2025 Blueberry Industry Net Promoter Score (NPS) offers a pulse check, or a proxy for confidence and advocacy within the industry. These insights are based on responses to the following question, analyzed using the standard NPS methodology:

"How likely are you to recommend a friend or colleague to invest in, join, or work in the blueberry industry?"

The industry-wide NPS came in at 43.92, a strong result. For context, NPS benchmarks are typically interpreted as follows: scores between 0 and 30 are considered good, 30 to 70 are great, and 70 to 100 are excellent. This marks the first time the NPS question has been included in the report download process, yielding a robust dataset of over 1,600 global respondents. With this volume, we were able to break down the responses by country and industry sector, uncovering some compelling insights.

From a geographic perspective, countries such as the UAE, Ecuador, Georgia (Republic), and Brazil stood out as especially optimistic, each with NPS scores above 70, placing them in the "excellent" category. At the other end of the spectrum, Japan was the only country to report a negative NPS, while Serbia, Poland, and Italy also ranked among the least enthusiastic. In contrast, major players such as South Africa, the United States, New Zealand, and Spain hovered close to the overall industry average of 43, reflecting a healthy and broadly positive sentiment.

When viewed by industry sector, the data offers a glimpse into the mindset of different roles across the value chain. Associations, nurseries, and consultants-sectors more involved in shaping the future of the industry-reported the highest levels of enthusiasm. Meanwhile, retailers and food service operators, who are more focused on immediate realities and outcomes of past decisions, expressed slightly more reserved optimism, though still within a range considered "good" by NPS standards. Exporters and importers appeared to share a similar outlook, with scores that closely tracked the overall

average. Notably, producers made up the largest portion of respondents, accounting for 29% of the total sample. Their NPS came in at 34.17 -below the industry average but still within the "great" category by comparative standards. Their high level of participation is also a strong signal that the report is reaching its intended audience.

The quality of the responses is reflected in the job titles of the participants, with the largest cohort-nearly 200 respondents-being CEOs, followed closely by senior management. Together, these two groups make up roughly 20% of the total responses, a strong indicator that the views expressed in this survey are not only representative of the industry but are also shaped by those in positions of leadership who will be guiding the sector forward for years to come.

Another particularly interesting dimension emerged when comparing the results between IBO members and non-members. IBO members, who represented 25.8% of respondents, recorded a significantly higher NPS of 59.4, compared to 37.3 among non-members. This difference may reflect the mindset of industry participants dedicated to the organization's mission to provide a forum for collaboration, learning, and opportunity-sharing across the industry. These values echoed how members perceive and promote the industry.

To ensure the reliability of the results, duplicate responses and entries from segments with fewer than three participants were excluded from the final infographic. The NPS question was posed as part of the sign-up form to access the 2024 report, with the majority of responses collected between August 2024 and December 2024. As such, these results best represent the mood of the industry during that period. The report team intends to continue collecting survey insights following this methodology and will integrate perspectives from a broad spectrum of respondents into future editions. With each update, the goal is to continue capturing and visualizing the pulse of the blueberry industry as it evolves and adapts to meet new challenges and opportunities.

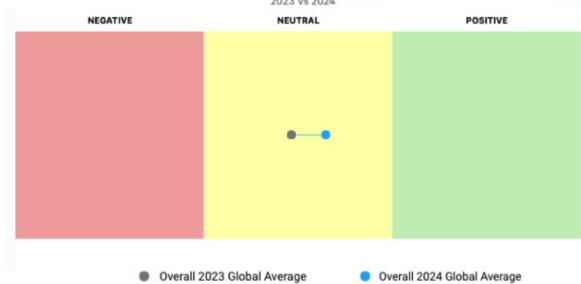
2024 GLOBAL PRODUCTION SURVEY

The survey results represent the volunteered opinions of:



Overall Evaluation of the 2024 Season

2023 Vs 2024



2024 Production Survey Overview

This year's survey reveals a generally positive industry sentiment. Compared with the previous year, when El Niño weather patterns disrupted key origins, evaluations in 2024 leaned more favorably across most parameters, although regional variations remain significant.

In 2023, El Niño had a pronounced influence on production, driving unusual heat, altered rainfall patterns, and harvest timing shifts in critical production regions, particularly Peru. This resulted in yield losses and quality issues. Elevated freight costs, coupled with logistical bottlenecks, added to

By contrast, 2024 marked a clear improvement. Weather related disruptions were less acute in most origins, allowing for more consistent harvest flows and better fruit quality. Input costs, while still elevated, were relatively stable and strong global demand, coupled with improved market access in several regions, bolstered grower confidence.

When examining specific performance indicators, growth in demand remains a standout strength, supported by ongoing promotional campaigns and the introduction of new genetics.

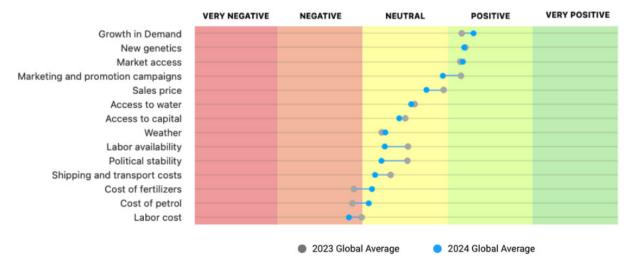
In 2024, several factors showed modest improvement, offering some balance against broader challenges. Market access strengthened slightly, indicating smoother trade flows and expanded distribution opportunities. Production costs benefited from a reduction in key inputs, with fertilizers and fuel becoming more affordable, easing financial pressure on growers. Labor expenses also moderated, helping to contain overall operating costs. Weather conditions were marginally more favorable, supporting stable yields. On the flip side, labor availability became more constrained, creating challenges for harvest and operations. Sales prices weakened after the temporary boost seen in the previous year, when El Niño related supply disruptions had inflated prices. Political stability also slipped, introducing more uncertainty into the production and trade environment.

In 2024, Peru, Chile, Mexico, and Spain all benefited from favorable weather and strong or stable positions in genetics, though each faced market side challenges most notably declines in market access and sales prices, with Peru's drop following the previous year's El Niño-driven spike. The Netherlands and Canada maintained stability through political steadiness and consistent labor, despite lower pricing. In the United States, steady demand provided a cushion against sharp falls in market access and prices. Morocco stood out for an improvement in political stability, though slower demand growth limited gains. Across Europe overall, some regions gained from easing input costs and stable weather, but broader declines in market access and sales prices weighed on performance.

This year, each country for which more than 5 responses were received, will offer a break out of the factors affecting their production compared to the global average. Of note in the effort to collect this data is the help offered by Aneberries of Mexico, whose members contributed the most responses to this survey.

Zooming out, the industry is most positive when considering general demand growth and the impact of new genetics with concerns about costs of key inputs marginally improving year on year as costs stabilize. Labor, political stability, and transport all indicate a more reserved outlook with access to water. capital, and climate stability remaining neutral but trending slightly negative.

Factors Affecting Global Production 2023 Vs 2024



HEALTH RESEARCH UPDATE

Bv Leslie Wada Leslie presents this update for 2025 as the Senior Director of Nutrition and Health Research at the USHBC/NABC

Since our last IBO Health Research report, we've had four USHBC-funded studies published in scientific, peer-reviewed journals.

Two of the studies focused on blueberries as sources of flavonoids, which are bioactive compounds found in plants. Anthocyanins are a type of flavonoids and blueberries are one of the best sources of anthocyanins.

Phillip Hwang, Ph.D., from Boston University analyzed data from the Framingham Study, a long-running population study that has been tracking generations of participants for cardiovascular and brain health outcomes. He and his team wanted to determine if eating fruits high in flavonoids during one's midlife and/or late-life stages could lower the risk of developing dementia. He analyzed data from 2,790 participants, aged 45 and older, who were followed over a 23-year period. The researchers found that higher long-term intakes, particularly during midlife, of flavonoid-rich foods like blueberries may contribute to reducing the risk of dementia and preserving cognitive function over time. His work was published in The Journal of Prevention of Alzheimer's Disease.

In another study led by Aedin Cassidy, Ph.D., of Queen's University, Belfast N. Ireland and Eric Rimm, Ph.D., of Harvard T.H. Chan School of Public Health, researchers studied the association between the intake of flavonoid-rich foods such as blueberries and three indicators of healthy aging (frailty, impaired physical function and poor mental health).

Their large study analyzed data from over 85,000 men and women aged 60 years and older from two U.S.-wide prospective cohort studies known as the Nurses' Health Study (NHS)

and the Health Professionals Follow-up Study (HPFS). Dietary intake data spanned over 24 years for the NHS, and over 12 vears for the HPFS.

In the NHS, a lowered risk of frailty (an assessment of fatigue, strength, aerobic capacity illness and loss of weight), a lowered risk of developing impaired physical function and a lowered risk of developing poor mental health was associated with higher habitual intakes of blueberries, tea, red wine, apples and oranges. In the males of the HPFS, high intakes of tea and blueberries and moderate intake of red wine was associated with a lowered risk of poor mental health, but there were no associations between average intakes of any other flavonoid-rich foods and either frailty or impaired physical function.

The researchers also looked at changes due to a decrease in consumption of flavonoid-rich foods. In the NHS, the greatest decrease in intakes of tea, blueberries and apples were associated with a 7%, 31% and 16% higher risk of developing frailty, respectively.

Increasing intakes of blueberries by 0.5 servings per day was associated with a 12% lower risk of frailty, suggesting that a modest increase of 3 servings per day in flavonoid-rich foods translated to a 6% to 11% lower risk across the healthy aging indicators in women, and a 15% lower risk of poor mental health in men. This study was published in the American Journal of Clinical Nutrition.

The studies by Hwang, and Cassidy and Rimm, contribute to the growing evidence that consuming flavonoid-rich foods,

such as blueberries, throughout one's life is an important part of a healthy diet.

Blueberries and berries are important sources of dietary anthocyanins. A recent paper in Annals of Medicine demonstrated that diets that meet recommendations for a healthy dietary pattern may not provide significant amounts of anthocyanins unless blueberries or berries are consumed. The common recommendation to consume two servings of fruit per day does not consider the variety of fruit needed to provide flavonoids such as anthocyanins. By replacing a serving of the most commonly consumed fruits in the U.S., such as grapes, apples and bananas, with a serving of blueberries or berries, the revised dietary pattern provided increased levels of anthocyanins, vitamin C and fiber - important nutrients that may help reduce cardiovascular disease risk.

Researchers have also discovered that blueberries can affect gut health. The BEACTIVE study was conducted by William Kraus M.D. and his team at Duke University in North Carolina. They fed blueberry powder (equivalent to 1.5 cups of blueberries) or a placebo powder to a group of sedentary older men and women who were overweight or obese. Fecal samples were collected at 0 and 12 weeks and analyzed for the various types of bacteria in the gut microbiome. In the placebo group, there was no significant change in the types of bacteria found in the fecal samples. However, in the blueberry-fed group, there was an increase in a type of bacteria (Coriobacteriales incertae sedis) that facilitates the metabolism of dietary polyphenols. Therefore, even in an older population, the gut appears to maintain its ability to utilize dietary polyphenols by altering the gut microbiome. Longer, larger studies are needed to determine if these changes are associated with other metabolic benefits.

For the past 20 years, the USHBC has been funding health studies in the important areas of cardiovascular health, gut health, prediabetes/diabetes, brain health and healthy aging, which includes infant studies and exercise studies. To critically evaluate this body of science, a roundtable that brought together a group of scientists to discuss the state of the evidence of the role of blueberries in these areas and create recommendations for future research. The proceedings of that meeting were published in *Frontiers in Nutrition*.

The interest in the health benefits of blueberries continues to grow as populations around the world struggle with similar concerns about brain health, gut health, cardiovascular health, diabetes and healthy aging. Research from USHBC-funded studies will continue to contribute to a better understanding of the importance of blueberries as part of a healthy diet.

Driscoll's Only the Finest Berries

Maximise the blueberry opportunity



Winning varieties

Leading R&D capabilities

Year-round global supply

Unique branded Berry Patch

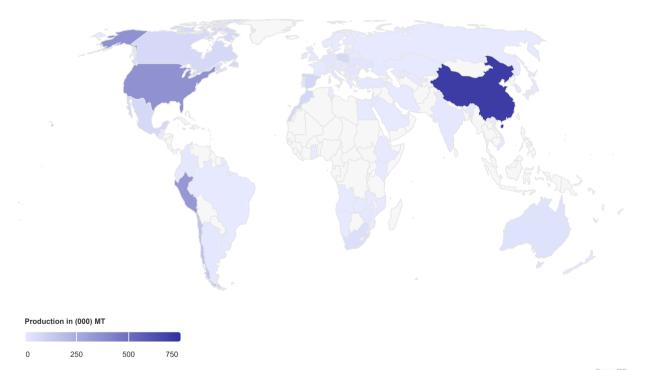


Scan for more information on Driscoll's

GLOBAL CULTIVATED FRESH

Planting and Production Data, Figures & Commentary (Denominated in Hectares and Thousands of Metric Tons)

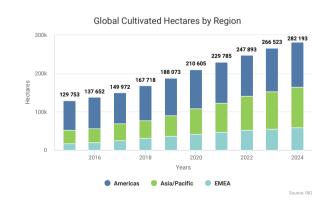
2024 Global Cultivated Production by Country

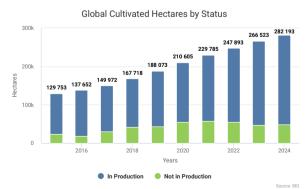


Global Cultivated Hectares by Subregion

Global Cultivated		Hed	tares Plante	d		2024 P	roduction (00	0) MT
Growth Totals	2020	2021	2022	2023	2024	Fresh	Process	Total
Americas	102,017	106,768	107,619	114,214	117,272	724.20	272.24	996.44
South America	40,162	42,047	42,055	42,942	45,565	426.93	75.78	502.71
US & Canada	53,915	55,578	54,118	59,254	60,497	227.99	195.89	423.88
Mexico / Central America	7,940	9,143	11,446	12,018	11,210	69.28	0.57	69.85
Asia / Pacific	66,579	75,984	88,565	96,984	106,379	591.87	160.29	752.16
Asia	62,928	71,884	84,558	92,733	101,617	552.84	159.29	712.13
Pacific	3,106	3,430	3,277	3,350	3,776	31.84	0.70	32.54
Central Asia / Indian Subcontinent	545	670	730	900	986	7.19	0.30	7.49
EMEA	42,009	47,033	51,709	55,326	58,541	357.43	44.58	402.01
So. Europe / N. Africa	10,981	11,750	12,907	14,166	15,155	170.54	15.18	185.72
Eastern Europe	20,268	24,679	27,536	29,294	30,099	105.05	13.16	118.21
Western / Central Europe	6,122	5,924	6,356	6,236	6,515	28.87	10.96	39.83
Africa	3,998	3,801	3,692	3,616	3,719	44.52	4.80	49.32
Middle East	640	880	1,218	2,014	3,053	8.45	0.48	8.93
Global Cultivated Totals	210,605	229,785	247,893	266,523	282,193	1,673.50	477.11	2,150.61

Source: IBO

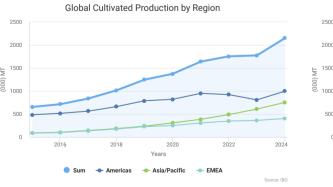


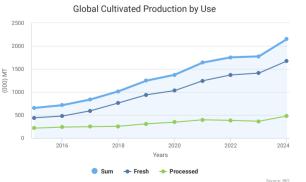


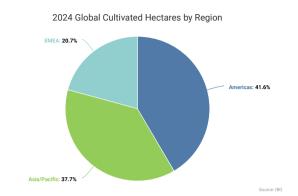
Global Cultivated Production by Subregion (000) MT

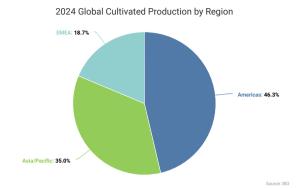
Global Cultivated		2022			2023			2024	
Productions Totals	Fresh	Process	Total	Fresh	Process	Total	Fresh	Process	Total
Americas	671.84	248.76	920.60	607.04	199.50	806.54	724.20	272.24	996.44
South America	404.30	85.81	490.11	328.58	60.28	388.86	426.93	75.78	502.71
US & Canada	192.29	162.01	354.30	207.40	137.99	345.39	227.99	195.89	423.88
Mexico / Central America	75.25	0.94	76.19	71.06	1.23	72.29	69.28	0.57	69.85
Asia/Pacific	383.28	103.48	486.76	474.92	131.88	606.80	591.87	160.29	752.16
Asia	357.73	102.69	460.42	445.08	130.98	576.06	552.84	159.29	712.13
Pacific	20.94	0.49	21.43	23.66	0.60	24.26	31.84	0.70	32.54
Central Asia / Indian Subcontinent	4.61	0.30	4.91	6.18	0.30	6.48	7.19	0.30	7.49
EMEA	315.33	30.67	346.00	328.26	32.07	360.33	357.43	44.58	402.01
So. Europe/N. Africa	142.07	13.61	155.68	146.54	14.12	160.66	170.54	15.18	185.72
Eastern Europe	98.75	6.08	104.83	104.00	6.21	110.21	105.05	13.16	118.21
Western/Central Europe	33.64	8.02	41.66	30.91	8.15	39.06	28.87	10.96	39.83
Africa	36.11	2.70	38.81	40.78	3.20	43.98	44.52	4.80	49.32
Middle East	4.76	0.26	5.02	6.03	0.39	6.42	8.45	0.48	8.93
Global Cultivated Totals	1,370.45	382.91	1,753.36	1,410.22	363.45	1,773.67	1,673.50	477.11	2,150.61

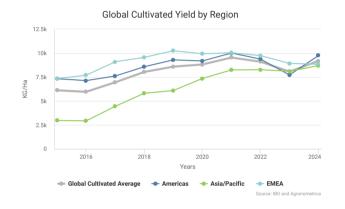
Source: IBO











Global Cultivated 2024 Production Metrics

Hectares Planted:	282,193 Ha
Hectares in Production:	234,002 Ha
Production:	2,150.61 (000) MT
Growth in Production1:	▲376.94 (000) MT (21.25%)
Growth from Hectares ² :	▲155.52 (000) MT (41.26%)
Growth from Yield ³ :	▲221.42 (000) MT (58.74%)
Yield:	9,190.56 (Kg/Ha)
	Source: IBO and Agronometrics

- Volume change compared to previous season
- ² Change in volume due to hectares entering or leaving production
- ³ Change in volume due to field productivity (yields)

Global Cultivated Fresh Report Team Narrative

In 2024, the global blueberry industry showed a robust recovery in volumes. Total global cultivated production reached 2,150.61 (000) MT, marking a 21% increase compared to 2023. Fresh blueberry production climbed to 1,673.50 (000) MT, displaying a 20% increase compared to 2023. Global average yields improved to 9190.56 kg/ha, driven by productivity gains across key producing regions.

The Americas maintained their role as the world's largest producing region, contributing 996.44 (000) MT, or about 46.3% of global supply. This recovery followed the production declines seen in 2023, with South America regaining momentum at 503,000 MT, supported by improved weather conditions compared to the disruptions caused by El Niño the year prior. The United States and Canada jointly accounted for 424,000 MT, while Mexico and Central America produced nearly 70,000 MT.

Asia/Pacific continued to show steady expansion, delivering 752,000 MT, representing 35.0% of global production. China remained the main driver, with Asia overall producing 712000 MT. Both the Pacific islands (33,000 MT) and Central

Asia/Indian Subcontinent (7,500 MT) added incremental growth, reinforcing the region's position as a growing market in recent years.

EMEA also experienced growth, contributing 402,000 MT, or about 18.7% of global output. Southern Europe and North Africa reached 186,000 MT, with expanded plantings and favorable growing conditions. Eastern Europe produced 118,000 MT, while Africa continued its rapid rise with nearly 49,000 MT. The Middle East, though still a small contributor, added just over 8,900 MT.

Overall, the 2024 season reflects a new phase of expansion, characterized by both higher yields and an acceleration of plantings entering production. The increase in volumes underscores the maturing global nature of production and consumption, with the Americas, Asia/Pacific, and EMEA all contributing meaningfully to growth. With consumption demand remaining resilient, the outlook highlights continued global diversification and an era of structurally higher production capacity.

GLOBAL CULTIVATED PROCESSED

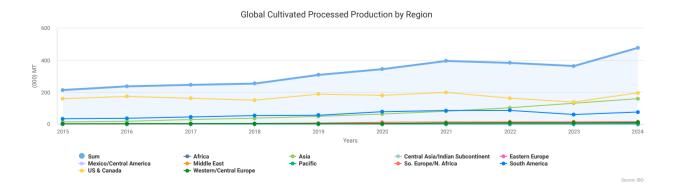
Planting and Production Data, Figures & Commentary

(Denominated in Hectares and Thousands of Metric Tons)

Global Cultivated Processed Production by Region(000) MT

Global Processed		2022			2023			2024	
Productions Totals	Fresh	Process	Total	Fresh	Process	Total	Fresh	Process	Total
Americas	-	248.76	248.76	-	199.50	199.50	-	272.24	272.24
US & Canada	-	162.01	162.01	-	137.99	137.99	-	195.89	195.89
South America	-	85.81	85.81	-	60.28	60.28	-	75.78	75.78
Mexico/Central America	-	0.94	0.94	-	1.23	1.23	-	0.57	0.57
Asia/Pacific	-	103.48	103.48	-	131.88	131.88	-	160.29	160.29
Asia	-	102.69	102.69	-	130.98	130.98	-	159.29	159.29
Pacific	-	0.49	0.49	-	0.60	0.60	-	0.70	0.70
Central Asia/ Indian Subcontinent	-	0.30	0.30	-	0.30	0.30	-	0.30	0.30
EMEA	-	30.67	30.67	-	32.07	32.07	-	44.58	44.58
So. Europe/N. Africa	-	13.61	13.61	-	14.12	14.12	-	15.18	15.18
Eastern Europe	-	6.08	6.08	-	6.21	6.21	-	13.16	13.16
Western/Central Europe	-	8.02	8.02	-	8.15	8.15	-	10.96	10.96
Africa	-	2.70	2.70	-	3.20	3.20	-	4.80	4.80
Middle East	-	0.26	0.26	_	0.39	0.39	-	0.48	0.48
Global Cultivated Processed Totals	-	382.91	382.91	-	363.45	363.45	-	477.11	477.11

Source: IBO



Global Cultivated Processed Report Team Narrative

The processed side of the blueberry industry is supplied by farms and operations dedicated to the category, complemented by fresh byproduct from many producing regions. Pricing for processed and frozen blueberries are lower but unit costs are generally lower due to the mechanization of harvest for most processed fruit. The processed category has an important interplay with the fresh industry, particularly in high chill where processing is a major component of the industry, by providing a pricing floor for fresh when growers must make the decision to allocate hand harvest labor to pickfresh or go in with machines for processing.. "It's profitable for efficient operations although profits are not at the level of attracting new investment for growth," explains one stakeholder.

While most new plantings worldwide in the last decade have been oriented toward the fresh market, a substantial portion of the world's orchards - especially in the Pacific Northwest of North America (large industrialized operations) and in southern China (predominantly smallholder plots) - are firmly in the processed camp, riding the "health halo" wave of blueberries as either a cheaper, shelf-ready consumer product in the home freezer in the IQF category (especially within triple-berry blends that are very popular at club stores) or an ingredient for baking, confectionery, smoothies and yogurts, not to mention the rising categories of protein bars and chocolate-covered fruit; this last trend seen more in raspberries but emerging for blueberries.

The processed sector also acts as an important channel of value capture that growers can turn to if weather events render part or all of their crops unfit for the fresh market, if markets become oversupplied, or if they wish to try their hand at machine harvesting for fresh (more often than not at the season's end, but a growing number of farmers are aiming to do this for the whole crop, particularly in the developed world). This last point may come across as counterintuitive given the stated target market is fresh, not processed, but as referenced

in the Industry Trends section of this report, it is inherent in the practice that a portion of the crop will not meet spec. It is not the case that all of that sub-standard fruit will be fit for processed - it is notorious for knocking off green berries that also would be rejected by the frozen industry (which then go to low grade juice stock) – but some of the bruising issues that can occur on otherwise good-quality berries are not necessarily to the detriment of its prospects for processing. There are, however, capacity constraints in this regard as some sources have noted a lack of new investment in infrastructure dedicated to processing blueberries, with the exception of some operations in the Pacific Northwest and Chile. The implication is thus that such byproduct fruit is either sent to a limited number of blueberry-dedicated facilities in other regions, or lumped in with more generalized processed fruit facilities.

Sizing specifications have also become more sophisticated with time, pushing more grade-outs in fresh. There is a general rule that 12.5mm or 0.5 inches are the cut-off for either small or large sizing, but segmentation has become more granular over time as size variance increases in the blueberry industry, and more importantly, sorting technology becomes more advanced and capable of more detailed size segmentation. In isolated cases there is even a market for frozen jumbo blueberries in IQF, though the category has yet to gain any critical mass. \The substitution effect of frozen blueberries with their fresh counterparts remains an important buffer for the industry as a whole, especially as it grapples with the overall trend of rising supply growth and changing retailer preferences within the fresh category. The health of fresh market demand tends to have flow-on effects for the frozen category, and this was keenly felt in a 2024 season whereby fresh volume increases were well absorbed by global markets on the whole. One source noted that oftentimes there are millions of pounds of processed blueberries that are uncommitted going into the North American summer, which weighs down pricing in negotiations going into the season, but because retail

movement was so good the overall inventories were very low in 2024. "We came in with an empty basket, meaning there was demand off-line, meaning you freeze it and you're shipping to customers right away," the source said. "A lot of the time customers are going to have carry-in until October-November before you get into the next year's crop. There's still a lot that ended up last season on-contract as a buffer; that buffer pretty well got sucked up, so there was demand right from the get-go."

"A large portion of the pack was contracted at harvest time with excellent movement against contracts," another source said. "Therefore there is anticipation of good demand for prompt shipments of the 2025 pack."

One issue reported in 2024 was that recoveries were lower than desired, signifying less product making the higher grades and therefore ending up as concentrate for juicing, which pays more poorly (see more below). But the sentiment in interviews for this report was overwhelmingly positive, highlighting consolidation and the economies of scale that have been achieved in this segment of the industry. In the case of North America it is dominated by a few large packers, some of whom source from their own operations while others are almost entirely sourced by third parties.

Another notable observation from 2024 was double-digit processed growth for Chilean exports – reflective of the prior year's season - which was pronounced for both conventional and organic processed blueberries. There are many possible reasons for this, including growing competitive pressures for Chilean producers who are progressively shifting to new varieties, and the fact that the Chilean Blueberry Committee has compartmentalized varietal types into more advanced, fresh export-ready and non-recommended categories, with the latter declining each year and a likely candidate for processed. Average pricing for organic was 33% higher than conventional for Chilean processed blueberry exports last year, and around one fifth of Chile's processed blueberry exports were in this category. There was still a premium in average pricing of more than US\$2/kg for the organic fresh versus the organic processed product

The IQF (individually quick frozen) market remains the primary target at the higher end of the processed market. This marks very little change over the last two decades with limited innovation on the product side among the growing, packing, and first handler side of the business. While there are exceptions, the majority of the value creation in processed blueberries is done by CPG (consumer packaged goods) companies (small and large) with the packing industry filling the role of an input supplier or at best a vendor of IQF polybags to retail. No doubt there is room for further downstream integration in the industry. Examples of this happening today include growing and packing companies introducing new dried and infused products as well as some new 'fresh like' ready-to-eat (RTE) products. Looking to the future it is not unreasonable to assume that there will be a substantial opportunity to create new uses for the market. The question remains as to whether this innovation can also be led by organizations which actually have established supply chains close to the raw product.

Industry efforts to boost consumption of processed blueberries are a key piece of the puzzle for lifting demand and returns for growers. As the product is less difficult to ship than highly perishable fresh blueberries, export market development is a logical pathway to lifting demand, but there is also a need to push more food manufacturing channels. To be effective, large-scale incorporation is required for this strategy to have a real impact as often a finished food such as a muffin or a protein bar has a very low gram-count of blueberries. What is also problematic is that whilst the fresh market is increasingly seeking out larger-sized berries, some food manufacturers such as bakers tend to seek out smaller-sized frozen

One sub-division of the processing industry that has struggled the most is juice-grade concentrate, for which inventories are at times high relative to demand. Unlike their peers in crops such as pomegranates, the industry has been unable to achieve the same levels of success for blueberry juice even though the product has similarly flavorful and high-antioxidant

attributes. When concentrates are considered across the full spectrum of the berry category, blueberries feature at the lower end of the price scale, and therefore would present a reasonable opportunity for new product developers.

It must also be noted that frozen highbush blueberries must also compete with frozen lowbush blueberries (See Global Wild Production section), with the latter tending to attract a premium over the former.

Editors Note on Global Planting Data

In 2007, with the support of the North American Blueberry Council, the first international planting and production report was published. It was a solo effort during a time when global industry statistics were very limited, particularly on commercial plantings. The "data" published relied heavily on frontline participants in the industry providing their best guesses on both plantings and production. In my 19 years producing and then overseeing this report, a great deal has changed. Among those changes has been the rise of industry organizations in many producing countries, resulting in substantial improvements in the quality of the data as well as the perspective. The rise of private companies with global footprints, together with passionate pioneers in new territories has further brought useful perspective when compiling this report. With these new sources of information comes an obligation - to move away from the guess work and conjecture and publish the 'official' information, adhering to a consistent methodology.

While this approach has generally served us well, I want to call out a concern with the planting data for 2024. Put frankly, the cumulative numbers do not square with the intelligence on the ground. I believe it is likely that our official total planting number for 2024 of 279,012 hectares is short of the real

number, specifically a portion of new plantings, many of which have not yet entered commercial production. This is important as it can impact forecasting as well as planning decisions for companies through the industry seeking to make informed decisions.

Time will tell if this concern has merit, but the report team and I agreed to include this section to assure maximum transparency in the report. The following write up outlines the issue for readers' considerations.

Missing Hectares?

Frontline intelligence on the planting and genetics side of the equation indicates attrition of 2,500-3,000 hectares, estimates of 3-4,000 hectares of replanting (resulting in no "new" hectares but higher future yield potential), and 18-22,000 new hectares. This should result in a net increase of 15,000-19,500 hectares. If this is true, we are overreporting attrition and underreporting the total net increase of global plantings. The variance in the attrition rate is best explained by corrections in local data rather than actual decreases year on year (e.g. Chile and Mexico did see a decrease in hectares, but the published YOY change is likely based on changes made over multiple years being registered in 2024). The under-counting of 3,500-7,500 hectares worldwide, if indeed the case, is worth considering when utilizing 2024 planting data.

Explaining the Variance

If the global planting growth for 2024 is indeed short of reality, what are the reasons behind the variance? Where are the likely candidates for under-counting?:

- Country Member Methodology: While the most significant standout for methodology differences was addressed, there are likely others. For example, some countries have data for plantings certified by government authorities for export, but these data do not include new plantings vet to enter production. This is not intentional obfuscation, but an opportunity to align methodology for the report. Peru was a standout example here that was corrected. I believe there are others.
- Regional Contributor Filters: When official data are not reliable, the report team leans on industry experts from the private sector who often focus on plantings in commercial production and/or plantings which compete in the formal

- competitive market. Yunnan China, with an abundance of 'informal' plantings, is a candidate for underreporting in this category and may even represent over half of the
- Private Competitive Concerns: Some companies are working on significant projects in new and existing growing regions where they are eager to keep their activities private at this time. Multiple examples exist in the greater Middle East, North Africa, Brazil, India, China, and rest of Asia,

Other Considerations

Noteworthy is that the majority of the "missing hectares" are intended to serve the new growth markets in EMEA, Asia, and the Middle East and are in most cases not focused on the large market of North America.

These variances are unlikely to have a deleterious impact on tracking trends and the data in the greater scheme of things. The data in this report have always been directional rather than precise. Importantly, I anticipate we will get these issues corrected in the coming years as transparency increases and the industry continues to organize (a hectare can only hide so long).

GLOBAL CULTIVATED TOP 10

Planting and Production Data, Figures & Commentary

(Denominated in Hectares and Thousands of Metric Tons)

2024 Top 10 Cultivated Hectares by Country

#	Country	2021 Hectares	2022 Hectares	2023 Hectares	2024 Hectares
1	China	67,425	80,104	88,626	97,452
2	United States	43,214	42,084	46,709	48,585
3	Peru	19,500	20,000	21,477	25,920
4	Chile	18,802	18,375	18,071	16,000
5	Poland	11,000	11,913	12,594	12,831
6	Canada	12,364	12,034	12,545	11,912
7	Mexico	9,100	11,400	11,970	11,160
8	Spain	4,570	4,810	5,496	5,914
9	Ukraine	5,318	5,500	5,550	5,600
10	Morocco	3,136	3,800	4,300	4,829

2024 Top 10 Cultivated Production by Country (000) MT

#	Country	2021 Production	2022 Production	2023 Production	2024 Production
1	China	350.83	450.15	563.54	698.66
2	United States	328.18	278.14	282.59	354.97
3	Peru	261.73	299.67	233.87	329.60
4	Chile	185.44	166.35	132.33	150.54
5	Spain	73.94	69.19	70.86	77.96
6	Morocco	47.21	56.50	56.05	71.73
7	Mexico	74.20	75.87	71.94	69.40
8	Canada	80.32	76.16	62.80	68.91
9	Poland	55.50	68.50	62.00	66.00
10	South Africa	26.00	30.50	35.00	38.60



Unlock the power of global trade insights with

AGRONOMETRICS GTD



Agronometrics Global Trade Data (GTD) is your key to:







Transform your strategies and make informed decisions at agronometrics.com

2024 Top 10 Cultivated Fresh Production by Country (000) MT

#	Country	2021 Fresh Production	2022 Fresh Production	2023 Fresh Production	2024 Fresh Production
1	China	271.07	349.35	434.87	542.08
2	Peru	243.53	285.58	223.87	318.10
3	United States	177.06	159.68	173.72	200.16
4	Chile	123.04	101.35	86.27	90.54
5	Spain	66.71	62.57	64.38	70.67
6	Mexico	72.70	74.93	70.71	68.83
7	Morocco	44.44	53.51	52.51	68.17
8	Poland	52.50	65.50	59.00	56.00
9	South Africa	24.00	28.00	32.00	34.00
10	Canada	33.29	32.61	33.68	27.83

2024 Top 10 Cultivated Processed Production by Country (000) MT

#	Country	2021 Processed Production	2022 Processed Production	2023 Processed Production	2024 Processed Production
1	China	79.76	100.80	128.67	156.58
2	United States	151.12	118.46	108.87	154.81
3	Chile	62.40	65.00	46.06	60.00
4	Canada	47.03	43.55	29.12	41.08
5	Peru	18.20	14.09	10.00	11.50
6	Poland	3.00	3.00	3.00	10.00
7	Germany	4.20	5.70	5.70	8.20
8	Spain	7.23	6.62	6.48	7.29
9	South Africa	2.00	2.50	3.00	4.60
10	Argentina	4.58	6.50	4.00	4.00

2024 Top 10 Fresh Cultivated Exports by Country (000) MT

#	Country	2021 Exports	2022 Exports	2023 Exports	2024 Exports
1	Peru	-	276.72	209.63	329.09
2	Netherlands	-	117.28	94.53	125.06
3	Chile	-	104.16	80.37	89.06
4	Mexico	-	75.90	83.16	72.42
5	Morocco	-	51.84	49.09	64.92
6	Spain	-	57.69	46.64	54.99
7	United States	-	20.55	23.44	35.24
8	Canada	-	18.83	22.59	27.78
9	Hong Kong	-	20.22	11.16	27.74
10	South Africa	-	26.91	26.31	26.34

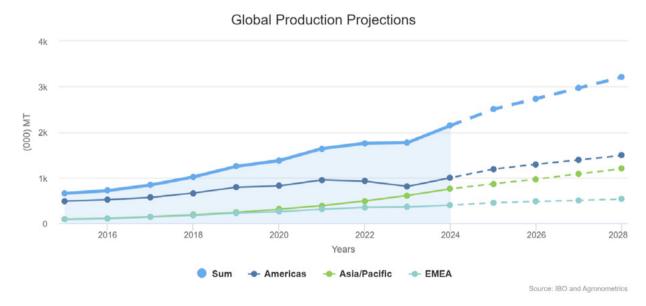
2024 Top 10 Fresh Cultivated Imports by Country (000) MT

#	Country	2021 Imports	2022 Imports	2023 Imports	2024 Imports
1	United States	253.54	289.24	248.26	305.74
2	Netherlands	115.47	149.58	103.70	144.40
3	Germany	62.29	70.72	63.18	81.08
4	United Kingdom	63.39	60.37	58.04	71.80
5	Canada	55.89	51.62	47.03	68.33
6	Spain	33.30	42.77	36.12	43.95
7	China	29.60	42.85	29.59	38.74
8	Hong Kong	27.41	25.39	15.29	32.30
9	Poland	14.25	21.44	18.20	25.43
10	France	13.63	14.27	15.67	22.96

GLOBAL CULTIVATED PRODUCTION FORECAST

Global Cultivated Production Forecast Report Team Narrative

Global Production Forecast



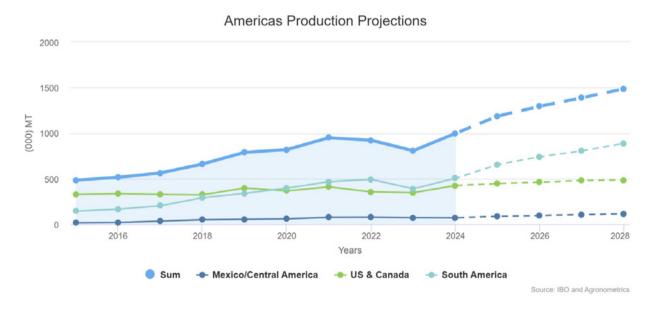
Global blueberry production is forecasted to continue its long established trajectory of growth, with combined fresh and processed output projected to exceed 3.18 million metric tons by 2028. The steady growth observed since 2005 is expected to accelerate further, supported by expanding planted area and improving yields across multiple regions.

- · Americas remain the dominant production region, with volumes forecast to surpass 1.48 million metric tons by 2028. Growth is led by the U.S., Peru, and emerging Latin American suppliers, consolidating the region's position as the backbone of global supply.
- Asia-Pacific continues to show strong expansion, reaching over 1.19 million metric tons by 2028. China is the primary driver, with sustained investment in acreage and production infrastructure fueling steady growth.

• EMEA (Europe, Middle East, and Africa), while smaller in absolute terms, is projected to nearly double production from 2020 levels, exceeding 528,000 metric tons by 2028. Growth in Morocco, Spain, and Eastern Europe underpins this trajectory.

Taken together, these trends reinforce the long-term outlook of structural demand growth supported by expanding global supply. However, while production is forecast to increase significantly, demand is expected to continue growing at a rapid pace, which will place ongoing pressure on producers to scale efficiently. This dynamic highlights the importance of continued investment in new plantings, technology, and supply chain infrastructure to ensure the industry can meet rising global consumption.

Americas Production Forecast



The Americas remain the powerhouse of global blueberry production. By 2028, production across the region is forecast to exceed 1.48 million tonnes, maintaining its role as the backbone of global supply.

In South America, Peru continues to be the primary driver of growth, with steady gains in both planted area and yields. Production is projected to surpass 658,000 tonnes by 2028 in service of all global markets, while Chile is expected to add significantly as new plantings mature, though removals of less competitive fields may offset part of these increases.

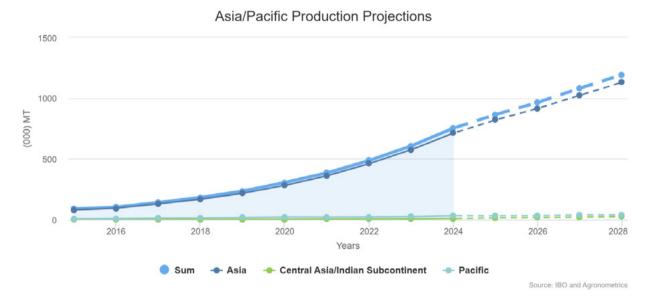
In North America, production is expected to exceed 485,000 tonnes by 2028, led by the western U.S. and supported by

continued stability in Canada. While some origins are projected to level off, the region will remain a cornerstone of global supply.

Mexico and Central America, though smaller in scale, show slowed expansion. Production is forecast to reach around 114,000 tonnes by 2028, with Mexico leading. While strong in the near term, the pace of expansion is expected to moderate as the region matures and faces a series of barriers to scaling (see Mexico section).

Taken together, the Americas are projected to deliver nearly 1.5 million tonnes of blueberries by 2028, underscoring the region's central role in sustaining long-term global supply growth.

Asia/Pacific Production Forecast



The Asia/Pacific region continues to be dominated by China, which remains the key driver of growth. Production is forecast to exceed 1.19 million tonnes by 2028, accounting for the vast majority of output in the region. China's growth has been fueled by rapid increases in planted area, with expansion expected to continue steadily over the next several years.

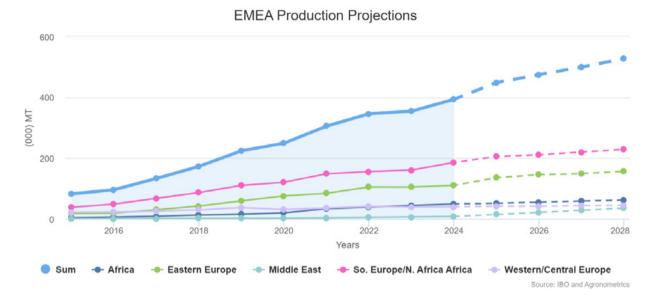
Our model may be over forecasting Asia volumes as China struggles to scale amidst restrictions to land usage and other barriers to sustained growth

In Central Asia and the Indian Subcontinent, production is starting from a small base but is showing considerable relative growth. Output is projected to exceed 24,000 tonnes by 2028, driven mainly by new developments in emerging origins.

The Pacific subregion, led by Australia and New Zealand, is also expected to expand, with production rising to around 37,000 tonnes by 2028. This reflects gradual growth supported by stable planted area and improvements in yields.

Taken together, the Asia/Pacific region is forecast to surpass 1.19 million tonnes of production by 2028. While China continues to dominate, growth across Central Asia and the Pacific underscores the region's increasing importance in the global blueberry industry.

EMEA Production Forecast



Production in the EMEA region is forecast to exceed 550,000 tonnes by 2028, with growth spread across several subregions. While Southern Europe and North Africa have historically led production, other areas are beginning to contribute more significantly to the region's expansion.

- Southern Europe and North Africa remain the largest contributors, projected to reach more than 229,000 tonnes by 2028. Morocco and Spain continue to lead the way, with expanding acreage and strong export orientation.
- Eastern Europe is expected to see steady growth, reaching 157,000 tonnes by 2028, as large areas of new plantings mature, particularly in Poland and other emerging producing countries.
- Africa (outside North Africa) is also showing strong momentum, with production forecast to reach around

62,000 tonnes by 2028, despite fluctuations in South Africa's output.

- Western and Central Europe are expected to remain stable, with modest growth bringing volumes to just over 44,000–45,000 tonnes by 2028.
- The Middle East, though starting from a much lower base, is projected to climbabove 35,000 tonnes by 2028, reflecting rapid expansion in newer producing areas.

Overall, EMEA is set for healthy and diversified growth, with traditional leaders in Southern Europe/North Africa complemented by significant increases from Eastern Europe and Africa. By 2028, these dynamics will further strengthen the region's role as a key pillar of global blueberry supply.

Offering context is crucial to the credibility of any forecast. In the table below we present the values predicted for the 2024 season compared to the actual outcomes recorded.

Globally, the forecast results showed a small variance of just 3.09%, indicating that the methodology provided a strong overall alignment with actual production. The largest discrepancy was observed in the Americas, where production was underestimated by 6.6%, reflecting stronger than expected growth in several producing countries.

The Asia/Pacific region was the only area where forecasts slightly overshot production, with a positive error of 1.5%. This suggests that while data quality in the region has improved, forecasting remains sensitive to local variations in growth and supply conditions.

The EMEA region once again demonstrated reliable forecasting with an error margin of only 3.2%, underscoring the region's stability and the robustness of the data used for projections.

As in previous years, most regional errors were negative, meaning the methodology tended to under forecast actual production. This conservative bias reflects both the inherent unpredictability of agricultural production and the challenges of accounting for shifting weather patterns, logistics, and market dynamics. Nonetheless, the relatively small global variance underscores the continuing improvement of our forecasting methodology.

Geography	2024 Forecast (000) MT	2024 Results (000) MT	% Error
Global	2098.764644	2165.860521	-3,0978854
Americas	930.1723057	996.428698	-6,6493862
Asia/Pacific	787.6286442	775.899823	1,51164117
EMEA	380.9636942	393.532000	-3,1937189



Peruvian Price Quality Index for Blueberries

Quantifying the bifurcation of prices between **premium** and standard fruit for Peruvian exports as measured at FOB origin

Download the full report FREE at agronometrics.com



What's Inside

- Quality Defines Value Premium berries are earning more
- Strategic Insights for Exporters
 Guide smarter export decisions
- Growing Market Bifurcation
 Price split by quality is growing
- Data-Driven Transparency
 Objective and unbiased results

This report is made freely available thanks to the generous support of our sponsors

Headline Sponsors





Featured Sponsors



Want to support this effort and access exclusive data? Learn more here

AMERICAS

AMERICAS

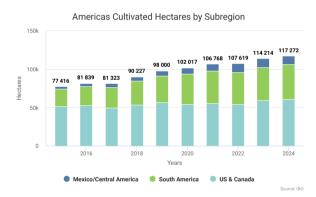
Planting and Production Data, Figures & Commentary

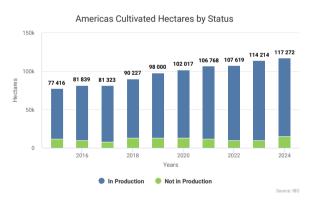
(Denominated in Hectares and Thousands of Metric Tons)

Americas Cultivated Hectares by Subregion

Americas		Hed	ctares Plante	2024 Production (000) MT				
Growth Totals	2020	2021	2022	2023	2024	Fresh	Process	Total
South America	40,162	42,047	42,055	42,942	45,565	426.93	75.78	502.71
US & Canada	53,915	55,578	54,118	59,254	60,497	227.99	195.89	423.88
Mexico/Central America	7,940	9,143	11,446	12,018	11,210	69.28	0.57	69.85
Americas Totals	102,017	106,768	107,619	114,214	117,272	724.20	272.24	996.44

Source: IBO

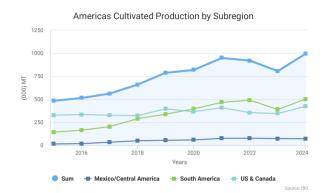


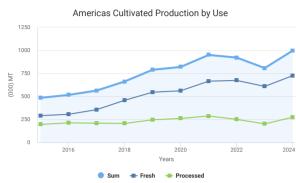


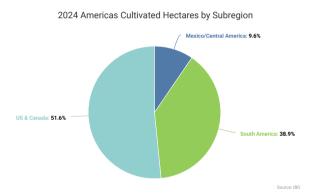
Americas Cultivated Production by Subregion(000) MT

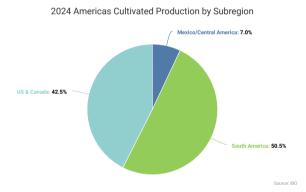
Americas		2022		2023			2024		
Productions Totals	Fresh	Process	Total	Fresh	Process	Total	Fresh	Process	Total
South America	404.30	85.81	490.11	328.58	60.28	388.86	426.93	75.78	502.71
US & Canada	192.29	162.01	354.30	207.40	137.99	345.39	227.99	195.89	423.88
Mexico/Central America	75.25	0.94	76.19	71.06	1.23	72.29	69.28	0.57	69.85
Americas Totals	671.84	248.76	920.60	607.04	199.50	806.54	724.20	272.24	996.44

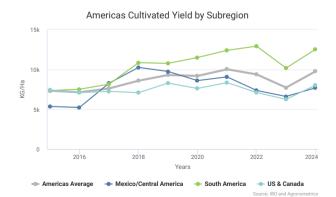
Source: IBO











Americas 2024 Production Metrics

Hectares Planted:	117,272 Ha
Hectares in Production:	102,079 Ha
Production:	996.44 (000) MT
Growth in Production ¹ :	▲189.90 (000) MT (23.55%)
Growth from Hectares ² :	▼-3.74 (000) MT (-1.97%)
Growth from Yield ³ :	▲193.62 (000) MT (101.96%)
Yield:	9,761.37 (Kg/Ha)
	Source: IBO and Agronometrics

¹ Volume change compared to previous season

² Change in volume due to hectares entering or leaving production

SOUTH AMERICA

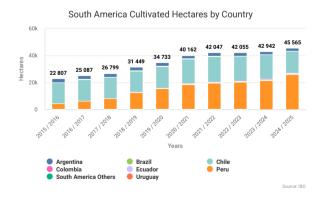
Planting and Production Data, Figures & Commentary

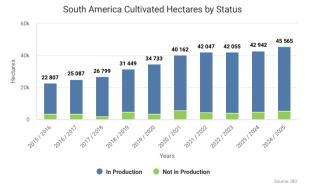
(Denominated in Hectares and Thousands of Metric Tons)

South America Cultivated Hectares by Country

South America	ca Hectares Planted						Production (0	00) MT
Growth Totals	2020/2021	2021/2022	2022/2023	2023/2024 2024/2025		Fresh	Process	Total
Peru	18,381	19,500	20,000	21,477	25,920	318.10	11.50	329.60
Chile	18,185	18,802	18,375	18,071	16,000	90.54	60.00	150.54
Argentina	2,515	2,500	2,300	2,100	2,100	5.90	4.00	9.90
Colombia	500	600	600	625	700	7.86	0.11	7.97
Ecuador	120	185	320	325	400	3.30	-	3.30
Uruguay	241	240	240	124	185	0.61	0.17	0.78
Brazil	220	220	220	220	260	0.62	-	0.62
South America Totals	40,162	42,047	42,055	42,942	45,565	426.93	75.78	502.71

Source: IBO



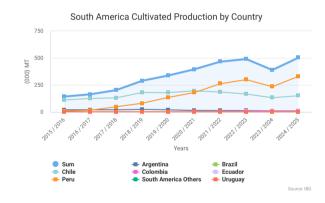


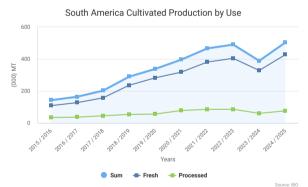
³ Change in volume due to field productivity (yields)

South America Cultivated Production by Country(000) MT

South America	America 2022/2023				2023/2024		2024/2025		
Productions Totals Fresh		Process	Process Total		Fresh Process Total		Fresh Process		Total
Peru	285.58	14.09	299.67	223.87	10.00	233.87	318.10	11.50	329.60
Chile	101.35	65.00	166.35	86.27	46.06	132.33	90.54	60.00	150.54
Argentina	6.28	6.50	12.78	6.40	4.00	10.40	5.90	4.00	9.90
Colombia	7.46	0.20	7.66	8.36	0.11	8.47	7.86	0.11	7.97
Ecuador	2.78	-	2.78	2.78	-	2.78	3.30	-	3.30
Uruguay	0.25	0.02	0.27	0.43	0.11	0.54	0.61	0.17	0.78
Brazil	0.60	-	0.60	0.47	-	0.47	0.62	-	0.62
South America Totals	404.30	85.81	490.11	328.58	60.28	388.86	426.93	75.78	502.71

Source: IBO

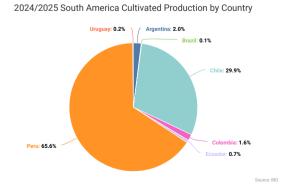






Colombia: 1.5% Ecuador: 0.9%

2024/2025 South America Cultivated Hectares by Country





Hectares Planted:	45,565 Ha			
Hectares in Production:	40,128 Ha			
Production:	502.71 (000) MT			
Growth in Production ¹ :	▲113.85 (000) MT (29.28%)			
Growth from Hectares ² :	▲21.37 (000) MT (18.77%)			
Growth from Yield ³ :	▲92.47 (000) MT (81.22%)			
Yield:	12,527.66 (Kg/Ha)			
Exports:	421.96 (000) MT			
Imports:	3.28 (000) MT			
	Courses IDO and Agrenometries			

Source: IBO and Agronometrics

South America Exports by Partner Subregion (000) MT

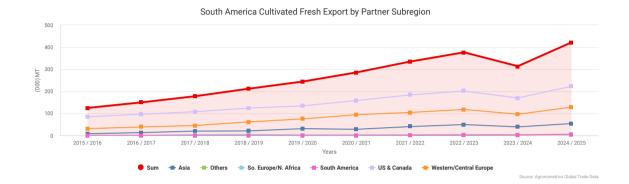
South America Cultivated Yield by Country

Subregion	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025
US & Canada	158.46	183.79	201.26	170.17	223.15
Western/Central Europe	94.28	104.37	118.01	96.17	128.35
Asia	28.04	40.36	49.62	39.07	54.05
So. Europe/N. Africa	2.92	3.23	4.28	3.30	6.10
South America	0.52	1.28	1.60	2.64	4.86
Others	1.56	1.94	2.04	2.67	5.44
South America Totals	285.79	334.95	376.81	314.02	421.96

Source: Agronometrics Global Trade Data

¹ Volume change compared to previous season

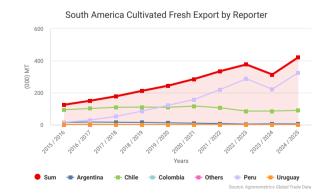
² Change in volume due to hectares entering or leaving production ³ Change in volume due to field productivity (yields)

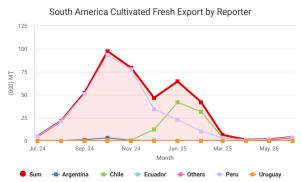


South America Exports by Reporter (000) MT

Subregion	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025
Peru	157.79	220.24	287.34	221.83	325.91
Chile	116.62	106.17	85.18	85.71	89.90
Argentina	9.84	7.59	3.96	5.83	5.12
Uruguay	0.94	0.56	0.19	0.30	0.28
Ecuador	0.00	0.00	-	0.02	0.74
Others	0.60	0.38	0.14	0.32	0.01
South America Totals	285.79	334.95	376.81	314.02	421.96

Source: Agronometrics Global Trade Data





South America Report Team Narrative

For an in-depth review of the leading producing countries of South America, please see the individual reports including official country member reports and IBO Report Team narratives for:

- Peru
- Chile
- Argentina

As Ecuador and Colombia now have nascent blueberry industries, the IBO team has collected the following information to complement the South America narrative.

While Colombia's blueberry industry has technically been in existence since the 1980s, it has really been just a decade since a more meaningful growth spurt started to be seen, motivated by export opportunities in world markets that back in 2014 were offering enormous premiums during shoulder periods of supply. What transpired instead was the unexpected development of a buoyant domestic market that still seems very far from reaching any kind of ceiling amongst a population of more than 50 million people. One source estimates that growers are moving 150MT of fresh blueberries through supermarkets each week during the season, and a further 50-80MT in the more informal, open markets that are common throughout the country. This is further supplemented by imports, predominantly from Peru, which more than doubled in 2024 to 902MT, having tripled the year before.

The informal markets are where consumers are most likely to see 125g packs, which used to be the industry standard, but Colombian supermarkets are increasingly merchandising 250g and 500g packaging of fresh blueberries, and the small

portion of the industry that is dedicated to proprietary genetics is seeing a degree of premiumization, particularly with jumbo-sized berries.

Unlike the South American sector's northward push into Peru that relied on low-chill genetics along the coast, the international ventures from Chile, the U.S. and elsewhere that entered Colombia have planted between 2,600-3,000 meters above sea level, under the moniker of 'tropical blueberries at altitude'. The growing systems are more reminiscent of Central Mexico no-chill evergreen production but without the punctuation of seasonality. There are approximately three peaks in production, the first and largest being in November-December, then May-June, and again in September. Whilst a decade ago there was talk of ambitions to increase plantings to more than 2,000 hectares, as of today the total surface area for the crop is sub-1,000ha.

Most of this production sits in the mountainous plains of Boyacá and Cundinamarca to the north of Colombia's capital Bogota, where very little difference in daylight hours throughout the year allows for pruning to induce production as desired by farm managers. It is a challenging region to produce in however, with growers needing to contend with cold. rainv nights and warm days.

Some of country's largest blueberry growers are affiliated with sophisticated floriculture companies with expertise and infrastructure geared toward the distribution and export of perishable products. As such, and because of hail and rain in the main growing region, the majority of these operations are under tunnel-style greenhouses. "10 years ago it was all planted directly into the soil, but new crops are all in substrate," notes one industry source.

As in many nascent industries, there is a predominance of the Biloxi variety, followed by Emerald, Legacy and Victoria – cultivars that are increasingly falling out of favour with retailers; growers would rather plant other cultivars, but there are long backlogs in the order books of nurseries that propagate material for newer genetics. Companies affiliated with large blueberry companies or breeders from the U.S., Chile, Spain and Australia are producing limited volumes of proprietary genetics, with varying degrees of progress between trials and commercial plantings depending on the program. A complex variety registration process further delays the introduction of new genetics.

Also like many emerging industries, it is not necessarily a given that Colombia's future blueberry sector will be as concentrated within its current geographic location. A leading Colombian nursery and grower, which supplies both open varieties and works with a premium Australian genetics program, notes the limitations of the 'Cundiabovacense' high plains in finding large contiguous tracts of land, and the proliferation of smallholder farming operations. It is estimated that around half the total plantings in Colombia is represented by farms that are just 1-5ha in size, while the other half is mostly for operations

of 10-20ha, although there have been reports of larger farms that are either planted or planned for the near future.

Trials are currently taking place in the Cauca Valley in Colombia's southeast, a region known for having sugarcane farms, and in the central area of the Ibague Plateau in Tolima, a rice-growing area with similar temperatures and humidity to Trujillo in Peru, although with more rain. The structure of landholdings in these regions lends itself more to larger tracts of 50-100ha or more if trials prove successful, although one challenge that is expected – due to their lower altitudes – is higher pest pressures. Another existing growing area, Antioquia, also a mountainous region, currently has very small plantings of the Emerald variety, but there is increased interest for more premium, closed varieties with royalties, including from avocado growers who want to diversify their crops.

As domestic blueberry demand continues to grow, the industry still has its sights set on export for the longer term, and the aforementioned development of premium varieties and the integration of larger pack sizes sets up a distribution readiness for global programs as the sector grows. The country aims to execute a systems approach for its main market, the U.S., with select growers currently undergoing monitoring and testing to deliver on this ambition. Currently the protocol options for shipping to the USA are either the less preferred methyl bromide treatment on arrival, or cold treatment in transit for 14 days. In 2023 there was a breakthrough with industry representatives advised that the U.S. had approved a systems approach, but it was expected this would take two years to be implemented. At the time of writing this milestone has not yet been reached, but if it is, it will pave the way for a potential seven-day timeframe from harvest to arriving in the ports of Florida. Even with the current limitations. Colombia's fresh blueberry exports jumped by three-quarters in 2024,

with the vast majority shipped to the USA. The largest volumes tend to be shipped between October and February, but peak shipments are not consistent, going from January in the 2023-24 to November in 2024-25, most likely reflecting the selective, niche nature of the exports in question. In 2023 market access was gained for the Canadian market, where the first trial shipments were sent in early 2024, but at the time of writing this has not advanced any further. The industry has historically also exported small quantities to neighboring Panama, and further afield to Saudi Arabia. Kuwait and Thailand.

