

Blueberry Growers Field Day, Tasmania

Mark Salter, Berry Industry Development Officer, Fruit Growers Tasmania

Fruit Growers Tasmania and Berries Australia held a Blueberry growers field day on the 18 April. Over 30 blueberry growers and industry participants attended the event held at Griggs Bros Farm at Castle Forbes Bay in southern Tasmania.

The morning session included four technical presentations followed by an orchard walk in the afternoon. Speakers included Stuart Doyle from AgVista, Kara Barry from the Tasmanian Institute of Agriculture (TIA), Kate Dickinson from Fruit Growers Tasmania and Gaius Leong who travelled to Tasmania from New South Wales to speak at the event and visit growers. Gaius is the Berry Industry Development Officer from New South Wales Department of Primary Industries (NSW DPI) specialising in blueberries and is based in Coffs Harbour.

Stuart Doyle was first up with his presentation on blueberry pests and diseases. Stuart has a wealth of experience in blueberry pests and regularly travels interstate and internationally consulting to blueberry growers around the globe.

Stuart covered some of the most important pests for blueberries, including Lepidopteran pests, a group of pests that includes light brown apple moth, loopers, cluster caterpillar, cotton budworm and helicoverpa pests.

Stuart also covered some other pests including aphids, mirids, mealy bugs and thrips and provided information on how to identify them and the damage they can cause. Stuart explained that due to the limited amount of chemicals growers have access to, it is vitally important to use each registered chemical sparingly and be particularly careful not to overuse chemicals in the same chemical group as this will lead to resistance issues. Stuart finished up by detailing some of the serious pests he is seeing overseas, including Spotted Wing *Drosophila* which is hopefully a pest we won't see here in Australia anytime soon.

You can read more about Spotted Wing *Drosophila* in previous articles from this journal which can all be found on the website Resource Library at berries.net.au/resource-library by entering 'drosophila' into the Search box

As well as reinforcing the importance of rotating the use of registered chemicals from the same chemical group, Stuart also recommended that growers adopt an Integrated Pest Management (IPM) program to help control pests. He explained the importance of an effective scouting program to identify which pests are present in your crop and if pest thresholds are exceeded, intervention may be needed. In some cases, it might be necessary to apply a broad-spectrum insecticide to control a particular pest, but this may also impact beneficial insects, resulting in the need to reintroduce beneficial species.

Gaius Leong from NSW DPI presented next on nutrition for blueberries with his presentation focusing on common nutritional limitations experienced in blueberry production. He started off with soil pH and explained that the ideal range for blueberries is mildly acidic at pH 5.0 to 5.8 (H₂O) and 4.5 – 5.0 (CaCl₂). He explained that even though blueberry plants can tolerate lower pH situations there are fewer nutritional issues at this higher range. He also explained that calcium does not increase pH but the carbonate component of lime does (e.g. gypsum, calcium nitrate). He recommended using finer particle size lime for soils



Gaius Leong, NSW DPI presenting about blueberry nutritional needs. Photo credit: Fruit Growers Tasmania

with cation exchange capacity (CEC) >6 and 'larger' particles for soil CEC <6 and to preferably apply soil amendments post-harvest.

Gaius also highlighted the importance of the major elements, particularly Nitrogen. The amounts applied each year are dependent on crop load, pruning, soil supply and fertiliser efficiency. North American studies vary and indicate levels of between 73-186 kg N/ha, with some studies going as low as 30-40 kg N/ha to as high as 250 kg N/ha, but 121 kg N/ha could be used as a guideline. He touched on the other major elements and their importance.

Gaius also covered salinity, compaction, and moisture infiltration. He explained high salinity can cause root burn, increase associated pathogens and can also affect moisture uptake and fruit size. Some recommendations to assist with mound compaction include to:

- maintain calcium and organic matter content;
- avoid massive fluctuations in soil moisture content; and
- use soil wetters and/or liquid gypsum to assist with infiltration especially after a 'dry period'.

