

Blueberry strategic agrichemical review and prioritisation summary

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On Monday the 9th of November 2020 blueberry industry representatives met to evaluate the blueberry strategic agrichemical review process report (SARP). Several elements were considered including determining if the findings were consistent with what is being seen on the ground, fine-tuning of priority chemicals, identifying pest knowledge gaps, and highlighting the requirements for further research.

For those who are not familiar with the SARP it involves a desktop study and industry consultation to achieve the following:

- Rank the importance of diseases, insects and weeds that can affect industry.
- Evaluate the availability and effectiveness of fungicides, insecticides and herbicides (pesticides) in the control of these plant pests.
- Determine any gaps in the current pest control strategy.
- Identify suitable new or alternative pesticides to address the gaps.

As it currently stands the pest and disease priorities for the blueberry industry are:

Disease priorities

Common name	Scientific name
High	
Blueberry Rust	<i>Thekopsora minima</i>
Flower Blight / Grey Mould	<i>Botrytis cinerea</i>
Stem Blight	<i>Neofusicoccum spp.</i> , <i>Lasiodiplodia spp.</i> and <i>Botryosphaeria dothidea</i>
Moderate	
Phytophthora Root Rot	<i>Phytophthora spp.</i>
Anthracnose	<i>Colletotrichum simondsii</i>
Alternaria Rot (Post-Harvest)	<i>Alternaria spp.</i>
Phomopsis Blight	<i>Phomopsis spp.</i>
Bacterial Canker	<i>Pseudomonas syringae</i>
Charcoal Rot	<i>Macrophomina phaseolina</i>
Botryosphaeria Stem Canker	<i>Botryosphaeria corticis</i>
Crown Gall	<i>Agrobacterium tumefaciens</i>
Low	
Rhizoctonia Root Rot	<i>Rhizoctonia spp.</i>
Septoria Leaf Spot	<i>Septoria spp.</i>
Spur Blight	<i>Didymella applanata</i>

Note: *Pestalotiopsis spp.* is an emerging disease issue that is being seen in NSW but was not classified in the SARP.

Pest priorities

Common name	Scientific name
High	
Light Brown Apple Moth (LBAM)	<i>Epiphyas postvittana</i>
Queensland Fruit Fly (QFF)	<i>Bactrocera tryoni</i>
Longicorn Trunk Borer	<i>Phoracantha</i> spp.
Broad Mite	<i>Polyphagotarsonemus latus</i>
Red-Shouldered Leaf Beetle	<i>Monolepta australis</i>
Moderate	
Elephant Weevil (EWB)	<i>Orthorhinus cylindrirostris</i>
Scarab Beetle / African Black Beetle	<i>Heteronychus arator</i>
Cotton Bollworm / Corn Earworm	<i>Helicoverpa armigera</i>
Native Budworm	<i>Helicoverpa punctigera</i>
Western Flower Thrips	<i>Frankliniella occidentalis</i>
Plague Thrips	<i>Thrips imaginis</i>
Flatid Leaf Hopper	<i>Flatormenis</i> spp.
Scale insects	<i>Coccidae</i> spp., <i>Diaspididae</i> spp., <i>Eriococcidae</i> spp.
Ants	<i>Formicidae</i>
Low	
Painted Apple Moth	<i>Orgyia anartoides</i>
Mango Webworm	<i>Dudua aprobola</i>
Orange Fruit Borer	<i>Isotenes miserana</i>
Green Vegetable Bug	<i>Nezara viridula</i>
Green Stink Bug	<i>Plautia affinis</i>
Cottonseed Bug	<i>Oxycarenus luctuosus</i>
Two Spotted Mite	<i>Tetranychus urticae</i>
Dried Fruit Beetle	<i>Carpophilus</i> spp.
Green Peach Aphid	<i>Myzus persicae</i>
European Wasp	<i>Vespa germanica</i>

Notes: Blueberry twig girdler is an emerging issue in NSW but was not classified in the SARP.
Broad mite was agreed to be a lower priority compared to the high classification given in the SARP.



High Priority Pest: Light Brown Apple Moth (LBAM).

Photo credit: Department of Primary Industries and Water, Tasmania, Bugwood.org.



High Priority Disease: Blueberry Rust.

Photo credit: Bruce Watt, University of Maine, Bugwood.org.

Key priorities moving forward for blueberries

1. Develop an IPM project proposal for submission to Hort Innovation for funding from the Blueberry Levy Fund. Proposal would focus on suitable controls for the following pests: Longicorn, Elephant weevil, Western flower thrips, Flatid leaf hoppers, scale and mealy bugs.
2. Engage with Hort Innovation for an industry preparedness strategy to deal with the imminent withdrawal of several chemicals e.g. mancozeb from the market.
3. Engage with Hort Innovation for an industry preparedness strategy for QFF as many effective products are at risk of being withdrawn.
4. Seek alternative chemical groups and options for controlling Lepidoptera under protected cropping.
5. Commission a literature review for stem blight as a start to look for alternative control measures.
6. Look at alternatives to Phosphorous acid for phytophthora control.
7. Lobby/apply for the removal of restrictions on certain products or minor use permits for use under protected cropping including:
 - Dithianon
 - Prodigy
 - Avatar
8. Pursue the following products for label registration or minor use permit:
 - Transform® for the control of mirids, flatid leaf hopper, thrips, scale, mealy bugs, whitefly
 - Add liquid form of Metalaxyl on phytophthora permit
 - Sivanto® Prime for the control of Leaf hopper, QFF
 - Vayego® for the control of LBAM, Loopers, Helicoverpa, Monolepta, Longicorn, EWB, Scarab
 - Spinosad on permit for use as a fruit fly toxicant so that growers are free to choose their protein product
 - Luna® Experience for control of botrytis, Alternaria and possibly rust in blueberries

Current advances in chemicals

- A trial is running looking at the following organic options for blueberry rust control: Serenade® Opti, a new Nufarm product called Intervene, Ecocarb PLUS, Aminogro, eco-oil™ and Anolyte.
- Intervene, a Group 19 fungicide with the active Polyoxin D zinc salt will be available later this year for the control of botrytis in blueberries.
- A new fungicide, Miravis® Prime is being introduced into Australia in the first half of this year. Miravis® Prime combines two active ingredients pydiflumetofen (Group 7) and fludioxonil (Group 12). It will be registered to control botrytis in berries.
- Work is being done with Imtrade for Tebufenozide to be available for blueberries to control caterpillar pests.
- Coragen® is now approved for use in substrate grown blueberries due to a label change.



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If you have any questions relating to the Blueberry SARP or would like to receive a full copy of the report, please contact Blueberry Industry Development Officer Melinda Simpson:

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