Ecuador

Ecuador's industry is much younger, having begun in 2015 with its production spread along the Andes Mountains in various locations on both sides of the equator. There are also trial plantings in coastal areas such as Santa Elena. Manabi and El Oro; the latter two being more often associated with Ecuador's world-leading banana export sector. Like Colombia. Ecuador is able to produce blueberries year-round, and it has a nascent export industry although most fruit is sold domestically.

Around 95% of volume from Ecuador's estimated plantings are currently concentrated in the Andes, and most of those plantings are still very young. Both Ecuadorian and multinational companies are conducting trials and tests with new varieties with the goal of meeting demand in overseas markets. One of these is a large, European fruit company that is conducting trials closer to the port city of Guayaquil, experimenting with pruning and other agronomic techniques to determine best practice for having production twice a year, targeting both the domestic and U.S. markets.

Brazil

As South America's largest country with rich agricultural traditions and a sizable upper middle class with high purchasing power, it is logical that Brazil would develop its own domestic blueberry industry and market, although on both fronts it is well short of its potential. A leading South American breeder. producer and marketer has had a presence cultivating berries in the state of Minas Gerais, although the focus from a production standpoint has not been blueberries. Two companies have reported working with growers who have serious intentions for planting in the northern state of Petrolinas, known for its table grapes, with at least one trial underway.

As a market, Brazil's fresh blueberry imports rose by 28% to 1,643MT in 2024, which for the sake of context is similar to the figures reported by Thailand. Peru is by far the leading supplier followed by Chile and Argentina, while neighbouring Uruguay and Spain across the Atlantic also shipped small volumes. Prices have tended to track above global averages.

GENERATIONS OF SWEETNESS













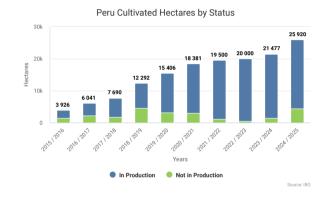


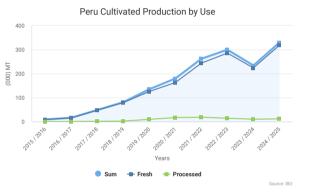
Wish Farms is a fourthgeneration, family-operated company founded in 1922, dedicated to quality, integrity, and exceptional service. As global demand for premium blueberries continues to rise, we're excited to partner with growers around the world to bring the best berries to market

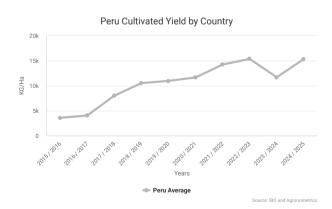


Planting and Production Data, Figures & Commentary

(Denominated in Hectares and Thousands of Metric Tons)







Peru 2024/2025 Production Metrics

Hectares Planted:	25,920 Ha
Organic:	13.00%
Under Structure:	Not Reported
Hydroponics:	Not Reported
New Genetics:	Not Reported
Hectares in Production:	21,477 Ha
Production:	329.60 (000) MT
Growth in Production ¹ :	▲95.73 (000) MT (40.93%)
Growth from Hectares ² :	▲17.27 (000) MT (18.04%)
Growth from Yield ³ :	▲78.46 (000) MT (81.96%)
Yield:	15,346.65 (Kg/Ha)
Exports:	325.91 (000) MT
Imports:	0.00 (000) MT

Source: IBO and Agronometrics

¹ Volume change compared to previous season

² Change in volume due to hectares entering or leaving production

³ Change in volume due to field productivity (yields)

Peru Cultivated Fresh Exports by Partner (000) MT

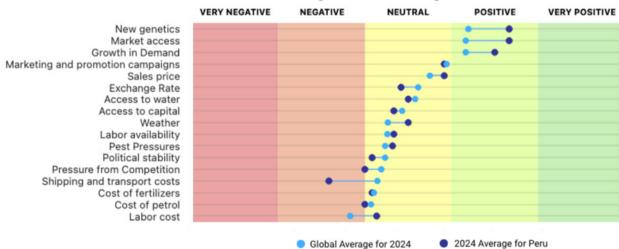
Reporter	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025
United States	84.69	120.96	154.91	124.83	178.22
Netherlands	42.09	51.25	71.06	46.93	72.80
Hong Kong	6.11	16.73	13.67	10.38	25.08
United Kingdom	10.41	12.66	14.31	13.14	15.92
China	9.29	10.91	23.64	16.00	14.48
Others	5.21	7.72	9.76	10.55	19.40
Peru Totals	157.79	220.24	287.34	221.83	325.91

Source: Agronometrics Global Trade Data



Factors Impacting Bluberry Production in Peru in 2024

Peru 2024 Average Vs Global 2024 Average for Each Factor





Peru Country Member Summary

Adapted from a Report by the Peruvian Blueberry Growers & Exporter Association, ProArándanos

2024 has been a challenging year, but also full of significant achievements for the blueberry industry in Peru. Despite the challenges arising from a campaign that started later than usual and with a significant concentration of exportable volume in the last months of the year, which generated logistical and market challenges, our industry has once again demonstrated its resilience and ability to adapt.

Peru continues to lead the world in exports of fresh blueberries, with a significant growth of 40% in volume exported compared to the previous year, reaching more than 300,000 metric tons (MT). This result strengthens our presence in international markets and forces us to continue working to care for and promote the image of Peruvian blueberries as a high-quality, sustainable product from an industry committed to social welfare.

Blueberry exports have seen significant growth in the last decade. This growth – in both volume and monetary value – has been possible thanks to the professionalism of the agricultural operations of the Peruvian industry, phytosanitary care and the opening and improvement of access to international markets, among other factors.

On the one hand, in terms of volume Peru went from exporting a total of 27,000MT in the 2016-2017 campaign to more than 318,000MT in the 2024-25 campaign, as can be seen in graph 1. This volume represents a 40% increase year-on-year, and an increase of 11% compared to the 2022-2023 campaign.

The compound annual growth rate in exported volume between 2016-17 and 2024-25 was 40%. On the other hand, in monetary terms, during this decade the freight on board (FOB) value of our exports went from US\$232 billion in the 2016-2017 campaign, to almost US\$2.1 billion in the 2024-25 campaign (see graph 1). The annual growth rate of FOB value during this period was 27%. In terms of growth, compared to last season, the value of exports grew by around 13%.



TOMRA Blueberry Solutions: Precision at Every Stage

TOMRA's comprehensive infeed, classification, filling and packing solutions are tailored specifically for the blueberry industry. Our advanced solutions are equipped with the latest technologies to meet your unique processing requirements—helping you deliver premium-quality blueberries to your customers.

Service and Support

Our service and support teams will be there when you need us.

LUCAi™ - Consistent Quality, Season After Season

TOMRA's deep learning software takes the guesswork out of grading.

Developing for the future

Developing new solutions to meet your future demands



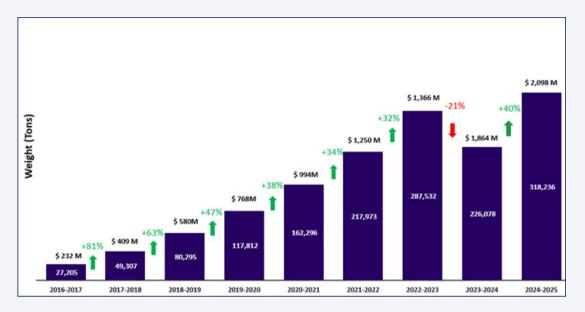
Supporting blueberry packers and growers today, and tomorrow

The result?

The right product, in the right pack, every time—no matter how the season unfolds.



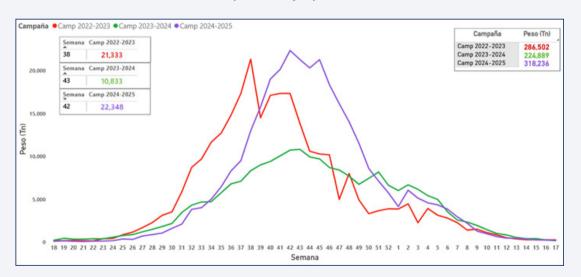
Graph 1: Evolution of Peruvian blueberries by campaign



Source: SENASA and Veritrade | Elaborated by Prorandanos

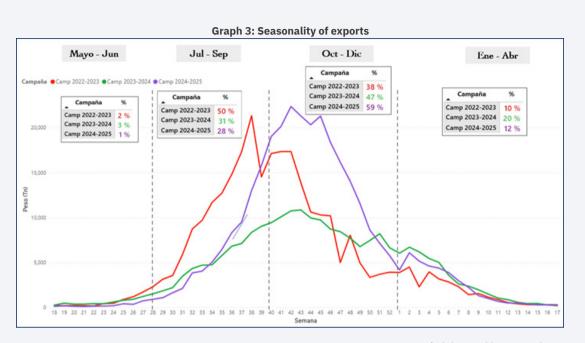
Weekly export performance of the past 3 campaigns

Graph 2: Weekly export curve



Source: SENASA | Elaborated by Prorandanos

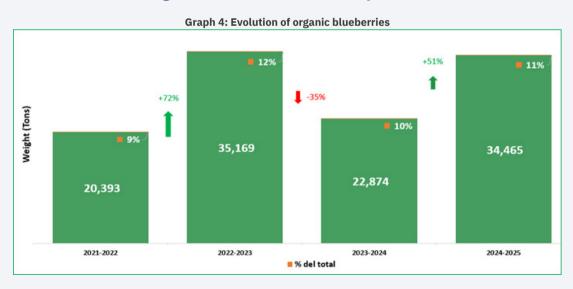
The peak of the 2024-25 campaign occurred in Week 42 with a total of 22,348MT - 106% more than the 2023-24 campaign, and 4% more than the peak of the 2022-2023 campaign.



Source: SENASA | Elaborated by Prorandanos

Likewise, the current campaign was characterized by concentrating 59% of the total volume exported in the months of October to December, unlike the last and previous one where between 47% and 38% of the total volume was concentrated in these months. An unusual fact that should be noted about this campaign is that for 9 consecutive weeks (between 39 and 47), the exported volume was above 15,000MT, an event that had only happened in 2 weeks in the 2022-23 season. Moreover, the accumulated volume between these weeks represents approximately 54% of the campaign's total volume (see graph 3).

Evolution of Peruvian organic blueberries over the last 4 years



Source: Peruvian exporters | Elaborated by Prorandanos

Unlike the sustained growth that blueberry exports have had, without distinction, the situation for organic blueberries has been more variable with both increases and declines. In 2024-25, it experienced a growth of 51% compared to the previous season (see graphs 4 and 5).

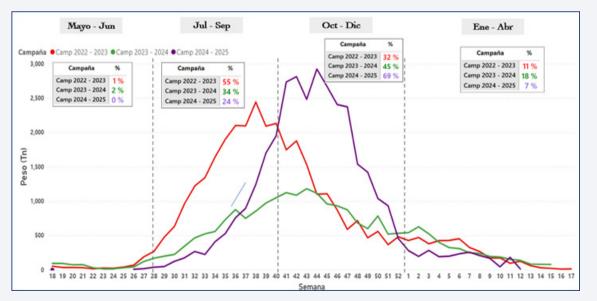
As for the peaks reached, in 2024-25 a record volume of almost 3,000MT was reached in week 44 (see graph 5). This represents 2.5 times the peak volume of the previous season, but 20% more than the 2023-24 campaign.



Graph 5: Weekly organic blueberry export curve

Source: Peruvian exporters | Elaborated by Prorandanos

It should also be noted that 69% of the total volume of the campaign was concentrated in the last quarter of 2024, well above the 45% and 32% recorded for the previous two campaigns (see graph 6).



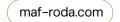
Graph 6: Seasonality of organic blueberry exports

Source: Peruvian exporters | Elaborated by Prorandanos

New BerryQS High precision, intuitive use

The new generation of Al-powered quality software for Berryscan G7. More visual and easy-to-use.











Main export markets for 2024-25 Peruvian blueberry campaign

The United States continues to be the main destination for Peruvian blueberries, capturing 55% of the volume exported to date. It is followed by Continental Europe with 24%, China with 14%, the United Kingdom with 5%, and the rest of the world with 4% (See Table 1). It is worth mentioning that, in the current campaign, Peru has shipped to 33 destinations in the world, one more than last season, which reflects the continuous effort in market diversification.

Table 1: Exports by destination











	Estados Unidos	Europa	China	Reino Unido	Otros
Peso(Tn)	173,197	75,730	37,108	15,873	13,582
Participación %	55%	24%	12%	5%	4%
Var. % vs 2023-24	41%	52%	41%	17%	64%

Source: SENASA | Elaborated by Prorandanos

Blueberry producing and exporting regions

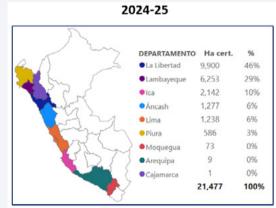
Table 2. Share of exports by region of origin

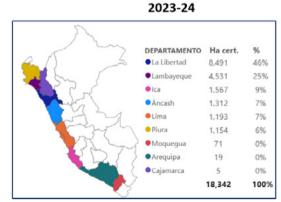
rable in that to expert by region or origin									
Región	La Libertad	Lambayeque	lca	Lima	Ancash	Piura	Moquegua	Arequipa	
Peso(Tn)	164,647	70,421	34,595	21,946	18,508	7,303	638	177	
Participación %	52%	22%	11%	7%	6%	2%	0%	0%	
Var % vs 2023-24	40%	74%	33%	34%	6%	12%	15%	32%	

Source: SENASA| Elaborated by Prorandanos

Five regions account for 98% of total exported production. La Libertad remains the leader, producing a little more than half of the volume exported in the current campaign, followed by Lambayeque with 22%, Ica with 11%, Lima with 7%, and Ancash with 6%. It should be noted that the 8 exporting regions experienced export volume compared to last season, with Lambayeque being the region with the highest growth (see Table 2).

Table 3: Share of certified hectares by region





Source: SENASA| Elaborated by Prorandanos

As for the number of certified hectares, in the 2024-25 campaign more than 21,000 hectares were certified for export throughout Peru, showing growth of 17% compared to last season. (see Table 3). La Libertad continues to be the region with the largest number of hectares, with about 50% of the total, followed by Lambayeque and Ica with 29 and 10 percent respectively.

Blueberry varieties

Table 4: Certified hectares by variety (Top 20)

Variedad	Ha. cert. 2024-25	Part. % 2024-25	Ha. cert. 2023-24	Part. % 2023-24	Var. vs 2023-24	Var. % vs 2023-24	Rank
Ventura	5,355	25%	5,085	28%	270	5 %	1
Sekoya Pop	3,329	16%	1,879	10%	1,450	77 %	2
Biloxi	3,302	15%	3,717	20%	-414	-11 %	3
Rocio	1,326	6%	1,264	7%	62	5 %	4
Magica	1,039	5%	651	4%	388	60 %	5
Atlasblue	836	4%	882	5%	-46	-5 %	6
Emerald	825	4%	922	5%	-97	-11 %	7
Sekoya Beauty	734	3%	466	3%	267	57 %	8
Rosita	641	3%	179	1%	463	259 %	9
Eureka Sunrise	390	2%	278	2%	113	41 %	10
Raymi	386	2%	182	1%	203	112 %	11
Madeira	362	2%	170	1%	191	112 %	12
Biancablue	322	2%	158	1%	165	105 %	13
Kirra	256	1%	210	1%	46	22 %	14
Imperial	225	1%	63	0%	162	258 %	15
Kestrel	193	1%	252	1%	-59	-23 %	16
Arana	189	1%	191	1%	-2	-1 %	17
Eureka	166	1%	179	1%	-13	-7 %	18
Matias	154	1%	209	1%	-54	-26 %	19
Abril Blue+	154	1%	144	1%	11	7 %	20
Otros	1,291	6%	1,261	7%	30	2 %	21
Total	21,477	100%	18,342	100%	3,134	17 %	1

During the 2024-25 campaign a total of 73 different blueberry varieties were certified- eight more than last season. Likewise, as can be seen in table 4, the varieties that grew the most compared to last season were Sekoya Pop with 1,450 hectares more certified than last season, Rosita with an extra 463 hectares, and Mágica with an additional 388 hectares. On the other hand, the varieties that decreased the most in certified hectares were Biloxi and Emerald, with 414 and 97 hectares less than the 2023-24 campaign respectively. It should be noted that the first 9 varieties in Table 4 account for 80% of the total hectares certified, unlike the 2023-24 campaign in which 7 varieties accounted for 80% of the campaign.

Peru **Report Team Narrative**

After a supply shock caused by El Niño in Peru that upended global blueberry markets in 2023 and led to extraordinary windfalls for the country's less-affected growers, and the ripple effects felt in 2024 as producers delayed the pruning of bushes to capitalize on ongoing shortages at the start of that year - thus prompting another delayed start to the season the world's largest blueberry exporting nation appears to be back on a growth trajectory that has reshaped the industry over the past decade. Younger orchards are set to mature and bring on renewed volume growth, and despite various headwinds there remains an appetite for varietal conversion and new plantings.

Accounting for 31% of global fresh blueberry exports last year, Peru's influence continues to loom large over the industry, creating challenge and opportunity, providing markets with levels of supply and product consistency that can drive the rhythm of consumption to new heights, but where diversions from expectations can leave markets either begging for more or crashing abruptly. As one stakeholder noted, "If Peru coughs the whole world gets sick, or benefits, depending on how you look at it."

Peru's export volume rebound in 2024 was anticipated, although a later start proved inconvenient to marketers and retailers who had to wait until late September for volume to be at comparable levels to the previous 'normal' season in 2022. While the most frequent comments around the 2024 season tend to concern Peru's lateness and the price declines later in the season with volume concentration between October and December (representing 65% of total volume, compared to 51% in 2023 and 45% in 2022), the most remarkable statistic relates to just how sustained Peru's high volumes were, and how well the market absorbed them with pricing that held up relatively well versus historical averages.

In 2022, Peru recorded one single week in September when weekly supply crossed the 20 million-kilogram mark, whereas in 2024 this milestone was achieved for five consecutive weeks in October and November, out of 10 consecutive weeks when weekly supply was at 15 million kg or higher. This "mountain of supply" was unprecedented for Peru, yet the average price paid versus 2022 was significantly higher in October, and remained just higher in November and December (although in the last two months of the year average prices weren't as high as in 2021). Amidst shorter supply periods in 2024, the average price paid for Peruvian blueberries was more than 50% greater in September against 2022 and even higher than the El Niño year of 2023, which can be said for all of the very early-season Peruvian fruit in 2024.

This performance reflects robust and growing demand for blueberries in 2024, which must also be credited to the promotional efforts of the industry, particularly in Peru's largest market the USA which accounted for 55% of the country's exports. Some stakeholders also credit this outcome to the aggressive varietal shift to superior genetics that has been taking place in Peru, with its previously more dominant open varieties of Biloxi and Ventura diminished in terms of their share of hectarage to levels of 16% and 26% respectively (down from 20% and 28% in 2025, and a combined 72% share as recently as 2020). Ventura especially proved susceptible to extreme temperatures during the El Niño event, but this doesn't appear to have hastened the rate of replacement rate beyond how it was already tracking. One grower emphasised continued demand for these two varieties provided their volumes are consistent and meet certain specifications, but even they are gradually substituting to other genetics, both through their own plans and at the behest of certain retailers. Overall the consensus is that an improved average quality achieved through proprietary genetics, including more jumbo sizing and better firmness and flavor, has played a role in lifting the sector.

Europe is Peru's second-largest market, receiving a volume that is just over half of what the USA imports, with a growth rate of 44% that was higher than the USA and China which both recorded growth of 41%. Shipments to Europe are much more heavily skewed towards the October-December period which represented 70% of its arrivals in 2024. But in Europe it has been reported that the volatility of Peruvian supply has led to more attempts to diversify sourcing from other origins such as Southern Africa.

Peru is diversifying too, in many forms including its markets, varieties, geographies for production, and timing. The USA is expected to remain the cornerstone market for Peruvian blueberries, but growers have long held the desire to divert

a greater share of volume to China, which has a track record of paying handsomely for earlier season fruit of high quality. While in Europe and the USA around a fifth of Peru's blueberries were received between July and September, in China the share for this period was closer to a third and historically has been more like half. Between a combination of maturing orchards, some earlier varietal replacement, pruning decisions, and to a certain degree geographical selection in Peru, at the time of writing Peru is expected to prioritize earlier production. In the absence of any market shocks in China or field-level shocks in Peru, this should see China start to represent a greater share of total volume in the years to come. Regarding overarching market development objectives, furthering the share of China helps alleviate some of the pressure on the USA and Europe as well, with the industry being highly cognisant of the importance of promotion to lift demand so that increased volumes can continue to be absorbed at prices that generate an attractive return in Peru. At the time of writing it is yet to be seen what impact the US tariff situation will have on demand or pricing (or if a 10% tariff on Peruvian fruit will remain), but this trade barrier is largely seen as yet another imperative to promote, promote, promote.

Peru also continues to increase its presence in multiple Asian markets, including India where it has seen a reduction in tariffs, but numbers are still fairly small given the distance to market. There is a high degree of optimism around the Chinese-backed port of Chancay north of Lima, which reduces the shipping duration to Asia and opens up new opportunities to other markets. "I consider it to be a logistical game changer," says one source. "10 days saved in transit time makes it almost the same as going to Philadelphia or Rotterdam or Shanghai. It reduces the risk."

This may have consequences for other destinations like Thailand, a growing market where Peru already dominates, and Indonesia and Vietnam where Peru is negotiating market access, in addition to Japan. Within Latin America, Peru does not have access to Argentina but is growing its exports — off low bases — to Brazil, Colombia, Chile, and indeed its own domestic market. However, the sheer size of Peru's crop renders such market developments as relatively insignificant in the greater context of the industry. Also off a low base, exports to

the Middle East increased almost 10-fold between 2022 and 2024, although to levels still short of the industry's exports in South America.

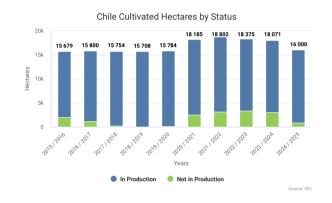
Peru has also significantly changed the make-up of where its blueberries are grown. Compared to 2016 when the northern department La Libertad accounted for 90% of the surface area dedicated to the crop, that share has fallen to 47%, although this belies considerable growth in La Libertad which has increased almost six-fold in that time. The reason its overall share decline stems from growth elsewhere, such as in the department to its north of Lambayeque (particularly the Olmos irrigation district) which now constitutes 27% of Peru's blueberry hectares, and Ica in the south at 10%. Production has increased substantially in Lima which has retained its 6% share, while Ancash to its north has come from having almost no production a decade ago to representing 6% of Peru's industry. Even though agronomic techniques can have sway on production windows, the northerly push that has been observed likely implies earlier production as growers seek export opportunities in shoulder periods of supply, which will have ramifications for southern African exporters who have been doing the same thing. Further south in departments like Lima there was less impact on crops in 2023 from the El Niño event. Growth in the south has been influenced by that circumstance, as well as the fruit quality profile achieved with the cooler nights and warmer days common during the season in regions such as Ica, Chincha, and Pisco.

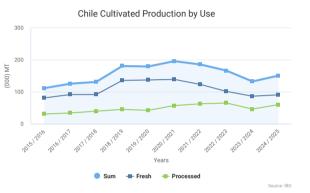
Diversifying timing is critical for multiple reasons. A glimpse of the industry's ambition to reduce the intensity of season peaks was seen last year in the form of multiple, consecutive high-volume weeks rather than one short spike, but the goal is to spread out supply much more. One industry representative claimed the biggest challenge in 2024 for Peru was logistics, because a very strong volume in the last three months of the year coincided with the country's table grape crop. The overlap caused logistical stress and congestion at the Port of Callao in Lima, although the opening of Chancay may have helped somewhat, and the situation was exacerbated by port strikes in the USA. The escalating concern of limits to labor availability coming in Peru has further prompted the need to spread the crop over a more extended period.

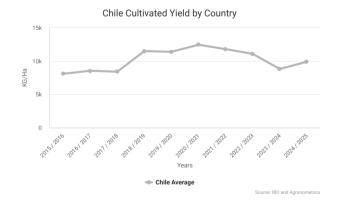


Planting and Production Data, Figures & Commentary

(Denominated in Hectares and Thousands of Metric Tons)







Chile 2024/2025 Production Metrics

Hectares Planted:	16,000 Ha
Organic:	23.00%
Under Structure:	Not Reported
Hydroponics:	Not Reported
New Genetics:	35.00%
Hectares in Production:	15,200 Ha
Production:	150.54 (000) MT
Growth in Production ¹ :	▲18.21 (000) MT (13.76%)
Growth from Hectares ² :	▲1.76 (000) MT (9.69%)
Growth from Yield ³ :	▲16.44 (000) MT (90.27%)
Yield:	9,903.95 (Kg/Ha)
Exports:	89.90 (000) MT
Imports:	0.01 (000) MT
	Source: IBO and Agranamatrics

Source: IBO and Agronometrics

¹ Volume change compared to previous season

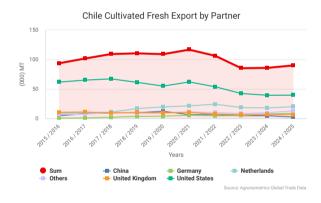
² Change in volume due to hectares entering or leaving production

³ Change in volume due to field productivity (yields)

Chile Cultivated Fresh Exports by Partner (000) MT

Reporter	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025
United States	61.88	53.68	42.30	39.33	39.49
Netherlands	21.39	24.09	18.53	17.77	20.01
Germany	5.45	4.48	4.83	7.54	8.75
United Kingdom	10.31	7.31	6.44	6.74	6.32
China	6.35	6.83	4.75	4.62	2.40
Others	11.22	9.79	8.33	9.71	12.93
Chile Totals	116.62	106.17	85.18	85.71	89.90

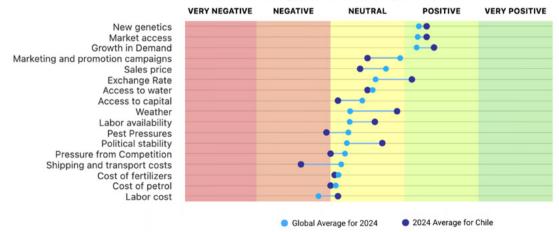
Source: Agronometrics Global Trade Data





Factors Affecting Global Production in Chile in 2024







Chile Country Member Summary

Adapted from a Report by the Chilean Blueberry Committee, ASOEX

Chilean fresh blueberry exports grew by 5%, driven by a 50% growth in new varieties

Fresh blueberry shipments during the 2024-25 season ended with more than 90,000 metric tons (MT), reflecting a 5% increase compared to last season, ending a downward trend from previous seasons. The most relevant fact is not the growth itself, but that it was due to the growth of new varieties in the total shipments. The volume of these varieties increased by 50% compared to last season and accounted for 21% of the exports.

This season clearly illustrates the adaptation work that the Chilean industry is doing in response to the increase in competition in markets, making significant progress in renewing its plantings. Also, the volume of blueberries destined for the frozen industry, estimated at 60,000MT, represents 40% of the total exported and a 30% growth compared to the previous season. Thus, total blueberry exports, including fresh and frozen, reached 150,000 tons with a 15% increase compared to last season.

Logistical headaches

When analyzing the results of this season, the general feeling is that it was a difficult exercise, not only due to increased competition in the markets and the pressure that generates on prices, but also due to logistics that presented relevant complications. Some services were overwhelmed by the large volume of fruit, both from Chile (cherries and blueberries) and from Peru (blueberries), which caused significant delays. Additionally, there were not enough shipping services or containers in adequate condition, as well as availability in Controlled Atmosphere (CA). On top of this, some events of heavy swells affected the departures of ships in certain weeks, while there was also rescheduling due to announcements of shutdowns at the ports on the East Coast of the U.S.

Greater market diversification and growth

This season the Chilean supply faced greater competition than last season in all markets. This is a reality that continues to pressure the Chilean industry to renew and improve in all areas of the value chain, from field to market. In terms of markets, the trend of growth in shipments to Europe continued, with a 12% increase compared to last season, placing the region at 43% of the total - the same share as exports to the US, whose volume remained stable. Shipments to Asia also remained the same as last season but with a remarkable growth in South Korea and a decline in China. The greatest growth was seen in Latin America with 111% more volume and 1.6% share of the total. Argentina and Brazil were the main markets in Latin America. Meanwhile, shipments to the Middle East increased by 11%, representing 0.4% of the total.

Chile **Report Team Narrative**

It has now been six years since Chile lost the title of world's leading blueberry exporter to its northern neighbor Peru in 2019. Chilean blueberry pioneer work began in the early 1980s and the country instigated counter-seasonal supplies to northern hemisphere markets in the 1990s, paving the way for the 52-week supply dynamic that consumers enjoy today.

From its heyday when Chile was practically alone in the market from November to February, hitting peak fresh blueberry exports of around 120,000MT annually, that figure has fallen by a quarter as the industry's windows of opportunity have been squeezed by competitors that can supply supermarkets throughout the Chilean campaign, and can do so with fruit that is closer to market, and often with varieties that are more sought after.

The Chilean industry has had to be nimble to adapt and survive, as it undergoes a slow process of renewal with genuine intent to find new market niches and lift fruit quality. It was the first South American country to open up the mainland China market for blueberries, but as Peru took over its market window, domestic growers in the province of Yunnan started producing more in December and January, and another Chilean crop - cherries - started to push down blueberry prices, it has transitioned away from that market to South Korea as its main Asian destination with exports up 46% in 2024-25. But Asia as a whole only represents around 10% of Chile's exports, and the key driver of Chile's 5% increase in fresh export volume last season was Europe, where it has been reported that a greater portion of fruit was sold in bulk to discounters for repacking. Following a few challenging years weather-wise, growers experienced fairly benign weather conditions in 2024, and with some younger plantings of converted genetic material maturing, total production was up by more than 9% while a large portion of the crop was also sent to the frozen market.

The country's challenges are compounded by a boom in varietal renewal in various lower-latitude regions with southern highbush genetics, which take less time to bear fruit compared to the northern highbush genetics that predominate Chile's largest growing regions.

Understanding a need to encourage varietal renewal, a few vears ago the Chilean Blueberry Committee introduced a non-mandatory 'traffic light' system to guide growers on which varieties to export. The guidance is subject to ongoing reclassification and comes with the important caveat that field and post-harvest management as well as geographical selection are also highly important, but on the simplest level it comprises 'green light' varieties (Group 1) both new and old that are known to perform well on longer journeys and are well received in the market, 'yellow light' varieties (Group 2) which can be exported but require more care, and a batch of 'red light' varieties (Group 3) whereby it is recommended not to export, selling to the frozen market or the domestic fresh market instead. It should also be noted that the domestic market continues to grow strongly and does not only comprise export rejects; some growers of proprietary varieties are even finding that early in the season, around October, they can receive export-level prices for a limited volume locally, and Chile has also seen significant growth in exports to Brazil and Argentina, albeit from low bases.

Since the classification was introduced. Group 1 has risen to represent 74% of Chile's fresh blueberry exports, and has undergone a sub-division into the categories of 'New' and 'Traditional'. The latter is declining but still represents more than half of Chile's total exports, and by volume is mostly Chile's two most dominant varieties - Duke and Legacy. Legacy is much higher yielding than Duke, but is seen as less attractive to many global buyers and its export volume was down 11.5% last year. In contrast, the 'New' sub-division of Group 1 saw 49% growth last year, and new plantings will likely see that category continue to rise in stature within the Chilean industry. The two leading varieties within the 'New' category are not very new in the true sense of the word, but other introductions are gaining pace, including one that is a known successful machine-harvestable cultivar, demonstrating the drive for efficiency gains. Meanwhile, Group 3 - the 'red light' varieties

- fell by a third last year and now only represents 2.7% of exports, and the middle group is down to a 22.4% share.

Indicative of Chile's future prospects, the presence of some of the world's leading plant genetics companies shows that opportunity abounds for successful varietal transition. Some thought that a leading U.S.-based company's opening of a nursery and research center in the country a couple of years ago was "crazy" given the sector was perceived to be in decline, but there has been positive interest and momentum for it and other competing genetics businesses. There are proven examples of export success with new varieties that the industry would like to see given more prominence in discussions with growers as a shining light to follow, and also for banks when assessing loan applications.

The genetic introductions taking place in Chile can be put into two categories: higher chill genetics that represent most of the change taking place, driven primarily by North American partners but also two companies with links to the U.K.; and low-chill genetics with a more diverse global participation from a variety of continents. The southerly limit for planting of the latter is regarded as the Maule region, which is about 100km north of Chile's blueberry epicentre around Chillan in the region of Nuble. The northerly band for such low-chill varieties is around the nation's capital Santiago, as well as in limited volumes a few hours' drive north of there in Ovalle.

Such low-chill genetics have been grown in Chile since around 2014 in pots and under tunnels, or at least under netting depending on the microclimate. This fruit competes with Peru, but is generally targeted at markets where Peru does not have much of a presence, and if it does compete with Peru it is mostly up against open Biloxi varieties which are not as highly regarded on flavor or size.

Despite an increase in production and exports in 2024-25, Chile's export value declined this past season as the Peruvian peak was later and came right on top of its season, while logistical problems also caused strain, not just because of port

strikes in Chile's largest market the USA, but also a large cherry crop which increased competition in Chile for containers. To overcome these challenges, the industry is investigating the possibility of arranging more charter services in ships with containers and cold storage chambers.

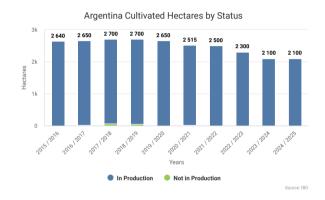
The Chilean Blueberry Committee is also trying to improve the conditions under which producers can ship to the USA. The country has a systems approach to export blueberries to the USA without fumigating from the Nuble and Biobio regions, and there are no restrictions for growers in the Metropolitana and Valparaiso regions, as well as those who farm from the Araucania region to the south. However, growers in Maule and O'Higgins – two key producing regions – must fumigate if they wish to export to the USA. This precludes those regions from shipping organic certified product to the U.S. market, and has implications for their desire to export conventional product as well. Exports of organic blueberries to Europe have increased in recent years, and others have opted to sell their organic fruit as frozen, which does not carry any such restrictions. Last year a systems approach was approved for all of Chile for table grapes and plums, so the committee hopes to be able to leverage this decision for extension into blueberries.

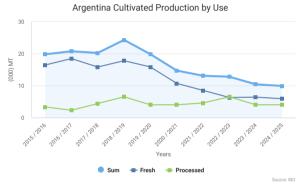
Labor availability challenges experienced by Chilean growers during the pandemic and post-pandemic periods appears to have improved over the past 12 months, although this is partly as a consequence of difficulties in the domestic economy and high interest rates, which have diminished a key competing industry for labor - construction - with anecdotes of more Chileans looking for work. But the main source of pickers is Bolivia whose residents can have extended stays in Chile with temporary agricultural work visas.

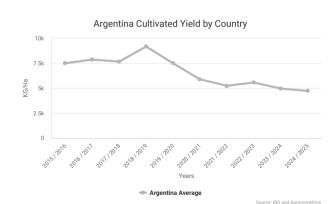


Planting and Production Data, Figures & Commentary

(Denominated in Hectares and Thousands of Metric Tons)







Argentina 2024/2025 Production Metrics

Hectares Planted:	2,100 Ha
Organic:	Not Reported
Under Structure:	Not Reported
Hydroponics:	Not Reported
New Genetics:	Not Reported
Hectares in Production:	2,100 Ha
Production:	9.90 (000) MT
Growth in Production1:	▼-0.50 (000) MT (-4.81%)
Growth from Hectares ² :	0 (000) MT (0.00%)
Growth from Yield ³ :	▼-0.50 (000) MT (-100.00%)
Yield:	4,714.29 (Kg/Ha)
Exports:	5.12 (000) MT
Imports:	0.97 (000) MT

Source: IBO and Agronometrics

Argentina Cultivated Fresh Exports by Partner (000) MT

Reporter	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025
United States	6.19	3.61	1.18	2.53	1.85
Netherlands	1.85	1.77	1.71	1.35	1.26
Spain	0.51	0.74	0.38	0.54	0.59
United Kingdom	0.22	0.02	0.02	0.42	0.35
Germany	0.30	0.75	0.07	0.18	0.27
Others	0.78	0.69	0.61	0.81	0.80
Argentina Totals	9.84	7.59	3.96	5.83	5.12

Source: Agronometrics Global Trade Data





¹ Volume change compared to previous season ² Change in volume due to hectares entering or leaving production

³ Change in volume due to field productivity (yields)

Argentina Report Team Narrative

Argentina was perhaps the first producing country to feel the heat of Peru's ascendance as a serious blueberry exporter. As one of the pioneers of South American production at the turn of the Millennium, harvesting earlier than Chile with a privileged position in overseas markets in September and early October. But the rise of Peru eroded this timing advantage, forcing Argentina to lift its competitiveness through various means.

Between 2016 and 2024. Argentina's annual exports of fresh blueberries fell by 70%, and as a sign of deteriorating returns its export value in USD dropped by 85% over the same period. However, in response to market dynamics with Peruvian supply - being short in 2023 and late in 2024 - Argentina's exports rebounded for the past two years following their lowest-ever level in 2022. Last season's export volumes were down slightly year-on-year, but a higher weighting towards September and October (still overlapping with Peru but to a lesser degree than in 2023) meant overall returns were higher with a significant year-on-year improvement in pricing as well, albeit still around half of what they used to be when the industry peaked in 2016. For the third year in a row, Argentina's exports to Europe were higher than to North America, which prior to 2022 had always been its largest market although the U.S. remains its biggest buyer by country.

It is worth mentioning that the overall decrease in Argentina's blueberry export on the trend line belies improvements in yield and operational efficiency for the country, which has seen a large reduction in surface area dedicated to the crop over the past decade, with several high-profile exits over the past couple of years. The industry's relatively small operations have embraced technology and vertical integration. With a climatic tendency towards rain and hail events, the majority of blueberry orchards are now planted in protected systems. Most Argentine growers close the containers for export within their own packhouses, but not all have been able to keep pace with the rapid operational changes required to survive.

The adoption of new varieties has been another strategy for Argentina's growers to lift their competitiveness. A U.S.-head-quartered nursery led the way in introducing new cultivars to the country in the 90s and its genetics contributed to a boom around 14 years ago and has new lines it is rolling out aggressively, while one leading Australian breeder has an Argentine partner that had its first commercial crop with new genetics in 2022.

In light of a more competitive global environment and a variety of challenges, Argentina has also taken steps to further its domestic market with blueberries now more common on supermarket shelves than they once were. As a sign of progress, in addition to a greater diversion of domestic supply to the local market, fresh blueberry imports rose by 170% between 2021 and 2024 with Chile proving the most significant supplier of note. At the time of writing, Peru still does not have access to the fresh blueberry market in Argentina.

US & CANADA

Planting and Production Data, Figures & Commentary

(Denominated in Hectares and Thousands of Metric Tons)

US & Canada Cultivated Hectares by Country

US & Canada		He	ctares Plante	d		2024 Production (000) MT		
Growth Totals	2020	2021	2022	2023	2024	Fresh	Process	Total
United States	42,219	43,214	42,084	46,709	48,585	200.16	154.81	354.97
Western:	16,268	17,361	17,604	18,299	19,780	86.14	111.45	197.59
Washington	8,053	8,175	9,024	9,926	10,800	22.32	70.67	92.99
Oregon	5,463	5,666	5,342	5,500	5,824	38.69	31.66	70.35
California	2,752	3,521	3,238	2,873	3,157	25.13	9.12	34.25
Southern:	14,097	15,093	13,919	16,722	16,973	63.72	26.58	90.30
Georgia	7,203	7,810	6,799	8,660	9,292	37.60	22.14	59.74
North Carolina	2,954	2,995	3,035	3,764	3,240	13.56	4.22	17.78
Florida	2,145	2,469	2,266	2,469	2,590	9.53	-	9.53
Texas	655	720	720	725	746	1.60	-	1.60
Miss/Louisiana	850	809	809	815	815	0.92	0.22	1.14
Southern Others	290	290	290	290	290	0.51	-	0.51
MidWest:	7,889	7,281	7,038	8,016	8,058	38.37	15.65	54.02
Michigan	6,961	6,151	5,908	6,839	6,880	36.29	15.42	51.71
Indiana	283	485	485	530	530	1.36	0.23	1.59
Midwest Others	645	645	645	647	648	0.72	-	0.72
Northeastern:	3,964	3,479	3,522	3,671	3,774	11.93	1.13	13.06
New Jersey	3,399	2,914	2,954	3,100	3,200	11.79	1.13	12.92
New York	565	565	568	571	574	0.14	-	0.14
Canada	11,696	12,364	12,034	12,545	11,912	27.83	41.08	68.91
British Columbia	10,705	11,215	10,810	11,300	10,679	25.83	41.08	66.91
Canada Other	991	1,149	1,224	1,245	1,233	2.00	-	2.00
US & Canada Totals	53,915	55,578	54,118	59,254	60,497	227.99	195.89	423.88

Source: IBO

Giumarra



A TRUE-BLUE BERRY PARTNER

Global Reach

Year-Round Conventional & Organic

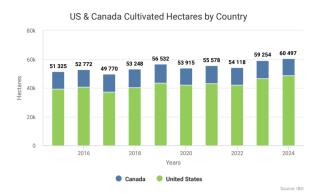
Renowned Service Backed by Generations of Experience

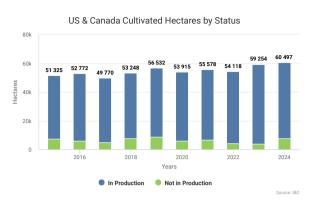
West Coast (562) 308-5480

East Coast (610) 268-0286

www.giumarra.com



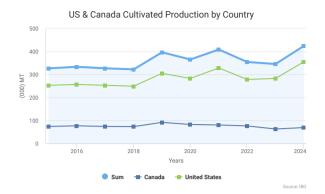


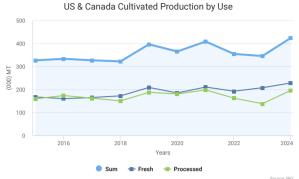


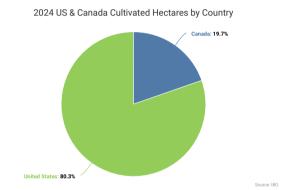
US & Canada Cultivated Production by Country(000) MT

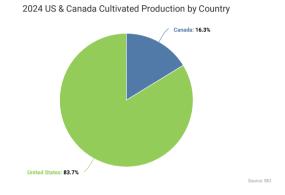
US & Canada		2022			2023			2024	
Productions Totals	Fresh	Process	Total	Fresh	Process	Total	Fresh	Process	Total
United States	159.68	118.46	278.14	173.72	108.87	282.59	200.16	154.81	354.97
Western:	75.12	104.50	179.62	68.43	75.34	143.77	86.14	111.45	197.59
Washington	23.14	56.25	79.39	18.50	43.16	61.66	22.32	70.67	92.99
Oregon	28.57	42.81	71.38	26.53	26.75	53.28	38.69	31.66	70.35
California	23.41	5.44	28.85	23.40	5.43	28.83	25.13	9.12	34.25
Southern:	43.54	11.80	55.34	69.09	12.31	81.40	63.72	26.58	90.30
Georgia	17.23	7.26	24.49	35.82	8.15	43.97	37.60	22.14	59.74
North Carolina	12.02	4.54	16.56	18.37	3.94	22.31	13.56	4.22	17.78
Florida	11.38	-	11.38	12.00	-	12.00	9.53	-	9.53
Texas	1.50	-	1.50	1.50	-	1.50	1.60	-	1.60
Miss/Louisiana	0.91	-	0.91	0.90	0.22	1.12	0.92	0.22	1.14
Southern Others	0.50	-	0.50	0.50	-	0.50	0.51	-	0.51
MidWest:	27.27	0.34	27.61	22.46	17.60	40.06	38.37	15.65	54.02
Michigan	25.15	0.26	25.41	20.40	17.24	37.64	36.29	15.42	51.71
Indiana	1.42	0.08	1.50	1.36	0.36	1.72	1.36	0.23	1.59
Midwest Others	0.70	-	0.70	0.70	-	0.70	0.72	-	0.72
Northeastern:	13.75	1.82	15.57	13.74	3.62	17.36	11.93	1.13	13.06
New Jersey	13.61	1.82	15.43	13.60	3.62	17.22	11.79	1.13	12.92
New York	0.14	-	0.14	0.14	-	0.14	0.14	-	0.14
Canada	32.61	43.55	76.16	33.68	29.12	62.80	27.83	41.08	68.91
British Columbia	29.03	43.55	72.58	30.12	29.12	59.24	25.83	41.08	66.91
Canada Other	3.58	-	3.58	3.56	-	3.56	2.00	-	2.00
US & Canada Totals	192.29	162.01	354.30	207.40	137.99	345.39	227.99	195.89	423.88

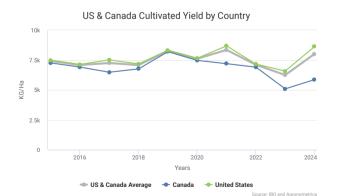
Source: TRO











US & Canada 2024 Production Metrics

Hectares Planted:	60,497 Ha
Hectares in Production:	52,869 Ha
Production:	423.88 (000) MT
Growth in Production ¹ :	▲78.49 (000) MT (22.73%)
Growth from Hectares ² :	▼-12.86 (000) MT (-16.38%)
Growth from Yield3:	▲91.35 (000) MT (116.38%)
Yield:	8,017.36 (Kg/Ha)
Exports:	63.03 (000) MT
Imports:	374.06 (000) MT
	Source: IBO and Agronometrics

¹ Volume change compared to previous season

US & Canada Exports by Partner Subregion (000) MT

Subregion	2020	2021	2022	2023	2024
US & Canada	40.56	41.17	38.71	44.98	61.50
Asia	1.44	0.25	0.22	0.31	0.86
Mexico/Central America	0.08	0.15	0.35	0.29	0.31
South America	0.02	0.06	0.06	0.13	0.13
Pacific	0.08	0.05	0.02	0.16	0.19
Others	0.08	0.19	0.03	0.15	0.04
US & Canada Totals	42.26	41.87	39.38	46.03	63.03

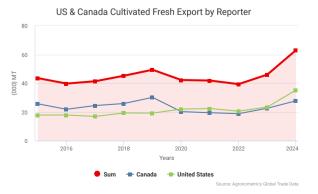
Source: Agronometrics Global Trade Data



US & Canada Exports by Reporter (000) MT

Subregion	2020	2021	2022	2023	2024
United States	22.00	22.38	20.55	23.44	35.24
Canada	20.26	19.48	18.83	22.59	27.78
Others	-	-	-	-	-
US & Canada Totals	42.26	41.87	39.38	46.03	63.03

Source: Agronometrics Global Trade Data





² Change in volume due to hectares entering or leaving production

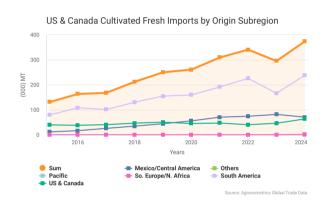
³ Change in volume due to field productivity (yields)

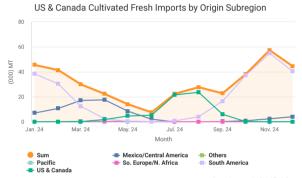
86 GLOBAL STATE OF THE BLUEBERRY INDUSTRY REPORT | 2025 GLOBAL STATE OF THE BLUEBERRY INDUSTRY REPORT | 2025 87

US & Canada Imports by Origin Subregion (000) MT

Origin	2020	2021	2022	2023	2024
South America	159.47	191.38	225.88	166.34	238.05
Mexico/Central America	55.96	70.72	74.37	81.78	70.96
US & Canada	45.40	47.25	40.51	46.38	63.70
So. Europe/N. Africa	0.04	0.08	0.11	0.76	1.35
Pacific	-	0.00	-	0.02	0.00
Others	0.00	-	-	0.02	0.00
US & Canada Totals	260.88	309.44	340.86	295.29	374.06

Source: Agronometrics Global Trade Data



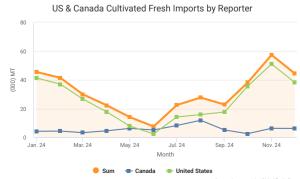


US & Canada Imports by Reporter (000) MT

Reporter	2020	2021	2022	2023	2024
United States	214.30		289.24	248.26	305.74
Canada	46.58	55.89	51.62	47.03	68.33
Others	0.00	-	-	-	-
US & Canada Totals	260.88	309.44	340.86	295.29	374.06

Source: Agronometrics Global Trade Data





US & Canada **Report Team Narrative**

Here we provide an in-depth review of the state of the industry in the United States and Canada. Please visit the following country reports:

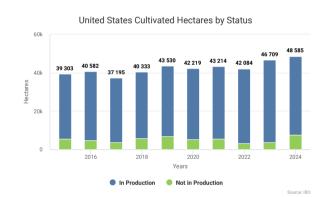
- United States
- Canada

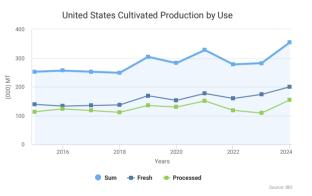
UNITED STATES

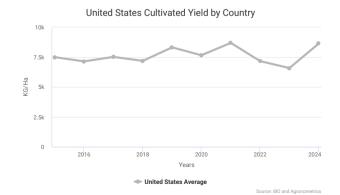


Planting and Production Data, Figures & Commentary

(Denominated in Hectares and Thousands of Metric Tons)







United States 2024 Production Metrics

Hectares Planted:	48,585 Ha
Hectares in Production:	41,128 Ha
Production:	354.97 (000) MT
Growth in Production ¹ :	▲72.38 (000) MT (25.61%)
Growth from Hectares ² :	▼-9.77 (000) MT (-13.50%)
Growth from Yield ³ :	▲82.15 (000) MT (113.50%)
Yield:	8,630.66 (Kg/Ha)
Exports:	35.24 (000) MT
Imports:	305.74 (000) MT
	Source: IBO and Agronometrics

- ¹ Volume change compared to previous season
- ² Change in volume due to hectares entering or leaving production
- ³ Change in volume due to field productivity (yields)

Grower-Owned Cooperative

North Bay loves berries. We have invested heavily in innovation, genetics, and partnerships to create blueberries that thrill consumers and impress customers around the world.

SEKOYA® Licensee

northbayproduce.com



United States Cultivated Fresh Exports by Partner (000) MT

Reporter	2020	2021	2022	2023	2024
Canada	20.44	21.78	19.96	22.53	33.77
Taiwan (CN)	0.23	0.08	0.05	0.06	0.40
Mexico	0.07	0.14	0.35	0.29	0.31
Australia	0.07	0.04	0.01	0.16	0.17
Japan	0.11	0.03	0.02	0.16	0.17
Others	1.08	0.32	0.17	0.25	0.42
United States Totals	22.00	22.38	20.55	23.44	35.24

Source: Agronometrics Global Trade Data



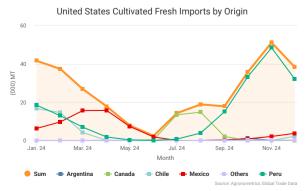


United States Cultivated Fresh Imports by Origin (000) MT

Reporter	2020	2021	2022	2023	2024
Peru	83.56	111.02	146.60	109.23	173.60
Mexico	51.17	63.09	66.50	72.63	63.48
Chile	52.33	55.67	55.70	40.92	37.60
Canada	20.12	19.39	18.75	22.45	27.73
Argentina	6.23	3.57	1.20	2.56	1.86
Others	0.90	0.80	0.49	0.47	1.47
United States Totals	214.30	253.54	289.24	248.26	305.74

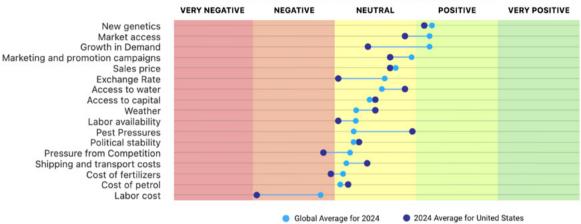
Source: Agronometrics Global Trade Data





Factors Impacting Bluberry Production in United States in 2024







United States Country Member Summary

Adapted from the report by the U.S. Highbush Blueberry Council (USHBC)

USA Blueberries 2024 Season Production and Historical Trends Setting the Stage: A Breakout Year for U.S. Blueberries

The 2024 U.S. blueberry season marked a year of remarkable growth and market momentum. Fueled by a combination of favorable domestic production and expanding import volumes, the industry reached new highs in total supply, while maintaining strong retail performance. With fresh blueberries leading consumer demand and frozen formats holding steady, the market demonstrated its capacity to grow sustainably while meeting year-round consumption needs.

The U.S. blueberry market experienced significant growth in 2024, with total supply – combining domestic production and imports – reaching approximately 1.39 billion pounds. This marks a 21.5% increase compared to 2023. Domestic production alone totaled 735.5 million pounds, up 22.9% from the previous year, while imports rose by 20.1% to 647.84 million pounds. This increase in availability reflects a strong production season in the U.S., and continued reliance on international sources to support year-round supply.



Creating the Crave!

The U.S. Highbush Blueberry Council brings together data, insights, community and resources to inspire and unite the entire blueberry industry - and ensure a healthy and profitable category as supply continues to grow.

Our demand-driving efforts are putting more blueberries in more carts, more often.

We're going **BIG** to drive the global crave for blueberries!

Learn more about our work today.





Imports Shift Toward Peru Amid Global Realignment

Among importing countries, Peru solidified its dominance as the top supplier to the U.S., accounting for 60% of total imports. This represents a growing concentration compared to previous years, up from 47.3% in 2023. In contrast, Mexico and Chile both saw declines in their shares of the import mix, suggesting a shift in sourcing that may have implications for future supply diversification. Despite these shifts, the combined increase in domestic and imported volume allowed the industry to meet elevated market demand without creating a surplus.

Table 1. Highbush Blueberry U.S. Production and Imported Volumes in 2024 Applicable Period(s): Jan.1-Dec. 31, 2024

	Total lbs (MM)	Volume % Change		
	2024	vs. 202 3	vs. 2022	
Domestic	735.5	+22.9%	+20.0%	
Import	647.8	+20.1%	-0.04%	
Total	1383.3	+21.5%	+10%	

Source: NABC Crop Report data

Fresh Blueberries Drive Retail Growth in 2024

Retail sales in 2024 were largely driven by the fresh blueberry segment, which saw dollar sales rise by 10.1% to \$3.34 billion, and volume sales grow by 8.4% to 646.1 million pounds over 2023. The average price per pound for fresh blueberries was approximately \$5.17. This growth reflects strong consumer demand and indicates that the additional supply was effectively absorbed by the market without putting significant downward pressure on pricing.

Frozen and Dried Segments Remain Steady and Supportive

The frozen blueberry category (mostly IQF) remained stable, with volume unchanged at 24.8 million pounds and a slight decline in dollar sales (-0.6%) to \$118.4 million. The average price per pound held at \$4.78. Meanwhile, the dried blueberry segment, though small, showed a 12.1% increase in dollar sales to \$4.6 million, with a modest 5.3% volume gain to 218,083 pounds. While not as prominent as fresh, both segments play a supporting role in year-round blueberry consumption.

Table 2. Blueberry Annual Retail Sales: 2024 vs. 2023 and 2022

	Dollars (\$)	% Dollar Chg.		Volume (Lbs)	Volume % Chg.	
	2024	vs. 2023	vs. 2022	2024	vs. 2023	vs. 2022
Total Category	\$3,462,574,371	9.7%	21.7%	671,069,871	8.1%	11.4%
Fresh Segment	\$3,339,571,961	10.1%	22.6%	646,064,519	8.4%	12.0%
Frozen Segment	\$118,366,403	-0.6%	2.7%	24,787,269	0.0%	-0.6%
Dried Segment	\$4,636,007	12.1%	-3.2%	218,083	5.3%	-12.4%

Source: SPINS IQ - Total US MULO + Natural Channel

Looking Ahead: Sustaining Growth Amid Shifting Dynamics

The U.S. blueberry industry's performance in 2024 underscores its continued maturation and resilience. Increased supply - both domestically and through imports - was met with sustained consumer interest, especially in the fresh category where growth outpaced inflation and volume gains held strong. While the frozen and dried segments remained more stable, the shifting dynamics in sourcing - particularly Peru's growing role - highlight the need for long-term supply diversification. As the industry looks ahead, the challenge will be maintaining this growth trajectory, while adapting to changing consumer behavior and global production patterns.

Driving Engagement at Retail

In 2024, the USHBC strengthened blueberry sales through e-commerce marketing, strategic partnerships and retailer collaborations that amplified the "Grab A Boost of Blue" message. Retailers were equipped with turnkey marketing resources, customized point-of-sale (POS) materials and toolkits to support seasonal campaigns and power-period promotions, driving consumer engagement across regions and nationally. Partnerships with major retailers, including Albertsons Corporate, Walmart, Kroger and Costco, exhibited strong results, with significant increases in dollar and unit sales year over year. These cumulative efforts contributed to record-breaking sales performance, significant weekly sales increases during promotional periods, and a notable lift in category sales and new customer acquisition.

Growing Consumer Demand

To remind consumers of the healthy boost they get from a handful of blueberries, the USHBC's strategic positioning and call to action, "Grab a Boost of Blue," was featured in advertising, at point of sale, in social media channels and on packaging.

Major League Pickleball Partnership

The USHBC partnered with Major League Pickleball (MLP) for its 2024 season, promoting blueberries as "The Official Fruit of Major League Pickleball" among a growing base of pickleball fans. As the first-ever produce commodity to partner with the premier organization for professional co-ed team pickleball, the USHBC deployed a multichannel marketing campaign to boost awareness of blueberries for healthy and active lifestyles among pickleball enthusiasts.

Through the partnership, blueberries were promoted in 41 ads on linear sports channels, including Fox Sports 1 and ESPN 2. Blueberries were featured prominently among thousands of people at 11 MLP events across the country, including major markets like New York, Las Vegas and Atlanta. Earned media of blueberries as the official fruit of pickleball appeared in popular consumer food and lifestyle media outlets, like Martha Stewart Online, Tasting Table and VegNews.

National Blueberry Month

In one of the most exciting celebrations of National Blueberry Month yet, the USHBC partnered with Major League Eating to host the first-ever blueberry eating competition in Grand Rapids, Michigan, at the MLP Mid-Season Tournament. Pickleball fans and locals attended the event to watch competitive eaters devour as many blueberries as possible in a short amount of time. The winner, Patrick Bertoletti, took the top prize after eating a staggering 18.475 lbs of blueberries.

In total, eight competitors ate 80 pounds of blueberries in 8 minutes.

To extend the excitement beyond the event, the USHBC also hosted the Great American Blueberry Challenge Social Media Contest, asking fans to share creative ways they enjoy blueberries for a chance to win \$10,000. The contest was promoted through influencer partnerships, paid social, digital ads and earned media, including Forbes, MSN and Yahoo! News, garnering 1.8 billion earned media impressions.