Kara Barry from TIA presented to growers with an update on the Blueberry Rust project her team is working on. The project is entitled "***New on-farm strategies for the prevention and control of blueberry rust in Tasmania***" and has several aspects to it including:

- Determine the temperature range of pathogen survival – particularly over winter
- Collect fine scale weather data from collaborating blueberry orchards
- Characterise blueberry foliage cycle and develop a growing degree days (GDD) model to predict leaf emergence
- Trial products which can result in complete defoliation of blueberry, with no or minimal consequence for yield and quality

The aim of this work is to better understand pathogen survival, infection risk timing, and also break the disease cycle in varieties that retain leaves over winter.

Kara shared the results of the latest defoliation trials that the research team have been conducting at Griggs Bros orchard with the semi-deciduous 'Legacy' variety.



Kara Barry, TIA presenting an update from the Blueberry Rust project currently underway. Photo credit: Fruit Growers Tasmania

The treatments being investigated include:

- Copper sulphate – Using high rates, trials have shown good defoliation results but negative impact on fruit buds resulting in poor yields the following season
- Ethephon – defoliation was not consistently achieved in preliminary trials
- Urea and Copper - trials have shown good defoliation results but negative impact on fruit buds resulting in poor yields the following season
- Protone – Preliminary trials have shown the most promise as less impact on yield has been detected. Timing of the application is temperature sensitive and new trials are testing a range of autumn application dates

The project concludes in 2026 and regular updates will be provided in this journal.

Kate Dickinson from Fruit Growers Tasmania gave an informative trade update. The presentation included an overview of national blueberry production per state, with Tasmania sitting at around 1,900 tonnes as the second largest producer, with NSW the largest producer at just over 17,300 tonnes.

Kate touched on blueberry exports and noted that there was a sharp increase in exports this year with a total of 1,088 tonnes + going to export. This equates to around 5% of the total Australian blueberry crop; an increase of 122% on the previous export season. The main exporting states are NSW with 983 tonnes followed by QLD with 50 tonnes, and Victoria with 31 tonnes.

The main export destinations were Hong Kong, Singapore, Indonesia and Thailand. Tasmania has access to a number of markets but there are still some for which an export pathway does not exist including China, Korea, Taiwan, and Vietnam.

Global demand for blueberries is increasing as a healthy snack food and Australia has good proximity to Asia with the opportunity for Tasmania being to leverage its reputation for other premium fruits. In terms of challenges, global production is also increasing dramatically, and we are a high-cost producer competing directly with other countries such as Peru and Chile. Success will be found by finding the market windows where we can profitably supply given we are unlikely to be able to reduce our cost base.



Field day attendees viewing the various defoliation trials taking place at Griggs Bros farm as part of the TIA Blueberry Rust project. Photo credit: Fruit Growers Tasmania

Kate also updated growers on the recent local blueberry promotional campaign which Fruit Growers Tasmania produced to help lift local sales during the post-Christmas period.

The campaign featured grower stories and a video to help consumers feel a connection to the product. It was supported by IGA and Hill St Grocer in over 70 stores. The campaign rolled out using the ‘Tasmanian Grown’ Facebook page (@tasmaniangrown.au) which had over 8300 views and 1739 post engagement comments.

It was well supported by both the retail sector and the news media with three stories featured in the Mercury, Examiner and Pulse Tasmania newspapers.

The campaign was a great success with fruit sales holding up well during the post-Christmas period. The campaign also resulted in the IGA group of stores wanting to run it again next year.

The lunch break at midday provided a great opportunity for growers to network and mingle. After lunch everyone proceeded to the field to view the Blueberry Rust defoliation trials which Kara and her team have been conducting at Griggs Bros.

The group viewed various defoliation trials, including hand defoliation, applications of copper sulphate and Protone® which are aiding in the defoliation of some of the semi-deciduous varieties.

While in the field growers also took the opportunity to quiz Stuart and Gaius further on pest and disease and nutrition issues.

Berries Australia and Fruit Growers Tasmania would like to thank all of the presenters with a special thanks to Stuart Griggs for hosting the event on his farm. The feedback from all those in attendance indicated the day was a great success.



Department of
Primary Industries