

# The Rise of White and Blush Strawberries

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White and blush strawberries may look like something out of a fairytale, but their story is rooted in science, patience, and a desire to bring something genuinely new to Australian consumers and growers. Their journey begins not in a lab, but in the wild.

In 2014, breeders imported seed from *Fragaria chiloensis*, a naturally occurring white, wild strawberry species sourced from the USDA ARS National Clonal Germplasm Repository. These wild plants produced tiny, soft, snow-white berries with an unexpectedly intense flavour and beautifully branched flower trusses.

The fruit was delicious but far from commercially viable. So began a multi-year breeding effort to backcross the wild plants and their offspring to established ASBP red strawberry varieties. The goal was ambitious: to retain the wild berry's pale colour and exceptional flavour while dramatically improving size, firmness, and shelf life. Slowly, generation by generation, the team shaped a strawberry that was both novel and commercially market-ready.

## Why create a white or blush strawberry?

The motivation behind these unusual berries is both practical and visionary.

### Creating a new market segment

Unlike apples, where consumers can choose between many distinctly different varieties like Pink Lady, Granny Smith, or Fuji, strawberries rarely carry variety names on their packaging. This makes it difficult for shoppers to make informed choices or develop preferences. White and blush strawberries offer a visually distinct alternative, something instantly recognisable, with its own flavour identity and eating experience.

### Supporting growers, especially smaller ones

These unique varieties open the door to a niche, premium market. Growers - particularly small-scale producers - can offer something special, consumer-focused, and potentially higher-value. It's a chance to stand out in a crowded market where the lowest production cost isn't the only factor in commercial success.

### What makes them genetically different?

The genetic story is simple: they're the result of crossing wild white *Fragaria chiloensis* with commercial red strawberries, selecting for pale colour and exceptional flavour while improving commercial traits. The genetics are the foundation of everything that follows.

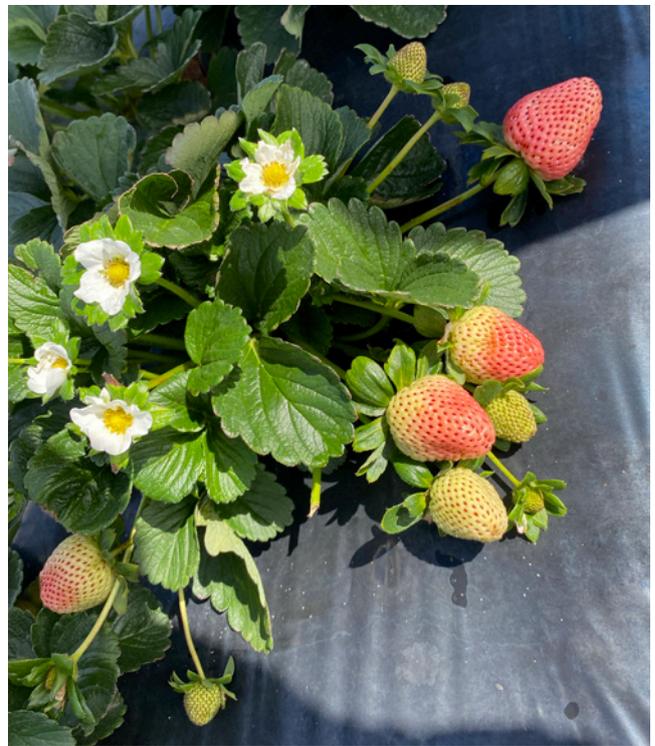
As part of the project 'Genetics of fruit sensory preferences (AS19003)', an investment of Hort Innovation Frontiers, trained sensory experts evaluated the new varieties. Their verdict: these berries are bursting with tropical, jammy, berry, and floral notes. They're intensely aromatic, very sweet thanks to high brix levels, and offer a flavour experience that catches people off guard, in the best possible way!

### What do consumers think?

Consumer taste panels have responded enthusiastically. White and blush strawberries scored highly for overall liking, especially among adventurous eaters who enjoy trying new things. Their novelty isn't just visual, the flavour difference really delivers.



**New 'blush' variety SB17-230-ASBP in the breeding trial at Maroochy Research Facility** Photo credit: Jodi Neal, QDPI



**White Strawberries growing on a WA farm site** Photo credit: Helen Newman



**Beautiful white strawberries** Photo credit: Jodi Neal, QDPI



**Jodi Neal is visiting Vince Ngo's farm in WA where he is trialling white strawberries** Photo credit: Helen Newman

## Breeding challenges

When introducing something unfamiliar, first impressions matter. Breeders prioritised consumer traits above all else: flavour, appearance, and shelf life had to be exceptional before anything was released.

Now that these foundations are solid, the focus is shifting to refining production traits: yield, fruit size, and truss architecture, while preserving the eating qualities that consumers are saying they love.

The varieties show promising resilience:

### White/pink variety SW20 317 ASBP

- Tolerant to Fusarium Wilt
- Moderately tolerant to Charcoal Rot
- Moderately susceptible to Colletotrichum Wilt and Powdery Mildew

### Blush variety SB17 230 ASBP

- Tolerant to Charcoal Rot and Colletotrichum Wilt
- Moderately susceptible to Fusarium Wilt and Powdery Mildew

Both handle rain well, an important trait for Australian conditions.

Sunlight plays a starring role in the end colour of each berry. Where the sun hits the fruit, a soft pink blush develops, and shaded areas remain pale or white. Under protected cropping, where light is more diffuse, the berries tend to develop a more even, lighter colour. Either way, they're striking and very different from the strawberries Australian consumers are used to.

For the breeders behind these varieties, the excitement is personal. Watching someone bite into a white or blush strawberry for the first time, and seeing their surprise at the sweetness and flavour, is a reward in itself. It's a reminder that innovation in agriculture isn't just about science; it's also about delighting the consumer, and ultimately, delighted consumers come back and buy again.

Growers who have trialled the varieties, along with consumers and marketing agents who've tasted them, have offered glowing feedback. Many say the flavour reminds them of wild strawberries from childhood. There is some understandable caution about how consumers will react once the fruit hits the broader market. But with strong marketing and public education planned by Australasian Plant Genetics, confidence is high that these berries will find their place and their fans.



**Blush variety SB17 230 ASBP** Photo credit: Jodi Neal, QDPI

## Acknowledgements

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