Consumer Research

The USHBC prides itself on being a data-driven organization that's committed to leveraging consumer insights to drive demand and catalyze innovation within the blueberry industry. Understanding consumer behavior and motivations is essential to shaping a successful marketing strategy, which is exactly where consumer research plays an important role.

Toward the end of 2024, we initiated three key areas of research:

- Consumer segmentation to identify distinct consumer groups, along with their attributes, motivations and behaviors, to determine whom and how we influence more frequent purchasing behavior.
- A deeper dive into how blueberries are perceived compared to others in the berry patch to uncover and understand consumer attitudes and usage patterns, and identify opportunities to grow repeat purchases for our category.



The OZblu series of zero-chill blueberry genetics have raised the bar in terms of yield¹, quality² and shelf-life³.

Now, the new series of OZblu genetics have raised the bar again! Now, you can produce and machine harvest for fresh⁴ consumption.



LEARN MORE

info@ozblu.com www.ozblu.com





[1] Top Performance from OZblu® Magica in Peru', Fruitnet.com, June 2023. ^[2] 'OZblu® Magica Stands Up to El Nino', Fruitnet.com, October 2023. ^[3] OZblu® Claims Record Blueberry Sea Voyage Length', Freshfruitportal.com, June 2021. [4] Machine harvesting for fresh tested successfully on a commercial scale close to point of consumption. • A brand health study to assess consumer perception, awareness and the overall marketing position of blueberries as a brand among consumers. This will ultimately serve as a "report card" we'll track annually to understand how our programming is making an impact on our brand over time.

When finalized, the research will ensure the USHBC's marketing strategy is driven by data and insights. Every marketing dollar counts, and we're focused on driving blueberry demand in a smart, strategic way.

Uniting the Industry

The North American Blueberry Council's (NABC) Memorandum of Understanding (MOU) was established in 2021 to support fresh and processed blueberry demand-driving activities across multiple channels. In 2024, the MOU raised over \$3.3 million, with over \$3 million going to the USHBC to increase demand-driving marketing opportunities, advance nutrition affairs and improve the blueberry industry's data and analytics. Since 2021, nearly \$9 million has been raised to help support strategic initiatives for the NABC and the USHBC.

Thank you to the following companies for their leadership and commitment to growing demand to ensure a healthy and profitable category as supply continues to grow.

MOU Signatory IMPORT Organizations

- Berry Fresh
- California Giant
- Camposol
- Driscoll's
- FamilyTree Farms
- Firestone
- Hortifruit
- North Bay Produce
- The Fruitist Company
- Wish Farms

MOU Signatory EXPORT Organizations

- Berries Paradise

MOU Signatory CANADIAN Organization

BerryHill

Country Partners

- Aneberries
- Proarándanos

Explore Our Demand-Driving Efforts

The 2024 USHBC Impact Report highlights all of our efforts to drive global demand for blueberries. Learn more at bit.ly/4ifdrHW





QUALITY. CAPACITY. PERFORMANCE.



United States Report Team Narrative

As the birthplace for the crop and a nexus for global industry development, the United States firmly retains its position as the market that will shape grower decisions in much of the world, even when that influence is indirect. From a supply side it may be Peru that has transformed supply dynamics, but the United States has long proven to be the most resilient and hungry market for the fruit, receiving 31% of fresh blueberry imports worldwide. And as referenced in the USH-BC's summary, a spike in Peruvian supply last year was "effectively absorbed" even with sustained high volumes over multiple weeks.

At the time of writing Peru is poised for a large crop that is unlikely to be as late this time around, and with its early-season shipments already underway, it is the first key blueberry supplier of note to be subject to the 10% tariffs imposed by the new government this year, as other tariffs announced for Mexico and Canada did not apply to blueberries due to exemptions under the USMCA (U.S.-Mexico-Canada Agreement). Expectations vary within the industry about what impact this will have, but amidst the ongoing uncertainty it is already the case that Peruvian shippers have locked in deals elsewhere to hedge their risk, although most would agree that the United States will remain its leading market by far.

Despite the emergence of new markets and aggressive volume growth in regions where consumption per capita has been playing catch-up with the United States, its share of global fresh imports increased by three percentage points between 2020 and 2024. Even compared to 2015 when major markets like continental Europe were far less developed than today, and when Peru was around 30 times smaller (exporting less than the USA at that time), the United States' global import market share has only declined slightly while its total imports have risen by more than 150%, and nominal value has gone up by more than 230% (not accounting for inflation). Amidst cost-of-living pressures, over the past four years the berry category has commanded more than 5% of average consumer spend in their grocery shopping basket, and blueberries represent a major part of the overall berry category.

Encouragingly, as per the USHBC's Country Member Summary, blueberry fresh category value growth (10.1%) outpaced volume growth (8.4%) in the U.S. in 2024, and was up 22.6% on two years prior.

As blueberry sales overtake strawberries in some stores, can tech help the category reach even higher?

One source noted that around two years ago a threshold was crossed whereby some of the country's leading retailers were reporting higher total revenue from blueberries than strawberries – a commodity that has long had significantly higher market penetration. This milestone, seen both on an aggregated annual basis in some cases and during peak volumes on a weekly basis in others, is largely due to greater shelf space dedicated to more highly priced jumbo and/or premium lines – facilitated by the extensive varietal conversion at play – as well as organics, which have kept up strong demand despite a narrowing of the pricing gap (at least compared to five years ago) between organic and conventional blueberries. Organic blueberries now represent half of the production in California, which is among the nation's hotspots for varietal renewal and tech research in a bid to lift yields and value, as well as field and post-harvest optimization.

Technological developments of interest that have been supported by the California Blueberry Commission include an

FamilyTree. THE WORLD'S MOST FLAVORFUL EDITOR



FRUIT

SIGNATURE VARIETIES. SENSATIONAL FLAVORS









app that is currently in the beta stage which aims to estimate the number of berries on a bush based on a photo, which can then be extrapolated over the acreage of a farm to provide crop estimates. To make exports easier, the commission has also introduced SO2 pads for shipments going to Asia, allowing the fruit to last longer and therefore opening up the option of longer shipping journeys that are more cost-effective. On a totally different front, the commission has also engaged a researcher in Australia to develop cryogenic freezing technology for blueberries for the past three years, with the end goal that "you can basically store the blueberries for significantly longer, and they come out looking and tasting just like they came off the bush," according to a source from the commission. "Right now it's working in the lab. Now we need to do a real world application – if it does that, it could change the industry," he said.

California's real-time data transparency platform serves as a major benchmark for other parts of industry to emulate, allowing marketers or growers to make better informed and more effective decisions. The USHBC has been extremely active on this front, and at the time of writing has made great strides in its ambition to have 80% of the industry sign up for its data reporting and analytics initiative. Last December the council set up a data taskforce, and at the time of writing is building AI agents to help iterate data sets, develop reports and recommendations.

Another major technological issue that has become increasingly relevant in the United States is that of machine harvesting for fresh to overcome challenges of labor costs and scarcity; a challenge that has become more pronounced as the new administration clamps down on immigration. The task of finetuning machine harvesting for fresh in a way that reduces waste and maximizes return is covered in depth within the Trends section of this report, as is the trend of varietal renewal which, as a tech matter relating to intellectual property (IP), is underscored by significant investments of time and resources into R&D.

Varietal transition remains at the forefront of the biggest changes at retail for blueberries as consumers become more accustomed to blueberries that are of larger size with preferred flavor characteristics and consistent firmness. This trend has galvanized the premiumization or segmentation of the category at retail, and whilst this is a challenge to achieve year-round it has become more common with certain brands, retailers and companies excelling in this regard.

There are, nonetheless, concerns about the conflation of size with quality and the commoditization risk for the category of relying excessively on berry diameter for pricing and perceived consumer value. The comparatively larger sizing of southern highbush blueberries, and the greater availability of such fruit, has also created a stark contrast for consumers between the appearance and eating qualities of domestic, summer blueberries versus imported berries and those from warmer U.S. climates. There is a strong will within the industry to develop and adopt northern highbush varieties with similar traits that consumers have gotten used to with new southern highbush genetics, but the timeline for any such change becoming widely seen would take many years, if it happens.

Improved weather for most of the U.S.

A defining characteristic of the 2024 season that helped underpin the 22.9% lift in domestic volume was a prevalence of relatively mild weather, at least compared to disastrous conditions in preceding years that are summarized more thoroughly in past editions of this report. While this claim won't hold for every state, there were notable examples such as California, which like Florida and North Carolina is primarily focused on the fresh market with a low proportion of fruit being sent to processors, thus placing a high demand on average fruit quality and firmness. One source described 2024 as one of the "one of the best growing years on record" for California with mild conditions and not too many extremely hot days, leading to a very large crop that was also buoyed



At Klasmann-Deilmann, we're proud to be the trusted partner of leading blueberry growers worldwide. With over 100 years of experience in producing high-quality growing media, we support your success with the most reliable substrates in the industry.

Proven performance

- Leading in professional growing media
- Unmatched quality certified by the RHP quality mark for substrates
- Full control of raw materials from peat to coir, GreenFibre® to perlite and others: all from our own production

blueberries

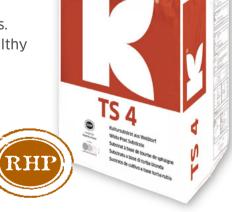
- Reliable supply year round from multiple factories worldwide
- Innovation and R&D that works for you like our 'Growcoon': the advanced, sustainable system for efficient propagation

Introducing our TS 4 substrates

Tailor-made blends designed specifically for blueberries. Engineered to promote vigorous root development, healthy plant growth, and high yields.







by younger fields with new varieties that are increasing in yield each year.

Another emblematic example is the Pacific Northwest which had previously been beset by volatile weather that discouraged pollination, but bounced back with a more "normal" year in 2024. Washington State's fresh volume surged by more than 40% to new highs, which may represent the fruition of past predictions from a source in this report that new and converted plantings signified major latent growth, but it could also partly stem from a diversion from processed (its traditional leading market channel) due to healthy fresh market conditions, particularly as the Peruvian season was running late. As later-season sources of origin, Washington and Oregon were selling fresh blueberries much later into the fall period, and USDA data indicates Washington overtook Oregon (which has a stronger historical fresh industry focus relative to its Pacific Northwest peers) in fresh blueberry sales for the first time in at least a decade. As a sign of strong demand, average pricing for the two states was higher year-onyear in July, held steady in August and jumped in September. This occurred even though the bulk of Washington's volume spike was sold in August. Overall, it has been observed that the varietal transition taking place in the Pacific Northwest has been veering away from late-season cultivars such as Elliott, while extensive plantings of other varieties like Calypso are helping to keep the season peak in the early August window. Oregon and Washington also lead in the adoption of some of the newest high chill cultivars positioned to complement and compete with the new lower chill cultivars driving the new jumbo and premium category.

In contrast to their West Coast peers, other key summer suppliers such as New Jersey and Michigan saw their fresh volumes decline year-on-year. In the case of Michigan, this is likely partly due to natural attrition as well as a portion of growers undergoing varietal changes; a process that takes longer to yield maturing fields in such cooler climates with northern highbush genetics. Michigan has also recently

achieved a national first as the first state where blueberry growers can insure their crops based on harvest windows. "Whereas before, if you had a loss that took out your entire crop of early season varieties but you had a really strong crop in your late season varieties, the loss would cancel itself out and you wouldn't have a claim," said one source. "That's a really big improvement, and one that we would love to see replicated throughout the country."

At the other shoulder of the U.S. season, the country's earliest producer Florida had a vastly improved campaign in 2024, after its early crop in 2023 was affected by unprecedented temperatures over Christmas in the lead-up, and a hurricane before that. In 2024 conditions were better, and the industry benefited from a trend observed over recent years that cold winter temperatures had been recorded earlier, which meant more chill hours were achieved before there was open bloom, meaning there was less need to freeze-protect during the pollination period. It was a similar situation in Georgia, one of the country's largest production states which witnessed almost 20% growth in 2024. However, it must be highlighted that this weather trend appears to have been broken in the winter of 2024-25 for Florida, with colder conditions leading the crop to be both delayed and short.

As referenced in the USA's country member summary, there was much less volume imported from Mexico, which ships most of its product in the springtime. Large year-on-year drops from Mexico could be felt in March and May, but Mexico actually shipped more fruit year-on-year in April, coinciding with Florida's peak. Nonetheless, and even with a Florida peak that was some 83% higher, April pricing improved over 2023. Later in the month however, pricing started to decline and dropped steadily as the weeks went on in May, leading to some crops being unpicked as it would have been economically unviable. This period also coincides with a ramp-up of a wide range of summer fruit, which pose more of a competition to blueberries than they did a decade ago.

Florida is an oft-cited state in the USA for the revitalization of fields with new genetics, and 2024 was a year where commercial volumes of newer releases - from a variety of public and private breeders – could be more tangibly felt in the market with many in their third years since planting. Florida is diverse in terms of its grower profile versus other states, with a lower proportion of intergenerational farms, and the number of operations with more than 50, 100 or 200 acres has increased in recent years. With a prevalence of farms with plants that are 10-12 years old, many are being changed to higher-yielding varieties from the University of Florida/ IFAS breeding program with a particular focus on machine harvestability, but also private companies from all over the world. "For the first time in in several years I've actually heard rumblings of new plantings from growers that are not blueberry growers who are looking to get into the space," said one local source.

Elsewhere in the Southeast, a large crop for Georgia was aided by the absence of spring frost events in 2024, as well as widely-planted university-released varieties coming to maturity. Despite high yields, it was reported that rains during harvest affected quality, leading to price pressure. Unlike their southern peers in Florida, Georgian growers saw a sharp average price decline of almost 17% during their peak month of May. One source observed that unlike in previous seasons when retailers in Georgia itself would show a preference for local product, there was a greater presence than before of Mexican fruit during the peak local season. There has been an expansion of new acres in Georgia for southern highbush amidst a decline in the surface area dedicated to rabbiteyes, which have not only become less desirable for marketers but are also showing signs of age with a large portion of rabbiteye farms in Georgia being 15-20 years old. There has been a lot more planting of the reportedly machine-harvestable-for-fresh Optimus variety and others from the University of Florida, while the Farthing variety is widely adopted as the leading Southern Highbush cultivar in Georgia. Despite these developments, the industry has faced challenges for

the 2025 season following the impacts of Hurricane Helene in September last year.

Going further north to North Carolina - which starts its season in May but peaks in June - domestic fresh blueberry volume rose to highs not seen since 2016, despite the negative impacts of rainy weather during the harvesting of early varieties in mid-May, and then drought conditions that put a strain on the later-season rabbiteve crop. But just as volume was strong, average pricing also fell to levels not seen since 2016, and there was a fair portion of fruit that was picked but not marketed. "I think that's more because of the early rains than for the drought later on," one local source said. "You don't see those numbers quite as high in more arid regions...it's hard to sell every berry in a really wet climate; we get times when it's too wet to pick, so you struggle more on the eastern seaboard of North America because of abundant rain." As is the case elsewhere in the region, North Carolina's varietal mix is in a state of renewal which in particular has shifted away from earlier varieties that are more prone to frost events. It is worth adding that many farmers in the state tend to intermingle southern highbush and rabbiteves in their farming operations, with the former planted in higher organic soils and the latter found in sandier soils. This set-up is expected to remain as North Carolina, one of the older production regions of the country, has natural advantages that make cultivation less capital-intensive, such as peaty soils with low pH levels and a water table that's close to the surface year-round, meaning there is less need for adding mulch or drip irrigation.

Export and import developments

The USA's fresh blueberry exports rose by 27% in 2024, although most of this can be explained by an increase in shipments to Canada. It is yet to be seen whether this trend could continue in 2025, but at the time of writing the data shows a year-on-year increase in fresh blueberry exports to

the neighboring country in May. No other market comes anywhere close to Canada in terms of its imports of U.S. blueberries, but some markets such as Japan, Taiwan, Mexico and Vietnam saw promising increases from low bases last year. Industry priorities for opening up new markets include negotiations for fresh blueberry protocols with Australia, New Zealand, and Israel, where the main pests of concern are blueberry maggot and spotted wing drosophila (SWD). The USHBC has presented its data and science around a systems approach to these governments, and while they have been waiting for 10 years, there are hopes in particular of making progress towards reaching the Australian and NZ markets, where other U.S. fresh fruit commodities have gained access and blueberries are "in the queue". Market access was recently granted for U.S. blueberries in South Africa in August 2024, and the USHBC also holds ambitions to expand existing market access agreements for Oregon-grown fresh blueberries into South Korea for California and Washington within five years.

In addition, after achieving a reduction in tariffs on U.S. blueberries in India from 30% to 10%, the industry is advocating

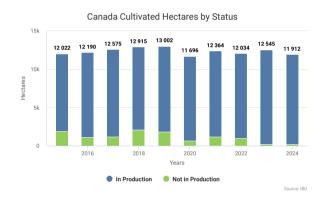
for the tariff to go down to zero in that market, where despite a long distance the U.S. industry reported a 26% increase in blueberry exports last year, mainly comprising dried fruit although there have been small airfreight shipments.

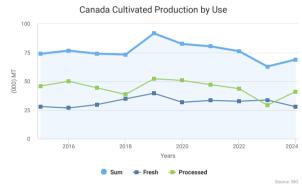
As far as emerging suppliers are concerned, from a very low base a handful of Moroccan blueberry exporters – traditionally focused on the European market but identifying the opportunities of short shipping times across the Atlantic - have been steadily increasing their shipments to the U.S. East Coast. With the bulk of the volume shipped between March and May, the data indicate Morocco-U.S. exports in 2025 will quadruple at the very least. To put the volume into context, this emerging trade is approximately the size of Mexico's blueberry exports to the U.S. 15 years ago. Nonetheless, with the struggles faced by the Mexico industry with water and labor availability, climatic challenges, and other difficulties there are reports of intentions by various companies to increase supply from Morocco to the U.S. market in coming years.

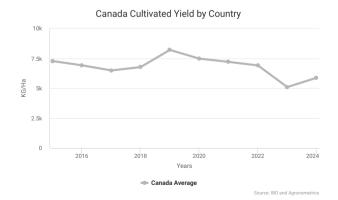


Planting and Production Data, Figures & Commentary

(Denominated in Hectares and Thousands of Metric Tons)







Canada 2024 Production Metrics

Hectares Planted:	11,912 Ha
Hectares in Production:	11,741 Ha
Production:	68.91 (000) MT
Growth in Production ¹ :	▲6.11 (000) MT (9.73%)
Growth from Hectares ² :	▼-3.09 (000) MT (-50.54%)
Growth from Yield ³ :	▲9.20 (000) MT (150.53%)
Yield:	5,869.01 (Kg/Ha)
Exports:	27.78 (000) MT
Imports:	68.33 (000) MT
	Source: IBO and Agronometrics

¹Volume change compared to previous season

Canada Cultivated Fresh Exports by Partner (000) MT

Reporter	2020	2021	2022	2023	2024
United States	20.12	19.39	18.75	22.45	27.73
Japan	0.01	0.01	0.02	0.00	0.03
Israel	0.03	0.07	-	-	0.02
India	0.00	0.00	0.02	0.01	0.00
South Korea	-	0.00	0.03	-	0.00
Others	0.09	0.01	0.01	0.13	-
Canada Totals	20.26	19.48	18.83	22.59	27.78

Source: Agronometrics Global Trade Data





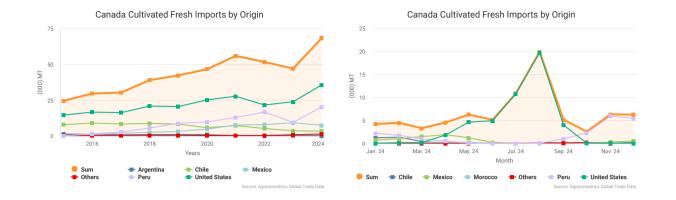
Canada Cultivated Fresh Imports by Origin (000) MT

Reporter	2020	2021	2022	2023	2024
United States	25.16	27.69	21.56	23.89	35.65
Peru	9.74	12.92	16.67	9.41	20.36
Mexico	4.77	7.63	7.87	9.15	7.48
Chile	5.78	7.20	5.17	3.59	3.35
Morocco	-	0.00	0.11	0.69	0.99
Others	1.13	0.45	0.24	0.29	0.51
Canada Totals	46.58	55.89	51.62	47.03	68.33

Source: Agronometrics Global Trade Data

² Change in volume due to hectares entering or leaving production

³ Change in volume due to field productivity (yields)



Factors Impacting Bluberry Production in Canada in 2024

POSITIVE VERY NEGATIVE NEGATIVE NEUTRAL **VERY POSITIVE** New genetics Market access Growth in Demand Marketing and promotion campaigns Sales price **Exchange Rate** Access to water Access to capital Weather Labor availability Pest Pressures Political stability Pressure from Competition Shipping and transport costs Cost of fertilizers Cost of petrol Labor cost Global Average for 2024 2024 Average for Canada



Canada - British Columbia Country Member Summary

Adapted from the report by the British Columbia Blueberry Council (BCBC)

The British Columbia (BC) blueberry industry produced a large crop in 2024. The 2024 season was characterized by moderate conditions during bloom, ideal conditions for fruit development, high yields, and summer rain events that impacted fruit quality in mid and late season cultivars.

Coming out of the winter, there was minimal cold damage. Pollination conditions were much improved over 2022 and 2023, resulting in abundant bee activity and excellent fruit set that led to a good crop in 2024. Following moderate conditions during the fruit development period and early season harvest, rain events in late July (affecting early picks of 'Calypso') and late August (affecting the second pick of 'Elliott') resulted in more of the crop diverted to the process market due to fruit quality issues.

Timing of harvest was typical for BC, with the first hand harvest of the earliest 'Duke' fields in the east end of the Fraser Valley coming in the first week of July and machine harvest ramping up approximately two weeks later. With good fruit set and sizing conditions, there was a typical number of harvests for major varieties without a large drop off in fruit size between picks.

Spotted wing drosophila (SWD) pressure ramped up with wet weather in late July. As in 2023, Blueberry Scorch Virus infections remained a concern. Diligent management of aphids and removal of Scorch-infected plants and infected fields continued as the industry maintained its efforts to reduce the impact of this viral pathogen.

Varieties and New Plantings:

'Duke' comprises more than half of the current acreage and is the most widely planted cultivar, followed by 'Bluecrop', 'Elliott', 'Calypso', and 'Draper'. 'Elliott' fields are starting to be removed in favour of other cultivars, primarily 'Calypso', which will soon become the third most important cultivar in the region in terms of volume as new acreages enter production. A small amount of 'Top Shelf' and Valor™ are still being planted in smaller blocks, but growers continue to look for new cultivar opportunities. Consequently, 'Duke' remains consistent as a "go-to" cultivar for new plantings behind 'Calypso'.

Production Challenges and Opportunities:

Variable weather patterns continue to impact plant development, making it difficult to predict the size of the crop and the timing of harvest each year. Pollination is often impacted when cool and rainy or overly warm weather conditions coincide with bloom. Moreover, there is an insufficient number of honeybee colonies available for rental in the region to pollinate the crop.

The rising cost and limited labour availability are primary concerns for producers. Costs of production are high in BC due to high labour costs, land values, and prices for agricultural inputs, particularly for pollination services and pesticides. High costs of production have pushed growers towards more efficient methods of production. Over half of BC's blueberry crop is harvested by machine for process markets, and machine harvesting for the fresh market has been steadily increasing as well.

Blueberry Scorch Virus is prevalent, particularly in older plantings, and is resulting in reduced yields and plant decline in some fields. BC blueberry growers are prioritizing aphid control and removal of infected plants or entire plantings to minimize the spread of the Blueberry Scorch Virus. Fungal diseases such as Phomopsis and Godronia cankers, mummyberry and Botrytis, and Anthracnose fruit rots can be challenging to control in this region due to the high precipitation in the spring and fall. Spotted-Wing Drosophila (SWD) and root weevils are the most difficult insect pests to manage in this region.

To deal with these production challenges, BC growers have invested in applied field research in the areas of pest, disease, and horticultural management as well as improving pollination and developing new varieties. The British Columbia Blueberry Council (BCBC)'s breeding program aims to develop new varieties that are locally adapted, tolerant of pests, higher yielding, and possess superior fruit quality traits including suitability for machine harvest (e.g., increased fruit firmness and resistance to bruising and splitting). Advanced selections are currently in grower trials, the final step prior to their future commercialization.

Market Trends and Projections:

BC has approximately 600 growers, primarily producing conventional blueberries, and there are around 30 large-scale packers and processors. The industry will likely see consolidation in the coming years as small-scale producers with less than 20 acres are finding it difficult to compete.

In years with adequate pollination, the abundance of blueberry fruit that hits the market across the Pacific Northwest during BC's 'Duke' season puts significant strain on both fresh packing and processing capacity. BC growers are looking to early and mid-season varieties (July and August harvesting dates), especially for marketing fresh products, to reduce the overlap with fresh blueberry imports from Peru in the late season.

Depending on the size of the crop, between 45-65% of BC's production goes to the process market.

The U.S. is the largest market for BC's exports, but other important markets include Japan, South Korea, Vietnam, India, and Taiwan.

Canada Report Team Narrative

Following four straight years of volume declines attributable to weather and pollination challenges in British Columbia, the province – one of the world's top five producers and accounting for approximately 94% of Canada's highbush blueberries – notched a 41% uptick in volume in 2024, representing a significant recovery even though the total harvest was slightly down on the five-year average.

This rebound coincided with an historically high crop for neighboring Washington State which produces at a similar time, yet even against this backdrop of an influx of additional volume the average export price for Canadian fresh blueberries

actually increased, with the lion's share of exports going to the United States.

Echoing a similar sentiment to points made in the U.S. section of this report, this outcome of steady pricing amidst higher volume reflects demand growth for the category in Canada; a hypothesis that is strengthened by the fact that fresh blueberry imports surged as well, surpassing CAD\$500 million for the first time. This is coupled with another milestone that the import value for Peruvian-origin fresh blueberries was practically on par with Canada's leading supplier, the U.S., which had never been the case prior. A late Peruvian peak was to

the benefit of Canadian growers, especially producers of the late-season Elliott variety for which harvesting started later than usual but such growers still managed to avoid any significant overlap with South American fruit. Whilst earlier rain events impacted the quality of some picks, the precipitation itself was a sign of improved weather conditions after a drought year in 2023 that impacted most of the industry, leading to the smallest crop in a decade.

The combined increase in domestic production and imports (although exports rose substantially as well) comes from a country that is often cited as having among the greatest blueberry consumption per capita levels in the world. Estimates vary with some calculating a figure of approximately 4lbs (1.8kg), although Agriculture and Agri-Food Canada estimated a level of 1.24kg of available blueberries per consumption in 2023, reduced to 0.99kg when accounting for losses. Both these figures would have likely risen for 2024 given the lift in total volume.

On a macroeconomic level these results may be encouraging, but it must be emphasized that they are in the context of a mature industry that has been severely challenged by multiple tough seasons and a dynamic of consolidation and cost pressures which, as referenced in the BC Blueberry Council's summary, make it difficult for small-scale producers to compete. It is estimated that around one third of acreage planted in British Columbia is in need of varietal renewal, and this is evident in the high take-up rates for the Enhanced Replant Program announced by the provincial government's

Ministry of Agriculture and Food in late 2024 with funding of up to \$2,500 per acre. Confidentiality agreements with members prohibit the council from releasing a figure of how many growers applied for the program, but it is understood to be quite high.

Even prior to the announcement of government support there were indications that a lot of cultivars were being replaced with newer varieties with greater consumer appeal, often at the behest of both retailers and marketers as certain varieties fall out of favor. Breeders of proprietary high-chill genetics have signalled ambitious roll-out plans for British Columbia, and have reported an interest from Canadian retailers to lift local supply with characteristics that have come to be more commonly associated with premium southern high-bush cultivars.

Aside from the uncertainty surrounding tariffs, which was a more heated issue in early 2025 than at the time of writing when blueberries are exempt from duties due to conditions in the USMCA agreement, key developments for the sector also include securing access to the Vietnam market for fresh blueberries last year, while an import program servicing Canada's eastern provinces from Morocco has been gathering steam from a low base, rising steadily since 2022 with a May 2025 peak that was up 142% year-on-year in volume and 221% higher in terms of value. Canada is also seeking to negotiate fresh market access with Mexico, which is the third-largest supplier to Canada, shipping most of the volume in late winter and into spring.

MEXICO / CENTRAL AMERICA

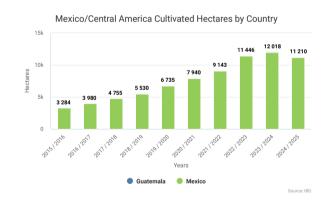
Planting and Production Data, Figures & Commentary

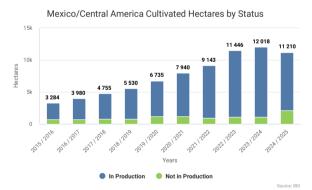
(Denominated in Hectares and Thousands of Metric Tons)

Mexico/Central America Cultivated Hectares by Country

Mexico/Central America	Hectares Planted				2024/2025 Production (000) MT			
Growth Totals	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Fresh	Process	Total
Mexico	7,900	9,100	11,400	11,970	11,160	68.83	0.57	69.40
Guatemala	40	43	46	48	50	0.45	-	0.45
Mexico / Central America Totals	7,940	9,143	11,446	12,018	11,210	69.28	0.57	69.85

Source: IBO

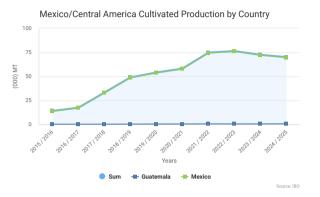


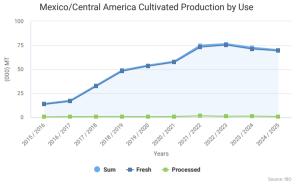


Mexico/Central America Cultivated Production by Country(000) MT

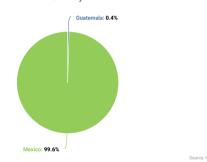
Mexico/Central America	2022/2023			2023/2024			2024/2025		
Productions Totals	Fresh	Process	Total	Fresh	Process	Total	Fresh	Process	Total
Mexico	74.93	0.94	75.87	70.71	1.23	71.94	68.83	0.57	69.40
Guatemala	0.32	-	0.32	0.35	-	0.35	0.45	-	0.45
Mexico / Central America Totals	75.25	0.94	76.19	71.06	1.23	72.29	69.28	0.57	69.85

Source: IBO

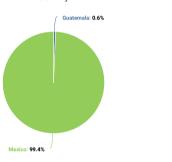


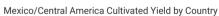


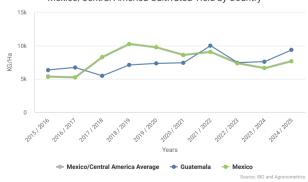
2024/2025 Mexico/Central America Cultivated Hectares by Country











Mexico/Central America 2024/2025 Production Metrics

Hectares Planted:	11,210 Ha
Hectares in Production:	9,082 Ha
Production:	69.85 (000) MT
Growth in Production ¹ :	▼-2.44 (000) MT (-3.38%)
Growth from Hectares ² :	▼-12.26 (000) MT (-502.42%)
Growth from Yield ³ :	▲9.81 (000) MT (401.89%)
Yield:	7,691.15 (Kg/Ha)
Exports:	73.99 (000) MT
Imports:	1.55 (000) MT
	Source: IBO and Agronometrics

¹ Volume change compared to previous season

³ Change in volume due to field productivity (yields)

² Change in volume due to hectares entering or leaving production

Mexico/Central America Exports by Partner Subregion(000) MT (Inferred from Partners)

Subregion	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025
US & Canada	69.87	75.63	88.23	71.71	72.41
Asia	1.47	1.29	1.30	0.94	1.28
Mexico/Central America	0.13	0.16	0.27	0.25	0.27
Western/Central Europe	0.11	0.21	0.27	0.22	0.03
Middle East	-	-	0.00	-	-
Others	-	0.00	0.00	0.00	0.00
Mexico/Central America Totals	71.58	77.29	90.07	73.12	73.99

Mexico/Central America Cultivated Fresh Export by Partner Subregion

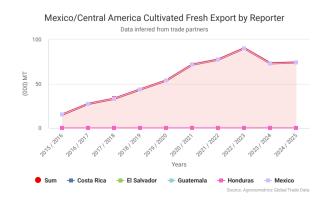
Source: Agronometrics Global Trade Data

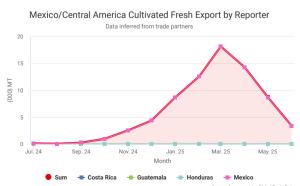
Data inferred from trade partners

Mexico/Central America Exports by Reporter(000) MT (Inferred from Partners)

Subregion	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025
Mexico	71.49	77.20	89.92	72.94	73.82
Guatemala	0.09	0.09	0.13	0.15	0.15
Costa Rica	0.00	0.01	0.02	0.02	0.01
El Salvador	-	-	-	0.00	-
Honduras	-	0.00	-	-	0.00
Others	-	-	-	-	-
Mexico/Central America Totals	71.58	77.29	90.07	73.12	73.99

Source: Agronometrics Global Trade Data





Mexico/Central America Report Team Narrative

For an in-depth review of the leading producing countries of Mexico/Central America, please see the individual reports including official country member reports and IBO Report Team narratives for:

Mexico

As an import market for fresh blueberries, Mexico/Central America has more than quadrupled in size from a low base since the pandemic with Mexico accounting for almost a third of the total. The region's import volume is comparable to Australia or Brazil, although import value is far below both. Mexico is the largest importer of blueberries in the region, but Costa Rica, Panama, Guatemala and Honduras have all seen impressive growth over the past four years.

Below is a brief review on the only commercial source of supply today in Central America, Guatemala.

Guatemala

Whilst pre-clearance protocols have been approved by the U.S. Animal and Plant Health Inspection Service (APHIS) for blueberries from Guatemala - the only noteworthy producer of the fruit in Central America – the program has not yet come to fruition due to limited budgets and the need to train inspectors.

From an extremely low base, Guatemala's fresh blueberry exports rose 30% in 2024 with Honduras accounting for almost all that volume. To date the country has been limited in its export options, shipping small volumes to nearby neighbors, also including El Salvador and Nicaragua, as well as to the U.S. where shipments need to have undergone treatment such as methyl bromide – a chemical that is difficult for growers

to secure outside of programs administered by Guatemalan phytosanitary authorities. Fruit exported to the U.S. must also arrive north of the Mason-Dixon line, prohibiting imports in ports such as McAllen, TX or Miami, FL. Data utilized in compiling this report show no exports to the U.S. have taken place since 2020.

Since its emergence around 2005 and having been built on the variety Biloxi, the Guatemalan sector has been turning to new varieties and production techniques such as growing under tunnels with substrate. Volume is led by a small group of companies, most of which also produce blackberries, sugar snaps, and other produce for export. The growing regions are at a lower latitude but higher altitude than Central Mexico.

With a production window traditionally between November and February, Guatemalan growers have felt increased competitive pressure from Peru and Mexico, while their logistical channels to reach the Americas' largest market - the USA - are more challenging. There are also limitations around the availability of large extensions of land suitable for the crop, so whilst plantings have grown somewhat in recent years it has been at a very slow rate.

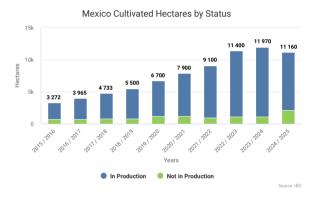
Incipient market development also appears to be underway as Guatemala recorded a 46% increase in imports last year, with more than half the volume coming from Mexico while Peruvian volume practically doubled.

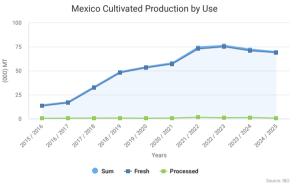


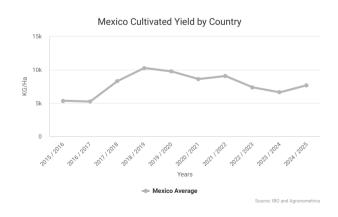
MEXICO |

Planting and Production Data, Figures & Commentary

(Denominated in Hectares and Thousands of Metric Tons)







Mexico 2024/2025 Production Metrics

Hectares Planted:	11,160 Ha
Organic:	8.00%
Under Structure:	80.00%
Hydroponics:	Not Reported
New Genetics:	15.00%
Hectares in Production:	9,034 Ha
Production:	69.40 (000) MT
Growth in Production1:	▼-2.54 (000) MT (-3.53%)
Growth from Hectares ² :	▼-12.27 (000) MT (-483.24%)
Growth from Yield ³ :	▲9.72 (000) MT (382.72%)
Yield:	7,682.20 (Kg/Ha)
Exports:	73.82 (000) MT
Imports:	0.30 (000) MT
	Source: IBO and Agronometrics

¹ Volume change compared to previous season

² Change in volume due to hectares entering or leaving production

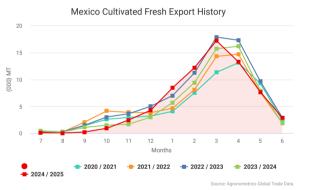
³ Change in volume due to field productivity (yields)

Mexico Cultivated Fresh Exports by Partner (000) MT (Data inferred from trade partners)

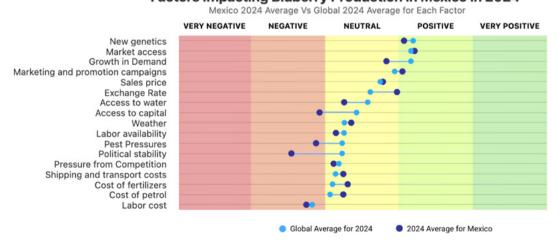
Reporter	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025
United States	62.85	67.73	78.08	64.24	64.59
Canada	7.00	7.90	10.15	7.47	7.81
Japan	1.09	1.08	1.16	0.89	1.26
United Kingdom	0.07	0.19	0.23	0.18	0.01
Guatemala	0.03	0.06	0.12	0.08	0.10
Others	0.44	0.24	0.19	0.07	0.05
Mexico Totals	71.49	77.20	89.92	72.94	73.82

Source: Agronometrics Global Trade Data





Factors Impacting Bluberry Production in Mexico in 2024





Mexico Country Member Summary

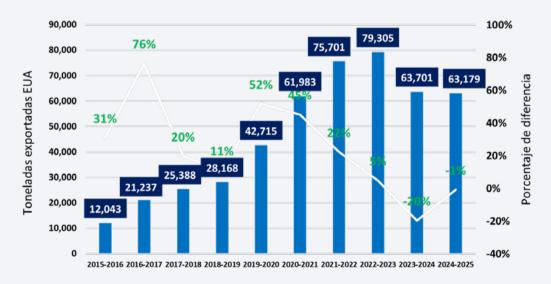
Adapted from the report by Juan José Flores García, general director of the National Association of Berry Exporters (Aneberries)

Mexico 2024/25 Season Summary

The Mexican blueberry industry has faced a challenging period over the last two seasons (2023-2025), experiencing a 24% decrease in exports to the U.S. compared to its peak in 2022–23 season. The main reasons include:

- Variety replacement
- Effects of climate change
- High investment and production costs
- As a result, there has been a reduction in planted area.

Despite these challenges, the sector has entered a phase of learning that will enable a strategic restructuring and planning of production, with better preparation for climate and market contingencies. In the words of Miguel Angel Curiel, president of Aneberries, blueberries are expected to surpass strawberries in revenue within the next two to three years, driven by the development of more productive varieties. By 2030, exports of fresh blueberries to the United States are projected to reach 100,000MT.



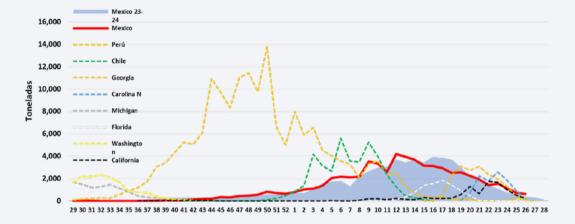
Graph 1. Export Volume (Fresh) to the U.S. - Metric Tons - Historical % Variation by Season | USDA 2015-2025

Exports to the United States

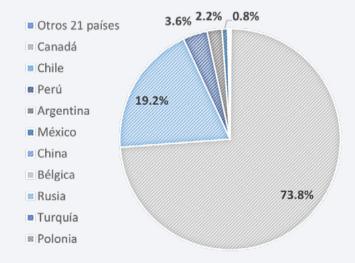
Despite the challenges, Mexico closed the season with over 63,000MT of fresh blueberries exported to the United States, maintaining its position as the second-largest exporter to that market, representing 16% of total U.S. imports.

Peru leads with 44%, followed by Mexico and then Chile in third place with 10.9%. Although the U.S. imports fresh blueberries from nine countries, domestic production covers 23% of its consumption.

In the frozen blueberry segment, Mexico ranks fifth among 26 supplier countries, with a market share of 0.8%. Canada tops the list with 75.2%, followed by Chile (17.5%), Peru (3.6%), and Argentina (2.4%).



Graph 2. Export/Production Curve to the U.S. | USDA 2023-2025



Graph 2. Export/Production Curve to the U.S. | USDA 2023–2025

Fresh Mexican blueberries are sold in 22 destination countries. The primary market is the United States, accounting for 96% of exports, followed by Japan with 2% and Canada with 1.5%.

Global Overview: Mexico closed the season with a total production of 64,000MT of fresh blueberries, generating \$487 million in revenue — a 4% decrease compared to the previous season.



Volume and Value of Exports by Region – CUSTOMS Aug 2024 / May 2025

Marruecos	1,538	
Argentina	1,860	
California S	3,102	
Nueva Jersey	4,164	
California C	7,187	
Florida	9,051	
Michigan	10,132	
Carolina	10,351	
Oregon	10,542	
Washington	15,901	
Georgia	17,888	
Canadá	24,521	
Chile	39,510	
México	63,179	
Perú		172,75

Graph 3. Volume of Fresh Blueberry Exported/Produced to the USA | USDA 2024-2025

Source of information: ANAM (National Customs Agency of Mexico) 2024–2025, USDA fresh and frozen 2014–2025, processed by Aneberries. / ANAM data updated as of May 2025, USDA data as of week 26 of 2025. Information is subject to change. Aneberries is not responsible for the misuse of this data.

Don't ask what Aneberries can do for you — ask what you can do for the berry sector.

For this Association, the motto above has been a guiding mantra since the very genesis of Aneberries. While, strictly speaking, Aneberries' role is to provide services to our members, it is paradoxically thanks to them that our actions have such an impact. The collective efforts of each company provide the momentum our sector needs.

This is what we call **associativity**, and it is how an association like Aneberries comes to life. In this short period of time, it has positioned itself as a benchmark within the agricultural sector, its dynamism serving as a testament to its success and growth - all thanks to teamwork and the goodwill of each member to make a difference.

So the questions arise: What is Aneberries? What does it do? Why is it so important?

Aneberries was founded 16 years ago in pursuit of self-regulation, with food safety as its main driving force, building upon efforts that some companies in the industry were already implementing and giving the Association a formal structure. Over the following years, we developed all our core areas of work:

• Plant Health, to offer more sustainable alternatives for pest control - a permanent and significant challenge for the sector. Thanks to targeted actions by this department, we have mitigated the impact of pests on production and producers' income. Notable achievements include the reconversion and recovery of blackberry crops, containing and preventing the spread of pests associated with the crop in Michoacán - one of the main production areas - through joint work with other agricultural associations and authorities such as SENASICA. We have also identified and controlled other key pests such as Scirtothrips dorsalis, Drosophila suzukii, leafrollers, Neopestalotiopsis rosae, Macrophomina phaseolina, and Duponchelia fovealis, among others.



Example: Amorbia cuneana (leafroller) in blueberries.

• Food Safety, supporting producers of all scales and promoting the adoption of the highest standards in Good Agricultural Practices. A notable achievement is the creation and implementation of the BerryGap Standard, serving as an internal recognition and support tool for small producers to meet the minimum food safety requirements and obtain export certification. Additional efforts include the management, collection, and disposal of empty agrochemical containers through Temporary Collection Centers (CATs), with the Jalisco CAT being repeatedly recognized as a national benchmark for the highest collection volumes. Another key tool is the highly requested List of Authorized Pesticides, a guide for proper pesticide application tailored to the main export destinations.



Recognition awarded to CAT Jocotepec for the highest number of containers collected in 2024.

• Sustainability and Social Responsibility, offering training and promoting good labor, social, and environmental practices, aligned with the Sustainable Development Goals (SDGs) promoted by the UN Global Compact, to which we are signatories.

Aneberries also works to protect the reputation of Mexican berries and their producers, achieving important international legal victories — such as the USITC Section 201 (blueberries) and Section 332 (raspberries) investigations into Mexican agricultural products. Both concluded that Mexican imports do not harm the U.S. industry, setting a positive precedent for other products under review. These victories, supported by the Mexican federal government, Aneberries, and the National Agricultural Council, reinforced the competitiveness and fair trade practices of the Mexican berry industry and strengthened Mexico's position in agricultural trade with the U.S., especially within the USMCA framework.

In terms of **trade and market development**, Aneberries continues to consolidate itself within the North American market while diversifying into others — including Europe, Asia (particularly Japan), and Latin America — through participation in key international trade fairs. These efforts have positioned us as a benchmark in the industry and earned us the **2021 National Export Award**.

We also aim to develop the domestic market by launching educational campaigns about the nutritional benefits of berries, increasing their adoption in the Mexican diet, and promoting them at national fairs. By showcasing the diversity of our crops to Mexican consumers, our goal is to make them feel proud to consume globally recognized, high-quality products that are not only delicious and nutritious, but also versatile in culinary applications.



Reception of the 2021 National Export Award (presented by the Ministry of Economy in February 2022).

This year, we also want to share with you one of the sector's greatest achievements: the **International Aneberries Congress** - the main forum where we meet every year for feedback, training, access to new technologies and innovations, and most importantly, to strengthen connections among all those involved in berry production in Mexico.

This year, we celebrate the **15th anniversary** of the Congress — a milestone filled with shared successes. Known as *"The Berry Festival"*, it is a celebration where everyone is welcome.



Now, the question is: How can you contribute to the sector? What can you do for the berry industry? Reach out to us, and together we can find a way for you to be part of this positive change for Mexico's berries.

Mexico Report Team Narrative

Having weathered a "perfect storm" of production and economic challenges in the spring season of 2024, in the aftermath of an already difficult 2023 (driven by weather), the Mexican blueberry industry has been given a reprieve this year with improved conditions and pricing. But the industry is nowhere near as large as stakeholders thought it was going to become three years ago - a time when most experts believed growth would slow to 20% from the aggressive pace seen from 2016 to 2022. However, volume has barely budged since then due to a number of factors. Difficult seasons have led to attrition amongst small growers, ongoing varietal transition is yet to be felt in volume figures, and not all varietal trials have performed to expectations. Notably, the kinds of yields achieved in other southern highbush hotspots like Peru and Morocco have proved elusive for Mexico and its diverse micro-climates that can present problems with heat, rain and pest pressures (and additionally comparatively lower farm sizes, meaning fewer economies of scale). There is an acknowledgement by some sources that mistakes were made in the industry's development around how and where fields were established, which was not as much of a pressing issue in a highly-priced market compared to today's more competitive situation, where steady rises in labor costs and labor scarcity have also been cited by multiple sources as exacerbating existing challenges.

Mexican blueberry growers suffered from all three of these issues in 2023-24, at least as far as the core spring season is concerned (more regarding the fall season below). Just as had been the case in the prior season, the season lead-up was characterized by high temperatures and wet conditions in the fall that were conducive to pest troubles, negatively impacting yield. This delayed the flower and fruit set industry-wide, and in some cases led the fruit to dry out or fail to set, particularly in Sinaloa which was hit harder than Central Mexico. On a more positive note, it has been reported that the instances of plant death observed due to heat stress in 2022-23 were not

repeated as growers took precautions by delaying the pruning of plants, which through the wounds created can expose the bushes to greater water loss, bacterial and fungal infection, pest risks, and sunburn.

These field-level issues were compounded by exchange rates between the Mexican peso and the U.S. dollar. High interest rates had led the Mexican peso to strengthen by 11% in the year to April 2023, and it strengthened by a further 8% by April 2024, meaning that in both campaigns growers were receiving lower returns in their national currency for each dollar of revenue than in the prior year. The higher interest rates also made it harder for local companies to invest. One source noted that this combination of factors led a high portion of growers to leave the business.

"Definitely it was one of the most complicated seasons we've had in the berry industry in the last 20 years. Everything came at once," as one stakeholder noted.

From most accounts at the time of writing, 2025 has shaped up more favorably with "benevolent" weather conditions (not as hot, a return to normal rain conditions in the summer and less rain in the fall), lower interest rates, and exchange rates returning to levels more similar to 2022 during the peak spring season. In March, exports to the U.S. – which absorbs almost all of its shipments - peaked a full four weeks earlier than in 2024, with average pricing that has mostly been higher than historical averages; this may also be reflective of a greater share in the mix of proprietary genetics, both from a quality (price) and timing perspective (earlier-fruiting cultivars), as one stakeholder reported the start of the peak was actually running two weeks later than normal.

The Mexican blueberry sector has grown from non-existence at the turn of the Millennium to one of the top focal points of blueberry development worldwide, hosting almost all

major blueberry genetics companies of note that specialise in southern highbush varieties. From around 2005, pioneering marketers, growers and breeders from Chile and the U.S. teamed up with Mexican producers and agronomists in an attempt to 'tropicalize' southern highbush blueberries in the state of Jalisco, fine tuning practices around pruning, varietal selection, soil management and protective systems such as tunnels. It was a practice that proved successful over time, culminating in dual harvests in both the fall and spring – the former generating the most lucrative returns for several years before Peru too was able to develop an industry and tap that same window.

A large portion of growers have shifted away from the fall production window from September to December in favor of the industry's more 'natural' timing of late winter into the spring with peak volumes in March and April. The transition away from this window, with late-year export volumes to the U.S. down 62% in 2024 compared to 2021, was prompted by a Peruvian season peak in August-October in 2021 which sent prices plummeting in what had previously been a very lucrative time period for Mexican growers. Those who could change their timing with pruning did, some continued, and others exited the industry. Those who stuck around received big windfalls in 2023 due to a short Peruvian season as prices more than tripled year-on-year, but in 2024 they dropped closer to 2022 levels once more.

For growers located at higher altitudes in Central Mexico, the likelihood of hail and frosts impedes their ability to change outside their more natural window of September to November. Farms at an altitude of around 1,800 meters above sea level are prone to frosts in late December and January, which is when plants will be flowering if they are pruned in summer in a bid to produce fruit in the spring, leaving growers exposed to losing their crops. This is why most producers targeting the

fall sales window aim to have their harvests wrapped up by the end of the year.

For a sector that used to be dominated by open varieties, the cultivar make-up of Mexico's blueberry has been overhauled to an extent with the majority of cultivated hectares now comprising proprietary varieties with practically every single global blueberry genetics company of note having a presence in Mexico with proactive plans in the pipeline for both the reconversion of existing hectares and the planting of new ones. One particular early-producing variety from a leading U.S. nursery and genetics company has gone from representing around 5% of Mexico's blueberry surface area to reaching 15% by the end of 2024. In contrast, the predominant open variety, Biloxi, accounted for more than a third of farms two years ago but was reduced to 20% in 2024.

A large proportion of proprietary variety plantings in Mexico are still young and are therefore in the early stages of the rising yield curve, implying lower volumes in the short-term, and – if expectations are met – higher yields and quality in the medium-to-longer term. Jalisco, which represents the largest surface area dedicated to blueberries of any state, has a lower percentage growth rate than many other states but is still the growth leader in absolute terms. High levels of growth have been seen in more underdeveloped states in terms of blueberries: Guanajuato, where there are various local players and the presence of a major British-American partnership with domestic industry, and a few companies looking to develop new plantings from another U.S. company; and Puebla, where a Mexican company has been conducting trials for a few years and is now ramping up plantings. Other key states that have seen planting growth include Michoacan, Sinaloa, and Baja California.

As noted earlier, Jalisco is the leading producing area, and is a part of the country where there is a prevalence of farms under

tunnels with a mix of both substrate and in-ground farms. Meanwhile, some of the world's leading blueberry companies invested heavily in the northern state of Sinaloa in recent years; a state where investors are more likely to find large, contiguous tracts of land than in Central Mexico where land sizes tend to max out at about 40-50ha. The cost of production is also cheaper in Sinaloa as tunnels are mostly not needed, and the majority of fruit is grown in substrate and is harvested slightly later than in Central Mexico. That said, it has been noted that there is not the same appetite for increased production in Sinaloa as there was just a few years ago, due to the aforementioned weather-related challenges, thrips, and less availability of water amid persistent drought conditions as well as difficulties in achieving the same fruit quality as the higher elevations of Central Mexico.

The Mexican blueberry industry has the comparative advantage of being right on the doorstep of the world's most significant fresh blueberry market, the United States, which buys most of its exports. Elsewhere, Mexico has been growing its presence in its second-largest export market Japan, where fruit is shipped on a 17-day sea journey from the Port of Manzanillo to Japan in controlled atmosphere conditions, or by airfreight when the opportunity presents itself. The market has been a point of focus for some growers whose premium genetics guarantee a longer shelf life, and average pricing is much higher than what Mexico receives in the U.S. (albeit with

volumes that are miniscule in comparison). At the time of writing, the ever-changing tariff settings in the U.S. have not had a large impact on the Mexican blueberry industry as the fruit is exempt from tariffs because of its USMCA-compliant status. However, to reduce tariff risk some shippers have opened up direct export channels and arrangements with Canadian partners, whereas previously the status quo was that Canadian-bound fruit would be re-exported by U.S.-headquartered entities.

Industry association Aneberries continues its efforts to raise domestic consumption amongst Mexico's population of more than 120 million people. The hope is that this could pave the way for a year-round program in Mexican supermarkets, encouraging more counter-seasonal imports from the USA, which after growing in 2023 fell substantially in 2024. Sources report high rates of growth in domestic consumption with blueberries mostly sold in 6oz packs, although the fruit is sometimes sold in 9.8oz jumbo packs and pints in club stores. Notably, growers are also sending high-quality, proprietary genetics to domestic supermarkets as well in a bid to enhance the consumer experience and encourage market development. One of the country's largest grower-marketers send domestically-grown blueberries to eight key distribution hubs throughout Mexico, which sell to all the main retailers. Consumption per capita in Mexico still remains very low at approximately 70g per person.

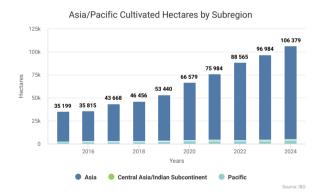
Planting and Production Data, Figures & Commentary

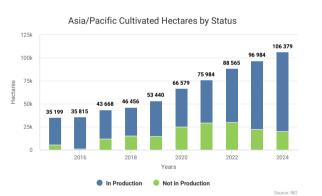
(Denominated in Hectares and Thousands of Metric Tons)

Asia/Pacific Cultivated Hectares by Subregion

Asia/Pacific		Hec	tares Plante	2024 Pi	roduction (00	0) MT		
Growth Totals	2020	2021	2022	2023	2024	Fresh	Process	Total
Asia	62,928	71,884	84,558	92,733	101,617	552.84	159.29	712.13
Pacific	3,106	3,430	3,277	3,350	3,776	31.84	0.70	32.54
Central Asia/Indian Subcontinent	545	670	730	900	986	7.19	0.30	7.49
Asia/Pacific Totals	66,579	75,984	88,565	96,984	106,379	591.87	160.29	752.16

Source: IBO





GLOBAL STATE OF THE BLUEBERRY INDUSTRY REPORT | 2025 129

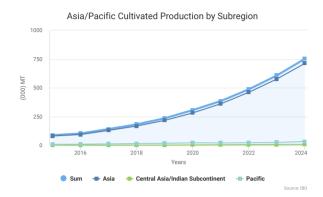
Asia/Pacific Cultivated Production by Subregion(000) MT

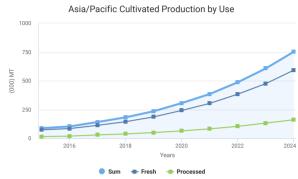
Asia/Pacific		2022			2023			2024		
Productions Totals	Fresh	Process	Total	Fresh	Process	Total	Fresh	Process	Total	
Asia	357.73	102.69	460.42	445.08	130.98	576.06	552.84	159.29	712.13	
Pacific	20.94	0.49	21.43	23.66	0.60	24.26	31.84	0.70	32.54	
Central Asia / Indian Subcontinent	4.61	0.30	4.91	6.18	0.30	6.48	7.19	0.30	7.49	
Asia / Pacific Totals	383.28	103.48	486.76	474.92	131.88	606.80	591.87	160.29	752.16	

Source: IBO

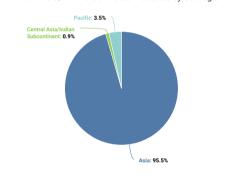
ASIA / PACIFIC

130 GLOBAL STATE OF THE BLUEBERRY INDUSTRY REPORT | 2025 GLOBAL STATE OF THE BLUEBERRY INDUSTRY REPORT | 2025 131

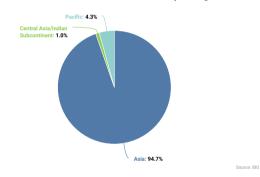


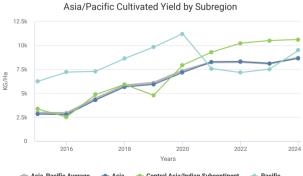


2024 Asia/Pacific Cultivated Hectares by Subregion









Asia/Pacific 2024 Production Metrics

Hectares Planted:	106,379 Ha
Hectares in Production:	86,405 Ha
Production:	752.16 (000) MT
Growth in Production1:	▲145.36 (000) MT (23.96%)
Growth from Hectares ² :	▲116.25 (000) MT (79.97%)
Growth from Yield ³ :	▲29.09 (000) MT (20.02%)
Yield:	8,704.80 (Kg/Ha)
	Source: IBO and Agronometrics

¹ Volume change compared to previous season

ASIA

Planting and Production Data, Figures & Commentary (Denominated in Hectares and Thousands of Metric Tons)

Asia Cultivated Hectares by Country

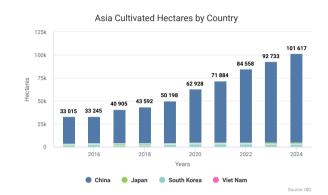
Asia		He	ctares Planted	l		2024 F	roduction (000) MT
Growth Totals	2020	2021	2022	2023	2024	Fresh	Process	Total
China	58,524	67,425	80,104	88,626	97,452	542.08	156.58	698.66
Yunnan	3,352	5,634	10,001	14,451	18,000	193.51	4.94	198.45
Liaoning	9,879	11,001	12,889	13,000	13,666	88.63	18.00	106.63
Guizhou	12,791	13,957	14,957	15,341	16,320	32.87	54.88	87.75
Sichuan	5,234	6,401	7,601	8,900	10,000	56.23	28.65	84.88
Shandong	6,001	6,491	7,001	7,201	7,680	62.61	6.00	68.61
Anhui	5,869	6,300	7,100	7,400	7,721	32.11	9.00	41.11
Jilin	4,252	4,622	5,400	5,800	6,068	13.25	10.52	23.77
Hubei	2,490	3,259	4,046	4,246	4,446	16.11	5.23	21.34
Guangdong	2,094	2,080	2,070	2,030	2,000	14.12	2.22	16.34
Hunan	2,294	2,379	2,390	2,490	2,660	12.22	2.12	14.34
Jiangsu	1,790	2,067	3,068	4,079	5,046	9.30	6.93	16.23
Jiangxi	904	1,191	1,390	1,432	1,630	3.80	5.63	9.43
Zhejiang	690	832	1,101	1,201	1,324	5.31	0.17	5.48
Chonqing	604	891	721	655	467	1.80	2.29	4.09
Shaanxi	281	321	371	400	424	0.21	-	0.21
South Korea	3,000	3,000	3,000	2,600	2,600	7.80	2.00	9.80
Japan	1,400	1,455	1,448	1,500	1,558	2.95	0.71	3.66
Viet Nam	4	5	6	7	7	0.01	-	0.01
Asia Totals	62,928	71,884	84,558	92,733	101,617	552.84	159.29	712.13

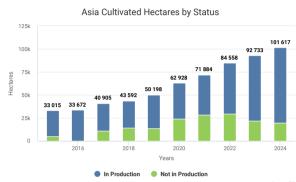
Source: IBO

² Change in volume due to hectares entering or leaving production

³ Change in volume due to field productivity (yields)

132 GLOBAL STATE OF THE BLUEBERRY INDUSTRY REPORT | 2025 GLOBAL STATE OF THE BLUEBERRY INDUSTRY REPORT | 2025 133

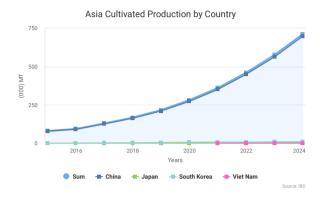


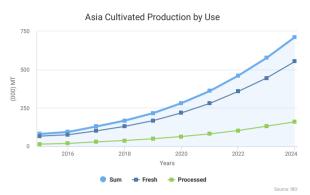


Asia Cultivated Production by Country(000) MT

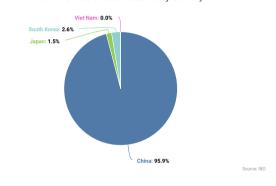
Asia		2022			2023			2024	
Productions Totals	Fresh	Process	Total	Fresh	Process	Total	Fresh	Process	Total
China	349.35	100.80	450.15	434.87	128.67	563.54	542.08	156.58	698.66
Yunnan	99.59	3.86	103.45	142.13	4.03	146.16	193.51	4.94	198.45
Liaoning	52.90	11.44	64.34	69.99	14.69	84.68	88.63	18.00	106.63
Guizhou	37.86	34.52	72.38	32.99	44.38	77.37	32.87	54.88	87.75
Sichuan	40.85	18.21	59.06	44.35	23.38	67.73	56.23	28.65	84.88
Shandong	37.58	3.81	41.39	49.59	4.90	54.49	62.61	6.00	68.61
Anhui	26.54	5.72	32.26	31.39	7.35	38.74	32.11	9.00	41.11
Jilin	8.17	6.17	14.34	10.37	8.51	18.88	13.25	10.52	23.77
Hubei	9.55	3.33	12.88	12.68	4.27	16.95	16.11	5.23	21.34
Guangdong	11.46	1.41	12.87	13.13	1.81	14.94	14.12	2.22	16.34
Hunan	11.53	1.35	12.88	12.22	1.73	13.95	12.22	2.12	14.34
Jiangsu	3.86	5.93	9.79	6.07	6.82	12.89	9.30	6.93	16.23
Jiangxi	3.41	2.28	5.69	3.35	4.14	7.49	3.80	5.63	9.43
Zhejiang	4.78	0.11	4.89	4.97	0.14	5.11	5.31	0.17	5.48
Chonqing	1.14	2.66	3.80	1.47	2.52	3.99	1.80	2.29	4.09
Shaanxi	0.13	-	0.13	0.17	-	0.17	0.21	-	0.21
South Korea	6.32	1.40	7.72	7.71	1.71	9.42	7.80	2.00	9.80
Japan	2.05	0.49	2.54	2.49	0.60	3.09	2.95	0.71	3.66
Viet Nam	0.01	-	0.01	0.01	-	0.01	0.01	-	0.01
Asia Totals	357.73	102.69	460.42	445.08	130.98	576.06	552.84	159.29	712.13

Source: IBO

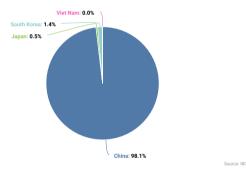


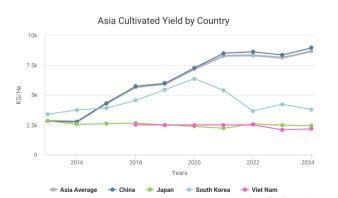


2024 Asia Cultivated Hectares by Country









Asia 2024 Production Metrics

Hectares Planted:	101,617 Ha
Hectares in Production:	82,270 Ha
Production:	712.13 (000) MT
Growth in Production1:	▲136.07 (000) MT (23.62%)
Growth from Hectares ² :	▲113.98 (000) MT (83.77%)
Growth from Yield ³ :	▲22.08 (000) MT (16.23%)
Yield:	8,655.76 (Kg/Ha)
Exports:	30.37 (000) MT
Imports:	89.52 (000) MT
	Source: IBO and Agronometrics

¹Volume change compared to previous season

² Change in volume due to hectares entering or leaving production ³ Change in volume due to field productivity (yields)

Asia Exports by Partner Subregion(000) MT

Subregion	2020	2021	2022	2023	2024
Asia	15.42	23.09	20.25	11.97	29.70
Eastern Europe	0.11	0.12	0.15	0.22	0.33
Central Asia/Indian Subcontinent	-	-	0.00	-	0.18
Pacific	-	0.00	-	0.03	0.17
Middle East	-	-	0.01	-	-
Others	-	0.00	0.00	0.00	0.00
Asia Totals	15.53	23.22	20.41	12.22	30.37

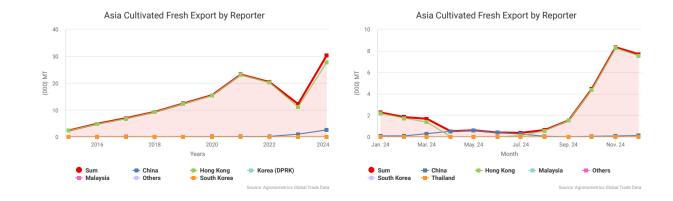
Source: Agronometrics Global Trade Data



Asia Exports by Reporter(000) MT

Subregion	2020	2021	2022	2023	2024
Hong Kong	15.38	23.07	20.22	11.16	27.74
China	0.11	0.12	0.18	1.01	2.59
Malaysia	0.00	0.01	-	0.04	0.03
South Korea	0.04	0.01	0.01	0.01	0.00
Thailand	0.00	0.00	0.00	0.00	0.01
Others	0.00	0.00	0.00	0.00	0.00
Asia Totals	15.53	23.22	20.41	12.22	30.37

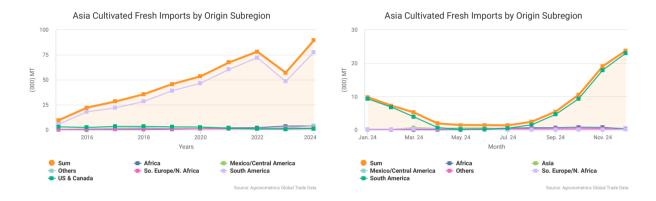
Source: Agronometrics Global Trade Data



Asia Imports by Origin Subregion (000) MT

Origin	2020	2021	2022	2023	2024
South America	46.63	60.28	72.14	48.28	77.67
Africa	1.13	1.91	2.10	3.69	3.84
Asia	0.12	0.22	0.22	0.66	2.51
So. Europe/N. Africa	0.97	0.95	0.87	1.36	1.68
Mexico/Central America	1.17	1.56	1.18	1.06	1.15
Others	3.41	2.36	1.64	2.05	2.67
Asia Totals	53.43	67.27	78.15	57.10	89.52

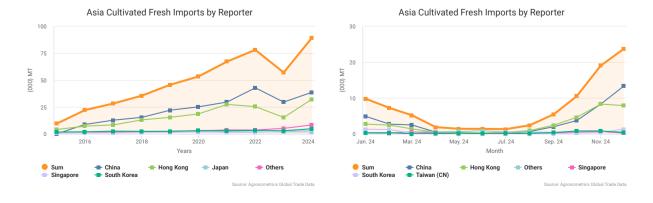
Source: Agronometrics Global Trade Data



Asia Imports by Reporter (000) MT

Reporter	2020	2021	2022	2023	2024
China	25.16	29.60	42.85	29.59	38.74
Hong Kong	18.61	27.41	25.39	15.29	32.30
South Korea	3.04	3.01	3.19	2.94	4.75
Singapore	1.78	1.38	1.34	2.32	3.53
Taiwan (CN)	1.20	1.43	2.57	2.01	3.55
Others	3.65	4.44	2.81	4.95	6.65
Asia Totals	53.43	67.27	78.15	57.10	89.52

Source: Agronometrics Global Trade Data



Asia Report Team Narrative

For an in depth complement to the happenings in the most established regions of Asia, please visit the following country reports:

China

If you exclude the world's largest blueberry producer, China (see China Report Team Narrative), Asia is a region that imports much more than it grows of the crop as exporters around the world seek new consumer markets in both developed and developing economies where rising middle classes present massive untapped potential

One industry leader who is active worldwide believes Southeast Asia in particular will see the highest consumption growth in percentage terms in 2025, followed by the Middle East.

"Singapore is a developed country, but for other countries in the region it's like China 5-10 years ago," adds another marketer who is developing a global sourcing program for Asian markets, and his company is not the only one doing so.

A milestone of leading the world in growth would be no surprise for Southeast Asia given the extraordinary growth rates recorded last year in its three largest markets Singapore (+49%), Thailand (+25%) and Malaysia, the latter having grown by 61% to overtake Japan as an import market. That said, Japan has a well-established blueberry industry of its own, as does South Korea which is Asia's largest importer outside of mainland China and Hong Kong, and also reported significant import growth last year of 33%.

Southeast Asia is a source of excitement for blueberry sector stakeholders worldwide who understand its potential to absorb rising volumes, based on a combined population of almost 700 million. Even earlier-stage blueberry import markets such as Vietnam, the Philippines and Indonesia rose rapidly at rates of 21%, 64% and 46% respectively last year, with their total imported volume now comparable to that of Japan.

The open market of Singapore – which imported 3,615MT last year - sells a wide assortment of blueberry origins, presented in diverse packaging styles and sizes to its population

that is one of the world's most affluent. One local marketer estimates that around 20% of the blueberries sold in the city-state belong to what could be described as the premium category, which is a much higher portion than in neighboring Malaysia and Indonesia.

South Africa is the leading supplier to Singapore, but for the 2024 season there were some reports of net weight issues – whereby a pack, for example, is labelled as 125g but in fact weighs slightly less – that led to rejections by retailers who required fruit to be repacked. However, with the exception of a few programs that pack into cups or other formats for supermarkets, most blueberries sold in Singapore and Southeast Asia are pre-packed at source. This is partly due to the fact Singapore is the main distribution hub for the region, and its labor costs are high and land availability is low.

Peru was the second-leading supplier to Singapore, and likely would have shipped more in 2024 had it not been for a delayed season which meant a greater share of shorter early volumes were sent to China, a higher paying market. Pundits are positive about the opening of Peru's Port of Chancay where container ships can go direct to Hong Kong in a 23-day journey, which is less onerous than other routes that often reach Asian markets in a roundabout way. This time saving has implications for post-harvest shelf life, opening up the potential for fruit to be shipped on to other Asian destinations.

China itself has also grown its presence in the Singaporean market in recent years, and was its third-largest blueberry supplier in 2024, while also establishing its presence in fast-growing import destinations like Thailand and Malaysia. It is understood that many years ago there were early attempts by Chinese exporters to ship inferior varieties into Southeast Asian markets and they were not well received, giving importers a poor impression of the industry. That perception has changed with more professional and concerted efforts

over the last few years, underpinned by strong post-harvest practices, premium genetics and creative marketing. Other sources of origin in Singapore are diverse, including Australia, Spain, Morocco, Poland, Zimbabwe and others.

Japan is a leading export market for U.S. fresh and frozen blueberries outside of North America, but the market is more relevant still for Mexico which accounts for more than half its imported supply. For a country with a population of more than 125 million people, Japan's per capita blueberry production and imports are now much smaller than their Korean neighbors and have been static for years. This may signal opportunities for growth with concerted efforts, especially considering Japan's strong horticultural reputation in other crops such as strawberries.

Supplier dynamics vary in Asian markets as protocol challenges persist for many industries. Peru dominates the import market in Thailand where it has access, and in the near future is expected to gain access to the Indonesian market - a prospect that has been described as a "game changer" should it transpire. Meanwhile, Chile is by far the leading supplier of fresh blueberries to South Korea (up 46% in 2024), having previously centred its Asian-focused exports in China before Yunnan started to impinge on its market window. Korea is also a very important market for exports of frozen blueberries from the U.S., where only one state, Oregon, has access to the market as far as fresh blueberries are concerned, but that channel has not developed greatly as the season is similar to local supply. The U.S. industry is currently working on a request for expanded market access in South Korea to include Washington and California within the coming years, while South Africa is aiming for access too. It has been reported that fresh blueberries from Oregon and Canada are brought in as substitutes if domestic production declines during the peak summer months, which can be the case with open-field operations.

From a production standpoint, South Korea is the second-largest producer on the continent after China, and its volume has been steadily increasing since overtaking Japan in 2016, doubling in size over the three years that followed to 2019. Much of this growth has come from higher-yielding early season southern highbush varieties under tunnels as plantings mature, although the shift in timing has led to a return in interest towards earlier northern highbush cultivars for open field production. A lot of the varietal conversion in Korea has been led by a private nursery and genetics company from the U.S. Pacific Northwest, and another breeder from Australia whose varieties – both domestic and as imports – are branded in a premium tier, but still in volumes that are too low to generate widespread consumer awareness.

Varietal and agronomic changes have led to a generalized improvement in fruit quality, with local Korean blueberries available from March to October. Frozen blueberries used to be much more important in the market than fresh blueberries, but as local production and imports have grown the retail prices have gone down, improving accessibility for consumers. "There's also been a broader shift in preference toward convenient, ready-to-eat snack fruits, which has contributed to higher fresh blueberry consumption," a local source notes.

Perceptions that Koreans like smaller berries have also become outdated, with a source noting that the preferred berry size has shifted upwards in recent years. "Where 16mm berries were common in wholesale and 18mm in retail, consumer expectations have moved up by about one size since the COVID-19 period," the source explains. "This reflects the Korean market's general preference for larger, more premium-looking fruit."

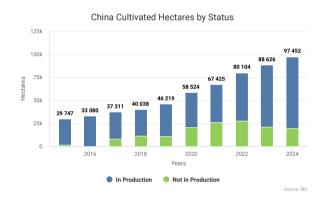
Laos has also emerged as a nascent industry in close proximity to the Chinese province of Yunnan. At least two large international blueberry genetics companies are involved in commercial trials in the country, where farms are expected to extend the earlier shoulder period of Yunnan's season. Whilst Laos does not yet have access to the mainland China market, the two countries are working on an export protocol, and in the early stages of development there is ample opportunity to sell fruit in other markets such as Hong Kong and Singapore.

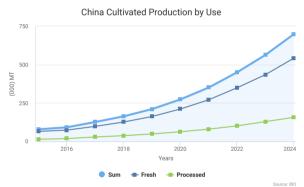
138 GLOBAL STATE OF THE BLUEBERRY INDUSTRY REPORT | 2025 GLOBAL STATE OF THE BLUEBERRY INDUSTRY REPORT | 2025 139

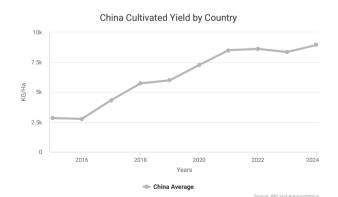


Planting and Production Data, Figures & Commentary

(Denominated in Hectares and Thousands of Metric Tons)







China 2024 Production Metrics

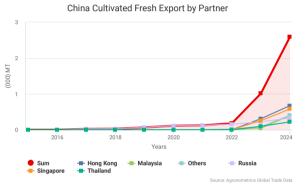
Hectares Planted:	97,452 Ha
Hectares in Production:	78,157 Ha
Production:	698.66 (000) MT
Growth in Production ¹ :	▲135.12 (000) MT (23.98%)
Growth from Hectares ² :	▲111.76 (000) MT (82.71%)
Growth from Yield ³ :	▲23.35 (000) MT (17.28%)
Yield:	8,938.92 (Kg/Ha)
Exports:	2.59 (000) MT
Imports:	38.74 (000) MT

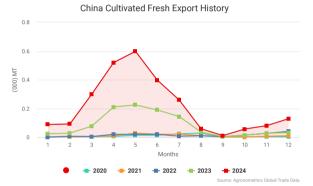
Source: IBO and Agronometrics

China Cultivated Fresh Exports by Partner (000) MT

Reporter	2020	2021	2022	2023	2024
Hong Kong	-	-	-	0.31	0.67
Singapore	-	0.00	0.00	0.25	0.58
Malaysia	-	0.00	-	0.05	0.39
Russia	0.11	0.12	0.15	0.22	0.33
Thailand	-	-	-	0.10	0.22
Others	-	-	0.02	0.08	0.40
China Totals	0.11	0.12	0.18	1.01	2.59

Source: Agronometrics Global Trade Data

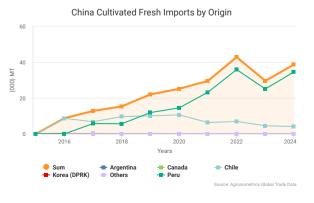


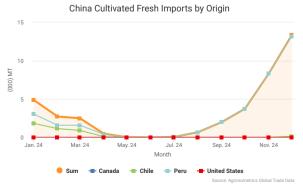


China Cultivated Fresh Imports by Origin (000) MT

Reporter	2020	2021	2022	2023	2024
Peru	14.54	23.27	35.89	25.05	34.61
Chile	10.62	6.32	6.96	4.53	4.13
United States	0.00	0.00	0.00	0.00	0.00
Canada	0.00	-	-	0.00	0.00
Others	0.00	-	-	-	-
China Totals	25.16	29.60	42.85	29.59	38.74

Source: Agronometrics Global Trade Data





¹ Volume change compared to previous season

² Change in volume due to hectares entering or leaving production ³ Change in volume due to field productivity (yields)

China **Report Team Narrative**

The Chinese blueberry industry is maturing. This may sound paradoxical given the country is already the world's largest grower of the crop, but blueberry market penetration remains low while high growth of 10-15% annually continues in the southwestern province of Yunnan that has been the hotbed of China's blueberry boom in plantings of southern highbush genetics.

Replicating trends seen elsewhere, the increased volume this expansion brings, has led to sharp price drops starting in mid-March, prompting growers to aim for earlier production through varietal selection, agronomic methods and/or altitude, and marketers harnessing extra supply to develop new export markets in the region. The extraordinary returns of years past are no longer a given in a market that has become more demanding, which means growers who lack the efficiency and quality output of more sophisticated operations are seeing their margins squeezed, leading to industry exits (although such attrition is vastly overshadowed by ongoing growth, which is not just occurring in Yunnan but nationwide).

When Yunnan's finishes up around June there is a stark difference in the attributes and eating characteristics of its southern highbush blueberries compared to the existing older northern highbush genetic stock that comes on-line for the Chinese summer. Sometimes referred to as the 'quality gap', this phenomenon is not unique to China and marketers are keen to explore options for extending the continuity of supply for large, firm and flavorful blueberries into the summer. This has created opportunities for the earliest supplies from Peru. Zimbabwe is also in a prime position to fill this need in relatively small volumes now that its negotiations for mainland China market access have proven successful with the recent signing of a protocol in September 2025 - an event that some sources anticipated and saw as a potential trigger for aggressive planting in that country. The northern growing regions of South Africa could benefit with market access, albeit slightly later, while Zambia actually does have China market access but is too early in its development to supply meaningful programs. Blueberries are next in line for Australia's market access negotiations with China after its apples were approved this year, but it too would only be able to supply a small

volume. Morocco, which produces blueberries early in the year at a similar time to Yunnan, is also reportedly advanced in its market access negotiations.

However, Chinese consumers demonstrate a preference for domestic fruit if the quality specifications are met, and marketers are eager to find higher-quality local supply in the summer window if possible. This is where one of the global trends in the blueberry industry comes into play as international blueberry genetics firms introduce new selections that replicate many of the characteristics that have come to be associated with premium southern highbush cultivars, but have been bred with northern highbush genes for colder climates. At least five foreign-owned blueberry IP companies - from the U.S., U.K., Australia and Chile - are reportedly planning such introductions. The earliest trials are due to commence this year with sites likely to be located in the Qingdao area in Shandong, the Dandong area in Liaoning near the border with North Korea, and in the Jilin province near the border of Russia and its easterly city of Vladivostok. In many ways it would be a full circle moment for the Chinese blueberry industry, which traces its history back to the first plantings in Shandong (see historical narrative below), the home of a sixth known breeding program that has active plans to work with industry on trials of new northern highbush genetics.

None of these projected plans, or indeed further legitimate varietal renewal in Yunnan, can take place without an orderly, legal system for intellectual protection that rewards and adequately compensates innovation. The past 18 months have been a watershed moment in this regard in China with several high-profile cases protecting the IP of foreign fruit companies operating in the country, not just in blueberries but also grapes, apples and kiwifruit. Industry stakeholders are encouraged but not completely sold on these developments. as they signal an intent to rectify an enormous proliferation of illegally planted blueberry genetics in China, with many local companies and retailers recognising the problem and indicating an openness to address the practice. There have been reports of growers of such illegal material approaching different genetics companies to admit their infringements, reaching agreements to pay the appropriate license fees and become







No.1 **Blueberry Brand in China**



Constant Pursuit of Leading Varieties

collaboration with global leading berry companies for licensed large-scale planting based on the preference of Chinese consumers

Global Production for 52-week Supply

52-week supply every year with production in key regions including Chile, Peru, and Yunnan Province in China

Self-owned growing areas in China

self-owned growing areas in Yunnan and Qingdao with smart plantation technology, empowering efficient operation of the blueberry industry

Quality Fruits Delivered with Smart Cold Chain Logistics

pioneer in fruit and vegetable cold chain, with over 30 self-built cold chain distribution centers. Joy Wing Mau Binhai Tower in Shenzhen, the first fully-automated intelligent fruit and vegetable cold storage in Asia

Omni-channel Sales, China Market at its Core to Reach Southeast Asian Markets

coverage of over 50 wholesale markets, 10,000 supermarkets, and 5 leading e-commerce platforms across Mainland China; expansion to HK, Singapore, Malaysia, Thailand, and Indonesia

Strategic Partnership with China's Aerospace Industry

certified provider of agricultural products for China's aerospace industry, covering 200 million households nationwide.







For collaboration, please contact: dani@joywingmau.com

legal farms. It appears this process of legitimization will continue as IP holders keep pursuing infractions in conjunction with industry, law firms and government, putting pressure on more illegal farms to come forward.

Nonetheless, the sheer volume of illegal nurseries and plantings means many thousands of illegal hectares will continue in operation as they are, with thousands more to come. Opinions vary about the ramifications of this dynamic – some argue the opportunity in China is simply too good to pass up even if your IP is infringed, whereas others question whether it is worth spending 10-20 years developing a variety and going through all the regulatory processes of bringing it into China legally if the developer of that cultivar only receives a small fraction of the return it ought to receive. Some sources say the pace of illegal planting is also a function of supply constraints from nurseries that cannot keep up with demand but the reality is also that illegally produced plants are available at a fraction of the cost of access compared to legal material. This quandary demonstrates the challenges of protecting plant rights across large nursery and farming operations where so many hands come into contact with plant material, and the difficulty of vetting all individuals in the supply chain who may seize on the chance to illegally propagate material. This is not just a China problem, but a global problem. "I know some breeding programs that have never entered China, but their varieties are in China." as one source noted.

Optimism continues

In the previous edition of this report we pointed to an air of optimism and momentum in the Chinese blueberry industry, and this description still holds true in 2025. A few years ago frustration abounded over blueberry plant material import permits, land restrictions for converting farms to non-essential crops like blueberries, and COVID lockdowns that limited sales in major coastal cities, although the latter sparked efforts to delve deeper into other cities, developing new sources of consumption that have ultimately been to the sector's benefit.

The same land use restrictions remain (see below for further details), and the demand amongst growers to plant new blueberry hectares is high when they are able to procure the space to do so, but the sector is still replete with growers who already have thousands of blueberry hectares planted and are interested in converting to higher-yielding genetics with better flavor, size and shelf-life characteristics.

The international genetics companies operating in China are happy to oblige, and there are a few – primarily from the U.S.. Australia and Spain - that are ramping up their introduction of new varieties and plant material as their licensees and partners plan to expand. There are some notable absences from particular global leaders in this space, as well as inclusions from up-and-comers who are reluctant to divulge their plans. Compared to a few years ago when breeding companies would be "scraping by" to get an import permit, now they are relatively easier to come by or have at least been obtained so that business in China is now more economically viable. A fast-growing Spanish breeder bought out its Chinese nursery partner, while a leading U.S. breeder has secured long-term production facilities for southern highbush and is now planning to develop a second young plant nursery for northern highbush. Both these companies have more and more licensees setting up operations in China from all over the world, while planting continues amongst affiliates from other genetics ecosystems. One of the southern highbush genetics pioneers in China is planning to pump up production in Yunnan of an Australian-bred early variety that is currently grown in tropical Far North Queensland. There are also reports of Chinese businesses reaching out to public and private blueberry genetics programs globally in pursuit of new alternatives.

The bullishness that pervades the Chinese industry is built around the idea that blueberry consumption still has a long way to go in China, with a rough estimate of 200g consumption per capita and the product still being fairly unknown to most citizens. "The growth of demand is coming from more consumers that haven't tried blueberries, or who didn't have a good experience with blueberries in the past," as one source explained.

Blueberries were previously only sold in 1st tier cities like Shanghai, Guangzhou, Shenzhen, Beijing, but have become more commonplace in 2nd tier cities too like Hangzhou and Chengdu. A leading Chinese grower-marketer has been building cold storage and distribution centres in many 3rd and 4th cities as well, underpinning growth opportunities for a range of fresh produce items including blueberries. Such infrastructure

ensures the berries reach these cities in an ideal condition, and then the next task is educating retailers about best practice such as keeping blueberries in refrigerated displays rather than open air, and engaging in marketing efforts to raise awareness. This includes sampling in stores, kindergartens and roadshows, advertising on elevator screens which is a more budget-friendly option in China than on television or bill-boards, and social media like TikTok (Douyin in China) and a platform called Xiao Hong Shu where consumers share their experiences with photos or videos, kind of like a mix between TikTok and TripAdvisor. Outside of initiatives led by marketers, one source notes a geographical correlation for blueberry consumption growth and fresh produce-focused retailer Hema Fresh's expansion into more 2nd and 3rd tier cities.

China is frequently described as a "bimodal" market for blueberries, meaning that high quality fruit is handsomely rewarded on price, and average-quality fruit is punished on price without much gradation between the two. There are several reasons for this; one is the great wealth that exists in certain pockets of the population where consumers are willing to pay significant premiums for healthy and flavorful food of all types, while for consumers outside this demographic who may buy blueberries they will always be at a high price relative to the household budget. This puts blueberries in more of a luxury category of consumption, and psychologically this is an important distinction in understanding the Chinese consumer; if you are buying a product that fits into an expensive or luxury category, the highest qualities are built into expectations and there is minimal tolerance for defects. Just because some consumers are willing to pay high prices, blueberry exporters targeting China take this for granted at their peril; at a certain price limit, and especially if the fruit is not of high enough quality, it will not move as traders (especially in 2nd, 3rd and 4th tier cities) are less willing to take on the risk of thin or negative margins in-market.

The heady pace that has historically accompanied so many growth spurts for a variety of industries in China led to what some have described as a "wild west" scenario for the conversion of farmland to uses other than staple agricultural crops, whether it be for the development of advanced horticultural systems and greenhouses or even commercial property. Both food security concerns and societal backlash (by Chinese

standards) over so-called 'nail house' hold-outs against large developments led to an adjustment in land use policy from Beijing that has placed a greater emphasis on utilizing arable land for rice, wheat, and corn, whilst also giving more negotiating power to individual plot holders; a major issue because the establishment of new blueberry farms often involves the agglomeration of sometimes hundreds of small landowners to negotiate with a local government enterprise that then signs a lease to the prospective grower, often with significant financial compensation from US\$32,000-64,000 per hectare required.

In practice, this has made securing farmland very difficult as laws are now applied more strictly, and implies much of the new growth in blueberry plantings will be taking place by converting existing orchards of other crops already classified as non-essential. This has already been taking place with Chinese companies investing further in the region, and with a high proportion of young plantings this should equate to rapid volume increases in the years to come.

Blueberries were first introduced to China in the 1980s in the northeastern province of Jilin and the province of Jiangsu to the north of Shanghai. But it wasn't until around 2010 that an exponential rise in production started to be seen with the province of Shandong as a major focal point, built mainly around northern highbush varieties. In 2012 China's largest blueberry grower at the time, based in Shandong's largest city Qingdao, was acquired by a large corporate fruit company owned by the parent of Lenovo Group. That company then merged three years later with China's largest fruit distributor, and in that same year it had entered into a joint venture with the world's largest blueberry company – based in Chile – to bolster production of the crop in China with leading genetics.

That joint venture partnership is now one of many that are growing IP/proprietary blueberries successfully in the southwestern province of Yunnan, the figurative engine room of China's modern fresh blueberry industry. Yunnan's blueberry production starts in December with small volumes, peaks from February to mid-April and continues until May, although the timing extremes are progressively being extended. Whereas early Yunnan production used to be in January, the earliest timing for volumes of note – albeit small relative to the total – is now November, with the season running until June.

There are even reports of Yunnan growers producing high-chill blueberries at high altitudes, albeit in small scale trials, in order to hit the market in the scarcest months of September and October. The reason Yunnan can have such an extended season is due to its richness of microclimate diversity and growing conditions, from the tropical area around Xishuangbanna to Jianshui at 1,500 meters above sea level and Qujing at 2,000m, where a U.S.-owned variety has been able to hit the "magic window" of September to November when there is little in the way of domestically-grown fruit. Aside from altitude and varietal selection as instruments to produce early, there have been modern experiments with shade cloth to induce plants to flower earlier, which has proven a successful method with some cultivars.

The 2024 season in Yunnan saw an estimated 10-15% increase in volume, continuing the trend of recent years. The spring was dry which meant growers faced challenges with water, and as is often the case there were high temperatures in April and May. Not all growers have adequate post-harvest processes or infrastructure in place, so such heat often means that the later season Yunnan fruit can be softer than the province's early fruit. A sharp reduction in older varieties such as Jewel and Emerald was observed in the market, although this might belie some replacements with illegally sourced plants of premium varieties. Going into 2025, the earlier part of the season was impacted by an influx of Chilean cherries, which have a substitute effect on blueberries and dragged down pricing. Notwithstanding efforts to grow earlier on some farms, the recent season started later overall due to cloudy and cooler weather.

In close proximity to Yunnan, the province of Sichuan is characterized by high altitudes and has a colder climate, which has implications for the varietal mix that can be planted with a slightly later season. But the province is known for its spring rains and heat during the harvesting period, with a broad reputation for inconsistent quality. The same could be said of some other southern highbush-growing provinces such as Anhui and Guizhou. Readers will note that Guizhou has the highest plantings of blueberries in China, but for context most of its production is from small growers producing rabbiteye cultivars that mainly go to juice grade processing with minimal impact on the fresh blueberry market.

Despite this, because of the high saturation of plantings in Yunnan and agricultural land restrictions more broadly, growers are investigating the potential of other warm — although much more humid - regions for southern highbush blueberry production, including Guizhou, Guangxi and Guangdong.

China's fresh blueberry prices usually start to plummet when large volumes of blueberries from the Yangtze River Delta area near Shanghai (Jiangsu, Zhejiang, Anhui) and the Shandong province come on-line. The season finishes in the northeastern provinces of Liaoning and Jilin, often winding up in August when late summer rains arrive. Some northern growers start earlier as growers cultivate their blueberries in greenhouses to induce earlier production, with some using locally designed greenhouses that have north-facing earthen walls. As a relatively new development, in other parts of the country such as Xinjiang, Shaanxi and Inner Mongolia, this low-cost and effective design for small holders has reportedly been deployed in trials over the past couple of years to successfully grow Bluecrop blueberries during part of Yunnan's season in areas with freezing temperatures outside. Such initiatives are at a very early stage and reportedly government-led, reutilizing infrastructure that was originally aimed at vegetable production.

Turning back to northern China, Shandong was selected to pioneer the country's blueberry industry due to sandy and acidic soil conditions in some parts of the province, and a more temperate coastal climate, where some endemic species of Vaccinium, the genus of blueberries, already grow naturally. Liaoning and Shandong play a critical role in servicing China during summer with production in June and July, while Shandong growers producing in greenhouses with back walls are able to achieve overlap with Yunnan with a March to late May window. However, this growing method only represents around 10% of the planting area, with most Shandong production grown in open fields or under tunnels. Yields and fruit quality vary greatly in the region with more sophisticated operations yielding 15MT per hectare while smaller farms yield around half that level. Yunnan, in contrast, has much higher yields that are more akin to what is achieved in Morocco, according to industry sources.

The 2024 season was challenging for growers in the northern provinces of Shandong and Anhui due to a mix of high temperatures and rain, which impacted fruit quality, following a more positive 2023 that was preceded by several years of flooding. In light of these frequent problems and high volumes pushing down prices, some growers have shifted focus from yield to quality, especially for the June period when supply is fairly scarce. Frosts tend to be more prevalent in Liaoning and Jilin, which are to the north of Shandong and are a bit later in their production, and when it comes to open field production such weather events often lead to crop diversions towards processing. As a general rule, most of the blueberries that are grown in northern China are also sold in the north due to post-harvest quality constraints.

Demand continues to exceed supply in China, but there is a belief within the industry that the market will become more selective about quality over the next three to five years. The market is already very exacting, even labelling blueberries by size such as 18mm+, 22+, etcetera, and ranking blueberries/varieties along tiers which, for example's sake, might be something like 'good', 'very good', 'premium' and 'traditional'.

Brands take precedence over company names and are often applied with segmentation. Blueberries now appear on the shelves of retailers, fruit shops, and stalls deep into the country, but in emerging cities it remains most common to encounter smaller pack sizes of 125g. However, for the industry as a

whole the packaging sizes and formats have become increasingly diverse, from cups to paper cartons to tubs to baskets, with international retailers and some local brands like Hema Fresh selling in 500g packages.

As a niche innovative concept that is gaining traction in some circles within China, garnering high premiums, more brands are selling blueberries in clusters, similarly to how grapes are sold, evoking a 'fresh field picked' aesthetic and experience. Opinions vary regarding the agronomic practices that underpin this marketing method, although some assert locally that it makes harvesting more efficient (especially with more sensitive varieties) and requires less labor for genetics less efficient to harvest. Labor continues to be an escalating issue in China's industry, like so many parts of the world.

As volumes from Yunnan increase with berries exhibiting longer shelf life, an emerging trend has been the increased presence of mainland Chinese fresh blueberries in other Asian markets such as Singapore, Hong Kong, Indonesia, Malaysia, Thailand and Russia. Last year China's exports increased by a 2.5x multiple to 2,592MT, and were up 1456% on export levels in 2022. At the time of writing 2025 were expected to far exceed the 2024 performance with March and April shipments both up three-fold year-on-year, albeit with lower pricing.

PACIFIC

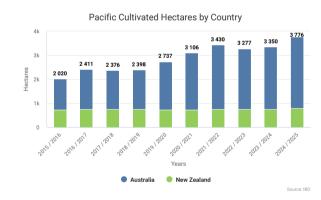
Planting and Production Data, Figures & Commentary

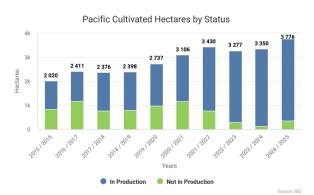
(Denominated in Hectares and Thousands of Metric Tons)

Pacific Cultivated Hectares by Country

Pacific	Hectares Planted					2024/202	5 Production (000) MT
Growth Totals	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Fresh	Process	Total
Australia	2,386	2,680	2,537	2,602	2,976	27.54	-	27.54
New Zealand	720	750	740	748	800	4.30	0.70	5.00
Pacific Totals	3,106	3,430	3,277	3,350	3,776	31.84	0.70	32.54

Source: IBO

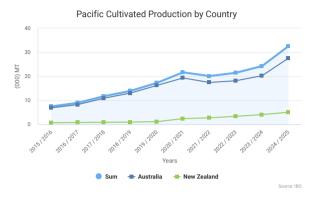


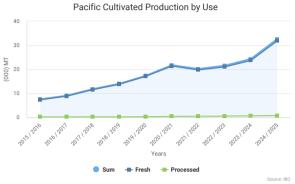


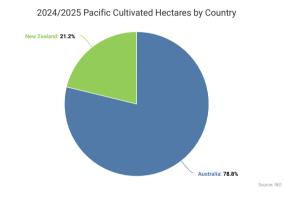
Pacific Cultivated Production by Country(000) MT

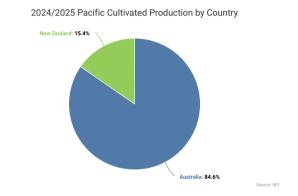
Pacific	2022/2023		2023/2024			2024/2025			
Productions Totals	Fresh	Process	Total	Fresh	Process	Total	Fresh	Process	Total
Australia	18.13	-	18.13	20.23	-	20.23	27.54	-	27.54
New Zealand	2.81	0.49	3.30	3.43	0.60	4.03	4.30	0.70	5.00
Pacific Totals	20.94	0.49	21.43	23.66	0.60	24.26	31.84	0.70	32.54

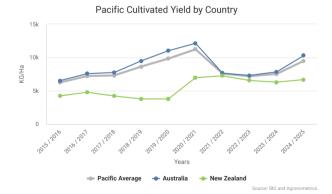
Source: IBO











Pacific 2024/2025 Production Metrics

Hectares Planted:	3,776 Ha
Hectares in Production:	3,430 Ha
Production:	32.54 (000) MT
Growth in Production1:	▲8.28 (000) MT (34.13%)
Growth from Hectares ² :	▲1.44 (000) MT (17.44%)
Growth from Yield ³ :	▲6.84 (000) MT (82.58%)
Yield:	9,486.88 (Kg/Ha)
Exports:	2.52 (000) MT
Imports:	2.14 (000) MT
	Source: IBO and Agronometrics

¹ Volume change compared to previous season

² Change in volume due to hectares entering or leaving production

³ Change in volume due to field productivity (yields)

Pacific Exports by Partner Subregion (000) MT

Subregion	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025
Pacific	1.60	1.28	0.87	1.38	1.75
Asia	0.46	0.58	0.49	1.08	0.76
US & Canada	-	0.00	0.00	0.01	0.01
Middle East	0.00	0.00	0.00	0.00	0.00
Central Asia/Indian Subcontinent	0.00	-	0.00	0.00	0.00
Others	-	0.00	-	-	0.00
Pacific Totals	2.06	1.86	1.37	2.47	2.52

Source: Agronometrics Global Trade Data



Pacific Exports by Reporter (000) MT

Subregion	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025
New Zealand	1.71	1.34	0.86	1.39	1.75
Australia	0.35	0.52	0.50	1.08	0.77
Fiji	-	-	-	-	0.00
Others	0.00	0.01	-	-	-
Pacific Totals	2.06	1.86	1.37	2.47	2.52

Source: Agronometrics Global Trade Data



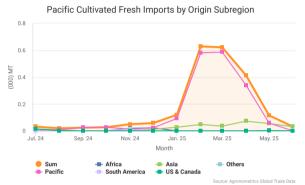


Pacific Imports by Origin Subregion (000) MT

Origin	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025
Pacific	1.56	1.28	0.86	1.40	1.76
Asia	-	0.00	0.02	0.14	0.31
South America	0.05	0.01	0.04	0.01	0.01
Africa	0.00	-	-	0.02	0.04
US & Canada	0.01	0.00	0.01	0.02	0.02
Others	0.03	0.02	0.02	0.00	0.00
Pacific Totals	1.64	1.31	0.96	1.59	2.14

Source: Agronometrics Global Trade Data



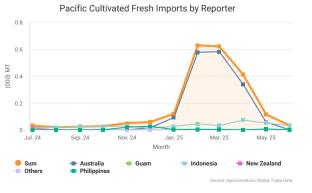


Pacific Imports by Reporter (000) MT

Reporter	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025
Australia	1.53	1.23	0.79	1.31	1.66
Indonesia	0.08	0.07	0.15	0.22	0.39
Philippines	0.01	0.00	0.01	0.04	0.07
New Zealand	-	-	-	0.00	0.02
Guam	-	-	0.00	0.01	0.00
Others	0.01	0.01	0.01	0.01	0.01
Pacific Totals	1.64	1.31	0.96	1.59	2.14

Source: Agronometrics Global Trade Data





Pacific Report Team Narrative

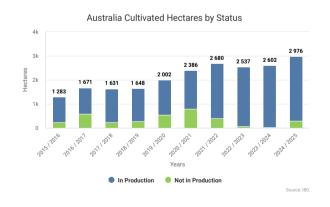
For an in-depth complement to what is happening in the Pacific please visit the following country reports:

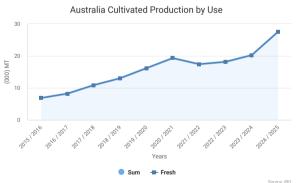
- Australia
- New Zealand

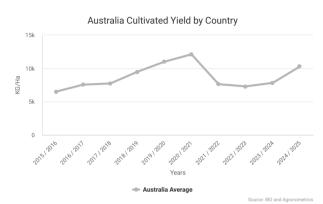


Planting and Production Data, Figures & Commentary

(Denominated in Hectares and Thousands of Metric Tons)







Australia 2024/2025 Production Metrics

Hectares Planted:	2,976 Ha
Hectares in Production:	2,680 Ha
Production:	27.54 (000) MT
Growth in Production ¹ :	▲7.31 (000) MT (36.13%)
Growth from Hectares ² :	▲0.76 (000) MT (10.39%)
Growth from Yield ³ :	▲6.55 (000) MT (89.61%)
Yield:	10,276.12 (Kg/Ha)
Exports:	0.77 (000) MT
Imports:	1.66 (000) MT

Source: IBO and Agronometrics

¹ Volume change compared to previous season

Australia Cultivated Fresh Exports by Partner (000) MT

Reporter	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025
Hong Kong	0.18	0.28	0.28	0.53	0.40
Singapore	0.11	0.19	0.14	0.35	0.19
Indonesia	0.03	0.03	0.06	0.07	0.08
Thailand	0.02	0.01	0.02	0.08	0.05
Malaysia	0.00	0.00	0.00	0.03	0.03
Others	0.00	0.00	0.00	0.02	0.02
Australia Totals	0.35	0.52	0.50	1.08	0.77

Source: Agronometrics Global Trade Data





² Change in volume due to hectares entering or leaving production

³ Change in volume due to field productivity (yields)

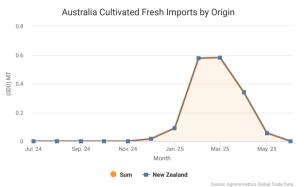
152 GLOBAL STATE OF THE BLUEBERRY INDUSTRY REPORT | 2025 GLOBAL STATE OF THE BLUEBERRY INDUSTRY REPORT | 2025 153

Australia Cultivated Fresh Imports by Origin (000) MT

Reporter	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025
New Zealand	1.51	1.22	0.79	1.31	1.66
Others	0.02	0.01	-	-	-
Australia Totals	1.53	1.23	0.79	1.31	1.66

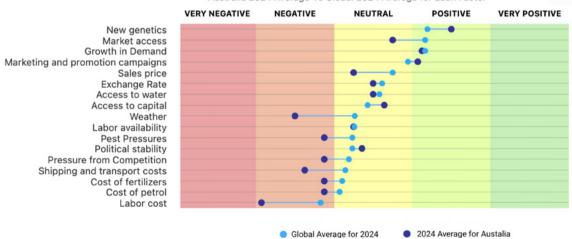
Source: Agronometrics Global Trade Data





Factors Impacting Bluberry Production in Australia in 2024

Australia 2024 Average Vs Global 2024 Average for Each Factor





Australia Country Member Summary

Adapted from the report by the Australian Blueberry Growers Association

Australia's 2024 blueberry season a landmark year for production and growth

The 2024 Australian blueberry season was a period of remarkable expansion, setting new benchmarks in production volume and value. Bolstered by strategic marketing efforts and a forward-looking industry, the sector demonstrated significant growth, as highlighted by the latest data from the Australian Horticulture Statistics Handbook 2023/24.

The Australian blueberry industry experienced a substantial leap in the year ending June 2024. Total production volume soared by 36% to 27,540 metric tons (MT), a significant increase from 20,211MT in the previous year. This impressive growth was mirrored in value, with production reaching \$505.1 million, marking a robust 20% rise compared to \$422.2 million in the year ending June 2023. These figures underscore a thriving sector poised for further expansion.

Expanding supply and consumer engagement

The increase in production translated directly to greater availability for consumers. Fresh blueberry supply in Australia reached 25,375 tonnes in 2024, a 35% increase from the previous year. This expanded supply led to a notable jump in per capita consumption, reaching 0.93 kg in 2023/24, up 31% from 0.71 kg.

Australian households showed a strong appetite for blueberries, with 47% of households purchasing them and buying an average of 199g per shopping trip. The majority of this fresh supply, 86%, was distributed into retail, with the remaining 14% going to foodservice. This indicates a strong presence in both supermarket aisles and the culinary sector.

Strategic marketing: the "Berry Basket" campaign

A key driver of consumer engagement in 2024 was the "Berry Basket" campaign, an industry-first initiative by Berries Australia and Hort Innovation. Launched in February 2024, this campaign united blueberries with raspberries, blackberries, and strawberries under a single, cohesive message. The campaign's humorous "One for me, one for you!" creative aimed to boost consumption across all berry types by emphasizing their versatility and appeal for various occasions beyond just breakfast. Through a multi-channel approach including TV, digital billboards, online platforms, and influencer partnerships, the campaign worked to keep Australian berries top-of-mind for shoppers.

BerryQuest International 2025

The momentum of 2024 carried into the anticipation for BerryQuest International 2025, held in Hobart, Tasmania, from February 24-27, 2025. This premier conference served as a vital platform for the industry, bringing together growers, researchers, and stakeholders from around the world. Discussions focused on key advancements in protected cropping, pest and disease management, and sustainable farming. The event also provided crucial networking opportunities and explored further market development, especially for exports, reinforcing the industry's commitment to growth and innovation.

The 2024 Australian blueberry season truly showcased a resilient and proactive industry. With impressive production figures, a united marketing front, and a clear vision for global expansion, Australian blueberries are set for continued success.

Australia Report Team Narrative

Aside from its outsized contribution to blueberry genetics globally, the Australian industry which accounts for very little of the international trade saw its revenue cross the AUD\$500 million (US\$328 million) mark in the 2024 financial year, reflecting both steady growth (up 22% in value and 17% in volume on 2020-21) and one of the world's highest average prices paid per kilogram (and the average Australian consumes around 1kg of blueberries per year). This high pricing is a function of Australia's very high labor costs by global standards as well as limited fresh blueberry import volumes, although the country is a net importer of blueberries with New Zealand filling in gaps of market scarcity early in the year, especially in February and March. But the gap between imports and exports narrowed in 2023-24 with a marked increase in shipments to Hong Kong, Singapore, and Thailand.

Australia only exports around 4% of its blueberry crop, but hopes are high that the industry will be able to diversify its sales mix in the years to come. In April this year the industry was encouraged by mainland Australian apple growers gaining access to the Chinese market, as blueberries are next in line behind this commodity for negotiations, and have been waiting for an outcome since 2017. Australian blueberries therefore now have active priority status, and hold a similar position in talks for Vietnam market access as well.

If the industry were to gain access to China, it would likely target the window of July to the end of November, coinciding with its more concentrated season and a period when China lacks the quality southern highbush production that Australia produces. Whilst this period overlaps with the Peruvian season, Australia's fresh fruit exporters are well accustomed to finding niche, premium opportunities in China – and indeed throughout Asia – despite the presence of large volumes from South American competitors; a trend that has been seen in stonefruit, citrus, cherries, table grapes and avocados, to name a few other commodities.

Another interesting development in Australia this year has been a joint venture between one of its leading breeders, which is among the biggest names in blueberries globally, and a major co-operative to launch a marketing joint venture which is anticipated to translate to further varietal renewal and sales synergies. In parallel this breeder, which for around a decade has been selling a premium pack branded with a variety name at one specific retailer, is now branding itself much more prominently in stores across multiple retailers. This comes as the market's most well-known berry brand – incidentally the world's largest berry marketer – in early 2024 took control via a consortium of investors of its JV partner in Australia, the country's largest vertically integrated

fruit grower-marketer which also has its own blueberry farms in Australia and globally, and as a breeder licenses its premium varieties all over the globe. Both said breeders not only continue to see their cultivars planted in new fields around the world, but they are also in the midst of helping clients and stakeholders who already have their varieties transition to next-generation blueberries, a few of which are very well-known from China to Peru to Mexico to Morocco.

These are two of three Australian companies that have played instrumental roles in fuelling the exponential rise in low- and no-chill genetics for the global industry. The third of these, headquartered in Western Australia which is far from the concentrated industry centre around Coffs Harbour on the East Coast but is growing rapidly, carries a lot of weight in the sector and has been particularly active in industry development within Southern Africa, among other regions. Whilst it has little desire to change the hand-picking dynamic in lower-income parts of the world (unless changing labor supply conditions demand it), of all the breeders worldwide this company is one of the most focused on developing varieties that are well suited for machine harvesting techniques oriented towards the fresh market. Its pilot farm for refining such varieties and cultivation methods towards machine harvesting has grown to 70ha (and there are plans for another 100ha), with some two-vear-old plants yielding 48MT/ha. However, it should be noted that the portion of fruit picked by machine varies depending on the variety. The same company is also rolling out its machine harvestable genetics in the United States, Spain and Portugal. Meanwhile there is also an emerging fourth Australian blueberry genetics player currently in the early stages of its commercialization journey, established by a former co-owner of one of the incumbents. One of the aforementioned companies imported the latest machine harvesting technology from Europe and was able to test with a few varieties, and planned to undertake more targeted trials in 2025.

In general, machine harvesting usage is still fairly uncommon, especially in the low chill industry at large, despite the high labor costs. Regulatory changes have made it more difficult recently for growers to source workers through the Pacific Australia Labour Mobility (PALM) scheme as they are now required to guarantee 30 hours of work per week, every week, whereas before the hours could be averaged out

in line with demand; a cost burden that adds to the fact the employer must also pay for the cost of bringing participants to Australia, and the risk of workers leaving the farm and applying for a temporary protection visa. The system that Australia used to mostly rely on backpacker labor with tourists has recovered greatly in the post-COVID era. Whilst British backpackers are no longer required to do a stint working in agriculture to extend their visas for a second year, growers are finding improved demand from pickers, particularly with working holidaymakers from places like Taiwan and South Korea

A wide variety of micro-climates allowed Australia to become the first blueberry-growing nation to achieve 52-week supply, with previous aggressive planting in the Coffs Harbour region of New South Wales (NSW) responsible for much of the growth in recent years and consumer demand that has responded in kind, albeit with a heavy concentration of volume between August and November, followed by rabbiteye volumes in the Australian summer. Planting in Coffs Harbour has slowed down of late (with the region accounting for an estimated 75-80% of Australian volume), while other regions have seen slow and incremental growth.

Outside of the Coffs Harbour window volumes tend to dwindle, but the market opportunities in other months or even during shoulder periods have led growers to explore geographical diversification. One region targeting a slight window extension, and where there have been recent plantings, is around Macksville in the Nambucca Valley to the south of Coffs Harbour.

Hotspots of growth are geographically dispersed, with the northernmost plantings of note being around the mango-and banana-producing region of the Atherton Tablelands of tropical Far North Queensland (FNQ), and to its west where conditions are drier. The emergence of FNQ as an Australian growing region has successfully targeted the March to May window, albeit with limited but growing volumes that are expected to be felt more significantly in the market in the coming years. It is a challenging region to grow blueberries with a great deal of season-to-season variation, but the opportunity of shoulder season pricing has attracted new entrants, and more farms have been moving away from public varieties like Snowchaser to next-gen blueberries. It must also be noted

that not all the fruit picked falls within the ideal window, and the season still overlaps with the first half of the season in NSW until September, even October. In addition to filling the period of significant shortages in the market, it also provides "ramp up to the peak" with new genetics in April and May, before the thick of the season begins in the Southern Hemisphere winter. Also in Queensland there is a large operation in Mundubbera, a region better known for its citrus and table grapes, as well as smaller farms in the macadamia-growing area of Bundaberg.

Far North Queensland as a total proportion of the Australian industry is small. Investment there is predicated on high early season pricing. It's a challenging place to grow, quite a bit of volatility and season-to-season variation. The leading Western Australia-based breeder referenced earlier is also developing new farms with next-generation genetics between Gingin north of Perth and Manjimup in the state's Southern Forests region. These operations were initially targeting the domestic market, but have sent a higher-than-expected portion of fruit to export markets in response to high overseas demand. Rather than utilizing distance to such a degree as growers have done in Queensland, even though Western Australia is an enormous state, the approach of this company has been to harness pruning and other farm methods to fill in market gaps, commencing harvests to a degree in March and finishing up in January of the following year.

Where the Australian production mix is really lacking is in its cooler climates to service the market from December to May a timeframe when the industry has historically struggled with sub-optimal quality. December and January are two months when almost all the domestic supply is from public varieties including rabbiteyes, even though the industry's share of proprietary varieties is expected to continue to increase. Some domestic and international breeders are attempting to bridge this gap through the development or introduction of hybrid mid-chill blueberries in the southern states of Victoria and Tasmania, although this is a process that could take several years. Victoria is where Australia's blueberry industry began, but its production is now a very low portion of the national total. Tasmania produces much more and most of the country's leading berry companies have a presence in the island state. where there also can be opportunistic exports at times given

Tasmania's fruit fly-free status that allows for easier access into numerous global markets compared to Australia's mainland growers. Varietal options are still limited in Tasmania though and there remains a dominance of older genetics like Duke, Legacy and Brigitta, although plantings of proprietary high chill genetics from a leading U.S.-based nursery and genetics company will be coming online soon.

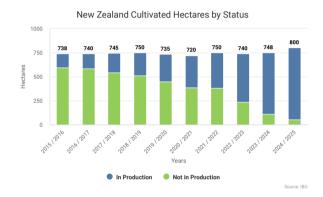
One company also has a breeding program in the Alpine region of Victoria where the intention is to replicate some of the characteristics of successful southern highbush varieties in low-chill cultivars that would be suitable for much cooler climates such as Poland and Canada. In the past 12 months this group has recalibrated its focus on its assessment of chill and cold hardiness, and is contemplating new strategies to address the issue in a country like Australia where there are few areas that reach such very cold temperatures. One option is to utilize freezer containers to assess tissue and bud damage, or another is to trial new sites such as in closer proximity to Australia's tallest mountain, Mount Kosciuszko, known for its eponymous national park and nearby ski resorts. Regardless of which path is chosen to address the issue of cold hardiness, this company's varietal introduction approach is built around collaborative development and testing of varieties in situ. It expects to be commencing trials of new northern highbush genetic materials with partners globally within the next two years.

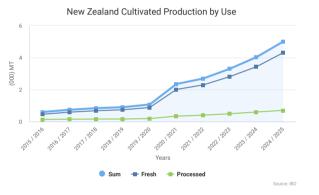
With regards to the 2024 season, last year was as close to "normal" as the industry could possibly get in Australia. With wet weather the campaign was late getting started, and hot weather in December impacted fruit quality somewhat. An isolated hailstorm affected one large grower in northern NSW, but this event did not hit the main growing area around Coffs Harbour. In March 2025, Australia witnessed a very unusual event of cyclone conditions that occurred much further south than where they usually occur in tropical Queensland. Ex-Tropical Cyclone Alfred diminished its intensity somewhat by the time it made landfall on the islands in Brisbane's Moreton Bay, but heavy rain ensued leading to flooding in southern Queensland and much of northern NSW. The berry industry was fortunate with the timing of this event, but the wet conditions led to a later start to the season and increased pest and disease pressures on farms.

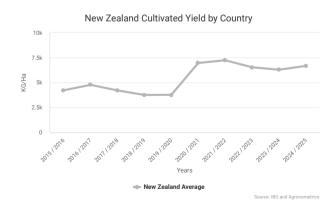


Planting and Production Data, Figures & Commentary

(Denominated in Hectares and Thousands of Metric Tons)







New Zealand 2024/2025 Production Metrics

Hectares Planted:	800 Ha
Organic:	Not Reported
Under Structure:	Not Reported
Hydroponics:	Not Reported
New Genetics:	Not Reported
Hectares in Production:	750 Ha
Production:	5.00 (000) MT
Growth in Production ¹ :	▲0.97 (000) MT (24.07%)
Growth from Hectares ² :	▲0.68 (000) MT (70.59%)
Growth from Yield ³ :	▲0.29 (000) MT (29.63%)
Yield:	6,666.67 (Kg/Ha)
Exports:	1.75 (000) MT
Imports:	0.02 (000) MT

Source: IBO and Agronometrics

¹ Volume change compared to previous season

² Change in volume due to hectares entering or leaving production

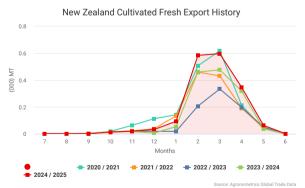
³ Change in volume due to field productivity (yields)

New Zealand Cultivated Fresh Exports by Partner (000) MT

Reporter	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025
Australia	1.55	1.23	0.80	1.29	1.65
Viet Nam	0.10	0.06	0.04	0.07	0.08
Thailand	0.03	0.01	0.00	0.01	0.01
Guam	-	-	0.00	0.01	0.00
United States	-	0.00	0.00	0.00	0.00
Others	0.03	0.04	0.01	0.01	0.01
New Zealand Totals	1.71	1.34	0.86	1.39	1.75

Source: Agronometrics Global Trade Data







New Zealand Country Member Summary

Adapted from the report by Blueberries New Zealand (BBNZ)

The New Zealand Blueberry industry (BBNZ) consists of 235 Growers, 22 associate members, and 3 exporting groups. Estimated figures known for yield produced is 5,500 tonnes with the industry encompassing 900 hectares roughly.

BBNZ has a number of focuses including:

1. Biosecurity Risks

• Import Health Standards for fresh blueberries

2. Market Access:

- Maintaining access to the Australian market
- Finalising access to South Korea
- Working on access to China

3. Grower engagement

- Communications
- Collaborations

4. Grower Capability

- Manuals, Webinars, Field days
- Development of new pre-harvest and post-harvest controls for pests and diseases
- Development of unified systems and processes

2024/25 Season Review

The 2024/25 season continued the relative calm climatic conditions of the previous season without major weather impacts. Of most note was a very dry late summer period which impacted yields of late varieties, especially for growers without irrigation or sufficient water reserves. In general, most fruit production was early this season which mitigated the yield loss at the end of the season. Overall, yields were relatively similar to the previous season.

It must be noted that the rainfall evened itself with a wet winter period. This was particularly heavy at the top of the North Island with the Tasman district being hit with two separate major flooding events two weeks apart. Although this is a minor blueberry growing region, the flooding did impact some blueberry growers.

160 GLOBAL STATE OF THE BLUEBERRY INDUSTRY REPORT | 2025 GLOBAL STATE OF THE BLUEBERRY INDUSTRY REPORT | 2025 161

Overall, planted area has remained relatively static with new plantings offset by some growers exiting the industry. There continues to be improvements in yields through natural orchard maturity, new genetics and improved agronomic practices.

Disease pressures were relatively low this season due to the drier conditions. Pest numbers were at normal levels. For exports to Australia, our number one market, there continues to be a number of pest intercepts at the border. The vast majority of these finds are mite or invertebrate eggs (83%). There is a significant research project underway by the industry to identify an effective treatment for these eggs.

The domestic market continues to perform well with increased consumption. This growth is driven by increased knowledge of blueberries, their health benefits, improving taste, consistency and availability.

New Zealand Report Team Narrative

New Zealand's blueberry season in 2024-25 saw a great improvement on two years prior when a bad frost wiped out a significant portion of production, but it was still not without its challenges amidst above-average temperatures and below normal levels of rainfall. The main growing areas of Waikato and Hawke's Bay experienced a warm late winter and early spring in the second half of the 2024 calendar year, triggering advanced maturity in the bushes which impacted the pre-Christmas sales cycle that New Zealanders had become accustomed to.

In its largest export market of Australia, New Zealand is known as an exporter of mostly rabbiteye blueberries between February and April, but for the domestic market that consumes around 70% of production the main NZ season starts in November before the majority of orchards are picking heavily in the two weeks leading up to Christmas. As a consequence there are usually significant enough volumes to generate higher consumption but the demand becomes so high over the summer Christmas period that prices are often elevated. However, because of the early onset of fruit in 2024, larger volumes started in early December instead, thus changing the dynamic so that prices fell before Christmas rather than in the New Year as is often the case.

Sources have described the harvest as of a very good quality, but the lack of rain had negative implications for growers who lacked irrigation and witnessed a drop-off in irrigation. Over the summer in the North Island there was a run of 28 days of temperatures above 27°C, which is hot by New Zealand standards, so in under-irrigated farms some late varieties shrivelled and weren't harvestable. By the time March rolled along, some producers were harvesting a fraction of what they normally would in that month. Prices then spiked to very high levels domestically, although the sentiment is that many growers "lost the back end of the season" and all the remunerative benefits that come with it.

It is curious to note that despite this reported drop-off, export volume was still much higher year-on-year and peaked in March, and exports between February and April were up 24% year-on-year with the vast majority bound for Australia. This is despite continued biosecurity challenges in that market where exporters report relatively high levels of inspections being unable to identify particular mites or eggs, prompting the decision to fumigate which impacts on fruit quality – an occurrence that is estimated to have occurred with around 30% of New Zealand's exports to its Trans-Tasman neighbor this past season. The percentage of such detections varies between companies and ports of entry, and the industry is working on ways to treat for mites and eggs

pre-cooling in order to mitigate this risk and better maintain fruit quality.

The industry is upbeat about its potential in Vietnam, which off a low base saw a 48% increase in imports from New Zealand in 2024. Unlike the Australian market that is saturated with domestic volume later in the year, Vietnam is relatively undersupplied in that period and New Zealand has been able to export there in a more spread-out fashion from October to March. That said, Australia dominates New Zealand's export strategy so significantly that even in the lower months of December and January it imported more NZ blueberries than Vietnam did over the entirety of 2024.

Elsewhere on the export front, New Zealand received the positive news in October 2024 that it had officially gained access to the South Korean market, although protocols were signed off so deep into the season that the scouting activity requirements for registered farms from the flowering stage could not be met. There was a great deal of enquiry to the industry's grower body around setting up export plans into the market, and at the time of writing it is expected that some growers will prepare for their maiden shipments in 2025.

While we have highlighted that New Zealand's peak season runs from November to May, through the use of agronomic techniques, varietal selection, varietal cropping and geographical diversity (the fruit is grown from Northland to Southland, close to 2,000km apart), the country is approaching a 52-week supply scenario if weather conditions are conducive to it, albeit with a dip in June-July.

This production window extension is aided by a concentration of growth in the northern parts of the North Island where fruit can be produced earlier. There used to be a peak in the Southern Hemisphere summer but that has flattened out somewhat in recent years with southern highbush varieties planted to capture the August-September-October window. In the South Island conditions are more similar to North America's Pacific Northwest, albeit with reduced temperature extremes, so varieties suited to Oregon, Washington State and British Columbia tend to be selected for that part of New Zealand.

While Rabbiteye volumes are dismissed as outdated by much of the global industry, those New Zealand producers who grow locally developed varieties insist the fruit has appealing flavor characteristics that are well received by the market. A Crown Research Institute (CRI), which has achieved great success globally in developing cultivars of other fruits that have become some of the biggest brands in the fruit industry, bred three Rabbiteye blueberries for New Zealand's climate that have proven popular domestically and have witnessed some interest from growers abroad.

Growers are increasingly turning to locally-bred varieties, not only due to the fact that trials have already taken place in New Zealand's unique conditions, but that NZ's strict phytosanitary rules for importing plant material make the process slow (and also more expensive than before) with delays that can last several years. "We're quite far behind in terms of global genetics," as one stakeholder noted.

There is still a high prevalence of public varieties in the cultivar mix. Historically, most of the genetic material provided has come from one major U.S. breeder and American universities, Varieties from a major Australian breeding company have also been adopted, while a well-known U.S. blueberry grower is one of the biggest investors in NZ's blueberry industry with protected operations under greenhouses and glasshouses in Hawke's Bay. This allows for production through to the end of May, whereas frosts earlier in the month tend to signal the end of the season for many growers in the region. It can also be said that much of New Zealand's growth may be attributed to relatively new hectarage dedicated to more premium market-oriented southern highbush varieties produced under tunnels, from a variety of genetics providers. The aforementioned Northland region is also home to various operations including one of New Zealand's leading fruit companies which can start production in limited volumes in late June or early July.

New Zealand's consumption per capita is still sub-1kg but the overall view is that consumption is increasing, and there remains an appetite for new planting, including from outside the blueberry industry, especially with growers of other crops that see opportunity in the commodity.

CENTRAL ASIA / INDIA

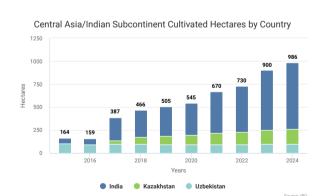
Planting and Production Data, Figures & Commentary

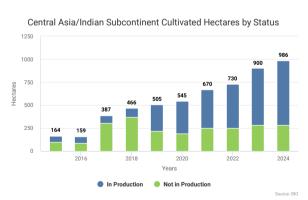
(Denominated in Hectares and Thousands of Metric Tons)

Central Asia/Indian Subcontinent Cultivated Hectares by Country

Central Asia/ Indian Subcontinent		Hed	tares Plante	2024 Production (000) MT				
Growth Totals	2020	2021	2022	2023	2024	Fresh	Process	Total
India	350	450	500	650	725	6.00	0.30	6.30
Uzbekistan	95	95	95	98	98	0.66	-	0.66
Kazakhstan	100	125	135	152	163	0.53	-	0.53
Central Asia / Indian Subcontinent Totals	545	670	730	900	986	7.19	0.30	7.49

Source: IBO



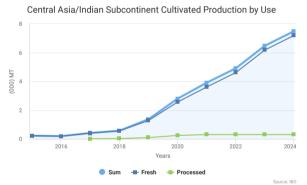


Central Asia/Indian Subcontinent Cultivated Production by Country (000) MT

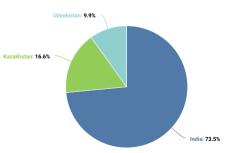
Central Asia / Indian Subcontinent	2022			2023			2024		
Productions Totals	Fresh	Process	Total	Fresh	Process	Total	Fresh	Process	Total
India	3.83	0.30	4.13	5.20	0.30	5.50	6.00	0.30	6.30
Uzbekistan	0.46	-	0.46	0.56	-	0.56	0.66	-	0.66
Kazakhstan	0.32	-	0.32	0.42	-	0.42	0.53	-	0.53
Central Asia / Indian Subcontinent Totals	4.61	0.30	4.91	6.18	0.30	6.48	7.19	0.30	7.49

Source: IBO

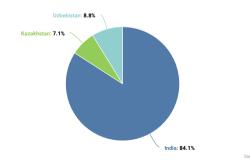


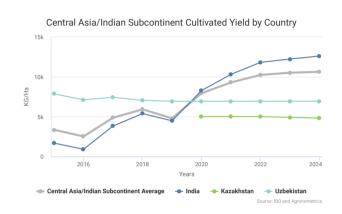






2024 Central Asia/Indian Subcontinent Cultivated Production by





Central Asia / Indian Subcontinent 2024 Production Metrics

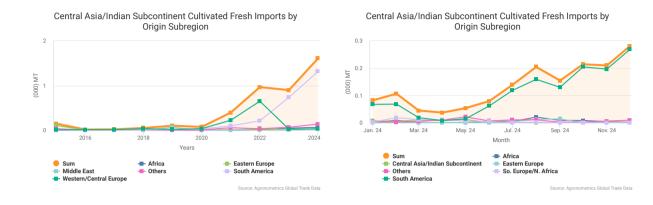
Hectares Planted:	986 Ha
Hectares in Production:	705 Ha
Production:	7.49 (000) MT
Growth in Production ¹ :	▲1.01 (000) MT (15.59%)
Growth from Hectares ² :	▲0.82 (000) MT (81.65%)
Growth from Yield ³ :	▲0.18 (000) MT (17.68%)
Yield:	10,622.70 (Kg/Ha)
Exports:	0.47 (000) MT
Imports:	1.60 (000) MT

Source: IBO and Agronometrics

Central Asia/Indian Subcontinent Imports by Origin Subregion (000) MT

Origin	2020	2021	2022	2023	2024
South America	0.03	0.10	0.21	0.73	1.31
So. Europe/N. Africa	0.00	0.01	0.00	0.03	0.06
Africa	0.00	0.00	0.02	0.05	0.06
Central Asia/Indian Subcontinent	-	0.00	0.00	0.02	0.05
Western/Central Europe	0.04	0.22	0.65	0.02	0.03
Others	0.00	0.06	0.08	0.04	0.09
Central Asia/Indian Subcontinent Totals	0.07	0.40	0.96	0.90	1.60

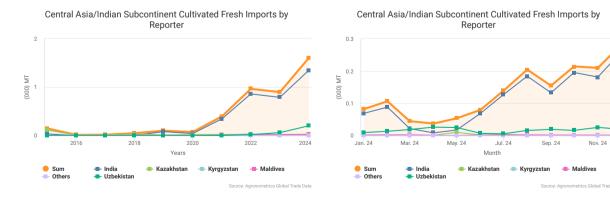
Source: Agronometrics Global Trade Data



Central Asia/Indian Subcontinent Imports by Reporter (000) MT

Reporter	2020	2021	2022	2023	2024
India	0.04	0.34	0.86	0.79	1.35
Uzbekistan	-	0.00	0.02	0.06	0.20
Kazakhstan	0.02	0.02	0.03	0.02	0.03
Maldives	0.01	0.01	0.02	0.02	0.02
Kyrgyzstan	0.00	0.01	0.04	0.00	0.00
Others	0.00	0.00	0.00	0.00	0.00
Central Asia/Indian Subcontinent Totals	0.07	0.40	0.96	0.90	1.60

Source: Agronometrics Global Trade Data



¹Volume change compared to previous season

² Change in volume due to hectares entering or leaving production

³ Change in volume due to field productivity (yields)

166 GLOBAL STATE OF THE BLUEBERRY INDUSTRY REPORT | 2025 GLOBAL STATE OF THE BLUEBERRY INDUSTRY REPORT | 2025 167

Central Asia/India Report Team Narrative

A relatively new focal point of the global industry's energy, India has drawn attention for new opportunities both in terms of production and market development. It is frequently compared to China which more than a decade ago was a new frontier, particularly in light of the magnitude of its consumer population and rich agricultural heritage, but in the words of one interviewee who is active in the country: "It's a very different monster to China. The potential of people is there but the GDP per capita is much lower, and I don't believe it will grow as fast as China."

"The consumption per capita in India is still very low but it's got gigantic potential," says another, more bullish source. "We think in the next 5-6 years it'll be the next China."

But like China, the potential gains are high and there is a certain FOMO (fear of missing out), with leading companies from all over the world either actively developing projects (often with local partners through joint ventures) in India with participation from most of the world's top breeders, or at the very least assessing how or whether to make a move.

Whilst the nation has diverse microclimates and mountainous regions that do have cold weather, for the most part it comprises tropical and sub-tropical climates coupled with summer monsoons. To adapt to these conditions, India's emerging blueberry industry has planted primarily low-chill southern highbush varieties, utilizing a mix of cultivar selection and agronomic techniques to avoid heavy rains with a main season that runs from mid-February to early June. Trials and small to medium-sized commercial projects are ongoing throughout the vast and diverse country with no conclusive consensus among contributors as to the regions which are most suited for competitive quality, unit costs, and logistics.

Cold chain infrastructure is still in need of further development, which slows down the industry's possibilities for accelerated growth in the near term. "It's not just about finding the right place to plant, the best variety or technique – it's about developing the whole cold chain, developing modern retail."

Given such infrastructure is less developed than in other countries like China, and the fact it takes longer to drive around the country with slow speeds on roads in general terms, some projects are opting to grow within reasonable proximity to major consumption centres like Mumbai, Delhi and Bengaluru where there is a higher percentage of people with the purchasing power to buy blueberries. Other regions where projects are being developed include Madhya Pradesh in north-central India as well as towards the interior from the southern coastal state of Goa. "When you go to big cities in the big retailers you see the presence of blueberries on the shelves," says one source. "The varieties that are reaching the shelves are really good."

One U.S.-headquartered company conducting trials in the country aims to produce for six to eight months of the year in India. As a leading exporter of Peruvian blueberries to India, this company aims to combine these two sources of supply to complete a 52-week season for the growing Indian market and is currently producing blueberries in several locations in central and northern India. As a sign of the market's potential, Peru's exports to the market more than doubled last year (up more than 10-fold on 2020) following a reduction in tariffs, accounting for 92% of all import volume, while the surge in import value was greater still at 2.7x. But for the Peruvian industry such volume barely registers: "We're very much in diapers for that market – the challenge is it's a very far market," says one Peruvian stakeholder.

Volumes from all other supplying origins were tiny last year compared to Peru, but there has been growth off low bases for Morocco, the USA (following a tariff reduction to 10%) and a few countries in southern Africa, although the latter are still working on export protocols to make a more definitive push into the India market. One novel development recently was that, according to import data, Tunisia – a frontier blueberry industry in its own right - made a splash in India between March and May this year with volumes in those three months alone that were greater than all non-Peruvian

exporters combined in 2024. This official data has not been corroborated by front line intelligence.

Australia has also had technical access to the Indian market for many years, although shipments require either methyl bromide fumigation or cold treatment unless they are from the recognized fruit fly-free areas of Riverland or Tasmania, neither of which are major producers of blueberries. Australian growers undertook trials to the market in 2019, but the aforementioned treatment issues combined with high tariffs made it an unattractive proposition for Australian industry to continue to pursue. However, a free trade agreement between the two countries means tariffs will be phased out through to 2028, which may prompt the industry to revisit India as a potential export channel.

New grower entries continue from both internationally-linked and purely local players alike, with numerous blueberry farms of 5-20ha in size scattered throughout India which is likely to grow as a cottage industry in the near future, given the advances that have been made in producing blueberries in a wide range of conditions, proximity to a potentially large market, and cheap labor costs, although the warm weather does create pest pressures and it is understood more expensive protected farming systems have been deployed, with a steep learning curve attached. "It's a climate that's very different to most parts of the world where blueberries are grown as it's a very tropical zone and you have monsoons in the month of June when you have practically 2.5 months of little light, and lots of rain," says one stakeholder. "You have to work out what are the best practices to get the best out of the plant."

From a competitive standpoint, Indian growers have previously been relatively insulated thanks to high tariff duties on imports. However, this dynamic is set to change somewhat following recent reductions in tariffs for fresh blueberry imports from 30% to 10% for major suppliers from the Americas. This regulatory change has the potential to boost movement and market development while the Indian industry itself becomes established. Blueberries in India are mostly sold in 125g punnets and consistency tends to be lacking,

but management of the fruit is improving and dedicated importers and distributors are attempting to raise the bar of consumer experience with the support of better cold chain infrastructure.

One of the world's largest substrate coir companies reported last year that larger Indian companies were showing increasing interest in blueberry production as well, with trials or potential operations planned in locations ranging from Pollachi in Tamil Nadu to the foothills of the Himalayas, as well as further interest in Madhya Pradesh.

There is an understanding amongst India's more sophisticated farming companies that blueberries require a significant amount of knowhow and pilot projects to test which varieties and growing methods work in certain regions. Given the Indian market's scale as a nation of 1.4 billion people including a large, growing middle class with a taste for premium fresh produce, investors who plan to develop blueberry projects have bold ambitions to put in motion as soon as they are comfortable with the feasibility of their plans. "We can grow as an industry several thousand hectares, but the way that demand is multiplying, I just don't see how it's ever going to be able to fulfil its needs," says one source.

Also important to note is the current status of intellectual property in blueberries in India. To date blueberries are not a protectable crop in the country and varieties thus cannot be protected by PVR's or other means in the country. There are some concerns that the lack of a legal framework to protect breeders' rights may at the very least slow the rate of access to better genetics to a broader industry.

Elsewhere in the Indian subcontinent, there is currently early-stage planning underway for blueberry cultivation trials in Sri Lanka.

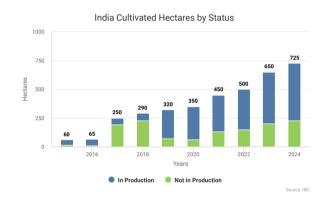
In Central Asia, Kazakhstan and Uzbekistan are the main producers of blueberries with fairly small industries, although even in these isolated countries there are international companies moving in with offerings of proprietary blueberry genetics.

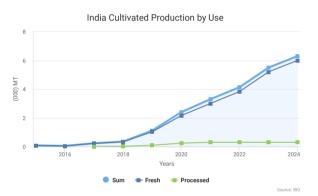
168 GLOBAL STATE OF THE BLUEBERRY INDUSTRY REPORT | 2025 GLOBAL STATE OF THE BLUEBERRY INDUSTRY REPORT | 2025 169

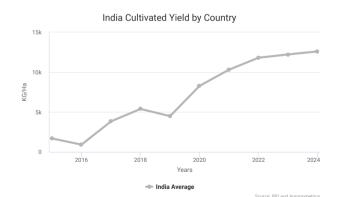


Planting and Production Data, Figures & Commentary

(Denominated in Hectares and Thousands of Metric Tons)







India 2024 Production Metrics

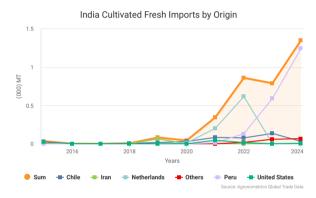
Hectares Planted:	725 Ha
Hectares in Production:	500 Ha
Production:	6.30 (000) MT
Growth in Production1:	▲0.80 (000) MT (14.55%)
Growth from Hectares ² :	▲0.61 (000) MT (76.39%)
Growth from Yield ³ :	▲0.19 (000) MT (23.61%)
Yield:	12,600.00 (Kg/Ha)
Exports:	0.15 (000) MT
Imports:	1.35 (000) MT
	Source: IBO and Agronometrics

- ¹ Volume change compared to previous season
- ² Change in volume due to hectares entering or leaving production ³ Change in volume due to field productivity (yields)

India Cultivated Fresh Imports by Origin (000) MT

Reporter	2020	2021	2022	2023	2024
Peru	-	0.01	0.13	0.59	1.24
Chile	0.03	0.08	0.08	0.14	0.03
Zimbabwe	-	-	0.00	0.02	0.03
Morocco	-	-	-	0.01	0.02
United States	-	0.05	0.02	0.00	0.01
Others	0.01	0.20	0.63	0.04	0.02
India Totals	0.04	0.34	0.86	0.79	1.35

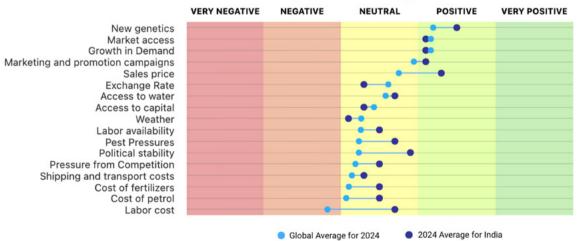
Source: Agronometrics Global Trade Data





Factors Impacting Bluberry Production in India in 2024

India 2024 Average Vs Global 2024 Average for Each Factor



EMEA (EUROPE, MIDDLE EAST & AFRICA)

GLOBAL STATE OF THE BLUEBERRY INDUSTRY REPORT | 2025 171

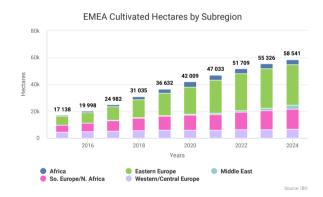
EUROPE, MIDDLE EAST & AFRICA (EMEA)

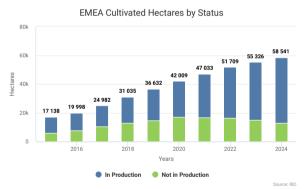
Planting and Production Data, Figures & Commentary (Denominated in Hectares and Thousands of Metric Tons)

EMEA Cultivated Hectares by Subregion

EMEA		Hed	tares Plante	ed		2024 Production (000) MT			
Growth Totals	2020	2021	2022	2023	2024	Fresh	Process	Total	
So. Europe/N. Africa	10,981	11,750	12,907	14,166	15,155	170.54	15.18	185.72	
Eastern Europe	20,268	24,679	27,536	29,294	30,099	105.05	13.16	118.21	
Africa	3,998	3,801	3,692	3,616	3,719	44.52	4.80	49.32	
Western/Central Europe	6,122	5,924	6,356	6,236	6,515	28.87	10.96	39.83	
Middle East	640	880	1,218	2,014	3,053	8.45	0.48	8.93	
EMEA Totals	42,009	47,033	51,709	55,326	58,541	357.43	44.58	402.01	

Source: IBO





EMEA Cultivated Production by Subregion(000) MT

EMEA	2022			2023			2024		
Productions Totals	Fresh	Process	Total	Fresh	Process	Total	Fresh	Process	Total
So. Europe/N. Africa	142.07	13.61	155.68	146.54	14.12	160.66	170.54	15.18	185.72
Eastern Europe	98.75	6.08	104.83	104.00	6.21	110.21	105.05	13.16	118.21
Africa	36.11	2.70	38.81	40.78	3.20	43.98	44.52	4.80	49.32
Western/Central Europe	33.64	8.02	41.66	30.91	8.15	39.06	28.87	10.96	39.83
Middle East	4.76	0.26	5.02	6.03	0.39	6.42	8.45	0.48	8.93
EMEA Totals	315.33	30.67	346.00	328.26	32.07	360.33	357.43	44.58	402.01

Source: IBO





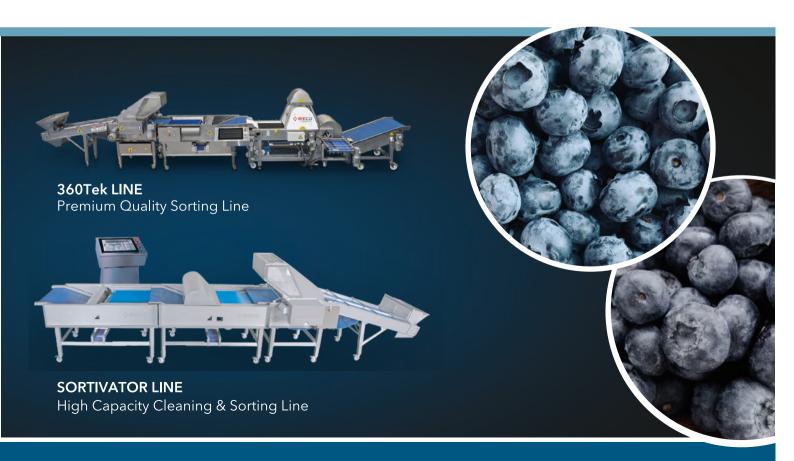
THE ALL NEW 360Tek SORTIVATOR

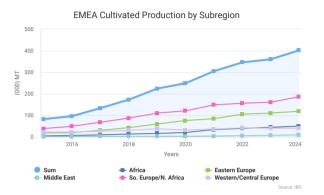
BLUEBERRY Optical **SORTING**

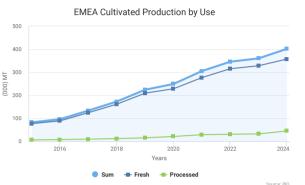
- Sorting by color: red/green
- Jumbo and Undersized Sorting
- Advanced Machine Learning Technology (AI)

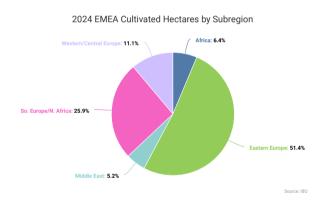


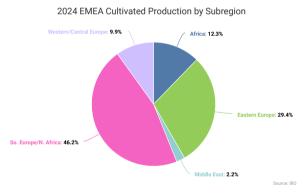


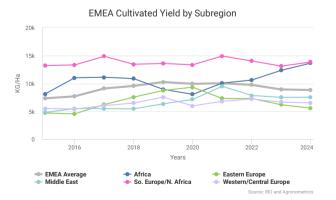












EMEA 2024 Production Metrics

Hectares Planted:	58,541 Ha
Hectares in Production:	45,518 Ha
Production:	402.01 (000) MT
Growth in Production ¹ :	▲41.68 (000) MT (11.57%)
Growth from Hectares ² :	▲43.02 (000) MT (103.21%)
Growth from Yield ³ :	▼-1.30 (000) MT (-3.12%)
Yield:	8,832.57 (Kg/Ha)
	Source: IBO and Agronometrics

Volume change compared to previous season

² Change in volume due to hectares entering or leaving production

³ Change in volume due to field productivity (yields)

SOUTHERN EUROPE / NORTH AFRICA

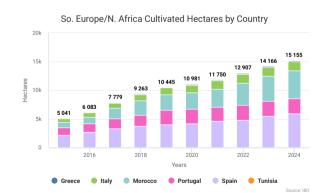
Planting and Production Data, Figures & Commentary

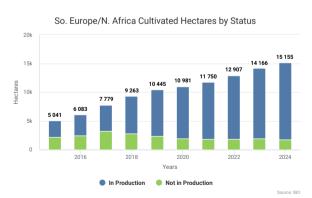
(Denominated in Hectares and Thousands of Metric Tons)

So. Europe/N. Africa Cultivated Hectares by Country

Southern Europe / North Africa		He	ctares Planted	i		2024 Production (000) MT			
Growth Totals	2020	2021	2022	2023	2024	Fresh	Process	Total	
Spain	4,210	4,570	4,810	5,496	5,914	70.67	7.29	77.96	
Huelva	3,089	3,310	3,532	4,200	4,520	57.26	6.30	63.56	
Spain Other	1,121	1,260	1,278	1,296	1,394	13.41	0.99	14.40	
Morocco	2,850	3,136	3,800	4,300	4,829	68.17	3.56	71.73	
Portugal	2,490	2,490	2,590	2,620	2,630	19.88	3.13	23.01	
Italy	1,357	1,451	1,575	1,596	1,608	11.30	1.20	12.50	
Greece	70	99	128	150	170	0.48	-	0.48	
Tunisia	4	4	4	4	4	0.04	-	0.04	
So. Europe / N. Africa Totals	10,981	11,750	12,907	14,166	15,155	170.54	15.18	185.72	

Source: IBO

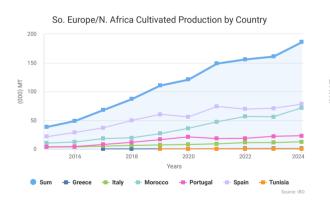


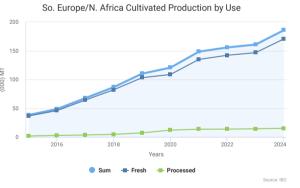


So. Europe/N. Africa Cultivated Production by Country(000) MT

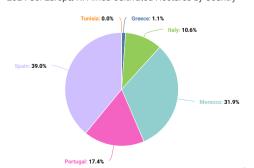
Southern Europe / North Africa	2022			2023			2024		
Productions Totals	Fresh	Process	Total	Fresh	Process	Total	Fresh	Process	Total
Spain	62.57	6.62	69.19	64.38	6.48	70.86	70.67	7.29	77.96
Huelva	52.00	6.00	58.00	53.00	5.80	58.80	57.26	6.30	63.56
Spain Other	10.57	0.62	11.19	11.38	0.68	12.06	13.41	0.99	14.40
Morocco	53.51	2.99	56.50	52.51	3.54	56.05	68.17	3.56	71.73
Portugal	15.50	3.00	18.50	19.05	3.00	22.05	19.88	3.13	23.01
Italy	10.00	1.00	11.00	10.00	1.10	11.10	11.30	1.20	12.50
Greece	0.46	-	0.46	0.56	-	0.56	0.48	-	0.48
Tunisia	0.03	-	0.03	0.04	-	0.04	0.04	-	0.04
So. Europe / N. Africa Totals	142.07	13.61	155.68	146.54	14.12	160.66	170.54	15.18	185.72

Source: IBO





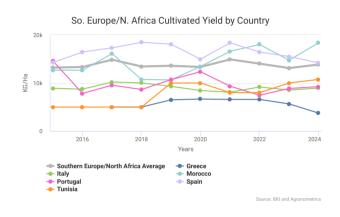
2024 So. Europe/N. Africa Cultivated Hectares by Country



2024 So. Europe/N. Africa Cultivated Production by Country



176 GLOBAL STATE OF THE BLUEBERRY INDUSTRY REPORT | 2025 GLOBAL STATE OF THE BLUEBERRY INDUSTRY REPORT | 2025 177



So. Europe/N. Africa 2024 Production Metrics

Hectares Planted:	15,155 Ha
Hectares in Production:	13,420 Ha
Production:	185.72 (000) MT
Growth in Production ¹ :	▲25.06 (000) MT (15.60%)
Growth from Hectares ² :	▲18.81 (000) MT (75.05%)
Growth from Yield ³ :	▲6.25 (000) MT (24.95%)
Yield:	13,838.83 (Kg/Ha)
Exports:	130.63 (000) MT
Imports:	63.47 (000) MT

Source: IBO and Agronometrics

So. Europe/N. Africa Exports by Partner Subregion (000) MT

Subregion	2020	2021	2022	2023	2024
Western/Central Europe	51.55	68.44	67.63	59.19	75.80
So. Europe/N. Africa	26.15	31.73	40.45	35.92	39.96
Eastern Europe	3.61	4.74	10.53	8.48	11.24
US & Canada	0.04	0.08	0.11	0.76	1.35
Asia	0.81	0.85	0.65	1.09	1.51
Others	0.10	0.11	0.16	0.47	0.78
So. Europe/N. Africa Totals	82.27	105.95	119.53	105.91	130.63

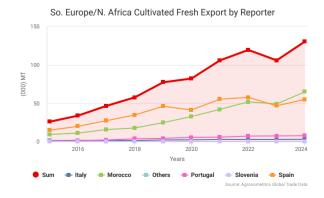
Source: Agronometrics Global Trade Data

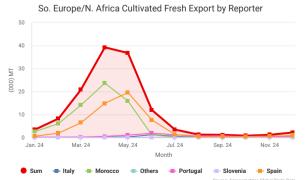


So. Europe/N. Africa Exports by Reporter (000) MT

Subregion	2020	2021	2022	2023	2024
Morocco	32.69	42.01	51.84	49.09	64.92
Spain	41.27	55.23	57.69	46.64	54.99
Portugal	5.47	5.74	7.13	7.32	7.64
Italy	2.36	2.81	2.79	2.80	2.98
Slovenia	0.23	0.07	0.06	0.03	0.06
Others	0.24	0.11	0.03	0.04	0.03
So. Europe/N. Africa Totals	82.27	105.95	119.53	105.91	130.63

Source: Agronometrics Global Trade Data





¹Volume change compared to previous season

² Change in volume due to hectares entering or leaving production ³ Change in volume due to field productivity (yields)

Southern Europe/North Africa Report Team Narrative

For an in depth complement to developments and trends in Southern Europe/North Africa please visit the following country reports:

- Spain
- Morocco

Driven largely by an uptick from Morocco to achieve a record season alongside steady growth from Spain, blueberry exports from Southern Europe and Northern Africa soared to new heights in 2024, although for many traders it may not have always felt that way as a combination of buoyant demand and a changing mix of timing (based on both weather factors and varietal shifts) meant the market was often short.

The two aforementioned countries (see sections for Spain and Morocco for more) serve a critical function in the global blueberry ecosystem, technically servicing the market from late in the year but with the bulk of volumes starting to come on-line from late winter, peaking in the spring, and with ongoing but smaller volumes from Spain in the first half of summer.

Estimates differ between data sources but it is very likely that the region, including shipments from smaller but growing industries such as Portugal and Italy, saw its export values cross the US\$1 billion mark last year, more than doubling in the space of five years.

Straddling both northern and southern highbush-appropriate climates, with a dominance of the latter, the region has witnessed a boom in blueberry production over the past decade and still has plenty of room for growth; just how much will depend on both demand growth and the competitive consequences of numerous emerging industries such as Egypt, Türkiye, the Republic of Georgia, and for the colder-climate producers, Serbia, Romania and Ukraine.

An historical gap in supply between the end of Huelva's (southern Spain) season in early June and larger volumes from

Northern Europe in July has galvanized production in other parts of the Mediterranean and Iberia, most notably Portugal which is featuring more and more in the plans of blueberry marketers, retailers and breeders wishing to capitalise on the market shortfall in June. As referenced in the Spanish section of this report, varietal conversions chasing harvests are widening that shortfall, but this wasn't felt so acutely as it could have in 2024 due to harvest delays at the end of the season because of cooler weather.

With historically very little culture of eating blueberries compared to their northern European counterparts, the region's two largest economies of Italy and Spain also represent an enormous and still untapped opportunity for blueberry sales growth. Blueberry consumption is rising in both nations at double-digit rates annually, even amidst a relative lack of promotional activity and premium genetics on the supermarket shelves in Italy, where shoppers have demonstrated a willingness to buy even 'standard' quality blueberries in larger quantities than the 125g packing sizes that are usually on offer, and at retail prices that are fairly high for the blueberry genetics they are producing. A message from one source was that Italy should be viewed less as a dumping ground for average-grade fruit, and that with retailer willingness to lift the category, adequate promotions and greater availability of premium genetics, Italy has the potential to become one of Europe's top blueberry markets, commensurate with its GDP size.

The Italian blueberry industry has not grown at the explosive rate that industry stakeholders had hoped for a few years ago, and its exports are roughly 40% of Portugal's. Northern Italian growers centred around Piedmont, who start harvesting in

late June, have seen their margins put under pressure by increased competition from Serbia, and as a consequence have increased their levels of focus on the domestic market. Despite increased domestic sales, the June export peak in 2024 was still the second-highest in Italy's history, down slightly on June 2023. However, higher shipments in other months particularly from January to May - translated to export gains for Italy overall in 2024 versus 2023. Whilst these months coincide with the harvest timing of a burgeoning southern Italian industry, the fact these southern operations are geared toward domestic sales imply the export result may have a different explanation. Italy, which imports far more than it exports, saw a more than 43% leap in blueberry imports last year with Spain as a key source of origin. Most of this volume would have been sold to the country's increasing consumer base, but even a small portion of imports being re-exported could have a material impact on Italy's export numbers.

Portugal

As a long country with diverse climates within a short distance, Portugal is fast becoming a viable blueberry supply alternative for European supermarkets in the late spring, early summer period, featuring in the origin stable of a few major global grower-marketers.

The geography in Portugal is such that one could have a low-chill blueberry farm within just a few hours' drive of a high-chill variety farm in the country's north. Southern Portugal has a similar although milder climate to Huelva with much production under protected tunnels, whereas in the hilly north there are more open field farms with mid-chill and high-chill varieties such as Duke and Legacy. The industry has been described as "atomized" with a prevalence of smallholder farmers whose crops are aggregated by larger operators

As has been the lesson learned elsewhere, an industry can only survive on lucrative windows for so long and Portugal's success will depend on its ability to adopt next-gen varieties — a process that is currently happening with cultivar from a handful of major players. Like Spain but not growing quite as early, Portugal has the advantage of proximity to major European markets and can produce fruit from March until the end of July, although with the pruning of modern genetics there are smaller quantities sold through to October.

It must be clarified that filling market gaps is not the only motivator for the Portuguese blueberry industry's development; one key player with links to South America has two Portuguese farms in different geographical zones that cover a large land area by European standards of 160 hectares, and a varietal mix and farm practices that allow for the continuity of supply starting from mid-February all the way until the first Polish blueberry volumes arrive in the summer.

Portugal's population may only be a fifth of the size of Spain's and a sixth of the size of Italy's, but like them its blueberry consumption is growing at double-digit rates, as is its production.

Italy

From an industry that began in the 1960s as a frozen-focused sector in Italy's northwestern Piedmont region, the cooperative-led horticultural model Italy is known for has driven most of the production increase in the north, predominantly in the pre-Alpine climes of Piedmont and Trentino, in addition to plantings in Veneto and Lombardy as far as northern Italy is concerned.

Harvests start in late June for the northern region and continue until August, and while there is a concentrated presence of early varieties like Duke, some growers are planting new varieties. This replanting is pronounced in the later-season northeast where old plantings of Brigitta Blue are being taken out in favour of alternative cultivars, but also in the northwest area of Piedmont where some Duke plantings have been switched for later-harvesting, high-chill genetics from an Oregon-based genetics company, one of two from the U.S. Northwestern state that are active in Italy. Growers of other fruits such as peaches and kiwifruit, the latter having been through a difficult decade or more with vine-killing disease Psa, have also been converting their fields to blueberries in northern and central Italy; a trend that has even extended to isolated plantings in completely new blueberry-growing areas between Rome and Naples.

There is quite a bit of buzz around southern Italy, especially in Sicily but also in Calabria and Puglia (a table grape hub where there is interest in crop diversification), as a prospective growth region for blueberries, spearheaded by large cooperatives from the country's centre and north. Southern Italian growers can grow during a similar timeframe as Morocco and Spain, covering the end of winter and carrying on through the springtime. Two southern highbush-focused genetics companies from Spain and an Argentinian breeding program have introduced their varieties for trials in warmer regions of Italy,

180 GLOBAL STATE OF THE BLUEBERRY INDUSTRY REPORT | 2025 GLOBAL STATE OF THE BLUEBERRY INDUSTRY REPORT | 2025 181

in addition to an Oregon-based breeder that has been actively rolling out a new club of varieties worldwide, but the genetic transition is less visible in Italy than in other growing regions. In Sicily which is the geographic focal point of these low-chill operations, the majority of plantings still comprise of the open Ventura variety.

Another great benefit of producing blueberries in Italy is its mix of microclimates and the possibility of playing with altitude to achieve different agronomic outcomes.

The varietal conversion that has occurred in the south has not only focused on the organoleptic, consumer-oriented qualities mentioned frequently in this report, but also to extend the production curve including into June. In a telling example of what is sometimes referred to as a 'quality gap' between the traditional northern highbush genetics and the southern highbush varieties retailers have become accustomed to in what used to be shoulder periods, some of the push to extend Italian southern highbush production into June is being driven by Italian growers and companies who themselves already produce in June, but are being asked by retailers if they can provide southern highbush-style genetics in that time period.

Amongst Italian fruit traders there is a feeling that their blueberry export opportunities are being put under pressure from competition and Northern European retailer expectations around varieties, making domestic market development a greater imperative.

"The space for exporting is decreasing, meanwhile at the other end the internal consumption is increasing a lot in Italy," one source explained.

Domestic consumption (up 21% in 2024) has been growing despite the observation that Italian supermarkets tend to charge consumers higher prices relative to other European retailers at the same time, and the relative lack of promotions and premiumization as referenced in the introduction. Growth is more skewed to the north where knowledge of the fruit is closer to that of northern Europe, whereas in southern Italy blueberries are culturally less known. One source noted the tourism industry has been a source of sales growth in southern Italy over the summer; unfortunately, a period that coincides with the end of the season in Sicily, as well as Calabria which runs a couple of weeks later than its island neighbor.

Analysis conducted by one source shows the average Italian consumer who buys blueberries purchases 250g per shop, which is out of sync with the 125g pack sizing that predominates in the country. With one of the highest rates of fruit consumption per capita in the world, increased market penetration in Italy could potentially signal higher sales growth than it would elsewhere. There are signals that the market is currently underserved and misaligned with the broader blueberry industry's objectives, and that with a nudge in the direction of better consumer-oriented marketing and genetics. Italy has an intrinsic, latent demand for blueberries that could make it a powerhouse consumer.

Greece

Blueberry production in Greece is still extremely low compared to the Western Mediterranean, but in recent years the country's supermarkets have been increasingly requesting the fruit from established strawberry growers in the Patras region which has a similar climatology to Huelva in Spain but with much more rainfall.

Unlike these southern Greek growers who are focused on the domestic market, four years ago a large cherry-exporting group from the northeastern Rhodope region near Turkey embarked on trials with a view to tap into the June window. This led to commercial plantings in 2021 with the first crop harvested in 2023 with small volumes sent alongside cherry consignments to existing Western European customers. This group has since encouraged more growers in the area to follow suit, and to date the primary varieties planted have been Duke, Chandler and Legacy.

Tunisia

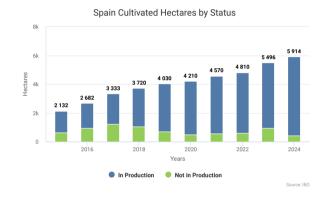
As it now becomes apparent that previous industry musings around developing blueberry plantings in other Mediterranean countries such as Türkiye and Egypt have now taken on a more serious tone (see Middle East section), other countries with warm growing conditions and proximity to Europe and the Middle East are also under consideration although some stakeholders are not revealing too much about their intentions. At least two large Spain-headquartered companies are eyeing Tunisian market development, one of whom already has operations in raspberries and strawberries in the country's north and has previously indicated plans to plant

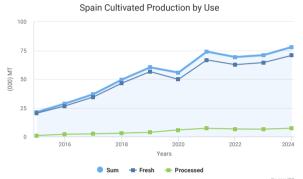


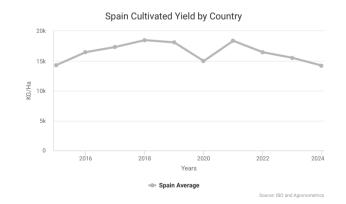


Planting and Production Data, Figures & Commentary

(Denominated in Hectares and Thousands of Metric Tons)







Spain 2024 Production Metrics

Hectares Planted:	5,914 Ha
Hectares in Production:	5,488 Ha
Production:	77.96 (000) MT
Growth in Production1:	▲7.10 (000) MT (10.02%)
Growth from Hectares ² :	▲16.16 (000) MT (227.61%)
Growth from Yield ³ :	▼-9.06 (000) MT (-127.61%)
Yield:	14,205.54 (Kg/Ha)
Exports:	54.99 (000) MT
Imports:	43.95 (000) MT

Source: IBO and Agronometrics

Volume change compared to previous season

² Change in volume due to hectares entering or leaving production

³ Change in volume due to field productivity (yields)

Spain Cultivated Fresh Exports by Partner (000) MT

Reporter	2020	2021	2022	2023	2024
Germany	19.12	30.60	19.73	15.32	17.48
Netherlands	4.65	6.18	10.03	6.10	7.58
Poland	1.59	2.21	5.77	3.90	6.02
United Kingdom	8.69	4.72	5.50	5.81	5.93
Italy	1.28	2.59	3.41	3.25	3.19
Others	5.95	8.92	13.24	12.25	14.78
Spain Totals	41.27	55.23	57.69	46.64	54.99

Source: Agronometrics Global Trade Data

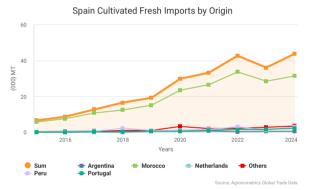


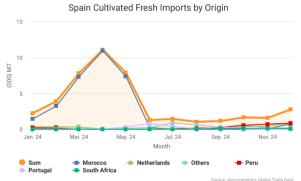


Spain Cultivated Fresh Imports by Origin (000) MT

Reporter	2020	2021	2022	2023	2024
Morocco	23.47	26.61	33.69	28.52	31.49
Netherlands	0.85	1.20	1.90	1.23	3.20
Peru	1.17	1.63	3.05	1.30	2.96
Portugal	0.60	1.05	1.48	1.72	2.16
Poland	0.17	0.19	0.56	0.27	0.61
Others	3.61	2.61	2.09	3.07	3.52
Spain Totals	29.87	33.30	42.77	36.12	43.95

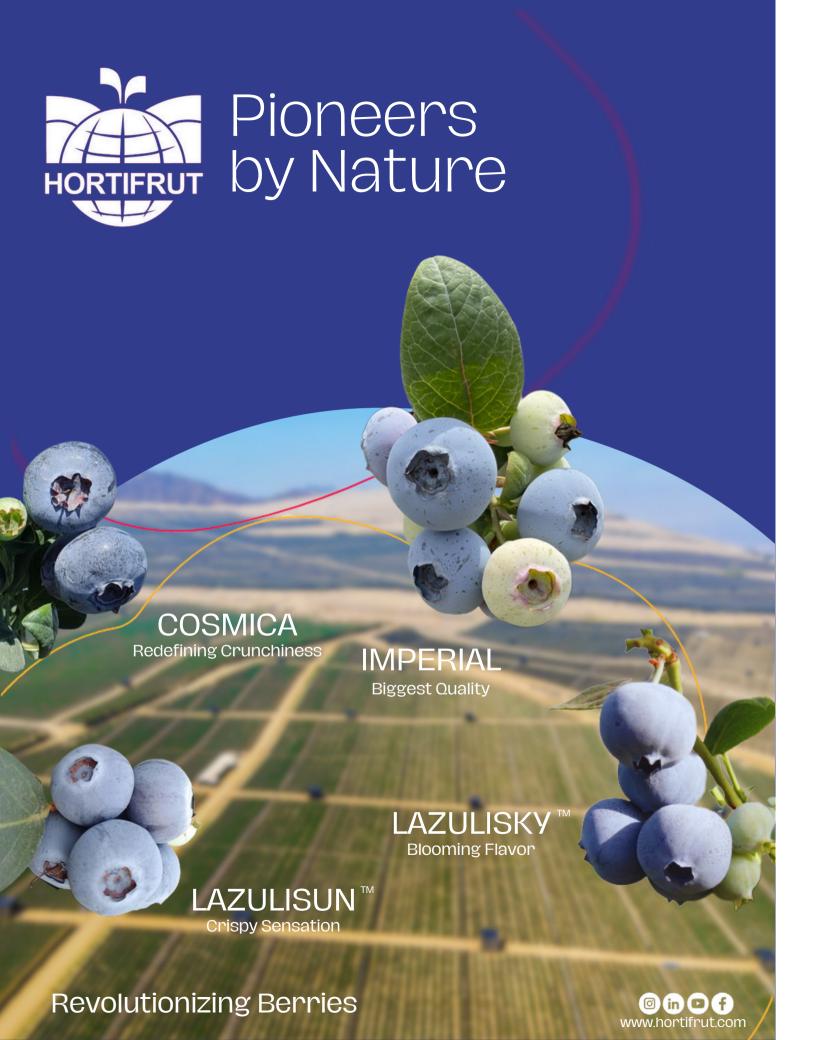
Source: Agronometrics Global Trade Data





Factors Impacting Bluberry Production in Spain in 2024

Spain 2024 Average Vs Global 2024 Average for Each Factor **VERY NEGATIVE** NEGATIVE **VERY POSITIVE** New genetics Market access Growth in Demand Marketing and promotion campaigns Sales price Exchange Rate Access to water Access to capital Weather Labor availability Pest Pressures Political stability Pressure from Competition Shipping and transport costs Cost of fertilizers Cost of petrol Labor cost 2024 Average for Spain Global Average for 2024





Spain Country Member Summary

Adapted from report by Freshuelva (The association representing the Spanish industry)

Evolution of the 2024 campaign

In Andalusia there are 4,520 hectares of blueberries planted of which just more than 300ha have not entered production. Andalusian blueberry production is almost entirely concentrated in Huelva, where blueberries have consolidated as the number two berry in our province after strawberries, with 22.3% of the surface area dedicated to organic production.

According to data from the Ministry of Agriculture, Fisheries, Water and Rural Development of the Andalusian Regional Government, our production represents 30.5% of blueberries in the EU, which makes Spain the second-largest grower in the community after Poland with 33.7%.

In 2024 it was again the case that the surface area for early varieties increased, allowing Spanish blueberries to secure their positioning in European markets against production from outside countries, mainly Morocco, and build loyalty in the market with exports that are constant and long-lasting over time.

Throughout the season there was constant uncertainty around the lack of water due to the drought we have been experiencing for several years, which led to cutbacks and a reduction of up to 25% in water usage.

Harvesting takes place between January and July, although harvesting begins earlier each year due to the increasing presence of early varieties, as mentioned above. Therefore, the peak that has been occurring in May was milder in the 2024 season.

Water and labor availability continue to be limiting factors for the cultivation of berries in the province in Huelva, especially for blueberries as a crop with a greater need for both these inputs.

Despite this, the sector knows how to adapt to these circumstances, and thanks to innovation with AI, the implementation of new technologies like irrigation sensors, and other cutting-edge technologies, water usage and irrigation efficiency have been optimized, achieving optimal crop development, as well as productivity and quality parameters that are within expectations.

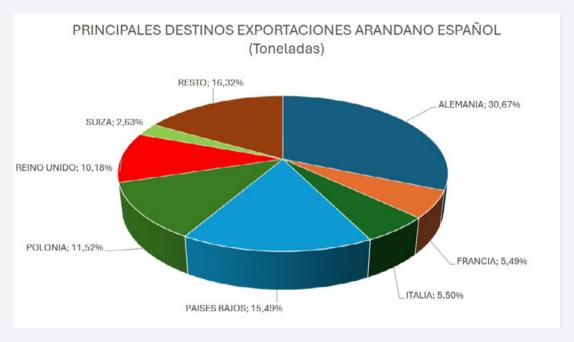
Meanwhile, in terms of labor the sector works with the central administration with the objective to consolidate agreements with other countries (like Morocco, Colombia, etc) that provide labor availability during the campaign. It must be highlighted as well that plant breeding programs are being developed by different breeding companies as well as growers of blueberries and berries in general that are specific to the conditions for production in Huelva, focused on fresh production and expanding the production curve in terms of timing.

Freshuelva and blueberry marketers in general continued to promote and encourage blueberry consumption in the domestic market in 2024, understanding that this is a market with significant room for growth.

Evolution of exports in 2024

Spanish blueberry exports occupy the number one ranking in the EU. More than 97% of Spanish blueberries are produced in Huelva, placing it at the top of the EU's blueberry-supplying regions.

Regarding exports outside the EU, the United Kingdom continues to be the main destination, with the same conditions and requirements as when it was part of the EU. This gives us peace of mind, and most importantly flexibility in trading operations with the country.

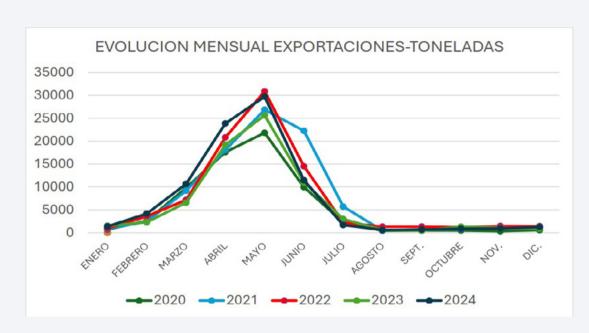


Source: DATACOMEX

The evolution of exports throughout 2024, which have increased by almost 19% overall, is reflected in the following table and graph:

	EXPORTACIONES ESPAÑOLAS (TONELADAS)											
	ENERO	FEBRERO	MARZO	ABRIL	MAYO	JUNIO	JULIO	AGOSTO	SEPT.	OCTUBRE	NOV.	DICIEMB
2020	707	2.627	9.821	17.586	21.815	9.951	2.308	446	509	489	341	579
2021	892	2.477	9.164	18.074	26.846	22.246	5.713	490	724	793	1.093	1.132
2022	935	3.604	7.163	20.810	30.856	14.503	2.223	1.340	1.349	1.186	1.478	1.434
2023	1.514	2.312	6.573	19.181	25.633	11.013	2.995	619	467	1.333	1.038	900
2024	1.397	4.184	10.669	23.860	29.709	11.467	1.685	604	693	867	938	1.253
%24/23	-7,72 %	80,94 %	62,32 %	24,39 %	15,90 %	4,12 %	-43,74 %	-2,35 %	48,28 %	-34,96 %	-9,64 %	39,29 %

Source: DATACOMEX



In both the table and graph one can observe an increase in exports in the first months of the year, due to an increase in surface area for early varieties, which smoothens the peaks of production that are seen in April and May and had been generating oversupply in markets, coinciding also with other European production and leading to a decline in prices.

Evolution of imports in 2024

Spanish imports are mainly concentrated in March to May, highlighting Morocco as the main supplier compared to other countries. It might be emphasised however that there has been an increase in imports with Peru and the Netherlands as their origin over 2023.

In contrast, it must be noted that imports from South Africa in 2024 suffered from a sharp decrease of more than 50% after a 2023 campaign in which they almost doubled with 92% more than in 2022.

These points are reflected in the following table:

PAISES	2020	2021	2022	2023	2024	%24/23
MARRUECOS	23.476	26.645	33.728	28.545	31.567	10,59
PERU	1.724	2.048	3.895	1.964	5.075	158,44
PAISES BAJOS	1.649	1.454	1.630	830	1.834	120,85
PORTUGAL	1.014	1.838	2.181	3.086	3.676	19,10
ARGENTINA	526	744	487	585	622	6,34
SUDAFRICA	518	611	602	1.153	551	-52,21
OTROS	3.453	2.169	2.355	3.134	4.182	33,43
TOTAL	32.483	35.622	44.649	39.097	47.507	21,51

Source: DATACOMEX

188 GLOBAL STATE OF THE BLUEBERRY INDUSTRY REPORT | 2025 GLOBAL STATE OF THE BLUEBERRY INDUSTRY REPORT | 2025 189

Spain Report Team Narrative

Following years of drought conditions and restrictions around water usage that have impeded Spain's mature and fragmented blueberry industry from springboarding into a new stage of growth, atypically heavy and constant rains were a blessing and a curse in the opening months of 2025 for Europe's leading springtime supplier.

"We've probably had more rain in the last six weeks than in the past three years," one source said in March.

"From January to now we've had more rain than ever, and I've been in Huelva 26 years," said another in late April. "We've never had rain that's so strong and for such prolonged periods."

This weather phenomenon has eliminated near-term concerns around water availability in the country's dams and reservoirs. The situation prior meant many growers, most of whom produce multiple berry types, had to make sacrifices around irrigation and blueberries were often given priority over raspberries and blackberries. That said, the uncertainty around irrigation capacity slowed – and some say "halted" – investments in new blueberry farms, along with the pace of transition to new genetics that the industry has long desired.

The negative side effect of the drought breaking with such intensity is that the increased moisture lifts the risk of fungal disease, which has led to some instances of botrytis in the fruit which growers have had to discard; an unusual problem in Huelva, but one that has become more likely as the industry attempts to spread out at its production more evenly away from the May peak, exposing earlier varieties to the effects of winter rains. The other consequence is that some mid-to-late season varieties have been delayed due to the cloudy weather.

This aforementioned delay for some orchards is not well reflected in the data, because overall the industry is growing marginally with a portion of younger fields that are maturing,

and these are also skewed towards earlier-fruiting cultivars in pursuit of avoiding the May "avalanche" that has long characterized the industry, leading to sharp price drops in that period. Other traits producers are looking for in new varieties include higher yields, greater heat tolerance, and characteristics that are more valued by the market (such as taste, size, firmness and shelf life). It is also worth noting that one of the world's fastest-growing blueberry genetics programs, Spain-based Planasa, was acquired by German global animal genetics company, EW Group in late 2023. It is one of the fastest-growing genetics programs on a global scale, while two other Spanish programs are also engaged in trials across a variety of established and emerging blueberry industries.

April and May continue to be the strongest months of production for Spain, with its industry concentrated in the southwestern Andalusian province of Huelva, but the share of blueberries shipped in April is increasing, while rises in the preceding months are much more pronounced, albeit from lower bases. For example, in 2024 shipments of blueberries from Huelva were up 24% year-on-year, and rose by 81% and 62% in February and March respectively. Based on the data available at the time of writing, these trends appear to have continued into 2025. The industry also can produce in limited volumes from November to January, and whilst the data does not indicate any massive rise in production over this period in recent years, there are reports that growers are starting their recruitment drives to bring in migrant workers earlier than before.

We do not have exact data to define what proportion of the Huelva industry is comprised of new varieties, but major international and domestic genetics programs are active in Spain, and one grower cooperative that accounts for almost a third of Spanish blueberry production has already converted a third of its hectares to new cultivars – these accounted for 26% of its volume last year, and that percentage is set to rise to 35% in 2025. A source from the cooperative highlights that earliness

is just one result of the shift, with another being larger fruit sizes and more consistent pack-outs, leading to a stark contrast in packhouses when compared to Snowchaser – an early variety that is one of the industry's two leading cultivars along with mid-season Ventura.

Another noteworthy dynamic is that a high proportion of varieties that have been removed were traditionally grown in May and June, and have been replaced by earlier cultivars. So even though production in May overall has been increasing, growing demand for blueberries in Europe has meant the supply during this period is still in deficit relative to what the market is capable of absorbing. This shift in timing driven by varieties is therefore widening the supply gap between campaigns in Spain and northern Europe's leading producer Poland, although smaller industries like Portugal, Italy, Serbia and Romania are filling some of this gap. This does mean though that Spain is simply relinquishing a period of attractive returns. As one source emphasised, "We will always produce in April, May and June," while last year there were delays for some fields going deeper into the June window: an anomaly reflected in a slight increase in volume for the month in 2024 after two years of steady declines.

Aside from Huelva, blueberries are also grown in Asturias, Cantabria and Galicia in northern Spain where high-chill blueberries are grown with production oriented towards June and July. Whilst the core industry is more than likely to remain predominantly concentrated in Huelva for many years to come, there is considerable interest in exploring alternative regions within the country to grow blueberries, tapping into the opportunities presented by the June window. Regions under consideration include in central Spain around Madrid, the northeastern area around Zaragoza, and in the interior from Barcelona; areas that are cooler than Huelva but with springs that are earlier than in Serbia or northern Italy. One challenge with this strategy though is the limited availability with small

parcels. Much of the existing industry outside of Huelva is composed of very small growers with lower levels of productivity than their southern Spanish counterparts.

What is perhaps most telling about the state of blueberry demand – or perceptions of it - is that Spain has been shifting its production window earlier even though this leads to greater overlap with its biggest competitor Morocco, which has the bulk of its season running from January to May, traditionally with an April peak although in 2025 the peak harvest has been delayed by a month. Stakeholders interviewed for the latest report have not witnessed a great clash of these two supply origins as the appetite for blueberries has been strong enough for it not to be a concern, for now. If the balance were to shift in the supply-demand equation, Spain may have the comparative advantage of slightly greater proximity to market and its provenance as a European supply source, but Morocco has a very high comparative advantage over Spain when it comes to the cost of labor, and its industry's ability to set up much larger-scale farming operations with economies of scale.

Spain is often referred to by blueberry industry stakeholders as an emblematic market of new consumption growth, and the double-digit consumption growth has continued. This is encouraging in a country where just a few years ago it was not normal to see blueberries on the shelves of supermarkets year-round. One domestic retailer that accounts for a major portion of the Spanish retail market, Mercadona, was an early adopter of stocking blueberries on the shelves and now most others have followed suit.

Not only is it normal now to see blueberries sold throughout the year all over Spain, but in times of more stable supply dynamics there are larger packaging sizes too with 400g or 500g seen as the norm just as it is in other parts of Western Europe. For the past two years though, in the context supply shortages and high demand in northern Europe, there has been a return

to 125g clamshell format, although 200g packs are common as well. In Spain, more people are discovering blueberries, consumers are purchasing blueberries more often, and they are buying more than before; all trends that are facilitated by counter-seasonal supply and the promotional efforts of local industry. Two-thirds of imports come from Morocco, although it is doubtful that most of this volume is consumed within Spain.

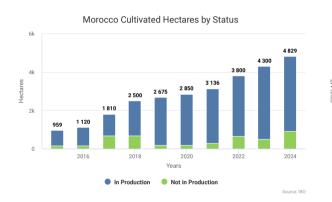
Around 83% of Spain's blueberry exports are sold in eight main European markets, the largest being Germany, the Netherlands, Poland and the UK. Following some adjustment challenges in the post-Brexit environment, the industry has found that conditions for shipments to the UK market have improved recently and are very streamlined, making it a similar process to shipping within the EU. The industry's larger players maintain a presence in emerging markets of Southeast Asia and the Middle East, but the sector overall is frustrated by a lack of progress in securing access arrangements to new markets such as South Africa and China. Blueberries are currently second in the queue regarding the negotiation of Chinese market access for Spanish fruit.

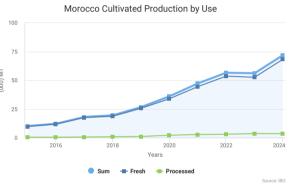


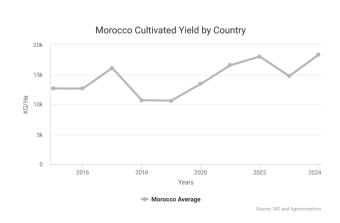


Planting and Production Data, Figures & Commentary

(Denominated in Hectares and Thousands of Metric Tons)







Morocco 2024 Production Metrics

Hectares Planted:	4,829 Ha
Organic:	Not Reported
Under Structure:	Not Reported
Hydroponics:	Not Reported
New Genetics:	Not Reported
Hectares in Production:	3,910 Ha
Production:	71.73 (000) MT
Growth in Production ¹ :	▲15.68 (000) MT (27.98%)
Growth from Hectares ² :	▲1.63 (000) MT (10.40%)
Growth from Yield ³ :	▲14.05 (000) MT (89.59%)
Yield:	18,343.18 (Kg/Ha)
Exports:	64.92 (000) MT
Imports:	0.00 (000) MT

Source: IBO and Agronometrics

¹Volume change compared to previous season

² Change in volume due to hectares entering or leaving production

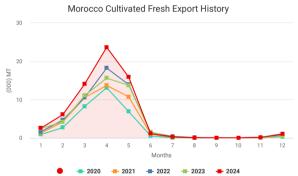
³ Change in volume due to field productivity (yields)

Morocco Cultivated Fresh Exports by Partner (000) MT (Data inferred from trade partners)

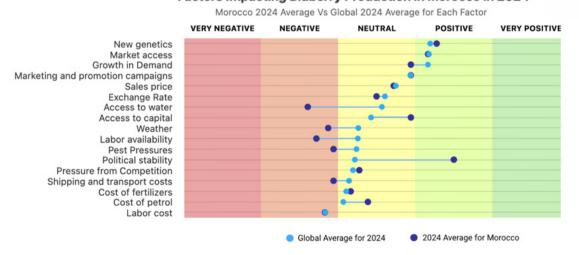
Reporter	2020	2021	2022	2023	2024
Spain	23.47	26.61	33.69	28.52	31.49
United Kingdom	1.64	8.08	10.35	11.19	15.03
France	2.78	2.51	2.99	4.50	10.06
Netherlands	1.38	1.05	1.44	1.22	3.01
Norway	1.89	2.00	1.96	1.33	1.92
Others	1.52	1.76	1.40	2.33	3.42
Morocco Totals	32.69	42.01	51.84	49.09	64.92

Source: Agronometrics Global Trade Data





Factors Impacting Bluberry Production in Morocco in 2024



Morocco Report Team Narrative

Moroccan blueberry exports bounced back to a new record in 2024 after a cold spell at the start of 2023 prompted the first volume decline in an otherwise upward trajectory over more than a decade. At the time of writing this upward trend has continued in 2025 in what one source described as a "mirror" of 2024, characterized by cooler conditions causing delays for crops, but with growth nonetheless as younger plantings mature and with "reasonable prices" for growers.

With the advantage of being on Europe's doorstep, mostly dry conditions (although 2025 has been an exception in the north where there has been plenty of rain, similar to Huelva in Spain), a relatively cheap source of labor (with some minor challenges), and the overcoming of water scarcity difficulties thanks to desalinisation plants, Morocco continues to be one of the cornerstone regions of the global blueberry industry.

Its industry serves markets early in the year and into the springtime - mostly in Europe, but its presence in Asia has been steadily rising while exports to Canada and the U.S. have gone up sharply from almost nothing in 2021 to above the 1,300MT mark in 2024. Only a small minority of Moroccan growers have the necessary certifications required to enter the U.S. market at this stage, but with a fairly short journey time across the Atlantic Ocean of 8-12 days, and the main competitor in its season window – Mexico – reaching production levels that are below previous expectations, there are some who believe North America will become a more significant part of Morocco's export strategy in the years to come. There are also high expectations that an export protocol for China will become effective next year

With practically all the world's leading blueberry companies and breeding programs present in the country, Morocco has built a reputation for consistency in terms of the fruit's organoleptic characteristics, driven in part by a relatively high proportion of premium-grade cultivars in the ground as well as the benefits of knowhow. The number of hectares planted

are not expected to grow as rapidly as in the past, but the pace of varietal conversion has been and will likely continue to be aggressive and highly skewed towards varieties that can grow earlier, making the most of winter shortages in Northern Hemisphere markets, especially in competition with times when Chile is the leading supplier. One source reports this rate of change is being held back somewhat by recent tightening biosecurity measures from the Moroccan government around the importing of plant material from Spain due to the country's presence of the bacterium Xylella fastidiosa, and it has been questioned whether such restrictions are part of a broader plan to incentivize a larger domestic nursery industry in Morocco, where - as far as blueberries are concerned – most material is coming from Spain. In response, nurseries have reportedly started transporting plant material into Morocco from other sources.

The northern region of Morocco, around Larache and Rabat, is where there were the first forays into low-chill blueberry production in Morocco in the mid-2000s, with a lot of activity coming from Spanish interests before Morocco became a hub for a veritable who's who of blueberries globally. With a cheaper cost of production, under 'normal' weather conditions this area is able to supply fruit slightly earlier than Spain.

The appetite for growth in Morocco spread to the southern region of Agadir which has since become a second heartland of the country's blueberry industry, developed with substrate production of proprietary southern highbush genetics, good agronomic management and tall 'canary greenhouse' protection, in contrast to the more open-field and tunnels set up in the north. It is a geographical expansion that has allowed the country to produce earlier with a peak window from January to April.

Morocco's benefits have attracted companies and investors from the Americas, Europe, South Africa, Israel, Australia, and Morocco itself – including citrus companies wishing to 194 GLOBAL STATE OF THE BLUEBERRY INDUSTRY REPORT | 2025 GLOBAL STATE OF THE BLUEBERRY INDUSTRY REPORT | 2025 195

diversify – to plant blueberries. Many view the country as an extension of European industry however, and a lot of the companies present also have production in Spain, thus offering diversification benefits to retailers. This is especially beneficial when cold snaps in Europe prompt later Spanish seasons so Morocco can fill the gaps (although northern Morocco's weather does tend to mimic that of Spain).

Morocco's industry is generally discussed along north-south lines, but there is an incipient, third geographic vertical that is much further south in the region of Dakhla, which is still limited to just a handful of rather big players with access to limited water that are betting on its potential for even earlier production. The preference is for flat plastic structures known as 'Canarian greenhouses' in what is a windy area, some 1,200km to the south of Agadir in the disputed territory of Western Sahara, although the geopolitical climate has shown signs of stabilising with support for Morocco's autonomy plan for the area from more developed nations such as the United States and Spain.

Perspectives about the potential of Dakhla vary greatly, with critics circumspect due to its remoteness, implying difficulties around securing labor and logistical hurdles in getting to market. It takes an estimated two more days to get to European markets than for Agadir, and there is still a shortage of sophisticated cold chain infrastructure. Those who are more

bullish on the region are attracted by the growing conditions, its promise of earliness, and "very positive" results in the fields to date which have encouraged continued new planting. The Kingdom of Morocco has previously announced plans to open up 5,000ha to agricultural projects in Dakhla under an irrigated perimeter with desalinated water. While this figure was never aimed just at blueberry cultivation, even the sector's biggest proponents believe the total plantings will be nothing like that number.

Dakhla has mild weather and its ultra low chill coastal climate allows for production at least a month earlier than in Agadir, and proponents believe the challenge of bringing in workers from outside can be achieved just as it has been in Peru, where isolated, northern desert farms have also had to attract pickers from farther afield. The delay of a couple of days versus Agadir is also potentially offset by the fact it can still get to market faster than competitors like Peru and South Africa.

The market is also starting to see the result of limited plantings of mid-chill blueberries grown in Morocco's Atlas Mountains, targeting the late June and July market windows. This timing is not as advantageous price-wise as Dakhla would be, but it is understood that the cost of production in the region is low while logistically it would only take a few hours more than from Agadir to reach Morocco's ports.



EASTERN EUROPE

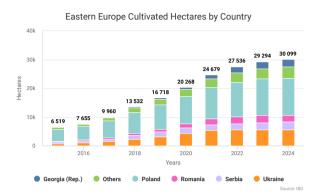
Planting and Production Data, Figures & Commentary (Denominated in Hectares and Thousands of Metric Tons)

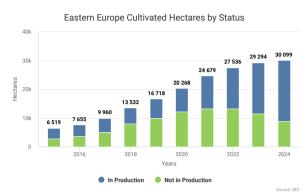
Eastern Europe Cultivated Hectares by Country

Eastern Europe		He	ctares Plante	d		2024 P	roduction (00	0) MT
Growth Totals	2020	2021	2022	2023	2024	Fresh	Process	Total
Poland	9,500	11,000	11,913	12,594	12,831	56.00	10.00	66.00
Romania	1,500	2,000	2,500	2,650	2,200	16.00	1.10	17.10
Ukraine	4,383	5,318	5,500	5,550	5,600	14.20	0.64	14.84
Serbia	1,800	2,000	2,100	2,460	2,800	5.47	0.50	5.97
Georgia (Rep.)	700	1,320	2,115	2,500	2,700	5.00	0.03	5.03
Belarus	290	362	400	437	485	1.43	0.89	2.32
Lithuania	270	300	350	360	570	1.07	-	1.07
Bosnia/Herzegovina	170	190	190	197	205	0.99	-	0.99
Croatia	360	380	400	370	420	0.83	-	0.83
Russia	400	750	1,000	1,100	1,200	0.82	-	0.82
Kosovo	90	90	126	150	170	0.78	-	0.78
Czech Republic	70	88	108	70	70	0.74	-	0.74
Latvia	500	600	550	550	500	0.50	-	0.50
Slovenia	60	70	70	70	70	0.40	-	0.40
Bulgaria	40	70	60	80	100	0.30	-	0.30
Slovakia	70	70	80	80	100	0.23	-	0.23
Montenegro	15	18	22	23	25	0.14	-	0.14
Macedonia	10	12	12	13	13	0.08	-	0.08
Hungary	40	40	40	40	40	0.07	-	0.07
Eastern Europe Totals	20,268	24,679	27,536	29,294	30,099	105.05	13.16	118.21

Source: IBO

196 GLOBAL STATE OF THE BLUEBERRY INDUSTRY REPORT | 2025 GLOBAL STATE OF THE BLUEBERRY INDUSTRY REPORT | 2025 197

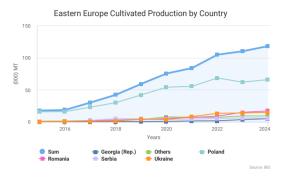


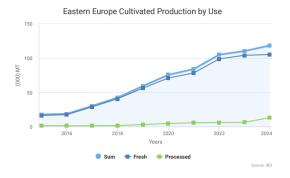


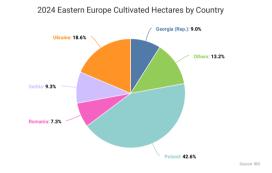
Eastern Europe Cultivated Production by Country(000) MT

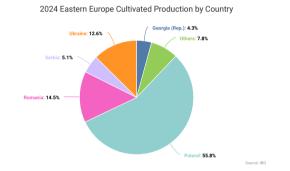
Eastern Europe		2022			2023			2024	
Productions Totals	Fresh	Process	Total	Fresh	Process	Total	Fresh	Process	Total
Poland	65.50	3.00	68.50	59.00	3.00	62.00	56.00	10.00	66.00
Romania	8.00	1.00	9.00	14.00	1.00	15.00	16.00	1.10	17.10
Ukraine	13.00	0.43	13.43	13.40	0.54	13.94	14.20	0.64	14.84
Serbia	4.74	0.45	5.19	5.82	0.45	6.27	5.47	0.50	5.97
Georgia (Rep.)	1.60	0.10	1.70	3.50	0.10	3.60	5.00	0.03	5.03
Belarus	1.25	0.60	1.85	1.38	0.87	2.25	1.43	0.89	2.32
Lithuania	0.65	0.25	0.90	0.70	-	0.70	1.07	-	1.07
Bosnia/Herzegovina	0.93	-	0.93	0.99	-	0.99	0.99	-	0.99
Croatia	0.73	-	0.73	1.54	-	1.54	0.83	-	0.83
Russia	0.05	-	0.05	0.71	-	0.71	0.82	-	0.82
Kosovo	0.65	-	0.65	0.71	-	0.71	0.78	-	0.78
Czech Republic	0.30	-	0.30	0.75	-	0.75	0.74	-	0.74
Latvia	0.42	0.25	0.67	0.42	0.25	0.67	0.50	-	0.50
Slovenia	0.37	-	0.37	0.40	-	0.40	0.40	-	0.40
Bulgaria	0.14	-	0.14	0.23	-	0.23	0.30	-	0.30
Slovakia	0.17	-	0.17	0.19	-	0.19	0.23	-	0.23
Montenegro	0.12	-	0.12	0.12	-	0.12	0.14	-	0.14
Macedonia	0.08	-	0.08	0.08	-	0.08	0.08	-	0.08
Hungary	0.05	-	0.05	0.06	-	0.06	0.07	-	0.07
Eastern Europe Totals	98.75	6.08	104.83	104.00	6.21	110.21	105.05	13.16	118.21

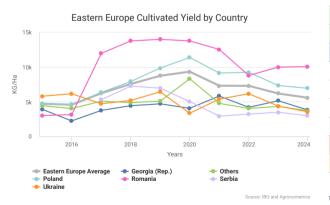
Source: IBO











Eastern Europe 2024 Production Metrics

Hectares Planted:	30,099 Ha
Hectares in Production:	21,204 Ha
Production:	118.21 (000) MT
Growth in Production ¹ :	▲8.00 (000) MT (7.26%)
Growth from Hectares ² :	▲19.35 (000) MT (241.87%)
Growth from Yield ³ :	▼-11.34 (000) MT (-141.74%)
Yield:	5,575.17 (Kg/Ha)
Exports:	50.13 (000) MT
Imports:	63.15 (000) MT
	Source: IBO and Agronometrics

¹Volume change compared to previous season ²Change in volume due to hectares entering or leaving production ³Change in volume due to field productivity (yields)

Eastern Europe Exports by Partner Subregion (000) MT

Subregion	2020	2021	2022	2023	2024
Western/Central Europe	23.63	23.26	24.72	26.74	31.93
Eastern Europe	11.57	11.70	15.01	14.08	15.63
So. Europe/N. Africa	0.40	0.56	1.33	1.67	2.35
Middle East	0.04	0.06	0.11	0.27	0.17
Central Asia/Indian Subcontinent	0.00	0.01	0.04	0.01	0.02
Others	0.01	0.03	0.01	0.01	0.03
Eastern Europe Totals	35.65	35.63	41.23	42.77	50.13

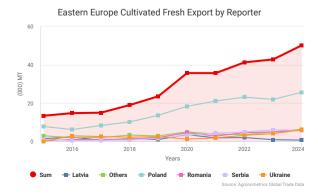
Source: Agronometrics Global Trade Data

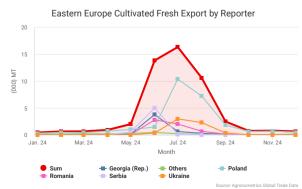


Eastern Europe Exports by Reporter (000) MT

Subregion	2020	2021	2022	2023	2024
Poland	18.30	21.05	23.09	21.89	25.64
Serbia	3.19	4.36	4.92	6.01	5.70
Georgia (Rep.)	0.67	0.95	1.39	3.46	4.99
Romania	4.50	2.77	4.57	4.95	5.76
Ukraine	1.19	1.82	3.16	4.06	6.02
Others	7.80	4.68	4.10	2.40	2.02
Eastern Europe Totals	35.65	35.63	41.23	42.77	50.13

Source: Agronometrics Global Trade Data

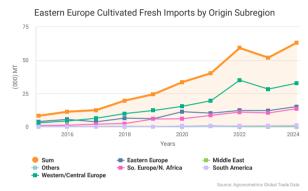


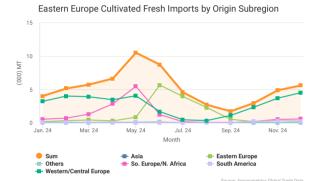


Eastern Europe Imports by Origin Subregion (000) MT

Origin	2020	2021	2022	2023	2024
Western/Central Europe	15.31	19.53	34.94	28.26	32.73
Eastern Europe	11.31	10.20	12.21	12.11	15.17
So. Europe/N. Africa	5.95	8.54	11.03	10.35	13.58
South America	0.59	0.65	0.62	0.78	1.05
Asia	0.11	0.12	0.15	0.22	0.33
Others	0.19	1.15	0.14	0.14	0.28
Eastern Europe Totals	33.45	40.19	59.10	51.85	63.15

Source: Agronometrics Global Trade Data

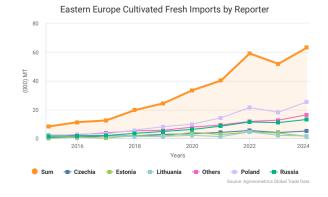


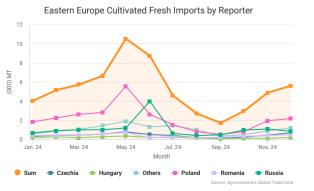


Eastern Europe Imports by Reporter (000) MT

Reporter	2020	2021	2022	2023	2024
Poland	9.91	14.25	21.44	18.20	25.43
Russia	6.22	8.52	11.41	10.98	13.16
Czechia	3.18	4.17	5.47	4.09	5.12
Romania	1.54	2.06	2.99	3.40	4.64
Latvia	1.27	1.10	2.88	2.37	2.27
Others	11.33	10.08	14.90	12.81	12.53
Eastern Europe Totals	33.45	40.19	59.10	51.85	63.15

Source: Agronometrics Global Trade Data





Eastern Europe Report Team Narrative

For an in-depth complement to what is happening in Western and Central Europe please visit the following country report:

Poland

Spanning a wide area of diverse populations, economies, climates and growing conditions, Eastern Europe accounts for around one twentieth of the world's fresh blueberry exports, around half of which comes from a gradually-rising, mature Polish industry (see Poland section) that has long been a backbone of European supply, and whose import market is in the top 10 globally, in 9th position ahead of France and behind Hong Kong. Eastern Europe also buys some 6% of the world's fresh blueberry imports with other key markets including Russia and Czechia, each with their own small industries that are far from ever fulfilling demand.

The region reported export growth of more than 7,000MT in 2024, which for context is comparable to the entirety of production in the previous year for the fast-growing industry of Zimbabwe. Of this additional volume that Eastern Europe put into the market, Poland accounted for half the growth while the remainder mostly came from the ascendant, younger industries of Ukraine, Romania and the Republic of Georgia. Serbia is also a key part of the region's blueberry production ecosystem, but its shipments declined last year, disrupting what had been an unabated upward trajectory since 2016.

The aforementioned Eastern European industries are all very different and call for case-specific considerations when determining their contributions to the region's outlook. On the whole the region's yields per hectare are relatively low on average, brought down partially by a proliferation of smaller operators with less professionalized farms where the level of knowhow and field-level planning are well below the more sophisticated farming companies of Eastern Europe, which in

certain cases have invested significantly in the post-harvest infrastructure and certifications necessary to both deliver higher quality and meet the stringent demands of Western European retailers. Each of these countries tends to have advanced and progressive growers that utilize their infrastructure and export capabilities to source from third-party growers, often assisting with expertise and education to help lift their respective industries. Unfortunately, competitive pressures have forced exits for many producers who have failed to reach the necessary yields to stay afloat, especially in Serbia.

However, it is not only the disparity of operational sophistication within the region that explains lower yields, but also the fact that there is such a significant surface area of new plantings that are young and far from reaching full production. Unlike other nascent industries of the world which for the most part comprise southern highbush genetics, the cooler climates of Eastern Europe are suited to northern highbush blueberries and thus the journey to maturation takes longer.

In the more southerly areas such as Romania, Serbia and Georgia (the latter not being technically part of Europe, but featured here given its proximity to Russia), earliness is a key consideration to fill the critical June supply gap between the end of the Spanish season and the start of the Polish season in July, while broadly speaking there are also labor cost benefits as well.

The earliest of these industries is Georgia with a season that runs from mid-May until mid-July with most of its production focused around its western Black Sea region around Guria, Samegrelo-Zemo Svaneti and Imereti; areas where the soil tends to be acidic, which allows blueberries to thrive. The sector in this region continues to expand although it is slowing down as producers assess results, and the majority of what's planted is not in full production yet, leading most to project major growth in the pipeline.

There are also currently trials in higher-altitude parts of the country's east near the capital of Tbilisi which are aimed at the July-August window. If these experiments prove successful it could lead to further plantings in the east, ultimately aimed at positioning the country as a longer-duration supplier which is more appealing to retailers. Through a combination of eastern plantings that could theoretically push crops deep into August, and production under tunnels and next-gen varietal selections that induce earlier harvests in the west, Georgia's industry has its sights set on a four-month supply window. The typical farm in Georgia is one hectare or less, but the huge number of small growers detracts from the fact that most of the blueberry volume comes from larger entities, which in Georgia is about 90%. Previously around 99% of Georgia's exports went to Russia, and whilst that market is growing for the industry as a function of production growth, substantial efforts have been made to build programs with traders and retailers in Western Europe, where Georgian fruit now has more of a presence. With the formation of the Georgia Blueberry Growers Association, representing around 1,200ha of the 3,000ha planted, growers within the group managed to shift 50% of their exports away from Russia and into other markets, mostly in Western Europe but also into some Gulf countries. This has required a refinement of post-harvest processes and as transportation to European markets can take 6-9 days versus 2-3 days for Russia. Earlier in the year the association had intentions to ship to Saudi Arabia, Israel and India for the first time in 2025, while China is also on the horizon with an export protocol in the works. "There is an opportunity for Georgia to have 5.000-7.000ha if trials in the east succeed, because one of the challenges we have now with Asian buyers is that our harvest window is still pretty small," one source noted. "We want to expand that."

Serbia's blueberry season is much tighter than Georgia's and only runs for around 4-5 weeks, starting in early June in the country's north, and there is some production in more mountainous regions which can extend harvests until mid-to-late July. Then Romania tends to follow with harvests starting 5-10 days later than Serbia's, with a longer season that usually runs from mid-June until the end of September. Romania is putting increased pressure on Serbia though, and benefits from the availability of larger plots of land that enable scalability.

Georgia, Romania and Serbia are all envisaged to play a role in the revitalization of northern highbush plant genetics in Europe, whereby supermarkets in tandem with certain breeders are urging global marketers to complement their low- or no-chill southern highbush supply from outside the continent with summer-oriented, mid-to-high chill varieties with similar attributes around size, crunch, firmness and flavor. This change can be most keenly felt in Romania (although the impact on significant volume will still be a couple of years away) where a handful of farms have commercial plantings of a branded selection of high chill varieties from a U.S.-based breeder, with 200-300ha either planted or to be planted in the near-term, and ambitions even just for one company alone to plant 1,000ha over the coming years - a figure that would equate to more than a third of Romania's total blueberry plantings in 2023, and with genetics that can potentially yield more fruit per hectare. A smaller number of companies in the same branded genetics program have planted blueberries in Georgia and are at an earlier stage - these will target European markets, but also have the comparative advantage of closer proximity to the Middle East and India.

It must also be noted that most farms in Romania are in open soil planting beds, which is complicated given the country's clay-like soils and unusually high pH levels, and such farms adopt a variety of methods to improve soil nutrition so that it is adequate for blueberries. This has prompted some of the newer operations to grow in pots with high levels of investment per hectare. Compared to other countries Romania has good water availability, but also extreme weather conditions.

In higher altitude areas there is a greater risk of frosts in April, which is when Duke (the most common cultivar) and Legacy blueberry bushes are in blossom; hence some growers have turned to the Elliott variety to avoid frost damage with later production. Another problem that some Romanian farms encounter (but not in a generalized way) is hail, leading to mitigative measures such as anti-hail cannons.

Serbia too has excellent water availability, but it can be mineral-rich which necessitates water filtration through reverse osmosis. Of all the different blueberry industries worldwide, Serbia is one where stakeholders are most likely to disagree with one another about the true situation, and there is a general reluctance to share information with each other: this is not an uncommon trait for a young industry, and the experiences of more mature sectors such as Poland and Chile show that such disunity can be overcome to a workable degree, to the betterment of the sector. As Serbia's agricultural census takes place every 10 years, the true extent of plantings is unknown. The hilly terrain makes it difficult to secure contiguous plots of land, and the cost of producing blueberries is expensive by Serbian farming standards; a high proportion of farms have anti-hail nets, modern irrigation and fertigation systems are common, and more and more farms have been planted in pots with substrate over more recent years. Ensuring more consistent quality and lifting yields is a common objective, with a perception that portions of the industry that were ill-equipped to export have tarnished the reputation of Serbia as a source of origin, leading to more intensive relationship-building efforts to demonstrate the reliability of the country's more cutting-edge farms and facilities. As one source noted, "It's a country brand...I don't mind having competitors. I want more competitors who are going to lift their game on quality."

Neighboring Serbia, Kosovo has a much smaller industry but one that has been growing in terms of size and sophistication with an improvement in orchard management practices. It has been reported that around 20 new growers entered the Kosovan industry last year, attracted by its early season advantage in June, while progress was also made in opening up new markets with growing interest from retailers in Germany and Switzerland.

Ukraine, occupying a more similar production window to Poland's but around one week earlier, also has shown interest in

this same U.S. genetics program but adoption is hindered by a misalignment between the commercial model and Ukrainian law, whereby the receipt of goods must take place within 180 days after a payment is made, but the nursery requires payment one year prior to delivery. Like Poland, Ukraine was badly affected by frost in 2024 yet its production still grew, and exports grew significantly due to a combination of volume growth and the erosion of both its once-relevant domestic market and Russian demand as the war between the two countries continues. For some Ukrainian growers who traditionally sold either domestically or to Russia-affiliated traders, prices were always far below international levels but with payments guaranteed and upfront. Last year a large sub-section of this industry segment turned its attention to the export trade (and this trend continues in 2025), with fresh volume shipped out of Ukraine rising by around 50% and the Netherlands overtaking Poland for the first time as the leading market destination. Ukrainians also secured higher pricing on average, although of the Eastern European industries of note, theirs is still by far the lowest average export price.

A Ukrainian stakeholder notes that early in the season in 2023 trucks carrying blueberries, including one that was ultimately destined for Finland and another for the U.K. market, were held up at the Polish border for 10 days, damaging fruit quality and shelf life. This experience was shared throughout the industry, prompting many to change their shipping routes to go through Hungary instead for the remainder of 2023 and the 2024 campaign, reducing reliability on Poland. Interestingly, exports to Spain have been steadily rising year-on-year, as well as to the Republic of Georgia, likely in the form of re-exports to Russia although there is a belief in Georgia that stricter regulations will diminish this trend.

Like Poland, there is no telling what Ukraine's export increase would have been last year had it not been for the frost event. Eastern Europe as a whole followed the same trend of extremely early seasons seen in the rest of the continent, ranging from two to three weeks early depending on the country and farm. This meant that Georgia, Serbia and Romania all peaked in June (albeit in different weeks), whereas Romania usually has its export peak in July. One Romanian company that usually starts harvests on 15 June began picking on 28 May last year, while Serbian exporters – who usually see more of a spread of their predominantly Duke crop between June

and July – shipped almost all of their volume in June and at average prices that were the lowest seen in a decade as volume clashed with late-season supply from Spain and also Portugal. Perceptions around the earlier season were more positive in Kosovo, which prior to 2024 had suffered from multiple years of hail troubles with its blueberry crops, with both higher yields and pricing than had been recorded previously.

The Russian blueberry industry was also negatively impacted by frosts in 2024, with around four waves of such events in May damaging plants in flowering stage throughout central Russia. As Eastern Europe's second-largest blueberry import market and a still relatively low penetration of its 143 million-strong population, a decent level of demand meant that a nascent domestic industry was forming with growth rates of 200-300ha planted annually prior to the start of its war with Ukraine in February 2022. Since then planting growth has slowed, as even though there are some new projects being established, other growers are going out of business and selling their farms as they grapple with agronomic or technical mistakes made early on that have translated to low yields. Year-on-year imports from Georgia have been surging with a

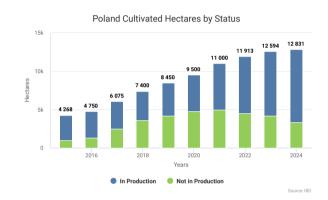
large spike in June 2024 even though the fast-growing trading partner is attempting to reduce its dependency on the Russian market. This Georgian supply – now accounting for almost half of Russia's total blueberry imports - clashes with production from some of Russia's largest growing operations, which are found just north of the border from Georgia in the Russian region of Kobardino-Balkaria. The varietal mix grown in Russia still comprises the open cultivars that characterize other northern highbush growing regions of northern Europe, while an interest in the adoption of newer varieties and more advanced agronomic and post-harvest education is hampered by strained relations with the West.

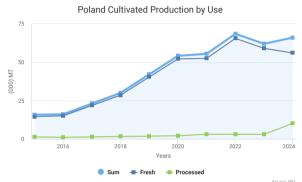
With consumption centred around major metropolises like Moscow and St Petersburg, "Russia still pays quite a lot for berries" as one source noted, and a stronger rouble last year increased the purchasing power of Russians. Trading with Russia is now more difficult than it was, so blueberries have become more of a luxury item in the winter months and merchandising has reverted to 125g packaging after a previous trend of much large pack sizing as the norm, although 500g packs of blueberries can still be found.

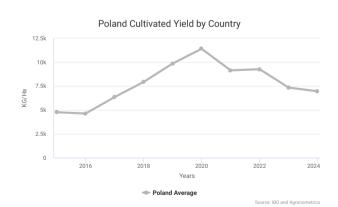


Planting and Production Data, Figures & Commentary

(Denominated in Hectares and Thousands of Metric Tons)







Poland 2024 Production Metrics

Hectares Planted:	12,831 Ha
Organic:	3.00%
Under Structure:	3.00%
Hydroponics:	Not Reported
New Genetics:	12.00%
Hectares in Production:	9,500 Ha
Production:	66.00 (000) MT
Growth in Production ¹ :	▲4.00 (000) MT (6.45%)
Growth from Hectares ² :	▲7.70 (000) MT (192.60%)
Growth from Yield ³ :	▼-3.70 (000) MT (-92.60%)
Yield:	6,947.37 (Kg/Ha)
Exports:	25.64 (000) MT
Imports:	25.43 (000) MT
	Source: IBO and Agronometrics

¹Volume change compared to previous season

Poland Cultivated Fresh Exports by Partner (000) MT

Reporter	2020	2021	2022	2023	2024
Germany	8.36	7.60	8.49	9.24	10.23
United Kingdom	3.01	4.41	3.94	4.26	5.40
Netherlands	1.48	1.64	1.75	1.19	2.44
Latvia	0.43	0.64	0.89	0.76	1.08
Spain	0.08	0.19	0.36	0.32	0.72
Others	4.92	6.56	7.66	6.11	5.77
Poland Totals	18.30	21.05	23.09	21.89	25.64

Source: Agronometrics Global Trade Data





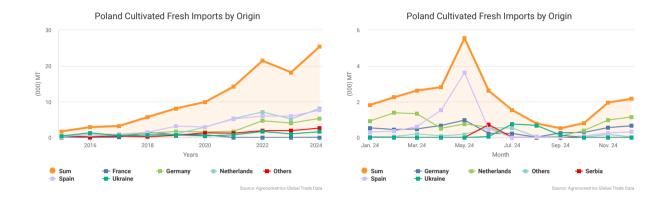
Poland Cultivated Fresh Imports by Origin (000) MT

Reporter	2020	2021	2022	2023	2024
Netherlands	2.90	5.32	7.13	5.20	8.12
Spain	2.95	5.18	6.02	5.97	7.63
Germany	1.56	1.74	4.70	4.04	5.36
Ukraine	0.44	0.75	1.68	1.04	1.62
Serbia	0.17	0.18	0.37	0.80	0.74
Others	1.88	1.08	1.54	1.15	1.96
Poland Totals	9.91	14.25	21.44	18.20	25.43

Source: Agronometrics Global Trade Data

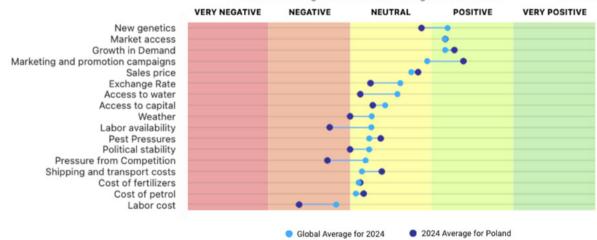
² Change in volume due to hectares entering or leaving production

³ Change in volume due to field productivity (yields)



Factors Impacting Bluberry Production in Poland in 2024

Poland 2024 Average Vs Global 2024 Average for Each Factor





Poland Country Member Summary

Adapted from a Report by the Polish Blueberry Promotion Foundation

Planted area and yields in 2025

According to data published by the Agency for the Restructuring and Modernisation of Agriculture, the total acreage of blueberry plantings in 2024 amounted to **12,916ha**, representing 2,6% growth compared to 2023. The total fruit production is estimated by Statistics Poland at **62,000 metric tons (MT)**, at exactly the same level as in 2023.

According to our estimates, conventional fresh fruit production constitutes **56,000MT**, organic production **3,000 MT** and fruit for processing and IOF freezing **3,000 MT**.

Country Narrative

Northern highbush blueberries have been grown commercially in Poland for over 45 years. The last 7 years saw an unprecedented increase in acreage and fruit production, for example with growth of nearly 25% between 2020 and 2021. However, starting from 2023 the pace of growth decreased considerably, with the replacement of old varieties gaining more importance than new plantings. Having said that, there is still significant potential for volume increases as plantings from before 2023 enter into full production.

On many farms, yields in the 2024 season were affected by a May frost, which due to the fact that the growing season was early by about 3 weeks, hit green fruit rather than flowers. This led to over 50% losses in some locations and smaller, but still significant losses in others.

Varietal replacement is gaining momentum, with cultivars such as 'Last Call', 'Megas Blue', 'Valor', 'Cargo' and 'Calypso' still dominating the scene. Some growers have also started varying scale trials of Fall Creek Collection and Sekoya varieties.

Polish commercial blueberry farms are drip irrigated, and most of them are equipped with fertigation systems. In general, blueberry fruit for the fresh market is hand-picked. Machine harvest takes place on bigger farms, usually only at the end of the season and the fruit is destined for processing. Many Polish growers and producer organizations possess state-of-the-art cold storage and packing facilities.

Blueberries are the second most popular berry in Poland, after strawberries, with penetration at 83%. Domestic demand for blueberry fruit increased sharply within the last 8 years. This allowed not only to prevent a decline of prices for locally produced fruit, but also boosted imports. This was made possible due to year-round promotional activities initiated in 2016.

Poland Report Team Narrative

With production that far exceeds all volumes combined from its summer harvesting peers in Central and Western Europe, Poland is the continent's second-largest blueberry exporter after Spain, playing a critical role in the market over July and August, with a minor presence in the shoulder months either side of this period. Such was the demand for blueberries in 2024 that Poland's fresh exports rose 17% (up 28% in value) despite production being static year-on-year, while processed exports (largely a secondary market for Poland as the industry prioritizes fresh fruit) were at the lowest levels seen in almost a decade.

Such is the extent of younger new plantings and converted varieties with room to mature that volume stayed constant despite devastating frost event, which was particularly pronounced in the southeastern growing region around Lublin (Poland's 2nd largest production area), albeit in a localized manner, and to a lesser extent in central Poland which is also a major source of blueberries. For well-established farms in Poland, the effect of these frosts were estimated to have knocked off 20% of volume overall, implying that volume would have likely spiked higher had it not been for this weather event.

The report supplied by the Polish Blueberry Promotion Foundation highlights this confluence of a growing season that was earlier by three weeks — a trend throughout northern Europe — and the frost which would have been less influential had the season been running at normal timing, with flowers instead of green fruit. An earlier frost also hit some farms in April which was more benign as orchards were still in the flowering stage, but the May frost had greater impacts, leading the government to offer some financial supports although these were not perceived as compensating anywhere near the level of losses sustained for affected growers.

"In one place you'd get -1°C which didn't do much, and in another place you'd get -4°C which destroyed most of the crop," one grower said. "For green fruit when it gets -4°C it's dead.

It's just frozen – the walls of the cells in the fruit are destroyed and it falls after a few weeks."

The earlier 2024 season is reflected starkly in the data, as fresh exports peaked in July instead of the usual August timing, with July shipments up 74% while August was down 27%. Volumes more than tripled year-on-year in June to unprecedented (but still relatively low) levels for that month, and as often happens with early-running seasons there was a sharp drop in the latest season fruit with September exports down 37%. This meant that unlike in the previous year. Poland was not able to take full advantage of the market shortfall caused by a delayed Peruvian season. Still, average pricing was exceptionally higher year-on-year in August, and somewhat higher in September. The varietal conversion afoot in Poland has also not had too much focus on later season cultivars either, as the industry relies heavily on Ukrainian labor, a large portion of whom are mothers who want to finish their itinerant work and be back home in time for the start of the school year in September. It has been reported that due to the inconsistency in Polish supply at the tail-end of the season in September, some U.K. retailers are opting to prioritize other supply sources at that time, which has led to more market diversification efforts around Europe for growers harvesting at that point in the season.

Lifting yields and converting varieties is a priority for parts of the industry, which is blessed with acidic soils ideal for blueberries in much of the country. There is an increasing acceptance that quality must be lifted for Polish blueberries to remain competitive in the future, and it has now been about five years since the beginning of a more concerted push to introduce a collection of genetics from a U.S.-based nursery, whose cultivars have become more common than before. However, the majority of traditional growers prefer to stick to the cultivars they already have planted in light of the high fixed costs of blueberry production and longer timeline to full production associated with northern highbush varieties. Duke and Bluecrop continue to be the main varieties, although the

latter has a reputation for lower quality after the second pick, so third and fourth picks – if there are enough pickers to carry them out – tend to have a higher share of volume directed to the domestic market.

Trials and adoption of next-gen varieties remain limited, and there is still a degree of skepticism as to whether such genetics are truly fit for the extremely high-chill conditions that Poland can exhibit. Experimentation with new genetics has at times performed poorly, but those who have deployed it with more sophisticated production methods are seeing good results with enthusiasm from supermarket buyers as well. In addition to the aforementioned U.S. breeder, a U.K.-head-quartered breeding program also has selections being trialed in Poland, which is seen as an "acid test for cold-hardiness".

Whilst the sector itself is highly fragmented with predominantly small growers, large operations account for a relatively high proportion of supply as well as new variety plantings. Recognizing the impending volume pressures that were to come, steps were taken several years ago for the sector to become more organized and adapt to the commercial challenges ahead. A key component of this strategy was marketing to get blueberries into more Polish households, and as a result a per capita annual consumption of 1kg per capita was achieved, setting a benchmark for other export-focused industries in middle-income countries.

There have been no updated per capita consumption estimates over the past two years since this figure was reported, but there have been encouraging signs in surveys undertaken by the industry. In August 2020, 25% of Polish consumers stated that they ate blueberries once (within the week preceding the survey), and 16% said they had eaten them 2-3 times in the same period. Those percentages have lifted to 32% and 20% respectively. Penetration meanwhile has stayed steady at the 83% level, but the survey shows consumers who eat blueberries are buying them more often. This exemplary performance in domestic market development has meant that in 2024, for the first time, Poland's fresh blueberry imports and

exports were almost the same, with consumers now used to a 52-week supply, although import volumes are substantially higher during the springtime to coincide with imports from Spain and Morocco.

The Polish market is not seeing the same level of premiumization as is seen in other northern European countries, although most see that the trend is emerging. What is more established than premiumization based on varieties is the presence of jumbo-sized blueberries, merchandised in different packaging and attracting higher prices per kilo. There is also an acute understanding in the industry that simply growing particular varieties does not guarantee premiums, and that achieving higher prices requires the implementation of proper agricultural practices to reach premium quality.

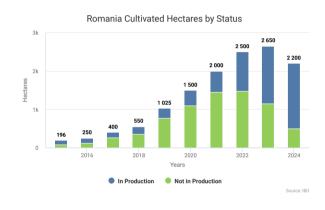
Another interesting trend in Poland is the level of vertical integration, complexity and diversification within the industry, including the formation of either grower-owned or independent marketing ventures to help cater for the higher volume growth that is coming from smaller farmers, agglomerating supply under certain standards for export markets with further investments in cold stores and packing lines. This infrastructure would be in obsolescence for much of the year if it weren't for import programs, so many of these operators have increased their focus on this trade with distribution hubs for not only Polish supermarkets, but increasingly the Baltic states as well. Such infrastructure, whilst clearly nowhere near as prominent as other hubs like Rotterdam, has created a re-export industry for Poland, sourcing from such origins as Serbia and Ukraine for sales throughout Western Europe, although stakeholders in those countries often would prefer not to have an intermediary. In Ukraine's case, experiences in past years of hold-ups at customs on the border have led some to seek alternative routes to market; what appeared a couple of years ago to be an upward trend in its exports to Poland has been stagnant for the past two years.

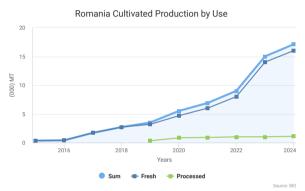
210 GLOBAL STATE OF THE BLUEBERRY INDUSTRY REPORT | 2025 GLOBAL STATE OF THE BLUEBERRY INDUSTRY REPORT | 2025 211

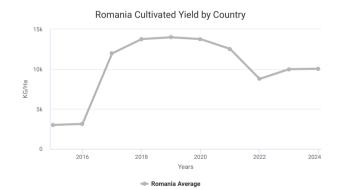


Planting and Production Data, Figures & Commentary

(Denominated in Hectares and Thousands of Metric Tons)







Romania 2024 Production Metrics

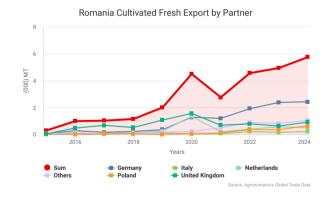
Hectares Planted:	2,200 Ha
Hectares in Production:	1,700 Ha
Production:	17.10 (000) MT
Growth in Production ¹ :	▲2.10 (000) MT (14.00%)
Growth from Hectares ² :	▲2.00 (000) MT (95.24%)
Growth from Yield ³ :	▲0.10 (000) MT (4.76%)
Yield:	10,058.82 (Kg/Ha)
Exports:	5.76 (000) MT
Imports:	4.64 (000) MT

Source: IBO and Agronometrics

Romania Cultivated Fresh Exports by Partner (000) MT

Reporter	2020	2021	2022	2023	2024
Germany	1.28	1.20	1.92	2.39	2.43
United Kingdom	1.57	0.69	0.79	0.63	0.92
Poland	0.05	0.11	0.36	0.36	0.65
Netherlands	1.34	0.20	0.40	0.57	0.50
Spain	0.01	0.01	0.07	0.18	0.42
Others	0.24	0.56	1.03	0.82	0.84
Romania Totals	4.50	2.77	4.57	4.95	5.76

Source: Agronometrics Global Trade Data





¹Volume change compared to previous season ²Change in volume due to hectares entering or leaving production

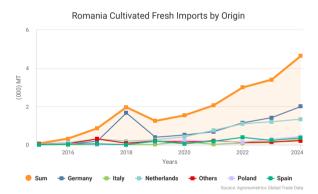
³ Change in volume due to field productivity (yields)

212 GLOBAL STATE OF THE BLUEBERRY INDUSTRY REPORT | 2025 GLOBAL STATE OF THE BLUEBERRY INDUSTRY REPORT | 2025 213

Romania Cultivated Fresh Imports by Origin (000) MT

Reporter	2020	2021	2022	2023	2024
Germany	0.51	0.68	1.15	1.42	2.00
Netherlands	0.42	0.76	1.10	1.20	1.34
Poland	0.24	0.18	0.14	0.29	0.43
Spain	0.06	0.19	0.39	0.23	0.36
Italy	0.17	0.03	0.09	0.12	0.29
Others	0.14	0.22	0.13	0.15	0.22
Romania Totals	1.54	2.06	2.99	3.40	4.64

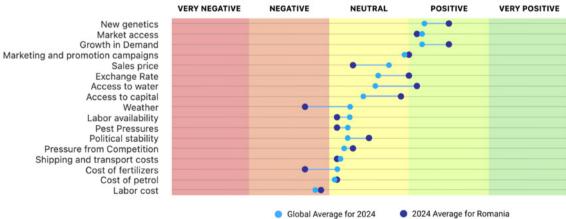
Source: Agronometrics Global Trade Data





Factors Impacting Bluberry Production in Romania in 2024

Romania 2024 Average Vs Global 2024 Average for Each Factor

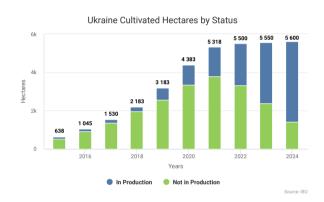


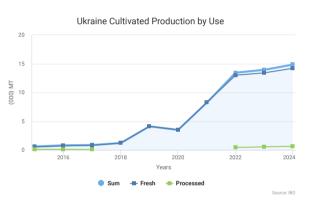


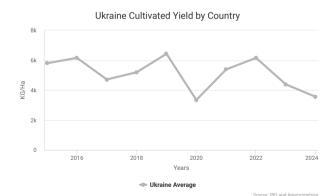


Planting and Production Data, Figures & Commentary

(Denominated in Hectares and Thousands of Metric Tons)







Ukraine 2024 Production Metrics

Hectares Planted:	5,600 Ha
Hectares in Production:	4,183 Ha
Production:	14.84 (000) MT
Growth in Production ¹ :	▲0.90 (000) MT (6.46%)
Growth from Hectares ² :	▲4.38 (000) MT (486.61%)
Growth from Yield ³ :	▼-3.47 (000) MT (-386.06%)
Yield:	3,548.89 (Kg/Ha)
Exports:	6.02 (000) MT
Imports:	0.52 (000) MT

Source: IBO and Agronometrics

¹Volume change compared to previous season

² Change in volume due to hectares entering or leaving production

³ Change in volume due to field productivity (yields)

Ukraine Cultivated Fresh Exports by Partner (000) MT

Reporter	2020	2021	2022	2023	2024
Netherlands	0.21	0.35	0.62	0.83	1.87
Poland	0.46	0.62	1.77	1.11	1.65
Georgia (Rep.)	0.00	0.00	0.01	0.44	0.58
United Kingdom	0.13	0.20	0.35	0.39	0.44
Spain	-	-	0.06	0.25	0.41
Others	0.39	0.64	0.35	1.03	1.07
Ukraine Totals	1.19	1.82	3.16	4.06	6.02

Source: Agronometrics Global Trade Data



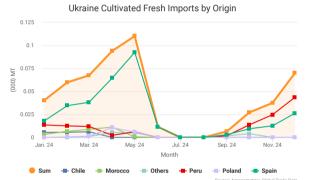


Ukraine Cultivated Fresh Imports by Origin (000) MT

Reporter	2020	2021	2022	2023	2024
Spain	0.13	0.11	0.21	0.37	0.31
Peru	0.13	0.22	0.17	0.15	0.13
Morocco	0.07	0.10	0.13	0.13	0.03
Poland	0.05	0.01	0.02	0.09	0.02
Chile	0.03	0.07	0.05	0.01	0.02
Others	0.79	0.11	0.01	0.04	0.02
Ukraine Totals	1.20	0.61	0.60	0.79	0.52

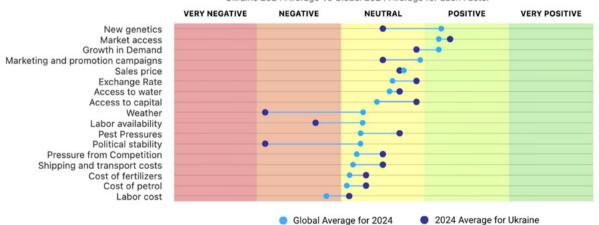
Source: Agronometrics Global Trade Data





Factors Impacting Bluberry Production in Ukraine in 2024

Ukraine 2024 Average Vs Global 2024 Average for Each Factor



WESTERN/CENTRAL EUROPE

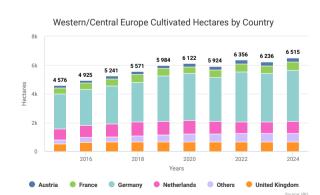
Planting and Production Data, Figures & Commentary

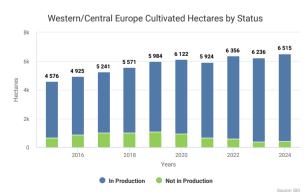
(Denominated in Hectares and Thousands of Metric Tons)

Western/Central Europe Cultivated Hectares by Country

Western/Central Europe	Hectares Planted					2024 Production (000) MT		
Growth Totals	2020	2021	2022	2023	2024	Fresh	Process	Total
Germany	3,289	3,050	3,475	3,389	3,541	9.50	8.20	17.70
Netherlands	920	873	827	810	840	4.70	1.40	6.10
United Kingdom	653	660	665	655	645	5.50	0.10	5.60
France	450	528	553	514	571	4.11	0.30	4.41
Austria	240	250	260	280	300	2.63	0.26	2.89
Belgium	130	128	107	112	102	0.90	0.70	1.60
Switzerland	108	135	163	177	204	0.84	-	0.84
Ireland	40	40	45	48	50	0.26	-	0.26
Finland	120	90	90	110	110	0.19	-	0.19
Denmark	100	100	100	70	70	0.10	-	0.10
Sweden	52	50	50	50	60	0.10	-	0.10
Norway	20	20	21	21	21	0.04	-	0.04
Western / Central Europe Totals	6,122	5,924	6,356	6,236	6,515	28.87	10.96	39.83

Source: IBO

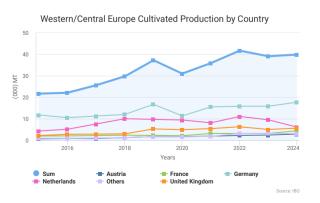


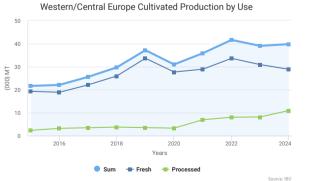


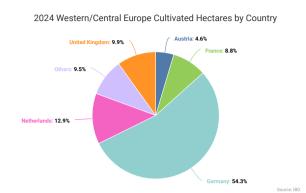
Western/Central Europe Cultivated Production by Country(000) MT

Western/Central Europe	2022				2023			2024		
Productions Totals	Fresh	Process	Total	Fresh	Process	Total	Fresh	Process	Total	
Germany	10.10	5.70	15.80	10.10	5.70	15.80	9.50	8.20	17.70	
Netherlands	9.90	1.14	11.04	8.20	1.30	9.50	4.70	1.40	6.10	
United Kingdom	6.10	0.15	6.25	4.90	0.10	5.00	5.50	0.10	5.60	
France	3.00	0.15	3.15	3.00	0.15	3.15	4.11	0.30	4.41	
Austria	2.06	0.18	2.24	2.20	0.20	2.40	2.63	0.26	2.89	
Belgium	0.90	0.70	1.60	0.90	0.70	1.60	0.90	0.70	1.60	
Switzerland	0.80	-	0.80	0.80	-	0.80	0.84	-	0.84	
Ireland	0.33	-	0.33	0.37	-	0.37	0.26	-	0.26	
Finland	0.20	-	0.20	0.20	-	0.20	0.19	-	0.19	
Denmark	0.11	-	0.11	0.10	-	0.10	0.10	-	0.10	
Sweden	0.10	-	0.10	0.10	-	0.10	0.10	-	0.10	
Norway	0.04	-	0.04	0.04	-	0.04	0.04	-	0.04	
Western/ Central Europe Totals	33.64	8.02	41.66	30.91	8.15	39.06	28.87	10.96	39.83	

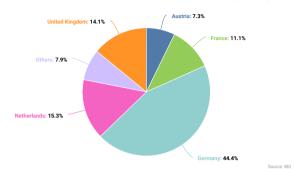
Source: IBO

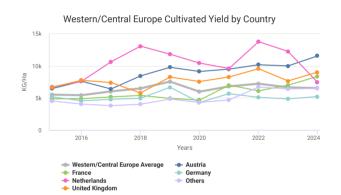












Western/Central Europe 2024 Production Metrics

Hectares Planted:	6,515 Ha
Hectares in Production:	6,090 Ha
Production:	39.83 (000) MT
Growth in Production1:	▲0.77 (000) MT (1.97%)
Growth from Hectares ² :	▲1.60 (000) MT (208.38%)
Growth from Yield ³ :	▼-0.83 (000) MT (-107.34%)
Yield:	6,540.98 (Kg/Ha)
Exports:	160.30 (000) MT
Imports:	373.56 (000) MT
	Source: IBO and Agronometrics

¹Volume change compared to previous season

Western/Central Europe Exports by Partner Subregion (000) MT

Subregion	2020	2021	2022	2023	2024
Western/Central Europe	81.45	81.05	95.51	79.57	103.99
Eastern Europe	14.95	18.88	33.17	26.86	35.21
So. Europe/N. Africa	8.57	10.40	16.32	12.77	19.52
Middle East	1.04	1.10	0.93	0.68	1.22
Central Asia/Indian Subcontinent	0.05	0.07	0.19	0.07	0.18
Others	0.15	1.07	0.25	0.13	0.18
Western / Central Europe Totals	106.21	112.57	146.37	120.09	160.30

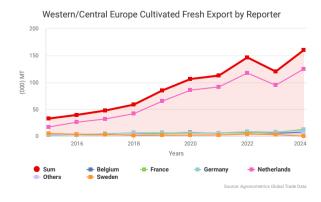
Source: Agronometrics Global Trade Data

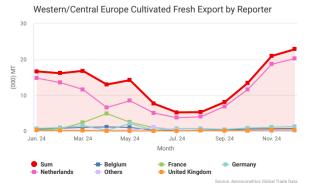


Western/Central Europe Exports by Reporter (000) MT

Subregion	2020	2021	2022	2023	2024
Netherlands	85.41	91.52	117.28	94.53	125.06
France	5.38	5.58	6.20	6.88	12.49
Germany	5.40	5.85	8.32	7.40	10.89
Belgium	6.41	5.33	7.45	5.25	7.52
Austria	0.66	1.19	1.53	1.67	1.91
Others	2.95	3.09	5.59	4.35	2.43
Western / Central Europe Totals	106.21	112.57	146.37	120.09	160.30

Source: Agronometrics Global Trade Data





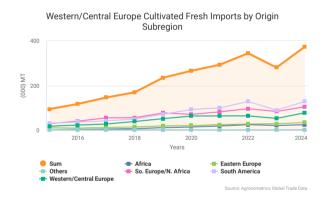
² Change in volume due to hectares entering or leaving production

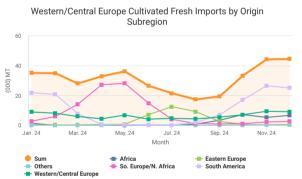
³ Change in volume due to field productivity (yields)

Western/Central Europe Imports by Origin Subregion (000) MT

Origin	2020	2021	2022	2023	2024
So. Europe/N. Africa	71.17	82.41	96.41	84.20	104.91
South America	92.92	100.31	128.64	90.22	128.77
Western/Central Europe	63.86	64.23	64.44	53.08	78.28
Eastern Europe	21.47	25.26	28.09	29.51	34.65
Africa	14.88	19.42	25.10	21.84	24.76
Others	1.62	1.58	1.73	1.65	2.19
Western/Central Europe Totals	265.92	293.21	344.40	280.50	373.56

Source: Agronometrics Global Trade Data

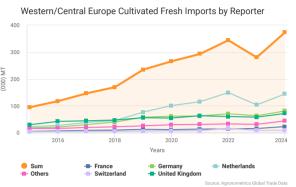


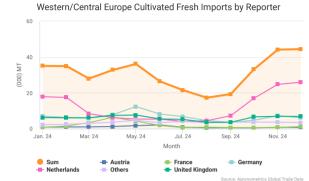


Western/Central Europe Imports by Reporter (000) MT

Reporter	2020	2021	2022	2023	2024
Netherlands	101.23	115.47	149.58	103.70	144.40
Germany	61.49	62.29	70.72	63.18	81.08
United Kingdom	54.73	63.39	60.37	58.04	71.80
France	11.51	13.63	14.27	15.67	22.96
Austria	7.14	7.58	9.24	9.24	11.96
Others	29.82	30.84	40.21	30.68	41.36
Western / Central Europe Totals	265.92	293.21	344.40	280.50	373.56

Source: Agronometrics Global Trade Data





Western and Central Europe Report Team Narrative

For an in-depth complement to what is happening in Western and Central Europe please visit the following country report:

United Kingdom

Amidst a dynamic of growing blueberry production around the globe, Western and Central Europe plays an essential role in making sure that volume is absorbed. While its internal consumption is lower than across the Atlantic Ocean in the USA and Canada, it is on par with North America when it comes to imports as each region accounts for close to 40% of the global total. North America remains the top importer, but the import supply difference between it and Western and Central Europe narrowed to just 3.8% in 2024, and the difference in import value (in USD terms) tightened to just 0.7%. It is noteworthy to mention that this was against the backdrop of a much stronger dollar against the euro (although it was weaker against the pound) in the final months of 2024, which were characterized by an influx of fruit from the leading supplier to both regions – Peru.

It must also be clarified that average pricing in Europe was down marginally in 2024 (still higher than 2022), as total imports rose by 32%, which appears to illustrate buoyant demand across the continent, despite sluggish economic conditions in its largest economies and stagnant performance for fresh fruit sales overall.

Blueberries are bucking that trend, and the narrowing gap in imports to these northern European countries versus North America demonstrates a relatively improved market performance and attractiveness to allocate supply. In last year's report we highlighted that during the El Niño-induced supply shortage of Peruvian blueberries in 2023, the European market had proven less responsive on price than the US. Observers note that this has changed, with Europe becoming much more dynamic on pricing in 2024 as buyers on average became somewhat less rigid in their negotiations. As a source from one of the world's leading blueberry marketers noted, "I have more confidence in Europe in terms of rewarding high-quality fruit than I ever have before."

As referenced in the Eastern Europe section of this report, warmer conditions led to earlier seasons across the northern half of the continent, starting 2-3 weeks earlier depending on the variety and location. As was the case in Poland and Ukraine, this exposed orchards with earlier varieties such as the predominant Duke cultivar to the deleterious effects of spring frosts which have much graver implications if there is green fruit on the bush than if it is just flowering. This was certainly the case for Western and Central Europe's largest grower, Germany, where the level of damage varied depending on water access that enables producers to overhead irrigate the plants for frost protection. There was cause for relief however in that the more active (but still very incipient and slow) genetic revival taking place in northern Europe is more often than not with mid-season varieties, which whilst more sensitive to agronomic practices were largely spared these negative frost effects. In contrast to a very poor campaign for early-season growers across the region, producers of late varieties – many of whom grow cultivars that are becoming less desirable to retailers each year – witnessed a boon in pricing due to the delay in volume from Peru, not to mention an earlier close to the season for northern Europe's largest grower Poland.

"But they'd have to be very shortsighted if they think that gap is going to be there very long, because in a normal season Poland will go strong up to the first few days in September, and certainly Peru, South Africa and Zimbabwe will all be coming in strong," said one stakeholder.

Higher costs and regulatory challenges persist for European blueberry growers, which in this region are highly skewed towards smaller operations that predominantly comprise of older varieties. The commercial reality is that for many, the fixed cost of investment in blueberry orchards has already been made and there is little surplus left over to reinvest in the kinds of upgrades the market is asking for, such as genetic replacement or operational improvements that could boost efficiency and quality. Nonetheless, a couple of successful early-stage commercial harvests for newer high-chill genetics in the region, attracting premium pricing, have led to greater interest in varietal changeover across northern Europe, including Poland and the more domestically-focused Austrian industry. In a bid to tip the cost-benefit analysis in favour of

transition, some marketers and sub-licensees of premium varieties are providing loans to assist.

The investment proposition for such changes is much more attractive in other jurisdictions where lower-chill genetics can be planted and harvested years earlier than in northern Europe, where higher chill genetics are required that take longer to mature. If an investor is specifically looking to plant higher chill varieties in order to be closer to market and target the European summer, Romania is generally regarded as a better option due to its lower cost and greater availability of larger tracts of land, while Serbia and the Republic of Georgia are also expanding in this regard.

The cost-benefit analysis, and the delays it represents for varietal transition in northern Europe, is compounded by a greater cultural reluctance to change. As one stakeholder put it for the previous edition of this report: "Some growers in Germany asked me for 150 plants for a trial, while growers in Romania asked for 25,000 plants, also for a trial."

Farming cost increases and the state of labor availability has led to a greater adoption of machine harvesting for fresh in industries such as Germany and the Netherlands; the latter having been relatively more at the forefront of technological and yield-driven trends by the standards of the region. It is estimated that at least one sixth of Dutch blueberry farms are harvesting their blueberries for the fresh market this way. Unlike their American counterparts who contend with similar economic challenges, Europeans are more cagey about revealing their usage of machine harvesters, due to concerns around perceptions of quality and the more cynical belief that European supermarkets would gobble up any corresponding margin improvement. There have been reports of automated harvesting machines being sabotaged as well, but overall the trend toward this method is on the rise.

In an alternative approach to reducing labor costs, some of the newer genetics being introduced can also be picked more efficiently and quickly by hand, thus increasing output per hour and reducing the labor cost per kilogram picked. And if higher packouts are achieved with less discarded fruit that isn't up to spec, overcoming the requirements of many such cultivars for more intensive field management and preparation, this effect is compounded by potentially higher returns per hour worked.

Germany & the Netherlands

The biggest blueberry sector in the region by far is Germany, which was the first nation in Europe to plant blueberries and was the dominant summer supplier until lower-cost production from Poland came on the scene in the 1990's. Around 70% of the country's blueberries are grown in the region of Lüneburg Heath between Hanover and Hamburg, with the remainder spread across Germany.

Germany has been an engine room of consumption growth for blueberries with per capita consumption jumping from 400g eight years ago to around 1kg in 2020 (with reports of double-digit growth through to 2022), and there is plenty of room for growth. Following the Netherlands which is the continent's largest re-export hub, Germany is the second-largest importer of fresh blueberries and saw its imported volume rise by 30% last year, which is higher than the 24% lift for the UK.

The production window for Germany runs from the end of June until mid-September with a large peak in July. Duke is the leading variety, followed by some other open and licensed varieties, although, as mentioned earlier, the purveyors of next-gen varietal programs are making a small impact to date though there are now examples to show for it. However, adoption has not been as great as elsewhere, with financial and scaling limitations likely playing a part. The average farm in Germany is around 3.5ha and most are soil plantings, but there are some very limited trials in pots with substrate. Only a few growers in the country have farms around the 50ha mark.

The production window for Germany runs from the end of June until mid-September with a large peak in July. Duke is the leading variety, followed by some other open and licensed varieties, although some of the larger genetics programs that are aggressively expanding throughout the European market sphere have not been particularly embraced by the German industry.

In the Netherlands there has historically been a higher tonnage per hectare than the German blueberry industry with a greater proportion of next-generation varieties. Dominated by five organisations that market most of the crop, around 90% of Dutch blueberry production is open field, sometimes with hail or rain covers. Economic pressures, combined with regulatory conditions and limited tools for growers, mean the sector is perceived to be on the decline with a degree of natural attrition.

The Netherlands' prominence as an import and export hub for blueberries was strengthened last year with a 39% jump in import volume and a 32% increase in its exports, with just over a third of what it shipped going to Germany. To put the country's importance for global blueberry markets into perspective, more than a fifth of all of Peru's blueberries exported globally arrived in Dutch ports, and in addition to its extensive infrastructure for receiving seafreight blueberries, Amsterdam Schiphol is among Europe's leading airports for direct flights to the Near and Far East, and around one fifth of all fresh blueberries imported by the Middle East last year were registered as being shipped from the Netherlands.

While the Netherlands has an outsized impact on the airfreight blueberry industry, as of mid-2023 its largest supermarket chain, Albert Heijn, will not accept fruit and vegetables that have been shipped by air. Similar moves have been made in Europe by the likes of Lidl and key Nordic and Baltic chain, ICA. This carries ramifications on allocations for suppliers farther afield that are able to produce in shoulder period of lower supply, and have the opportunity to fill market gaps at fairly high prices.

The trend of premiumization at retail is already more established in the UK, but it is increasing on the continent as well, although more so in the Netherlands than Germany which is still perceived by many to be more of a price-driven market. For the premium lines that exist however, Germany is seeing larger packaging sizes than before, and tends to involve more promotions and advertising than standard lines.

France

With the second-largest population in the European Union and the world's 7th largest GDP, the underperformance of the French market when it comes to blueberries has long been something of an enigma to the industry. Its fresh blueberry imports last year were around a quarter of those recorded by neighboring Germany, which also has a substantially larger domestic production base.

But what France lacks in domestic production growth, it has been making up for in its imports which have more than doubled since 2018, rising even in 2023 when the rest of Europe's arrivals were down due to the Peruvian shortfall. Off a low base, French blueberry consumption is steadily increasing and many see the market as Europe's biggest growth opportunity. One source noted that France arrived late to the boom in avocado consumption that swept through the continent, and eventually became Europe's largest consumer of the fruit. Whether that could occur in blueberries is yet to be seen, but it is still cause for encouragement.

The same source noted that in 2023 France had a very low market penetration rate of just 16% for blueberries, compared to 25% in raspberries and 75% in strawberries. And as recently as 2020, a survey found just 60% of shops had blueberries on their shelves – a level that may have increased toward the 80% mark since then but, anecdotally, it is still common to go to stores in the countryside or in small shops in the cities and not find blueberries at all. For the retailers that do stock blueberries, there is less diversity than in other northern European countries in terms of pack sizing, differentiation and sources of origin that one finds in a particular store. It is estimated that some 60-70% of the retail sector is still primarily price-driven, but traders are slowly convincing more retailers to pay more for higher-quality fruit - with specific varieties, bigger sizing or certain flavor characteristics - in order to drive sales. "It's really growing fast, and I think if the market continues with these kinds of increases we'll be the same as Germany maybe in 10 years," said the source.

But why is France so far behind the rest? One explanation is its relatively low levels of domestic production and a short season, within the context of a culture that values seasonality more highly than perhaps other parts of northern Europe – a habit that is more in line with its Mediterranean neighbors with an abundance of locally-produced summer fruit available during the season, and a very high preference amongst retailers to stock French product and a willingness to pay extra for it.

Despite an incremental rise in plantings, production in France was down in 2024 and trend volume has barely changed in recent years. Existing volume and new plantings are concentrated in the southwest, and the industry is often plagued by frost damages as well as rain in July, which was the case in 2024 and increased pressures for managing the threat of spotted wing drosophila (SWD). Growers in the concentrated French production region near Bordeaux, have prioritised early production in their varietal selections, implying a greater share of bushes in bloom when spring frosts occur. The season is very short, running from mid-June to mid-August depending on the farm, with a highly concentrated volume peak with 50% sold in the month between mid-June and mid-July. The varietal mix is also fairly old and characterized by open varieties like Duke, Legacy, Liberty, Bluecrop, and Cargo. There has been some adoption of newer genetics, and also of Rabbiteyes in the southwest which are harvested late in the season.

Aside from the southwest of France, which is home to both large-scale coastal plantations and smaller mountainous ones, the area of Val d'Isere in central France is home to prominent blueberry farms, including a major berry company. In the eastern part of the country, blueberry production is smaller in scale and primarily consists of smaller producers. However, these areas contribute to the later harvest period, albeit with limited production capacity compared to larger farms.

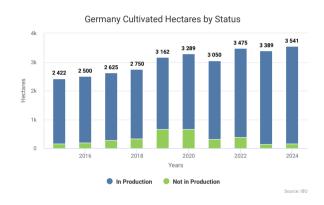
A company headquartered in northern France, which is one of the country's leading blueberry marketers working with a cooperative of growers and its own small commercial plot, plans to increase its plantings over the next five years and work with growers to help double the country's production. This involves plans to utilize the country's variety of microclimates, including leveraging the higher-altitude Massif Central to produce fruit through to September.

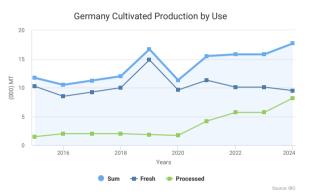
As in the rest of northern Europe, labor remains a challenge in France and some larger farms are working on mechanical harvesting for fresh, although the average small size of French operations makes this practice harder to implement across a large percentage of the industry.

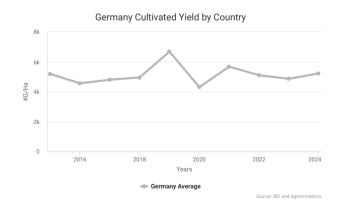


Planting and Production Data, Figures & Commentary

(Denominated in Hectares and Thousands of Metric Tons)







Germany 2024 Production Metrics

Hectares Planted:	3,541 Ha
Organic:	Not Reported
Under Structure:	2.00%
Hydroponics:	Not Reported
New Genetics:	8.00%
Hectares in Production:	3,389 Ha
Production:	17.70 (000) MT
Growth in Production1:	▲1.90 (000) MT (12.03%)
Growth from Hectares ² :	▲0.68 (000) MT (35.57%)
Growth from Yield ³ :	▲1.22 (000) MT (64.43%)
Yield:	5,222.78 (Kg/Ha)
Exports:	10.89 (000) MT
Imports:	81.08 (000) MT
	Source: IBO and Agronometrics

Source: IBO and Agronometrics

¹ Volume change compared to previous season

² Change in volume due to hectares entering or leaving production

³ Change in volume due to field productivity (yields)

Germany Cultivated Fresh Exports by Partner (000) MT

Reporter	2020	2021	2022	2023	2024
Austria	2.37	2.08	2.44	2.65	3.09
Netherlands	0.42	0.65	0.66	0.68	2.57
Finland	0.39	0.65	0.79	0.94	1.00
Czechia	0.12	0.20	0.74	0.63	0.82
Switzerland	0.11	0.06	0.36	0.49	0.67
Others	1.99	2.20	3.34	2.02	2.76
Germany Totals	5.40	5.85	8.32	7.40	10.89

Source: Agronometrics Global Trade Data



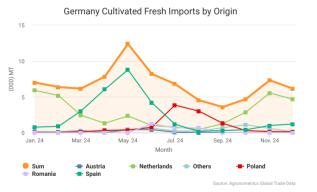


Germany Cultivated Fresh Imports by Origin (000) MT

Reporter	2020	2021	2022	2023	2024
Netherlands	27.23	25.67	29.94	21.34	33.78
Spain	21.47	22.50	26.16	23.39	28.01
Poland	7.37	7.97	9.75	10.96	10.46
Romania	0.97	1.36	1.89	1.80	2.62
Austria	0.60	0.93	1.06	1.46	1.46
Others	3.86	3.85	1.93	4.22	4.76
Germany Totals	61.49	62.29	70.72	63.18	81.08

Source: Agronometrics Global Trade Data



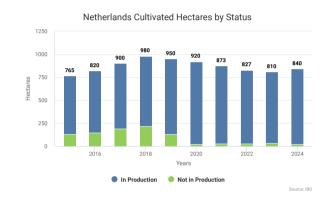


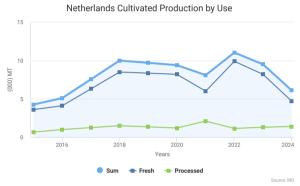
228 GLOBAL STATE OF THE BLUEBERRY INDUSTRY REPORT | 2025 GLOBAL STATE OF THE BLUEBERRY INDUSTRY REPORT | 2025 229

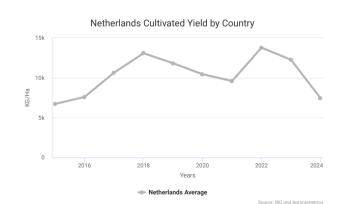
NETHERLANDS ==

Planting and Production Data, Figures & Commentary

(Denominated in Hectares and Thousands of Metric Tons)







Netherlands 2024 Production Metrics

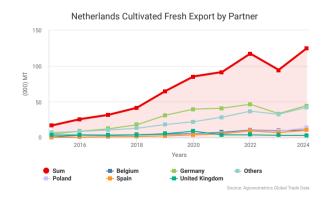
Hectares Planted:	840 Ha
Organic:	8.00%
Under Structure:	1.00%
Hydroponics:	Not Reported
New Genetics:	50.00%
Hectares in Production:	820 Ha
Production:	6.10 (000) MT
Growth in Production1:	▼-3.40 (000) MT (-35.79%)
Growth from Hectares ² :	▲0.55 (000) MT (16.22%)
Growth from Yield ³ :	▼-3.95 (000) MT (-116.22%)
Yield:	7,439.02 (Kg/Ha)
Exports:	125.06 (000) MT
Imports:	144.40 (000) MT

Source: IBO and Agronometrics

Netherlands Cultivated Fresh Exports by Partner (000) MT

Reporter	2020	2021	2022	2023	2024
Germany	39.74	41.02	46.53	33.52	44.87
Poland	5.03	5.62	9.98	8.79	13.70
Belgium	5.58	7.34	10.61	9.62	10.67
Spain	3.84	5.19	9.38	6.91	10.30
Italy	1.70	2.00	3.05	2.76	4.38
Others	29.52	30.33	37.74	32.94	41.13
Netherlands Totals	85.41	91.52	117.28	94.53	125.06

Source: Agronometrics Global Trade Data





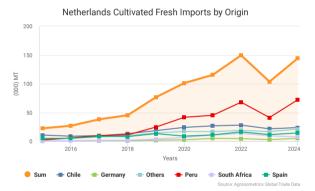
¹Volume change compared to previous season

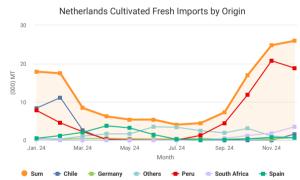
² Change in volume due to hectares entering or leaving production ³ Change in volume due to field productivity (yields)

Netherlands Cultivated Fresh Imports by Origin (000) MT

Reporter	2020	2021	2022	2023	2024
Peru	41.68	45.19	67.90	41.27	72.26
Chile	24.13	26.77	28.12	21.63	23.82
Spain	8.93	11.10	16.32	11.58	14.45
South Africa	6.81	10.68	13.72	9.48	7.65
Germany	2.58	5.01	4.64	2.85	5.04
Others	17.09	16.71	18.88	16.89	21.18
Netherlands Totals	101.23	115.47	149.58	103.70	144.40

Source: Agronometrics Global Trade Data



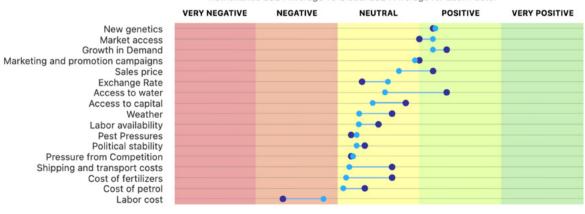


2024 Average for Netherlands

Factors Impacting Bluberry Production in Netherlands in 2024



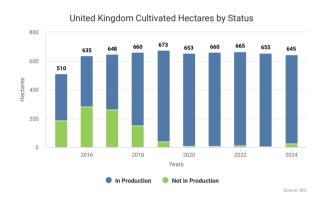
Global Average for 2024

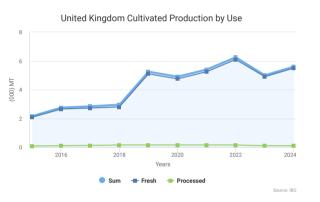


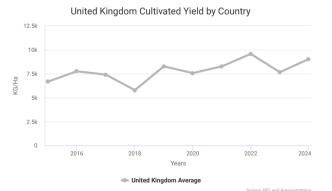


Planting and Production Data, Figures & Commentary

(Denominated in Hectares and Thousands of Metric Tons)







United Kingdom 2024 Production Metrics

Hectares Planted:	645 Ha
Organic:	5.00%
Under Structure:	35.00%
Hydroponics:	Not Reported
New Genetics:	9.00%
Hectares in Production:	620 Ha
Production:	5.60 (000) MT
Growth in Production ¹ :	▲0.60 (000) MT (12.00%)
Growth from Hectares ² :	▼-0.25 (000) MT (-42.12%)
Growth from Yield ³ :	▲0.85 (000) MT (142.12%)
Yield:	9,032.26 (Kg/Ha)
Exports:	1.95 (000) MT
Imports:	71.80 (000) MT

Source: IBO and Agronometrics

¹Volume change compared to previous season

² Change in volume due to hectares entering or leaving production

³ Change in volume due to field productivity (yields)

United Kingdom Cultivated Fresh Imports by Origin (000) MT

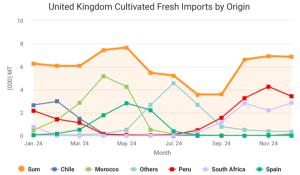
Reporter	2020	2021	2022	2023	2024
Peru	10.40	11.03	14.97	13.68	18.08
Morocco	1.64	8.08	10.35	11.19	15.03
South Africa	6.00	5.92	7.28	7.98	10.18
Spain	13.44	13.28	9.52	7.58	8.10
Chile	7.41	9.57	8.47	7.02	7.49
Others	15.85	15.52	9.78	10.59	12.93
United Kingdom Totals	54.73	63.39	60.37	58.04	71.80

Source: Agronometrics Global Trade Data

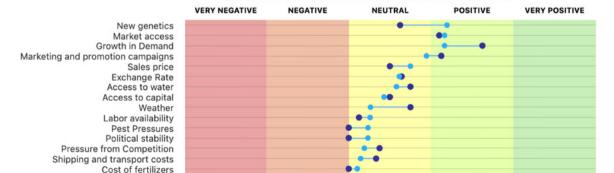


Cost of petrol

Labor cost



Factors Impacting Bluberry Production in United Kingdom in 2024



Global Average for 2024
 2024 Average for United Kingdom

United Kingdom Report Team Narrative

Adapted from the report by Steve Taylor on behalf of the United Kingdom Berry Industry

The UK season runs from early June under plastic in the south of England through to late September, or even early October in a mild year, in Scotland.

Overall in terms of yield, whether it be MT per hectare or total UK production, both were up on pre-season estimates. The biggest part of the increased yield came from MT per hectare rather than increased ha. Since the Brexit vote in 2026, there have been a series of negative factors affecting the UK grower of all fruits. Some of these are directly related to Brexit such as there being no free movement anymore for EU(27) citizens to work in the UK, or global challenges such as the effects of the war in Ukraine. In 2024 there were no specific new regulatory changes or global phenomena that affected the season either way.

At the time of writing ahead of the 2025 season, on 5 April this year the government increased the total cost to employ anyone working under £14/hr by over 10% (note, the minimum wage was £11.44/hr and has now increased to £12.21, but also employers' taxes have massively increased). This wage increase at the bottom end of the pay scale therefore will have ripple effects further up the payroll.

Another factor for January 2026 onwards is that the Government has ended an EU Grant Scheme that has been wound down. This grant scheme allowed a blueberry grower to get a 50% grant on a range of items such as blueberry plants, pots, tunnels, fertigation equipment, etcetera. This is now zero, while the EU(27) growers, specifically the competition from Poland, still have access to these same grants going forward. The playing field is therefore not level and this will further inhibit any decisions to expand or replace plantations in the UK.

The UK is a very programmed market, and so although 2024 was a bumper yield on average across the country, the excess was not programmed with the major multiples, such as those that are relied upon to give better prices. These MT were effectively then programmed with imports and the UK grower had to effectively take a lower price to displace some of the fruit that was programmed to be imported.

Overall however, due to the global rather than local demand, the average prices increased in 2024 compared to 2023. Given the average yield per hectare of all hectares increased slightly, as there was a lower percentage of new plantings in the system, growers were happy in general with the prices compared to previous years.

This however does not mean that the industry overall is profitable, as the cost of picking blueberries by hand is around £2/kg. The 10% cost to employ a picker in 2025, increases this to £2.20, which is a 10% increase in cost that is not going to be faced by the competition at the time, predominantly countries such as Poland, but more recently Romania and Ukraine.

The UK growers' target market is the period after Spain and Morocco finish and before Poland has volume the second week of July, although mid-season unmanipulated crops will come in July and August, and would therefore otherwise clash with Poland. Growers therefore concentrate on either early varieties such as Duke (new genetics are still struggling to beat Duke overall in that time slot) and the late season for Scottish growers, targeting the first couple of weeks of September. Scottish growers have a far greater weather risk and therefore have the dilemma of cropping under tunnels and risk bringing the crop forward or leave crops outside and risk poor weather, but in 2024 they got it just right. This was due to

a confluence of events in their favor, namely Poland finishing earlier than normal, and Peru starting late again (not quite as late as 2023 but still later than most predicted).

The UK grower is only supplying the UK market, as it needs a provenance period in order to get a net grower return (NGR) that approaches anything like profitability. When this is combined with the fact that the UK consumer, unlike for strawberries, will pay little extra for UK blueberries, and also the 10% increase in total cost to employ a picker, it means that there is little overall incentive for a UK grower to attempt to get the total production up over the current circa 6,000MT level.

The general predictions are therefore that the UK is at or close to its peak of hectares in the ground and that new plantings are more likely to be for replacement rather than expansions. The total number of growers is also likely to be at a peak and may even see a slow decline as the efficiencies of small areas make it unprofitable. The UK soils are generally not suitable for blueberries grown in the soil, and so growers also have a higher percentage in pots than say Eastern European competition. The extra cost of this, when combined with a low provenance premium, means that the UK grower must target specific time or quality time slots and generally become more efficient than its competition rather than attempt to compete head on.

A notable fact is also that the UK is almost exclusively northern highbush blueberry types, as is its competition from Eastern Europe in this period, but it is a fact that the most lucrative part of the UK market is for the 'top tier' or premium lines. The divergence of southern highbush and northern highbush genetics now means that these premium stock keeping units (SKUs) are almost exclusively being done with imports. Fruit from Zimbabwe, for example, fills a lot of these slots from mid-July onwards and it alongside South Africa continue to dominate these slots through to Christmas, with Peru also coming to the party from September.

There is no reason to think that the UK grower is ever going to get these slots back, as the diversion of southern highbush and northern highbush is going to continue at pace. The more worrying part for a European grower, is that this dynamic is

going to diminish the viability of the northern highbush grower over time, as has been seen with what has happened to Chile's market in recent years.

The UK has a way to go before it reaches a crisis due to these genetic reasons and there are certainly some new northern highbush or hybrid genetics coming through. These differences are however already eroding the more profitable parts of the market - the early time slot is being squeezed from the front end, and for Scotland the September time slot is already at major risk, specifically from Peru and Zimbabwe getting earlier rather than Poland getting later.

For all the reasons above, it is likely that the UK production has reached its peak, but there will always be a demand for a local product. Supply and demand will dictate if we will see static production or a slow decline back to a profitable level that only the best growers are going to achieve.

Further reflection (report team contribution)

Further to Steve Taylor's summary, it is worth noting that the improved price responsiveness observed in the Western and Central Europe section applies to both the European continent and the UK, with the latter also holding a crucial future role in absorbing increased global volumes. At the time of writing, with Peru set to be the first major blueberry exporter of note to be subjected to a 10% tariff in the USA (Canada and Mexico have the benefit of exemptions under the USM-CA), European retailers - both on the continent and in the UK - received increased and much earlier levels of enquiry from Peruvian companies looking to hedge their risks and reduce the share of supply going to the USA. The tariff situation is ever-changing and it is impossible to predict what the situation will be once this report is published, but even if there were a material change for Peru's tariff settings, its industry has already locked in a diversification strategy for which the UK will be one component.

Other UK-related events of great relevance in the past year include the acquisition of Europe's largest berry marketer,

BerryWorld, by Chile-headquartered Agroberries in September 2024. Aside from its impact with grower relationships in numerous regions around the world, and its partnership with one of the world's leading blueberry breeding programs based in Australia, it is also at the forefront of trials for that company's northern highbush genetics in the UK itself. Meanwhile, another UK blueberry breeder is also in the midst of a southern highbush genetics roll-out globally, and the earlier-stage introduction of U.S.-bred northern highbush genetics in cooler climates around the globe.

Regarding the late-season Scottish growers who received improved returns in 2024, whilst there are no firm statistics by geography in the UK, it is estimated that they account for approximately 1,000MT of the circa 6,000MT produced by the national industry, with the bulk of the remainder grown along the south coast of England. One grower alone accounts for 2,000MT of that figure, and unlike continental Europe there is not such a high prevalence of family-run, smaller plots of

blueberries in England, and aside from minor exceptions most operations produce multiple berry types as the industry itself was birthed by soft fruit growers trialling blueberries at the request of retailers/marketers, and then going on to make it a more substantial business.

Even though UK retailers have been pioneers of premiumization of blueberries, and it is not uncommon to see blueberries listed by variety, there is a belief held by many that the market's emphasis on private label has been to the detriment of value creation and grower returns. One of the globe's top blueberry marketers successfully broke through this barrier last year with one British retailer and has started doing trials with another, in combination with promotions and marketing/brand activations that are necessary to make an impact. This company's experience and whether its ambitions transpire could prove a bellwether for this market, and very likely others given the influence that UK retail practices have around the world.

236 GLOBAL STATE OF THE BLUEBERRY INDUSTRY REPORT | 2025 GLOBAL STATE OF THE BLUEBERRY INDUSTRY REPORT | 2025 237

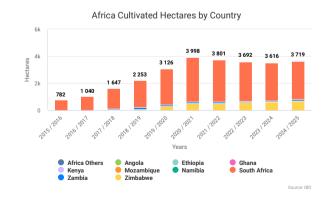
AFRICA

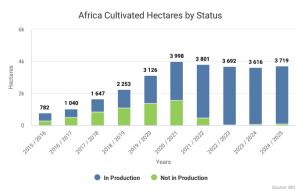
Planting and Production Data, Figures & Commentary (Denominated in Hectares and Thousands of Metric Tons)

Africa Cultivated Hectares by Country

Africa		Не	2024/202	25 Production (000) MT			
Growth Totals	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Fresh	Process	Total
South Africa	3,322	3,100	2,934	2,803	2,803	34.00	4.60	38.60
Zimbabwe	518	527	575	615	710	9.50	-	9.50
Zambia	100	100	100	100	100	0.70	0.20	0.90
Namibia	13	17	17	21	22	0.16	-	0.16
Kenya	26	32	38	44	50	0.07	-	0.07
Ethiopia	2	2	3	3	4	0.03	-	0.03
Ghana	1	2	2	2	2	0.02	-	0.02
Mozambique	3	4	4	8	7	0.02	-	0.02
Africa Others	12	15	18	19	20	0.01	-	0.01
Angola	1	1	1	1	1	0.01	-	0.01
Africa Totals	3,998	3,801	3,692	3,616	3,719	44.52	4.80	49.32

Source: IBO

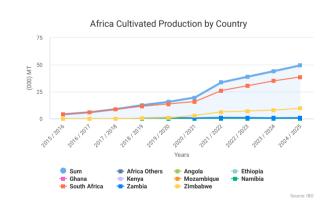


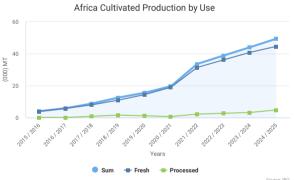


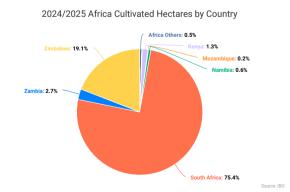
Africa Cultivated Production by Country(000) MT

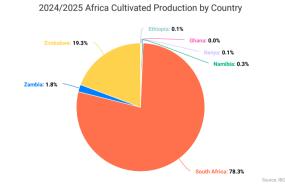
Africa	2022/2023			2022/2023 2023/2024			2024/2025			
Productions Totals	Fresh	Process	Total	Fresh	Process	Total	Fresh	Process	Total	
South Africa	28.00	2.50	30.50	32.00	3.00	35.00	34.00	4.60	38.60	
Zimbabwe	7.00	-	7.00	8.00	-	8.00	9.50	-	9.50	
Zambia	0.80	0.20	1.00	0.50	0.20	0.70	0.70	0.20	0.90	
Namibia	0.16	-	0.16	0.12	-	0.12	0.16	-	0.16	
Kenya	0.06	-	0.06	0.07	-	0.07	0.07	-	0.07	
Ethiopia	0.02	-	0.02	0.03	-	0.03	0.03	-	0.03	
Ghana	0.02	-	0.02	0.02	-	0.02	0.02	-	0.02	
Mozambique	0.03	-	0.03	0.02	-	0.02	0.02	-	0.02	
Africa Others	0.01	-	0.01	0.01	-	0.01	0.01	-	0.01	
Angola	0.01	-	0.01	0.01	-	0.01	0.01	-	0.01	
Africa Totals	36.11	2.70	38.81	40.78	3.20	43.98	44.52	4.80	49.32	

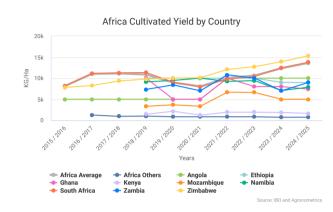
Source: IBO











Africa 2024/2025 Production Metrics

Hectares Planted:	3,719 Ha
Hectares in Production:	3,617 Ha
Production:	49.32 (000) MT
Growth in Production ¹ :	▲5.34 (000) MT (12.14%)
Growth from Hectares ² :	▲0.67 (000) MT (12.54%)
Growth from Yield ³ :	▲4.68 (000) MT (87.65%)
Yield:	13,636.02 (Kg/Ha)
Exports:	32.85 (000) MT
Imports:	1.20 (000) MT

Source: IBO and Agronometrics

Africa Exports by Partner Subregion (000) MT

Subregion	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025
Western/Central Europe	17.19	20.61	24.57	22.19	23.96
Asia	1.31	1.80	2.75	3.43	3.63
Middle East	0.89	1.14	1.68	2.47	2.88
Africa	1.33	0.77	1.08	1.26	1.18
So. Europe/N. Africa	0.43	0.72	0.81	1.27	1.10
Others	0.01	0.17	0.02	0.09	0.10
Africa Totals	21.17	25.22	30.92	30.71	32.85

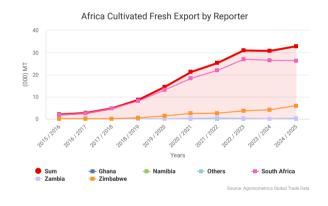
Source: Agronometrics Global Trade Data

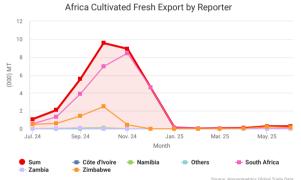


Africa Exports by Reporter (000) MT

Subregion	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025
South Africa	18.29	21.90	26.90	26.48	26.30
Zimbabwe	2.45	2.57	3.62	4.10	5.99
Zambia	0.21	0.44	0.23	0.04	0.24
Namibia	0.16	0.16	0.14	0.07	0.27
Ghana	-	0.14	0.02	-	-
Others	0.05	0.01	0.01	0.02	0.05
Africa Totals	21.17	25.22	30.92	30.71	32.85

Source: Agronometrics Global Trade Data





Africa Report Team Narrative

As sub-Saharan Africa's largest blueberry industry, South Africa (see South Africa Special Report), sees a proportional shift in its volume towards the northern provinces of Limpopo and Mpumalanga in pursuit of earlier production, interest in project development has piqued further north in multiple countries, the most advanced being Zimbabwe which is arguably one of the leading sources of bullishness in the global sector based on its performance to date and potential. Zimbabwe, together with the other neighboring countries to the Republic of South Africa, all benefit from lower phytosanitary barriers to the importation of plant material, helping accelerate

the adoption of new genetics relative to the larger neighbor to the south.

Over the past nine years a sufficient node of talent and infrastructure has been established to foster an industry in Zimbabwe that has been making its presence increasingly felt in Europe, as well as the Middle East and Far East. The country will continue to see strong growth despite its appetite for new plantings being hamstrung by an unfavorable financing and investment climate given its political and economic history. The industry will also likely be galvanized by the recent signing in September 2025 of an export protocol with mainland China,

¹ Volume change compared to previous season

² Change in volume due to hectares entering or leaving production

³ Change in volume due to field productivity (yields)

which has been highly anticipated by industry stakeholders as a likely source of optimism to spur further plantings.

Aside from Zimbabwe's earliness and ability to produce 'oversized' blueberries at a time when this offering is relatively undersupplied globally in June-July, its other attractive traits include sophisticated and modern farming systems, and the potent combination of highly skilled agricultural human capital and low labor costs. These attributes are present to varying degrees in other countries where trial experimentation and commercial planting are underway, although the theme of low labor costs is a consistent driver.

Both local and international stakeholders are participating in ventures within the southern half of the continent, including South Africans who are more connected and attuned to the political, cultural and business considerations of their region. International breeding/IP companies, marketers, horticultural consultants and service providers are actively observing prospective sectors, but have formulated different theses around the opportunities and risks, leading to very different dynamics on the ground in each emerging sector. Some sources, while optimistic around the conditions for development in certain countries, are reluctant to invest given there is still untapped potential in the already proven growing areas of Zimbabwe and northern South Africa. Given the increments that can be achieved from new plantings in the latter two regions, some hold the belief that one must plant hundreds of hectares in any other part of Africa for such a venture to be worthwhile.

Zambia is currently the only African country that has access to mainland China, but as a very early-stage sector it still doesn't have sufficient volume to send large shipments to that market, with growers cautiously laying the groundwork for future exports while cognizant of the extremely high standards required to succeed in China – a market where Zimbabwe and South Africa are also eagerly attempting to negotiate market access.

Namibia is another early-stage jurisdiction with high growth potential, but its industry has grappled with unusual frosts in recent years and certain varieties not meeting expectations, necessitating genetic renewal.

A domestically focused Kenyan industry has also been advancing and has the equatorial benefits of year-round production. Like Kenya, neighboring Uganda – where trials are taking place - is able to grow from March to May, with the potential to double crop on evergreen low chill varieties if desired. Earlier this year one of the world's leading berry companies announced a joint venture to commercially plant blueberries in Rwanda, a small nation located just south of Uganda.

In terms of logistics, Namibia and landlocked Zimbabwe and Zambia all depend on South Africa for logistics to ship a substantial portion of their blueberry crops to global markets. In light of ongoing inefficiency in South African ports and the memory of the 2022 port strikes, logistics are one considered of the greatest risk factors for Southern African blueberries, and this is further compounded for its neighboring industries. "The further you go north into Africa, your bigger challenge is finding your deepwater ports and reefers," notes one South African stakeholder.

Whilst Harare Airport in Zimbabwe has excellent infrastructure for airfreight shipping, in 2024 there was a sharp decline in the reliability of Europe-bound services, making Johannesburg a much more important airfreight shipping source than it was previously for Zimbabwean blueberries.

Zimbabwe

With a beneficial market window from mid-May to August, ideal growing conditions, highly professional industry, and a low cost of labor, it has been said that Zimbabwe could comfortably increase its surface area dedicated to blueberries by 1,000ha within the next three years, which is more than it has in the ground currently.

This suggestion is hypothetical however, because Zimbabwe is certainly not growing anywhere near that quickly. The belief reflects a healthy appetite amongst the industry's 20-plus growers where the majority of volume is linked to two dominant genetics and marketing programs - one being a South American-owned, UK-based marketer with Australian genetics, and the other being an Australian genetics program that last year became part of the world's largest berry marketer, based in the USA. Both are in the process of bringing new selections into the country with improved agronomic and market

suitability. Other leading genetics programs are also making inroads in the development of the industry.

Meanwhile the sector is opening up to a new wave of proprietary varieties from outside these two spheres, with selections that are being aggressively promoted by companies from the U.S., Spain, and elsewhere. The buoyancy of the sector is illustrated by the fact that one of Zimbabwe's pioneers, which is based around another genetics program but did not expand significantly, is eyeing a reacceleration of trials and plantings. What remains of the open varieties Biloxi and Ventura is also in the process of being replaced.

Unfortunately, growers' desire to grow is hindered by constraints around access to capital, as Zimbabwe carries a high level sovereign risk, interest rates are also high, and its banks are reluctant to provide farmers with loan terms longer than 3-5 years. The implications for expansion are that add-ons to existing blueberry projects tend to be more viable than greenfield developments.

"We've seen a pipeline building up," notes one industry source who is active in Zimbabwe, when asked about attempts to bring in foreign investment. "The enquiries have been there, there's real intent to get deals over the line and get some hectares in the ground, but it's stalling at the last minute because of the guarantees that need to be in place. Let's hope we can get over that hurdle."

This highlights an imbalance in demand over supply. The ambitious ideal that volume from 1,000ha could be absorbed by markets is reinforced by healthy returns of late, and the potential of a trade protocol in the works with China. If such an agreement were to be achieved, Zimbabwe has a clear midyear window that coincides with the end of the campaign for China's more premium-level blueberries grown in the province of Yunnan, overlapping only with the country's northern highbush genetics which are traditionally not as large as the jumbo fruit that Zimbabwe can achieve. Like South Africa, Zimbabwe also benefits from an increasing trend in Europe of retailers wanting to reduce their dependency on Peru through diversification of sources of origin.

Even with more modest planting growth, Zimbabwe has volume growth locked in for the future. There are fewer than a

handful of projects in Zimbabwe that are more than six years old, meaning most fields are still very young and will generate larger crops as they mature. Most farms are within a 100km radius of the capital Harare, and compared to South Africa there is a higher proportion of open-field planting. Amongst stakeholders present in Zimbabwe, estimates differ wildly about the portion of production grown in pots versus in soil.

Historically the Zimbabwean season has tended to begin in mid-to-late May although early volumes can commence as early as late March, peaking in August and finishing up in mid-October. As a rule of thumb, the industry aims to have 90% of the crop done by the end of September, as even the slightest blemish on fruit will impact returns in October when there is a heavy supply from Peru and South Africa. Zimbabwe tends to have wet weather and occasionally hail starting in October as well, which also incentivizes getting the crop harvested before then.

The 2024 season has been described by many as excellent, although industry returns would have been higher had it not been for slight weather challenges that delayed harvests, which led to a more condensed season peak that occurred in September from weeks 37-40. The reasons behind this are difficult to pinpoint, but conditions in the lead-up included sunny days from March onwards, a cold snap which triggered concentrated flower induction, but an overall mild winter that resulted in fewer chill units for the plants than normal, which has implications for yield.

In the early season in May and June Zimbabwe tends to ship a relatively higher proportion of fruit to the Far East while regulation-size (not large, 14mm-plus) berries are sold in neighboring South Africa during this period. This is then followed by exports to continental Europe and the UK, which were particularly short in 2024 and exhibited high demand for Zimbabwean fruit.

There were however some comments that, amidst a short market, some who had committed to supermarket programs in Europe were left earning significantly less than growers who played in the open market, even for fruit that was larger and of arguably better quality. This observation does not detract from an overwhelmingly positive sentiment overall, including from the growers concerned.

"If every season was like the last two seasons in terms of price it'd be magical," one grower noted. "But they've both been seasons where Peru has not performed as well as they can and should due to things out of their control, so when Peru does come back – which they will – what is the norm?"

One notable change in Zimbabwe in 2024 was its pathway to market. Having previously exported 15-18% of its blueberries via air-freight previously and lifting this percentage to 46% in 2023, the portion lifted to about 50% last year and companies were even hiring freighters to ship all the volume to Europe in the thick of the season. And what was most remarkable was that far less fruit was being sent from Harare Airport. "In 2023 we did 95% of our airfreight out of Zimbabwe, whereas last year that shifted to maybe 5%," one grower noted.

Whilst Qatar Airways and Emirates flights linking to the Middle East and Asia were reported as consistent, there were concerns around flight cancellations from KLM into Europe, prompting growers to ship their blueberries out of Johannesburg's airport.

For the estimated 45% of Zimbabwe's blueberries that are shipped via seafreight (around 5% are sold in South Africa itself), it takes approximately two days to get to the port in Cape Town. A lot of growers will send their blueberries to the fruit industry hub of Paarl for repacking first, but the industry is exploring whether it could have more full containers of blueberries that can go directly from Zimbabwe to the port.

Namibia

Targeting a similar production window to Zimbabwe, northern Namibia's highly concentrated blueberry industry is mostly comprised of two large projects north near the border with Angola. This report's authors have been unable to secure direct interviews with these growers, but it is understood that the first of these is a partnership between African interests and a leading U.S.-based grower-marketer, while the other is led by a consortium of South African and Namibian investors, working with genetics from another U.S.-based company and a Spanish-based group.

These leading projects were launched in inland areas near Rundu and Divundu which have ideal sandy soil, plentiful labor and water, and cheap land for lease. Historically and prior to planting, they were not seen as frost prone as Namibia's coast as they had not experienced a "true frost" in 30 years; that is, prior to 2023.

In that season the crop was almost wiped out by multiple frost events, and in 2024 the Rundu farm was again beset by frost conditions that cut a large portion of its expected crop. The Divundu farm, in contrast, fared better in 2024 but certain older varieties have not been performing up to standard and there is likely to be more genetic conversion planned. One reason for this may be Namibia's extreme heat, whereby winter temperatures can still go over 30°C, putting to the test whether any variety is truly low- or no-chill.

Weather events and varietal challenges have kept Namibia's nascent industry from achieving Zimbabwe-levels of production from a timing and quality consistency perspective. In a best case scenario, its first fruit is picked at the end of May or the first week of June, before peaking in August through to the second week of September. Harvesting is usually finished in early October when tropical thunderstorms have the potential to affect quality.

Despite the aforementioned difficulties, there is big capital betting on Namibia and a genuine desire for aggressive expansion, with active parties reportedly interested in growing their farms by hundreds of hectares in the years to come. The fruit that is harvested is mostly shipped in bulk - palletized, containerized and driven to Cape Town. Shipment options from Walvis Bay on the Namibian coast have opened up with direct routes to Europe, sailing once a week

In the desert region of Aussenkehr in southern Namibia, known for its table grapes, there are comprehensive substrate trials taking place involving varieties from a handful of global genetics programs, some of which serve to showcase new cultivars to visiting producers from South Africa if they haven't yet passed through quarantine there. The latitude of southern Namibia is close to that of Bloemfontein in South Africa, so harvests are around one week earlier than in the Western Cape.

Zambia

As a fertile country with a strong agricultural tradition, Zambia has become an attractive prospect for blueberry industry development as it can potentially produce slightly earlier than Zimbabwe. Like Namibia, it has plentiful access to land, water and a cheap supply of labor.

The country also technically has Chinese market access – gained in 2020 - although it is understood that only one small trial shipment has taken place, with cold sterilisation treatment in Lusaka before it was air-freighted to China. Once Zambia can build up sufficient volumes to warrant a Chinese program, and more importantly be certain that quality on arrival will meet the stringent market's specifications, the likely route to market from the landlocked country would be to truck the fruit to Johannesburg in South Africa or Mombasa in Kenya, conducting cold sterilisation of the blueberries during the sea journey. It is believed that the South African route would be easier, and that was only made possible a couple of years ago when Zambia gained access to the South African market.

The highest concentration of production is currently around the capital Lusaka, which is less than 500km northwest of Zimbabwe's capital Harare, with picking starting in April. There are pockets of production in Livingstone in the south, as well as in the northern areas of Mkushi and Kitwe, where production can commence as early as February with the season peak running two weeks before Zimbabwe.

Even though the industry has had its setbacks, some in the industry are still of the opinion that Zambia will be home to another boom in blueberries, given it would have a similar season to that of Zimbabwe and would be growing off a much lower base than its southern neighbor. Its earliness and potential have attracted some of the biggest companies in the global blueberry industry to invest in the country.

Rest of Sub-Saharan Africa

As mentioned in the introduction to this section, in addition to the early-stage industries of Zambia and Namibia, there are extremely early-stage blueberry trials happening in the East African nations of Rwanda and Uganda with longer established trials in Kenya, with the latter being the most advanced of the three. In West Africa there has been some discussion of certain stakeholders and development financiers looking at Senegal, although it could not be confirmed whether any real activity is taking place or planned at this stage.

There are currently three farms in Kenya – one with open varieties, one affiliated with a U.S.-based marketer, and another utilising varieties from a U.S. breeding program. Because Kenya sits on the equator, growers are in the position whereby with the correct pruning practices and varietal selections across their farms, they can achieve year-round production.

Increasing interest for trial farms means nurseries are shipping more plants to Kenya, including for greenfield projects in blueberries. Sources of demand for new plantings include avocado and flower producers who would like to diversify their holdings. Most of the fruit is sold internally and the industry is some way off being ready to supply sufficient volumes for export.

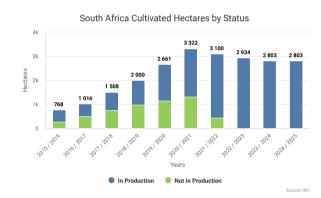
It has also been noted that there is potential for sub-Saharan Africa to establish a more prominent position as a blueberry market. Even though the percentage of people who could afford blueberries is low, out of a total population in Africa of 1.5 billion even a small portion of consumers would signify a large market for the fruit. This is already starting to be seen in South Africa, while other areas of particular interest for market development amongst consumers with purchasing power include Kenya, Ethiopia, and Nigeria.

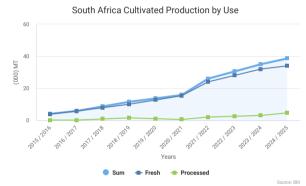
((;)) ((

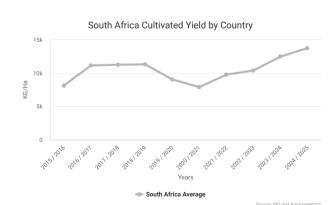


Planting and Production Data, Figures & Commentary

(Denominated in Hectares and Thousands of Metric Tons)







South Africa 2024/2025 Production Metrics

Hectares Planted:	2,803 Ha
Organic:	Not Reported
Under Structure:	Not Reported
Hydroponics:	Not Reported
New Genetics:	Not Reported
Hectares in Production:	2,803 Ha
Production:	38.60 (000) MT
Growth in Production ¹ :	▲3.60 (000) MT (10.29%)
Growth from Hectares ² :	0 (000) MT (0.00%)
Growth from Yield ³ :	▲3.60 (000) MT (100.00%)
Yield:	13,770.96 (Kg/Ha)
Exports:	26.30 (000) MT
Imports:	0.86 (000) MT

Source: IBO and Agronometrics

South Africa Cultivated Fresh Exports by Partner (000) MT

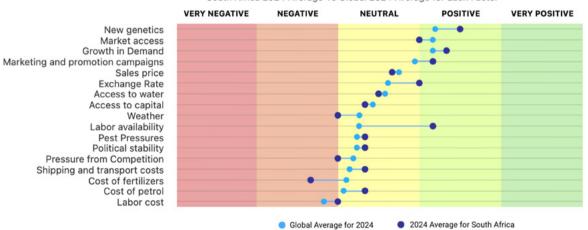
Reporter	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025
United Kingdom	6.82	6.08	7.30	8.44	9.38
Netherlands	8.01	10.66	14.41	8.96	7.76
UAE	0.56	0.78	0.95	1.51	1.87
Germany	0.49	1.15	0.33	1.84	1.57
Singapore	0.45	0.53	0.81	1.04	1.01
Others	1.97	2.70	3.10	4.69	4.71
South Africa Totals	18.29	21.90	26.90	26.48	26.30

Source: Agronometrics Global Trade Data



Factors Impacting Bluberry Production in South Africa in 2024

South Africa 2024 Average Vs Global 2024 Average for Each Factor



Volume change compared to previous season

² Change in volume due to hectares entering or leaving production ³ Change in volume due to field productivity (yields)



South Africa Country Member Summary

Adapted from the report by Berries South Africa

Conditions in South Africa continue to show promise of opportunity to expand production with value chain processes and logistics turning a corner, providing increased support for the successful export of high-quality blueberries into markets.

This position was reinforced by export volumes increasing 7% year-on-year in 2024, with low rejection rates confirming the excellent quality of supply into the market.

While hectares under production remain flat, volumes produced continue to increase due to the ongoing replacement of orchards with newer varieties as well as the maturation cycle of orchards reaching prime production age. Investment into production methodologies and improved phytosanitary management contribute to this as well.

Berries ZA is making significant progress in new market access for the export of blueberries, providing the opportunity to diversify market supply and create the demand for the expansion of production in our region. The disruption of global supply dynamics in the 2023 season created the opportunity to initiate discussions with new markets previously untapped by South Africa.

Berries ZA and the broader fruit industry in South Africa have been working closely with container terminal operators with the intention of ensuring a more consistent service delivery for sea-freight supply into key markets. While the progress has been steady, the positive shift is gaining momentum and we look forward to our combined efforts providing our receiving partners with the timeous delivery of high-quality produce.

South Africa, Berries ZA, and the IBO look forward to hosting the IBO Summit in Cape Town, September 2025, creating new dialogue around our production region, and supporting the growth and development of the broader global blueberry industry.



Special Report South Africa



Photo Credit: Berries ZA

Rebounding from the turmoil of devastating port strikes during its season peak in 2022, the South African blueberry industry experienced two consecutive favorable seasons for market conditions that have allowed the necessary cash flow for many growers to recover and recalibrate, although the event naturally led to some grower attrition.

Weather conditions meant that for the second year running South Africa was unable to fully capitalize on a delayed Peruvian season, with volume falling short of expectations and only achieving marginal growth year-on-year.

As part of an ongoing trend seen in recent years, winter conditions materialised later which meant fruit ripening was around two to three weeks behind normal in both the Western Cape and in the north, implying later picks.

Frost incidents in Limpopo in the north over July and August affected yields on farms by up to 30% in the more extreme cases but just 3% in others, while an isolated and highly

unusual frost in the Western Cape in late August-early September badly affected one particular farm of scale. There was also a very wet winter in the Western Cape where floods were experienced for the second year in a row, affecting a number of farms, while a wind event took down some nets and orchard infrastructure on a number of projects.

Nonetheless, the shortfall was compensated by strong pricing for South African growers, with total returns up by almost 13% on 2022 even though the volume was similar. In the industry's prime periods of market scarcity when it tends to yield the best returns, volume was up 28% and 45% year-on-year in August and September respectively, signifying a shift in recent years towards earlier-yielding fruit through varietal renewal and a geographical expansion in the country's north. Total export value rose by more than 50% year-on-year in August and September.

If it weren't for the aforementioned frost and a warmer winter in the north, the move to capture greater returns from earlier



Planasa is a leading company within the agri-food sector, focused on innovation and development of future blueberry varieties.











fruit would have been much more pronounced. A high proportion of fields in South Africa are grown in substrate with around 12% produced under tunnels, targeting earlier-fruiting genetics as producers strive to harvest closer to the Southern Hemisphere winter as possible. Proprietary genetics are on offer from several breeding programs.

In contrast to the export improvements in August and September, October returns were fairly steady year on year, and lower prices brought down export value in November and December.

South Africa's blueberry sector is in the process of a broadscale transformation that is both coming to grips with the reality of a future characterized by higher competing volumes from Peru - particularly during the Western Cape season peak in October and November – and the realisation of South

Africa's comparative advantages, namely its reputation for consistent quality and a higher proportion of superior genetics (currently in a renewal phase) that can enable supply source priority when it comes to tiering and premiumization; a relatively high level of social and ethical certifications by global standards; and a sophisticated agribusiness export infrastructure for numerous perishable commodities that makes it capable of capitalising on new opportunities as the industry works toward market access agreements in Asia, especially in China, India and Thailand. From a low base, exports to the Middle East and Asia (usually skewed towards earlier-season fruit) have been steadily rising in recent years at 20-30% annual rates, with promising emerging markets including the UAE, Hong Kong, Malaysia and Singapore. South Africa and its neighboring countries are uniquely suited to produce high quality, cost competitive blueberries, with more compelling logistical advantages to many critical markets.

Logistical Routes to India

Over projection of the globe with population by country







GROWN GLOBALLY LYCED LOCALLY

There's more to our world than just blueberries...

At BerryWorld, we're building the future of fresh berries. Powered by a global platform and fuelled by flavour, we grow award-winning varieties all year round.

Backed by data-driven production and expert marketing, we deliver berries that are bursting with goodness and loved locally around the world.

DISCOVER OUR WORLD OF BERRIES BERRYWORLD.COM

LET'S TALK BERRIES: enquiries@berryworld.com





Logistics Play a Central Role in Industry's Potential



Photo Credit: Shutterstock

The supply disruptions in 2023 caused by the El Niño phenomenon in Peru, and that country's later season in 2024, have engendered a strategic imperative amongst retailers to diversify supply sources from other growing regions. This has reinforced South Africa's prospects despite its less advantageous marketing window for the Western Cape, but also compels the sector to retain focus on market positioning and supply chain efficiency. The industry remains very program-heavy with the retailers of its two largest markets, the UK and continental Europe, based on direct relationships that are strengthened by vertical integration.

The sector benefits from proximity to Europe with approximately 20 days for end-to-end shipping (down from 40 days at the height of the 2022 port strikes in Cape Town) and, with Johannesburg being one of the Top 10 busiest airports globally, direct flights to major European airports. The latter is a pathway the industry tends to exploit earlier in the season and in times of shortages, such as what occurred in both 2023 and 2024. Whereas in the years leading up to 2022 the industry exported less than 20% of its blueberries by air, the portion lifted to 45% in 2023 and 39% in 2024 as the market proved hungry for supply, though air freight is not viewed as a sustainable solution long term.

The industry does not quantify its airfreight-seafreight split by region, but it is estimated that for the northern growing areas

that produce earlier, approximately 80% is exported by air at this time. This shipping method is only economically justifiable when pricing is high given the associated cost, and is unviable for programs with certain European retailers that have either banned the air-shipping of produce or are phasing it out.

It is therefore essential for the longevity of the South African industry that it is able to return to a higher proportion of seafreight shipping, which can only occur if port operations are stable. Since the strikes in 2022 that debilitated exports from Cape Town for more than three weeks, new management has taken over the state-owned port and rail transport operator Transnet. Inefficiencies remain but industry sentiment around the port is now more positive than it was two years ago, especially given new rules and regulations that have been designed to prevent a similar disaster from recurring. Industry is engaging with both Transnet and the associations of other major commodities like table grapes and citrus to help effectuate improvements. Areas that could be improved include stock management and technical expertise as turnaround times can be unnecessarily lengthy when machinery requires replaced parts or repairs.

When queues emerge in Cape Town it is common that shipping lines opt not to call in the port. This trend, combined with the fact that strong winds also have the potential to cause delays, means growers and exporters have had to sharpen

their planning skills and systems, organising harvests around when sea containers are due to arrive and diverting to airfreight when delays look likely. "Waiting is really the enemy of quality," as one stakeholder noted, and this illustrates that the large shift to airfreight is not only driven by overseas market demand but is also partially a consequence of port inefficiency. As far as other ports go, such as Durban and Port Elizabeth, sailings tend to pass through Cape Town so it is usually the preferred port of choice. Other burgeoning blueberry industries in southern Africa such as landlocked Zimbabwe and

Zambia also depend on South Africa's air- and sea-export infrastructure to reach international markets.

Whilst the mix of South Africa's Europe-bound exports shifted toward the UK last year, up 25% while exports to continental Europe were down 10%, it has been noted that post-Brexit conditions have been challenging from a customs perspective with the Department for Environment, Food & Rural Affairs (DEFRA) inspecting all blueberry containers from South Africa for the past two years, rather than just a percentage from other Southern Hemisphere suppliers.

Varietal and geographical transformation at play



Photo Credit: Berries ZA

From a very pessimistic position in 2021 and 2022 due to collapsed prices as a result of Peruvian supply spikes and the aforementioned port problems, the mood around new planting and investing in varietal renewal has changed significantly in South Africa. The fundamentals of projections for a Peruvian supply increase have not changed, but there is now greater appetite in South Africa to rise to the challenge with the support of new cultivars.

There is a significant replacement shift happening now in 2025 that is expected to continue into 2026, driven both by incumbent leaders and more recent entrants in the South African blueberry genetics space. Because of lengthy quarantine

periods required to introduce new genetic material into South Africa, 'recent' in this instance still covers a timeframe of many years. Travelling abroad to other jurisdictions where such varieties have already been released is par for the course with South African growers assessing new IP of interest.

The current transformation would not be the first major change for the sector since the first blueberries were planted in South Africa's northern Coromandel region in the 1980's. It wasn't until the late 90's that any industry to speak of truly began with a greater concentration in the Western Cape, first with high-chill varieties before the introduction of low-chill genetics, coming mainly from U.S. universities. In 2014 one

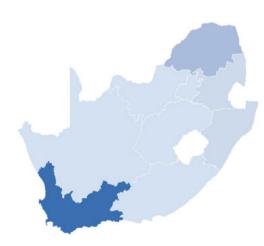
of the pioneering companies of the industry was acquired by a major U.K. marketer that would bring genetics from a renowned Australian breeding program into the country. It was around this time that another company linked to a different Australian breeding program ramped up its presence, and these two companies have come to dominate the sector and still account for the majority of exports. Another of the key pioneers in South Africa's berry industry was acquired by the world's largest berry marketer in 2022.

In addition, the past decade has seen more genetics providers and investors enter the market from around the world from countries such as Australia, the U.S., and Spain. Incumbents are revitalizing their genetic mix with fresh selections that trend to achieve higher yield and bigger sizing, while newer players are making headway. The two fastest-growing genetics companies globally, which are effectively challengers in the South African market, have piqued the interest of growers looking to more open models, often with a preference for managing their own exports unlike pre-existing genetics programs that are tied to specific marketers. This is a sign of a maturing industry and has been in the works from a boots-onthe-ground perspective for at least the last five years. Feedback from non-affiliated parties for the flagship new varieties of these challenger companies and the leading incumbents has been overwhelmingly positive.

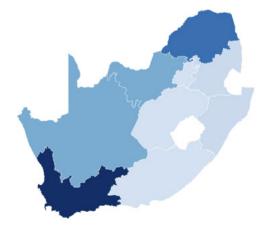
Overall, growers are looking to adopt blueberries that can finish up harvesting in September if possible, thus avoiding the peak season clash with Peru's peak. This is a tough ask for growers in the Western Cape who cannot do too much to avoid their natural window if they are to produce high yields, which is why they tend to lock in retailer programs rather than speculate on an open market.

The Western Cape growing region, highly concentrated within a 250km radius of Cape Town but with many different micro-climates, accounts for 60% of the industry. The remaining 40% can be found in a more geographically dispersed region referred to as the 'north', which is expected to gain a greater share of the industry in the future given its earlier production. The main growing areas of the north are to the north of Pretoria, the Limpopo province to the far north which borders Zimbabwe, and Mpumalanga to the east of Johannesburg. KwaZuluNatal is also a growing area of note, with its colder Midlands area home to a 'true winter' where a grower must wait a few years for plants to reach maturity. Whereas many farms in the Western Cape are hitting the seven-year mark and are witnessing slight drops in yield, Limpopo's established farms, which are relatively younger, are getting into their peaks

Distribution of Plantings by State



5 Years Ago



Now





With **BLUEBERRY VISION 3** and **UNIQ BLUEBERRY** your blueberries have more value. Nothing is left to chance thanks to an **efficient and complete sorting of the qualities**: **internal** and **external quality**, **shape defects**, in addition to **optical size** and **color**.



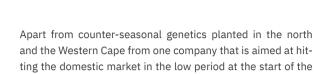


VISIT US AT
IBO SUMMIT
International Convention Centre
Cape Town, South Africa
September 25-27, 2025

UNITEC Headquarters

Via Prov.le Cotignola, 20/9 - 48022 Lugo RA - Italy - Ph. +39 0545 288884 - unitec@unitec-group.com unitec-group.com





year from January, as a general rule the earliest fruit from the

north comes on-line in June, before volumes start to pick up in July and become more significant in August, while the Western Cape runs about a month behind that schedule.

Domestic market development



Photo Credit: OZblu

South Africa's domestic market development is hindered by the unaffordability of blueberries for a large proportion of the population in a country where income inequality is significant, but it has been on the rise. One of the country's leading high-end supermarkets has a well-developed berry category offering that includes blueberries, and "the others are trying to catch up" according to one stakeholder. "You're seeing the market grow," they said. "We've aggressively tried to grow that, because you've always got fruit that's not going to make 21 days at sea."

For the segment of the South African population that can afford it, the market is fairly spoilt compared to other export-focused

countries as it practically only has premium genetics, with an absence of the more 'introductory' varieties that have defined domestic market offerings in other low-chill countries. "You don't see Ventura, you don't see Biloxi. You might see a bit of Snowchaser every now and then, but that's about it," the same stakeholder exclaims.

With the complementary support of Zimbabwean supply from April to June, the domestic market is supplied 52 weeks a year, although with a high degree of price and volume variability.

Social contribution and job generation



Photo Credit: OZblu

While certain regions in the world either experiment with or transform towards more machine-harvested business models, South Africa is frequently cited as an industry where such a change would not only be largely unnecessary given the low cost of labor versus other jurisdictions, but would actually be counterproductive to one of its key social mandates - job creation. In South Africa, and southern Africa more broadly, unemployment rates are high and youth unemployment is higher still, which means the blueberry industry can play a vital role in shaping the economic livelihoods of families and social empowerment in areas where there are limited alternatives

As a labor-intensive crop, the cultivation of blueberries creates jobs for harvest workers, packhouse employees, as well as more professionalized senior roles and indirect employment to those who service the sector, not to mention all of the industries in regional areas where staff spend their earnings. Another source of positive social contribution is the fact that the blueberry industry has a high weighting towards female employment with women making up the majority of the workforce

The South African industry is poised for a transformation as awareness rises of the potential for the country, and its peripheral neighbors in the regions, to become a critical source of global supply of quality fruit for 5+ months of the year. While the industry has faced headwinds, the path to a new and competitive position for South Africa and Southern Africa is front of mind for many in the industry and beyond.

Packhouse Workers are Women 6 Out of Every 10 Packhouse Workers 6 Own 6 Own 6 Own Women in South African blueberry packhouses

MIDDLE EAST

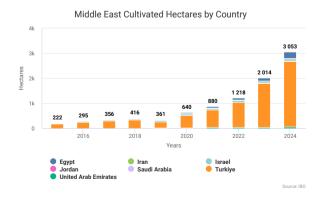
Planting and Production Data, Figures & Commentary

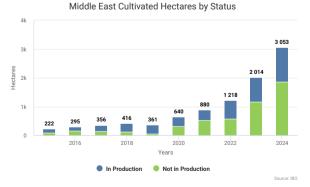
(Denominated in Hectares and Thousands of Metric Tons)

Middle East Cultivated Hectares by Country

Middle East		Hec	2024 P	roduction (000)	MT			
Growth Totals	2020	2021	2022	2023	2024	Fresh	Process	Total
Turkiye	500	700	1,000	1,750	2,625	7.00	0.48	7.48
Egypt	40	60	80	106	250	0.70	-	0.70
Israel	60	68	76	83	89	0.38	-	0.38
United Arab Emirates	25	32	40	50	60	0.26	-	0.26
Iran	10	13	14	14	16	0.09	-	0.09
Jordan	4	6	8	10	12	0.02	-	0.02
Saudi Arabia	1	1	-	0	0	-	-	-
Middle East Totals	640	880	1,218	2,014	3,053	8.45	0.48	8.93

Source: IBO



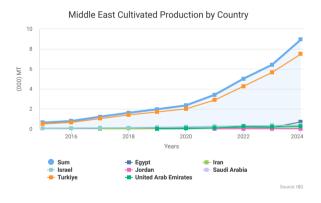


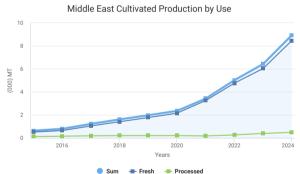
258 GLOBAL STATE OF THE BLUEBERRY INDUSTRY REPORT | 2025 GLOBAL STATE OF THE BLUEBERRY INDUSTRY REPORT | 2025 259

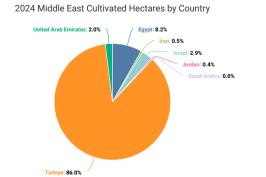
Middle East Cultivated Production by Country(000) MT

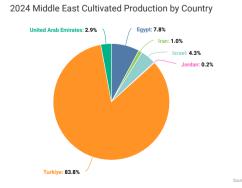
Middle East	2022			2023			2024		
Productions Totals	Fresh	Process	Total	Fresh	Process	Total	Fresh	Process	Total
Turkiye	4.00	0.26	4.26	5.26	0.39	5.65	7.00	0.48	7.48
Egypt	0.12	-	0.12	0.14	-	0.14	0.70	-	0.70
Israel	0.30	-	0.30	0.33	-	0.33	0.38	-	0.38
United Arab Emirates	0.25	-	0.25	0.20	-	0.20	0.26	-	0.26
Iran	0.07	-	0.07	0.08	-	0.08	0.09	-	0.09
Jordan	0.02	-	0.02	0.02	-	0.02	0.02	-	0.02
Saudi Arabia	-	-	-	-	-	-	<u>-</u>	-	-
Middle East Totals	4.76	0.26	5.02	6.03	0.39	6.42	8.45	0.48	8.93

Source: IBO









Middle East 2024 Production Metrics

Hectares Planted:	3,053 Ha
Hectares in Production:	1,186 Ha
Production:	8.93 (000) MT
Growth in Production ¹ :	▲2.51 (000) MT (39.10%)
Growth from Hectares ² :	▲2.58 (000) MT (102.97%)
Growth from Yield ³ :	▼-0.07 (000) MT (-2.73%)
Yield:	7,536.67 (Kg/Ha)
Exports:	1.01 (000) MT
Imports:	9.46 (000) MT

Source: IBO and Agronometrics

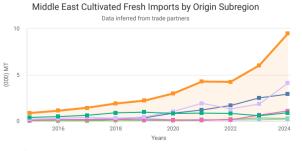
Middle East Imports by Origin Subregion (000) MT (Inferred from Partners)

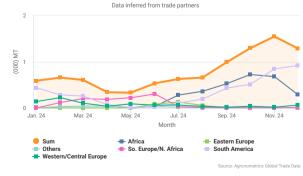
Middle East Cultivated Yield by Country

Middle East Average

Origin	2020	2021	2022	2023	2024
South America	1.03	1.91	1.31	1.84	4.09
Africa	0.85	1.19	1.67	2.50	2.91
So. Europe/N. Africa	0.11	0.09	0.13	0.63	1.10
Western/Central Europe	0.81	0.85	0.82	0.57	0.89
Eastern Europe	0.05	0.06	0.20	0.33	0.27
Others	0.12	0.16	0.11	0.14	0.21
Middle East Totals	2.97	4.26	4.23	6.01	9.46

Source: Agronometrics Global Trade Data





Middle East Cultivated Fresh Imports by Origin Subregion

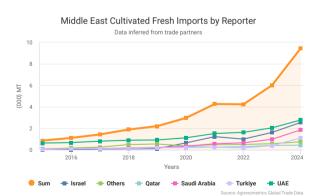
¹ Volume change compared to previous season

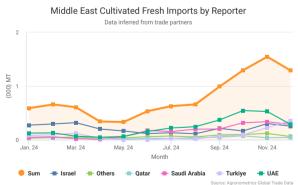
² Change in volume due to hectares entering or leaving production ³ Change in volume due to field productivity (yields)

Middle East Imports by Reporter (000) MT (Inferred from Partners)

Reporter	2020	2021	2022	2023	2024
Israel	0.65	1.22	0.99	1.62	2.55
UAE	1.12	1.52	1.62	2.05	2.78
Saudi Arabia	0.33	0.56	0.65	0.98	1.86
Turkiye	0.20	0.24	0.17	0.39	1.10
Qatar	0.32	0.24	0.29	0.41	0.43
Others	0.36	0.48	0.50	0.56	0.75
Middle East Totals	2.97	4.26	4.23	6.01	9.46

Source: Agronometrics Global Trade Data





Middle East Report Team Narrative

One of the world's fastest-growing import markets, up 57% in 2024 and tracking higher year-on-year in 2025 at the time of writing, albeit from a low base, the Middle East is a source of enthusiasm for globally-focused players in the blueberry industry. With the United Arab Emirates, Israel, Saudi Arabia and Türkiye as its largest markets (and all grew significantly last year), the absolute volume that the Middle East absorbs is small, equivalent to around 10% of what is imported in Asia for example, but it has potential for much more growth and pays higher on average than Europe and North America. Peru just edged out South Africa as the leading supplier to the Middle East in 2024, although the latter achieved higher export value into Middle Eastern markets. These two countries represented approximately two-thirds of imports.

The region is also noteworthy for the burgeoning growth of two blueberry-producing countries in particular, Türkiye and Egypt, which are both home to a veritable who's who of the industry as emerging growth sectors. Türkiye is by far the more developed of the two with its exports up 45% last year, but numerous interviewees made forecasts that both origins will become major players within the next three to five years. Each has a different harvest peak, but both share the logistical benefits of proximity to both Europe and the Middle Eastern market more broadly, including the untapped potential to develop their own domestic markets with populations of 117 million in Egypt and 86 million in Türkiye.

Other beneficial attributes that both countries share which are often cited include the availability of water, labor and land, as well as flat land in the case of Egypt; something Türkiye also boasts with the added benefit of farming valleys of various elevations that allows for season extension. Both nations also have rich export-focused agricultural traditions, and have

been known to follow trends seen in Morocco in other fruit commodities. Despite all the excitement and hype though, it is important to emphasize that Türkiye's export volume is still less than 1% of Morocco's (as most of the product is consumed domestically), and Egypt's production is likely less than 0.5% of its North African peer to date.

"Egypt's a long way behind [Morocco] at the moment but I think it has the ability to catch up; I don't know about overtake," says one source that has a handful of partners working on commercial trials with plans to expand aggressively next year.

"I think the biggest thing when you're starting a lot of these projects is finding homegrown talent," says another interviewee, one of the leading producers in Egypt. "The genetics probably give you 30% of what you need. That 70% left over is really farm management and post-harvest."

Türkiye

With the possibility of starting harvests in limited volumes as early as mid-January in the southern Antalya region either under heated tunnels or with early varieties even outside of tunnels, Türkiye's diverse range of microclimates allow for production easily through to August, extending into October with the utilization of different geographies and altitudes. A mild winter and the absence of frost events meant that for the 2024 season harvests for fields without tunnels began in earnest in March, kicking off an early and prolonged season with an export peak in June, compared to July in the previous year.

The 45% lift in exports last year is attributable to significant planting growth in recent years, and the trends of new

plantings continue with several international blueberry companies putting in new plants or trialling different advanced genetics. One source estimates an average yield for the industry of 15MT/ha, but this figure is weighed down by a prevalence of older varieties and smaller growers who are inexperienced with the crop. Newly established orchards tend to exceed this average level in their first or second harvest, and some varieties in well managed fields are said to be reaching 25-30MT/ha in their first year.

Blueberries were introduced to the country in the 2000 by a university professor who brought back varieties from the US, leading to research and trials to test how the fruit would perform in Türkiye, starting with cultivation in the Black Sea region. Unfortunately, a challenging breeders' rights situation has historically impeded development for blueberries, but Türkiye is nonetheless a member of plant variety protection accord UPOV and the country is witnessing a swell of interest from investors.

This has been supported to an extent by a local nursery with family ties to one of the country's largest cherry and fig exporters, which has collaborated with a leading U.S. nursery and genetics company to give impetus to an emerging industry, currently with capacity to produce 400,000 plants per year – a figure it expects will double in the near future. Other local groups are progressing plans as well with a multitude of European, North American and South American entities.

Harvests tend to start in March around Antalya, Adana and Mersin on the southern coast, where the warm climate is comparable to Huelva in Spain. Tunnel production is increasing rapidly in all of these areas with the local market absorbing all the early production, although as volume grows it is anticipated that early-season exports will start to become a more attractive option. Aside from private sector-led growth initiatives, the government has also designated organized agricultural zones throughout the country with plans to support heated tunnel infrastructure with artesian wells.

There are also blueberry industry operations around Bursa close to the Marmara Sea and the nation's capital Istanbul, as well as in Salihli, which sits inland from Izmir on the western, Aegean coast. In Salihli there are trials taking place for 15-20 different blueberry varieties. For cooler areas, mid-chill and high-chill varieties – Legacy and Duke respectively – have been planted with the European market in mind.

The average size for a blueberry farm in Türkiye is currently 3-5ha with smaller farms mostly found in the Marmara and Black Sea regions. However, more recently established orchards tend to be at least 10-20ha and can often be significantly larger than that.

Egypt

Quite a few international companies reported their first commercial harvests in Egypt this year, marking what may be an inflection point for growth in the industry which is mostly comprised of farms in close proximity to the River Nile, between Cairo and Alexandria. Two of the leading players in this emerging industry include a U.S.-headquartered group that is part of a fast-growing global genetics program, and a South American-owned company with Australian-bred genetics, but practically every major globally-focused blueberry company has a presence of some sort.

Despite the flurry of activity that is taking place there, stake-holders are keeping their cards close to their chests in terms of revealing the extent of their trials or plantings, and it is a challenge to pinpoint the total surface area planted or volume. It has been observed that prior to the last couple of years, most projects were no larger than 5-8ha, but that appears to be changing in an aggressive way.

It is believed the country's season, once more fully developed, would largely mimic that of Morocco regarding timing; the goal for one investor in Egypt (which has a similar latitude to Agadir in Morocco) is to achieve peak production in February. Despite

its similar latitude to Morocco, the industry would have the potential to cater to different markets given that along the coast the distance from Alexandria to Agadir is roughly 5,000km. That said, interest in Egypt from Europe is high and the very limited volume exported to date has been spread across the UK, Netherlands, France and Malaysia, among others.

It has been asserted that Egypt has preferable water availability to Morocco, where drought conditions are described more fully in the country's editorial section. The land is flat and labor is reportedly abundant, and these three factors around the ease of irrigation, topography and an available workforce were described by one source as the "secret sauce" for a successful industry, much like Peru in some respects. The other benefit is that Egypt has more than 100 million people; even though the income per capita is very low, it is almost at the same level as South Africa, where the local industry has built a decent and growing domestic market. One grower that has conducted consumer surveys in Egypt found that one in five people would be interested in buying blueberries.

Israel

Aside from its relevance as an import market for fresh blueberries, Israel is also a grower of blueberries with its small country hosting a massive diversity of growing conditions from dry and hot desert conditions to wet mountainous terrain. One source has noted that it is possible to pick from October to August by moving between different parts of the country, but peak production occurs in June.

Blueberries have been grown in Israel since the 1960s but it wasn't until 2013 that the industry kicked off in earnest with an R&D department of the Ministry of Agriculture introducing University of Georgia varieties for testing, and now cultivation is spread throughout Israel. The varietal mix is largely open

and the predominant cultivar is Biloxi, as has been the case in so many low-chill jurisdictions. There is also a local grow-er-exporter situated in northern Israel producing proprietary varieties under licence in partnership with an Australian genetics company, and this is one of the country's largest operations. It has also been noted that a few new varieties have been introduced to the country over the past two years, with a greater incidence of cooperation between small growers and growth for producers with larger operations by Israeli standards of up to 25ha.

Most blueberries in Israel are grown in pots, both for agronomic reasons and also religious reasons. An exhaustive explanation may be too time-consuming, so for simplicity's sake it could be summarized that the consequences of Jewish rules around Kosher food production are that the fruit from blueberry trees (because the notion of a 'bush' is not permissible) can only be eaten by Jews after the third year. Berries grown prior to that three-year mark can only be sold to non-Jews. Tree structures must also be pruned so that there is just one main stem, and there are further limitations around tissue culture. One nursery has shown ingenuity in adapting to these rules in order to propagate plants for growers so they do not have to wait as long as under more traditional methods.

Some farmers in Israel reduced their plantings in recent years due to the market pressure brought by increased competition from a more open import market, as well as increased input costs, but some have been surprised by price stabilization more recently.

Regarding Israel's contribution to the blueberry industry, it is worth highlighting that an Israeli was among the pioneers of the Moroccan blueberry industry, and the company they helped forge is part of one of Morocco's leading berry export groups, now owned by the world's largest berry marketer.

GLOBAL WILD AND COMBINED PRODUCTION

GLOBAL WILD PRODUCTION

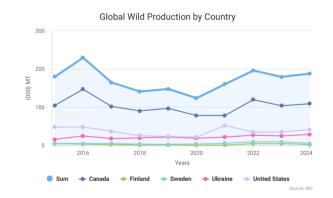
Planting and Production Data, Figures & Commentary

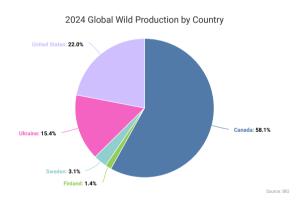
(Denominated in Hectares and Thousands of Metric Tons)

Global Wild Production by Country(000) MT

Global Wild Blueberry		2022			2023			2024	
Productions Totals	Fresh	Process	Total	Fresh	Process	Total	Fresh	Process	Total
Canada	-	119.52	119.52	-	103.80	103.80	-	109.00	109.00
United States	0.34	34.47	34.81	0.35	35.16	35.51	0.41	40.83	41.24
Ukraine	-	27.00	27.00	-	25.00	25.00	-	29.00	29.00
Sweden	-	9.54	9.54	-	9.74	9.74	-	5.81	5.81
Finland	-	4.83	4.83	-	5.00	5.00	-	2.71	2.71
Global Wild Totals	0.34	195.36	195.70	0.35	178.70	179.05	0.41	187.35	187.76

Source: IBC





Global Wild Production Report Team Narrative

Encompassing a variety of species throughout the colder regions of the Northern Hemisphere with much smaller berry sizes (1g or less) than highbush varieties, larger fluctuations in volume from year to year, and a predominantly frozen market-focused industry due to the challenges of shipping the fresh fruit in marketable condition, wild lowbush blueberries are prized by certain demographics of consumers for reasons ranging from taste to nostalgia to connecting with what is

perceived as a more natural world and fruit genetics that have been unchanged for thousands of years. It is a class of blueberry that has historically traded at a premium to cultivated blueberries within the processed category, although last year the difference in average pricing for Canada – the world's biggest exporter – was negligible and far below what was achieved in 2023. Exports volumes from Canada rose significantly in 2024, but the lower pricing meant that returns were

flat-to-declining. At a time when growers had been challenged by weather and pollination issues, Canadian wild blueberry operations had both lower volumes and farmgate values for their crops. For the USA, a much smaller producer, the price premium of wild over cultivated in processed was retained.

The U.S. state of Maine and eastern Canada account for the largest share of global wild blueberry production with the native Vaccinium angustifolium as the main species representing 95% of North America's crop while the remaining 5% is Vaccinium myrtilloides, also known as the velvet leaf blueberry.

While in 1995 both Canada and the U.S. state of Maine had equivalent levels of wild blueberry production, the Canadian Government's decision to release tracts of Crown land to private growers encouraged growth in the sector which now produces substantially more of the fruit than Maine, with the province of Quebec accounting for almost half of Canada's volume in 2024.

Quebec's 2024 crop was only just below the record harvest of 2023 (attributed to a mix of frost and a warm summer that produced smaller fruit), and more than a quarter higher than the five-year average. But Canada's production was brought down more substantially by the provinces known as the Maritimes – the Atlantic provinces of New Brunswick, Nova Scotia and Prince Edward Island. These provinces were impacted by excessive rainfall and extreme cold weather in 2023, negatively affecting bud development for the 2024 crop.

As the Canadian wild blueberry industry has grown it has also become more dependent on importing pollinators from other provinces and countries (not only honey bees, but also leaf cutter bees and bumblebees), especially when overwintering losses lead to a decline in the availability of local bees, as was the case in 2024. As noted by Agriculture and Agri-Food Canada, for the first time last year Prince Edward Island imported more honey bee colonies from the provinces of Manitoba and Ontario than it had resident colonies for wild blueberry pollination.

South of the border in Maine, the 2024 harvest was two weeks earlier than in previous seasons, although volume was still close to the five-year average. To capitalize on the opportunity of an earlier season, honeybee hives were imported into the state from the southern states of the U.S., providing adequate pollination that combined with positive growing conditions overall.

Across the continent's northeast on both the Canadian and U.S. sides of the border, warmer temperatures have led to longer growing seasons in recent years, resulting in higher yields and incentivizing further growth. However, a downside is that such conditions are also conducive to increased insect and disease pressure and extreme temperature and moisture conditions, leading to more extreme fluctuations in yields per acre. Unlike the highbush sector where irrigation is commonplace on farms, this is mostly not the case for wild blueberry barrens although around one third of Maine's hectares are irrigated.

Agronomically, wild blueberries are distinctive from the highbush varieties that define the bulk of the global industry. The first distinction is that the bushes are generally not planted (although there are exceptions) but 'activated' by forest clearing and fires on the wild stands that evolved after glacial retreat 10,000 years ago, and based on observations of the average plant cover, experts estimate an average of 270 different genotypes can be found per hectare. Secondly, it is a two-year crop so when looking at the number of hectares/acres for any given industry, only half of those hectares/acres are being harvested in a particular year; one year provides the formation of the buds, and the next year the blossoms on the fruit. This is unlike highbush blueberry plants that have both vegetative and reproductive buds simultaneously.

A third, and important point from the global blueberry industry's perspective, is differentiation as a survival imperative to the wild blueberry sector's existence. The associations of the term 'wild' for this highly cultivated crop conjure up a marketer's dream that resonates with consumers and the manufactured food companies that want to attract them. Proponents claim they have more antioxidants (which on a per weight basis is often true due to higher skin to flesh ratios), and the wild blueberry industry continues to invest heavily in lowbush blueberry-specific health research and promotions. In addition, a comparative 2021 study from Forney et al in four Canadian provinces found a higher and more consistent sugar-to-acid ratio for lowbush versus the highbush cultivars involved in the study (Duke, Brigitta, Jersey, Liberty and Aurora). The Canadian and Maine industries - with support from government programs - jointly fund health research into wild blueberries, as well as more efforts to coordinate promotional activities. Both the Maine and Canadian associations have active offshore programs working with local marketing organizations to promote the unique qualities of wild blueberries in order to increase demand.

Amidst variable weather conditions, low pricing and an increase in production costs, there are reports of some smaller wild blueberry growers transitioning into the fresh market or organic production in an attempt to improve profitability. although as it stands in Canada it still the case that 98% of the crop is processed or individually quick-frozen for sale in the retail market. From an operational perspective, research efforts are underway for using drone technology to monitor for pests and spray for crop protection, improving mechanical harvesting, as well as the improved use of fertilizer and irrigation techniques to optimize productivity. In addition, university programs in Nova Scotia and Maine are breeding wild blueberries to better cope with climate change (testing for resilience against such stressors as increased temperatures and moisture fluctuation), also with traits that improve harvest and production efficiency.

Wild production outside of North America is difficult to track in general and is based on best estimates from industry sources.

In terms of European wild blueberry production, Vaccinium myrtillus or the European bilberry is native to the continent as well as the Caucuses and much of Asia. Scandinavia is a major source of production with bilberry bushes to be found throughout the forests of Norway, Finland and Sweden, where the cultural and historical connection to wild, foraged fruit is strong. Crops are also extremely variable as is access to labor with pickers needing to be flown into the harvest regions in many cases.

In Finland there is a deep cultural tradition with the 'everyman's law' whereby anyone can roam the land, even if it is privately owned, and pick wild European bilberries without needing permission from the landholder. Finns have a great attachment to this tradition and have a great appreciation of European bilberries, which also have a deep blue or almost black color inside unlike highbush blueberries which tend to have more of a relatively whiter color. Finnish people tend to buy them frozen, while there are also manufacturers that dry the berries at a very low temperature (so as to not affect their nutrient content) and then ground them into a powder which is sold to food manufacturers in the baking and dairy product sectors. One company based in the UK run by Finnish expats has successfully developed a consumer-facing blueberry powder product that is sold to some of the country's leading supermarkets and health store chains. Meanwhile on the other side of the Atlantic Ocean, the North American industry is exploring the potential of developing higher value-added products such as fermented products with wild blueberries, which could enhance the health benefits and help develop new markets for the fruit.

Chinese Wild blueberries

'Chinese Wild': Vaccinium Uliginosum L. and Vaccinium Vitis Idaea are native to China, particularly the forested northern provinces of the country. The native Vaccinium Uliginosum is often dark reddish-blue, red or dark blue and often referred to as "蓝莓"(pronounced "Lan Mei"). "Lan Mei" is the most common word used for blueberries in China and now applies to highbush as well. Meanwhile the Vaccinium Vitis Idaea, or Lingonberries, are a deep red and also native to the northern reaches of Europe, especially Scandinavia. These berries are harvested most often by villagers who live near the forested areas where these species grow. The fruit is then sold on to brokers who process the fruit or resell it to processors who sell the finished product. Most of the fruit is now sold domestically, often as a health product in teas, powders, dried fruit, extracts and even cosmetics. Annual production is largely contingent on the amount harvested from the wild and the impact of winter weather on the crop.

'Chinese Cultivated Lowbush': Another interesting segment of Chinese domestic blueberry production is the 'Cultivated Lowbush' industry. In the far northern provinces of Jilin, Heilongjiang and the continental north of Liaoning, the extreme winters have proven a challenge for traditional highbush production. Early trials conducted in the late 1990s and early 2000's led by Jilin Agricultural University, showed that the cold hardy Lowbush and 'Half High' cultivars were more likely to crop and survive in the harsh conditions. Most of these varieties are considered ornamentals in the rest of the world while a few others represent exemplary selections from Wild patches in North America sourced from the USDA germplasm repository in the 1990's. Cold hardiness, increased likelihood of protection from snow cover (due to plant height) and apparent tolerance of difficult soil and moisture conditions have led to the large-scale planting of Cultivated Lowbush (in rows) and 'Half High' blueberries. Due to mixed information available from China, it is likely that most of the 'cultivated lowbush' production from China is represented in the Highbush production and acreage figures for China.

GLOBAL WILD AND CULTIVATED COMBINED

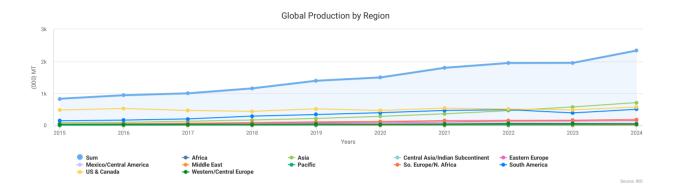
Planting and Production Data, Figures & Commentary

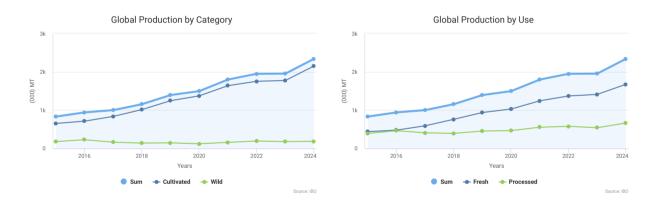
(Denominated in Hectares and Thousands of Metric Tons)

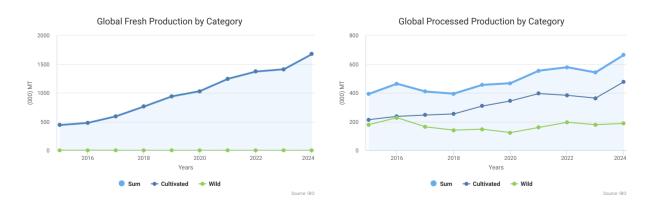
Global Production by Region (000) MT

Global Cultivated and Wild Blueberry Combined		2022			2023			2024	
Productions Totals	Fresh	Process	Total	Fresh	Process	Total	Fresh	Process	Total
Americas	672.18	402.75	1,074.93	607.39	338.46	945.85	724.61	422.07	1,146.68
US & Canada	192.63	316.00	508.63	207.75	276.95	484.70	228.40	345.72	574.12
South America	404.30	85.81	490.11	328.58	60.28	388.86	426.93	75.78	502.71
Mexico/Central America	75.25	0.94	76.19	71.06	1.23	72.29	69.28	0.57	69.85
Asia/Pacific	383.28	103.48	486.76	474.92	131.88	606.80	591.87	160.29	752.16
Asia	357.73	102.69	460.42	445.08	130.98	576.06	552.84	159.29	712.13
Pacific	20.94	0.49	21.43	23.66	0.60	24.26	31.84	0.70	32.54
Central Asia/ Indian Subcontinent	4.61	0.30	4.91	6.18	0.30	6.48	7.19	0.30	7.49
EMEA	315.33	72.04	387.37	328.26	71.81	400.07	357.43	82.10	439.53
So. Europe/N. Africa	142.07	13.61	155.68	146.54	14.12	160.66	170.54	15.18	185.72
Eastern Europe	98.75	33.08	131.83	104.00	31.21	135.21	105.05	42.16	147.21
Western/Central Europe	33.64	22.39	56.03	30.91	22.89	53.80	28.87	19.48	48.35
Africa	36.11	2.70	38.81	40.78	3.20	43.98	44.52	4.80	49.32
Middle East	4.76	0.26	5.02	6.03	0.39	6.42	8.45	0.48	8.93
Global Totals	1,370.79	578.27	1,949.06	1,410.57	542.15	1,952.72	1,673.91	664.46	2,338.37

Source: IBO







CLOSING COMMENTS FROM THE EDITOR

CLOSING COMMENTS FROM THE EDITOR

It has been an honor to lead this project in service of the industry, now in its 19th year. As a participant in the private sector, I am grateful for the trust of the IBO board to set aside the "day job" and focus on the production of a unique product intended to empower a more informed industry with as little bias as possible. I want to thank all the many contributors who volunteered time to support this project, and particularly thank the incredible Report Team who has carried the vast majority of the burden to bring this next edition into being. Colin, Matt, Sarah, Violeta, and Claudio, thank you for the tremendous effort to produce what I believe is the best report yet.

In closing I would like to share some of my reflections for your consideration as we move the blueberry industry into its next phase together.

Double Clicking on Category Value and Volume Growth

When I first reviewed the data on category value and volume growth, I took these figures at their generic face value and was encouraged. But when I 'double clicked' on the details behind the numbers, it became clear that there was more to the story, one we address briefly in the trends section, but I want to call out again here. This trend is not a simple story of a value increase across the category often outstripping volume growth. It is indeed much more nuanced. The reality is that a new category of what many call "premium" blueberries are having a disproportionate impact on category value growth while the rest of the category experiences more steady growth in category value and volume.

While still very encouraging for the category as a whole, it also tells us more about where the opportunities lie: Giving consumers the product they want while creating new categories and new occasions supported by next level quality. This is further reinforced in markets like the US where household penetration is not growing as quickly while a subset of consumers are willing to pay high prices for better fruit and the rest of the established consumer base consumes more, but many consumers have yet to adopt blueberries in their eating habits. There is a lot to unpack here and it's worth serious consideration.

Quality at Scale, Product, and Price Bifurcation Trends

Further elaborating on the section above, a threshold has been crossed over the last few years resulting in many months of the year (I estimate nearly 7 months in most global markets) during which a next level of fruit quality is available at scale. New genetics combined with new sources of supply by professional growers, virtually, and vertically integrated companies has driven a true paradigm shift in product. This development has, in turn empowered the launch of both new categories and occasions at retail leveraging this new product to drive value, grow consumption, and improve the consumer experience. This trend has also resulted in a market that is at times bimodal in pricing for fruit and may be starting to impact demand for a portion of the blueberries in the market as retailers and consumers have more options.

This trend is thus positive for many, but not for all. This is particularly challenging in growing regions where this new category of quality has yet to scale and the growing industry doesn't have the point of reference of confidence that their investment in pursuing this new level of product would be rewarded. This challenge becomes more pronounced when growers must take on considerable financial burden to make these investments. We therefore risk, as in industry, leaving

behind growers and companies who have made critical contributions over the decades and bring much to the table. I will express a personal opinion and state that there is an opportunity for the larger successful companies, banks, investors, and even governments to recognize this dynamic and not wait on the sidelines. The trend is particularly pronounced in the long established incumbent industries who also have some of the biggest opportunities to lead the change and capture new positions in future category value creation.

Existing Consumers, New Consumers, Categories, AND Occasions

As stated above, we are seeing significant growth in market and household penetration in the growth markets of Europe, Asia, Middle East, and beyond. The US penetration growth has slowed meanwhile. How much of this is driven by the consumer experience with the product? We have an incredible opportunity to empower increased consumption with existing consumers while growing our base of new consumers. But both groups must be understood and properly served to realize that outcome. This will require a sustained improvement in the product on the shelf, strengthening current categories, creation of new categories (not just the 'super premium' category growing today which has its limits), and focusing not just on categories but consumption occasions. How can we as an industry and in our private activities take on this opportunity with greater vigor, and when possible, coordination?

Structural Limits to Sustained Supply Growth

Land, water, labor, climate, capital, talent, policy, regulatory, trade, geopolitical stability. Our industry is facing pressure on every one of these critical factors to varying degrees around the world and it will only become more challenging. While global demand and consumption growth for blueberries has

been nothing short of spectacular and is expected to continue for years to come, I worry we take for granted just how difficult it will be to grow the cost competitive quality needed to serve the market over the last decade. There will be more challenges to overcome on the supply side of the equation amidst the global market opportunity.

The Easy Times are Behind Us

Having poured over this report, there is an opportunity to take a step back and reflect. In closing, I will share my personal reflection from a lifetime immersed in the crop. Put simply, there is incredible opportunity on the horizon, but the easy times are behind us. Even when the long term trend of increased consumption is real, there will be market disruptions. We will see good years and bad years. We will at times struggle with the level of change and challenges mentioned above and throughout this report. Scaling will be more difficult and competition will increase substantially in all areas as is common when an opportunity of this size and scope exists. A bright blue future for industry participants in service of current and new consumers with a future platform of categories, occasions, and better blueberries is indeed before us, but what got us here, will not get us there.

The IBO was founded with the objective of bringing the industry together to become more coordinated and informed, in service of this wonderful crop, its growers, and its consumers around the world. If you are involved in the industry, please join your local organization or support the foundation of one, and participate in the IBO as we can tackle the challenges and opportunities together, united around the magic of the blueberry.

-Cort Brazelton

Chief Editor.

IBO Global State of the Blueberry Industry Report

SUPPORT THE IBO

If you are a participant in the industry and are not an IBO member, please join this voluntary organization. There is active global coordination and promotional work ahead and we need support. The organization's budget is remarkably small for what is done year in and year out. And, without the IBO, there is no Global State of the Blueberry Industry Report or member library!

We need your help and support, please consider joining.

https://www.internationalblueberry.org/become-a-member/

Until next time, best wishes and enjoy your blueberries! Best Regards,

The IBO State of the Industry Report Team

SUPPORT

ACKNOWLEDGMENTS

The quality of the narratives in this report depends on the insights provided by interviewees. We would like to thank all the participants who volunteered their time and expertise to make this report a reality. The list below includes many of the names of those who have contributed, although it is not an all-inclusive list as many contributors have chosen not to be mentioned.

Alistair Campbell Alyssa Houtby Amine Bennani Andrés Armstrong Andrés Duque Andrew Bell Bill Cline Bo Hu Brent Walsh Brittany Lee Carlos Esteve César Ortiz Caroline Barbier Cindy van Rijswick Dane Castle Dani Geng David Magaña David Yarborough Dejan Dusic Derek Eisele Dominika Kozarzewska Evgeniy Kharlan Fred Douven Garland Reiter George Jessett

George Miclos

Henk Vaandrager Herman Van Dyk Huan Zhang Hyojun Kim Irina Koziy Ivan Leache Jaime Sanchez Jamie Petchell Jason Richardson Joe Vargas John Early John Shelford Jon Salters Juan Pablo Vogt Jürgen Bangert Kelvin Bezuidenhout Kelvin Ong Kujtim Lepaja Laina Gray Luca Molari Luis Miguel Vegas

Mano Babiolakis

Marcel Beelen

Markus Duran

Miguel Bentin

Michael Brinkmann

Murat Aysan Paul Nselel Paul Bryce Pieter Zietsman Rachel McKenzie Rafael Domínguez Roberto Samano Roger Horak Sanja Larsson Sean Chen Sergio Torres Shako Tsintsadze Steve Mowatt Steve Taylor Stuart Torr Teddy Koukoulis **Thomas Danis** Thomas Drahorad **Todd Sanders** Tom Gunther Tornike Panjavidze Uriel Ben Haim

Vicente Jimenez

Zilfina Rubio Ames

ABOUT THIS DATA

Introduction

The Global State of the Blueberry Industry Report exists for the purpose of empowering participants throughout the blueberry industry with the best information available. The IBO holds a conviction that a more informed industry and market is a healthier one.

Disclaimer

Collecting, synthesizing, and presenting data on a dynamic and diverse industry such as the global blueberry industry begs for a disclaimer, or perhaps more appropriately, a request for forgiveness.

Without a doubt there are regions with commercial plantings and production that have been overlooked in this report. Over-reporting in some regions is also a possibility. The precision of planting and production figures provided varies widely, from very accurate to simplistic best guesses. The data and analysis presented in this document is therefore not intended to be presented as hard fact, but rather to capture trends - both macro and micro - to achieve a better understanding of where the blueberry industry has been, where it is today, and, ultimately, to speculate as to where it is going. The authors request understanding for any omissions, errors and other weaknesses in this report.

Should you encounter a discrepancy that should be fixed please inform us at info@agronometrics.com

Units of Measure

All production and planting data in this report are presented using the Metric system, specifically thousands of metric tons and hectares. For conversion to the English Imperial system, there are 2,204 lbs. in a metric ton and 2.47 acres in a hectare.

Structure

Organizing Geography: This report is broken down by geography which presents the world in vertical 'thirds', consisting of the Americas, Europe-Middle East-Africa (EMEA), and the Asia-Pacific. Within those regions are the respective sub-regions and countries which in some cases are further broken out into Country regions and producing areas. The content of this report is organized using the described hierarchy and ranked by the 2024 production volume.

Subregions - Subregions are disaggregations of the regions grouped geographically into areas with similar, or related characteristics for the production of Blueberries:

- Americas South America, North America, and Mexico/Central America.
- Asia Asia, Pacific, and Central Asia/Indian Subcontinent
- EMEA Southern Europe/North Africa, Eastern Europe, Western/Central Europe, Africa, and the Middle East.

Counter Cyclical Production

Wherever possible the annual aggregations of this report intend to capture the complete season of production. The first year of a season is used to compare between calendar year producers and split year producers. This means that the 2024 season in the northern hemisphere is comparable to the 2024/2025 season for the southern hemisphere.

An example of this would be the totals for the Americas, where North America uses the normal calendar as its season, while South America is a split year producer. When both are presented at the same time they would both be reported using the year initiating the season.

Processed Blueberries

This is a standard industry term which captures all 'non-fresh' forms of blueberries and related vaccinium species. Examples include, but are not excluded to, IQF, block frozen, pure, juice stock, block frozen totes, and also provides reference to dried and dehydrated derivatives of blueberries (the weight and volume data for which is quite unreliable). The IBO report presents "processed volume" in terms of net volume at harvest or packing (IE post initial sorting but before extensive processing diversion to frozen, IQF, juice, etc). Thus the figure is a reference to total crop diversion to the 'macro' channels of Fresh and Processed.

How Net Promoter Score (NPS) Is Calculated

The Net Promoter Score (NPS) is a widely recognized metric used to measure sentiment by assessing how likely individuals are to recommend a product, service, or—in this case—the blueberry industry. It is based on responses to a single question: "How likely are you to recommend a friend or colleague to invest in, join, or work in the blueberry industry?" Respondents answer on a scale from 0 to 10 and are then grouped into three categories. Those who respond with a 9 or 10 are considered **Promoters**—enthusiastic supporters likely to advocate for the industry. Respondents giving a 7 or 8 are labeled **Passives**—satisfied but not especially enthusiastic. Those scoring between 0 and 6 are called **Detractors**, as they are less likely to recommend the industry and may hold negative views.

The NPS is calculated by subtracting the percentage of Detractors from the percentage of Promoters, resulting in a score that ranges from -100 to +100.

NPS = % Promoters – % Detractors

A positive score indicates that more respondents are enthusiastic about the industry than not. For interpretive context, scores between 0 and 30 are generally considered good, 30 to 70 are great, and scores above 70 are seen as excellent. This simple yet powerful methodology allows for clear comparisons across countries, sectors, and time periods, helping to visualize industry sentiment in a quantifiable way.

IBO Hectare, Production Statistics and Narratives

Sources of Information and Methodology

Country Members of the IBO: Are the leading source for data and information on individual countries in this report when available. When country member data was not available, more emphasis was placed on public sources and individual contributors.

IBO Associate & Marketer Members: Volunteer members of the IBO from throughout the private sector have been generous with data and intelligence on the regions where they are active. They have provided particularly unique insight on key trends and intelligence.

Interviews with Industry Leaders: There is no replacement for person-to-person interviews and discussion. The information shared in these conversations has been invaluable to improving the amount of intelligence available to the industry via this report. Care has been given to not disclose sensitive information that is meant to remain private. Thank you to all who took their time to be interviewed and particularly their willingness to be open and share their knowledge, experience, and insights.

Note on Individual Contributors: Many thanks to the independent parties and individuals who provided valuable input and intelligence to the report team. It has enhanced the quality of the information in the report.

Anonymity: For reasons of confidentiality and/or privacy, many contributors are anonymous. Their willingness to provide information, insight, perspective, and intelligence was invaluable.

Media: The quality of media reporting on the blueberry industry has improved in recent years. Although many trade publications still tend toward general treatment of basic market issues or advertorials, there are new sources of information, largely online, which are beginning to focus on issues and stories which provide valuable reporting on the industry. Work by Agronometrics, Fresh Fruit Portal/Portal Fruticola, Fruitnet, Fresh Plaza, Blueberries Consulting, Italian Berry and The Business of Blueberries Podcast have proven particularly useful in cases.

Interviews with Retailers, Buyers, and End Users: Without the input of the final purchasers this report would be incomplete. They are the ones who deliver the product to the consumer and, as such, have a significant impact on decisions regarding products, promotion, and pricing, to name a few. As a result, buyers for supermarkets, consultants in marketing, food companies, and other purchasers were interviewed to ensure their perspective and input was included. Special thank you to those who help get our product to consumers and for your willingness to take the time to share insights.

Public Data Sources: When available, official data published by national and international statistical agencies has been incorporated into this report. Sources such as EUROSTAT, FAOStat, USDA, CAN Stat, and other government bodies frequently publish production data that provide essential reference points for measuring industry performance. These datasets, while sometimes limited in timeliness or level of disaggregation, are valuable for establishing a baseline of credibility and consistency across regions.

Regression Methodology: As a last resort, when data for the previous season cannot be independently verified, the values presented in this report are calculated using regression models based on historical data points. This methodology follows the framework laid out in the Production Forecast section and is employed only when direct sources of information are unavailable, ensuring that every effort is made to provide a consistent and informed representation of industry performance.

Trade Data

Agronometrics Trade Data

The IBO report gets to benefit from the work the Agronometrics team has done compiling blueberry trade statistics through their Global Trade Data service. To learn more about the trade data used in this report visit https://www.agronometrics.com/global-trade-data/

To offer context and match the trade statistics with the IBO data, the groupings and associations within the trade dataset have been modified to match the organization and structure of the IBO report.

Below is some helpful terminology to help understand the titles of the charts produced for this report and other nomenclature:

Reporter - Reporter, or country being written about

Partner - Partner, or country outside of the region being written about, when talking about Exports.

Origin - Partner, or country outside of the region being written about, when talking about Imports.

Missing or Anomalous Trade Data

Accuracy - Much of the Trade Data used by the report is sourced under the HS code 081040 which includes the imports and exports of Fresh Cranberries, Blueberries and Other Fruits of The Genus Vaccinium. For many countries, six digits of resolution is a limitation of the data available, meaning that there is no way of differentiating between a cranberry and a blueberry. Fortunately, for most of the world this aggregation is not an issue as all major production of cranberries and other fruits of the Genus Vaccinium family is concentrated in North America where detailed trade statistics specific to blueberries are available. With this in mind, it is entirely possible that some of the records reported as Blueberries in this report, may indeed be cranberries.

Data Availability - To report on global imports and exports of blueberries from around the world, the dataset works with governments from around the world to collect and make global trade data available to the general public. This said, the availability is dependent on the collection and dissemination efforts of local authorities/associations, data discrimination policies and politics for more than 150 contributing countries. As such, not all origins provide perfectly accurate or timely information for us to work with.

Morocco - Unfortunately, the trade statistics out of Morocco are rather limited. This has a large impact on the numbers for Southern Europe/Northern Africa as Morocco is the second-largest producing origin in the region and accounts for a large percentage of the production volume. To account for this and present as complete a picture as possible. The statistics for the sub-region and the country are being implied from the imports of trade partners like Germany and the UK which do report on imports from Morocco.

Fruit from Morocco may also be partially double counted in the Spanish export statistics.

Mexico - Mexico is in a similar situation to Morocco. With no public trade data available the values for the origin and the aggregations it is a part of are being inferred from its trade partners.

Netherlands - The Netherlands is an important transit point for imports into the EU. As such the volumes being re/exported may be double-counted in our statistics.

Other Origins/Destinations - Similar calculations inferring imports or exports from trade partners were made for the subregions Middle East, Asia in most cases due to lack of available data from the countries being reported on.

Yield Calculation Methodology

The yield figures of this report are calculated by dividing the production total in kilos by the hectares hypothetically of an age to be in production for each producing region as volunteered by IBO members and individual contributors.

Calculation of Growth from Hectares and Yield

The metrics of growth from hectares and growth from yields are a useful tool to help understand the driving forces behind the increase, or decrease in production observed within the different producing areas and regions. Where growth from yield exceeds growth from hectares this points to most of the growth coming from increased efficiencies in production, through new cultivars or farming methodologies. Whereas, when growth comes mostly from

280 GLOBAL STATE OF THE BLUEBERRY INDUSTRY REPORT | 2025 GLOBAL STATE OF THE BLUEBERRY INDUSTRY REPORT | 2025 281

hectares, this indicates that increases in volume are primarily being driven by expansion of land dedicated to the commercial production of blueberries.

Below are the equations used to calculate the different types of growth being measured. For regions composed of several producing areas, the results of these equations are added up to form a total.

Growth from Yield = Δ Yield * Ha in Production Growth from Hectares = Δ Production - Growth from Yield

Licencing and Redistribution of Content from the Report

All content within this report, inclusive but not limited to charts, tables, texts, graphics, and any other data or materials ("Content"), is made available by the International Blueberry Organization (IBO) for the benefit of the broader blueberry community and beyond.

The IBO hereby grants to the user a worldwide, non-exclusive, royalty-free, sublicensable and transferable license to use, reproduce, distribute, prepare derivative works of, display, and perform the Content in any media formats and through any media channels, for any purposes, whether public, private, commercial, or non-commercial.

Notwithstanding the above, the user is required to provide clear and unambiguous attribution to the IBO, or its partner organizations as the original source of the Content, regardless of the medium of use. Such attribution should be in the form of a citation, for example:

"Source: International Blueberry Organization (IBO)"

"Source: IBO" for industry specific applications where readers know of the organization.

"Source: Agronometrics and IBO"

"Source: Agronometrics Global Trade Data"

As a general guide, use the same source that is used within the publication itself to reference data, or as otherwise reasonably designated by the IBO.

While the IBO makes no warranties or representations of any kind concerning the accuracy, suitability, or safety of the information contained in this report, it encourages the free dissemination of its Content for the betterment of knowledge and innovation within the blueberry industry and beyond.

PRODUCTION FORECAST METHODOLOGY

Recognizing the importance of accurate projections to the development of the industry, the methodology used to forecast methodology attempts to use the available information to its fullest extent. Our projections have been upgraded to include a machine learning technique that allows us to personalize the regressions to the individual characteristics of each producing region.

Agronometrics Disclaimer

The forecast being presented in this report has been created by Agronometrics for the benefit of the industry. IBO members have been consulted in the process of creating the projections published, however, the work and projections are solely of Agronometrics and do not necessarily reflect the views, opinions, or outlook of the IBO as an organization.

The forecasts have been created in as objective a way as Agronometrics feels is reasonable and responsible based on the best information available and in good faith. These predictions are only meant as a guide and Agronometrics accepts no responsibility for any financial or legal issues that may arise from the use of the forecasts.

Methodology

The methodology we chose was to infer the projection of volumes based on the independent forecasts of hectares in production and yields.

Projecting Hectares

Using an estimated delay in production calculated internally for each producing region, our methodology infers from the hectares planted the hectares that will be coming into production in the coming years. Because hectares are capital intensive to establish, and the physical characteristics of a geography are difficult to change, using hectares planted as an indicator is, by its nature, a reasonable indicator of the hectares that will come into production given the respective delays.

Where the delays to production are less than four years and forward-looking planting data has not been volunteered, linear regression is used to project the remaining periods necessary to cover the four-years being forecast by the report. A machine learning technique explained below was used to customize the amount of history used for the linear regression to best represent the data of each origin being projected.

Projecting Yields

Yields and thus total volume growth are a challenging metric to forecast. Because we use hectares that are already in production in the calculation, both the numerator (production) and the denominator (hectares in production) grow at similar rates canceling out large increases that many origins have experienced with a more stable rate of kilos/hectare. Linear regression can be used on this line to have an accurate idea of how yields will then likely change over the coming years. If we dive deeper into the data, a general trend of increasing yields which is rather prevalent in the world is a sign of modernization in production standards and/or varietal changes. Yet if a region experiences major

sustained shifts in yield relative to historical trends, for example because of replantings, this can skew the data for a period of time before self correcting.

As a calculated value using production, there is no indicator that can be used to anticipate how yields will perform in the future, however it is a stable enough metric that we are able to create accurate forecasts by simply using linear regression. As a safeguard, yields were capped at 25,000 kilos per hectare, which is viewed by experts as a realistic theoretical limit for average production efficiencies (recognizing there are outlier examples in the industry of higher yields but they are not an established norm).

As with hectares, a Machine Learning tool was used to identify the most relevant amount of history used for the regressions each origin as explained below.

Production Projections Volunteered by Member Organizations

The input survey sent to each producing region allows for member organizations to input their estimates for the upcoming season. Where it has been made available, this is the value used for the first period being projected. Any future volumes volunteered by member organizations farther out than one period are discarded in favor of using the methodology described here.

Machine Learning Methodology for Regressions

The forecast was created using a custom designed Machine Learning (ML) tool to help personalize the regressions used to reflect the reality of each producing region in the forecasts. The ML tool was trained by backdating the report and testing how much history should be used to best represent the forecasts of that individual origin. This means that every possible available length of historical data was used to forecast each origin with linear regression. This exercise was then repeated back dating the data and recreating the information that would have been available for each year from 2010 to 2020. The results of every forecast created were then compared to the actual values for the time periods being forecasted, offering a measure of how accurate each forecast was. The regression that offered the least amount of error was chosen on an origin by origin basis.

Linear regression was used in order to avoid overfitting the data which may otherwise overly distort the results, especially as it is widely believed that the industry may be in the process of transitioning to more stable levels of growth in production.

Interestingly, the amount of history that the methodology selected to create the forecasts generally lined up with how developed each origin was, using longer history with more established producers and shorter projections for newer entrants into the market.

Forecast Error

The only thing that is definitive about a forecast is that it is wrong; the question is how wrong. The methodology that is being offered by this publication is only meant to serve as a guide for how the industry will likely develop. Although it is our best attempt at projecting how the industry will develop, we realize that as detailed as we attempt to be, any mathematical model is merely making broad stroke assumptions about how hundreds of thousands of participants in this industry are making the millions of decisions that will actually change how the industry will develop over the next four years we are attempting to project.

In order to offer context and help build credibility in the work being published by the report, we offer in the table below the values predicted last year for the 2024 season compared to the actual data collected.

2024 Forecast Error by Sub Region. Values in (000) MT

Geography	2024 Forecast (000) MT	2024 Results (000) MT	%Error
Asia/Pacific	787.628644	775.899823	1,51164117
Asia	743.563042	734.870823	1,18282275
Pacific	36.1423457	32.540000	11,0705154
Central Asia/Indian Subcontinent	7.92325618	8.489000	-6,6644342
Americas	930.172306	996.428698	-6,6493862
South America	477.338137	502.710000	-5,0470177
US & Canada	376.548166	423.867698	-11,163751
Mexico/Central America	76.286003	69.851000	9,21247083
EMEA	380.963694	393.532000	-3,1937189
Africa	44.541117	49.326000	-9,7005291
Eastern Europe	123.918336	110.271000	12,3761789
Middle East	6.22603324	8.376000	-25,66818
So. Europe/N. Africa	165.013247	185.724000	-11,15136
Western/Central Europe	41.2649605	39.835000	3,58970871
Global Total	2098.764644	2165.860521	-3.196

2025 COVER DESIGN

Continuing the tradition we began in 2024, this year's report once again includes a section dedicated to explaining the concept behind the cover design. For 2025, the spotlight is on South Africa, and the design draws inspiration directly from the country's rich cultural identity.

In exploring South African art, paintings, and handicrafts, we found that one of the most emblematic elements of its visual culture is *shweshwe*, a traditional printed textile widely recognized for its intricate geometric patterns and vibrant indigo tones. Historically introduced through trade, shweshwe has been embraced as a symbol of national identity and is often worn during celebrations, ceremonies, and everyday life. Its repetitive motifs and cultural depth make it a natural choice to represent South Africa on the cover of this report.

Building on this heritage, the 2025 cover design reimagines the shweshwe style to create a distinctive pattern. When observed closely, this pattern reveals the form of a blueberry, complete with its characteristic five-pointed crown. This subtle integration symbolizes the way global blueberry production and culture intertwine, while paying homage to the country hosting the focus of this year's report.

In addition, hidden within the design is a subtle reference to the "Y" shape of the South African flag, a powerful national symbol that represents the coming together of diverse elements into unity. Its inclusion reinforces the narrative of South Africa's role in the international blueberry industry: a nation bringing its unique character and strength into the global market.

Together, these elements transform the cover into more than just a visual introduction, serving as a symbolic gateway that connects South Africa's cultural heritage with the global blueberry industry, inviting readers to explore the stories and data that lie within the report.

We hope you enjoyed this year's cover and the story it tells through South Africa's culture and symbolism. Each edition is an opportunity to discover new ways of connecting blueberries with the places and people that shape our industry. And while this year we celebrate South Africa, we can't help but feel excited about which country and story will inspire the next cover.

Violeta Rodríguez

Chief Digital Officer Agronometrics



2024 READER SURVEY

