

Ant Management – Blueberries

Technical Note

Ants are not typically an insect that are viewed as a pest species, however in substrate grown Blueberries there are reasons to monitor and possibly control ant species within your orchard.

Over the relatively short history of substrate growing blueberries Ants have become a pest both as a competitor for space in the substrate and as an insect that protects and actively 'Farms' sucking pests.

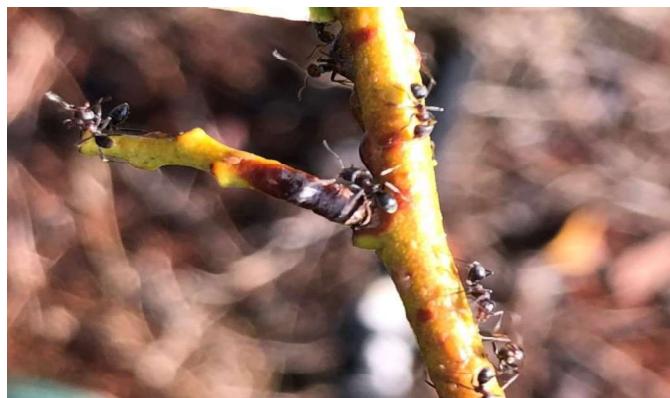
In Australia *Iridomyrmex rufoniger* or the common black ant, Argentine ants, *Linepithema humile*, and other visually similar small black ants commonly 'farm' sucking insect pests. These ant species can be seen swarming around and tending to aphids, mealybug, leaf hopper nymphs, and soft and waxy scale insects. The ant species that specialise in this behaviour are usually seeking the honey dew produced by the sucking insects and will actively protect the insects from beneficials to keep their food source safe.

Many of the same ant species will vigorously infest the light and airy growing media favoured by Blueberry growers. There have been cases where ants had laid eggs and established colonies in less than a week from substrate container placement on farms with visible ant activity and large egg clusters easily found at planting time.

What to look for?

Ant activity is not always obvious in passing, and if there are no insect pests to 'farm' the colony activity may be quite subtle. Signs to look for include

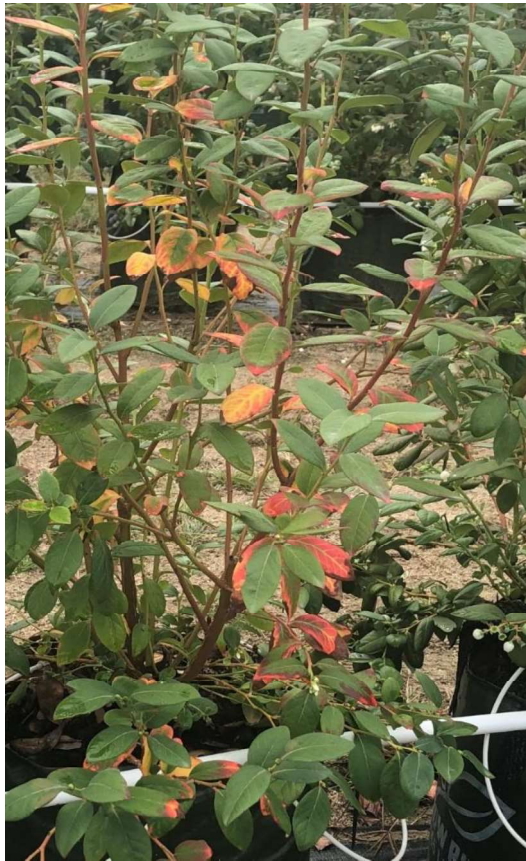
- Ant mounds in between rows visible when weather changes are expected.
- Fine material around the base of pots / bags where workers have moved substrate to make room for the colony
- Ringbarking of plants at pot level, weak root systems, reddening of leaves and general ill thrift. Reddening and a 'loose' feel to a plant are important signs that warrant further inspection of root area and pot removal.
- Lines of ants seeking moisture from irrigation lines
- "Farming" of sucking pests and the sooty mould associated with honeydew.



Ants tending to scale insects



Ants and eggs in termite damaged crown



Reddening and ill thrift caused by root damage



Colonised Substrate

Controls

There are several ant bait products that are permitted for the control of ants in Horticultural situations. Some of these products are knockdown only, others contain both knockdown and insect growth regulating chemicals. Often colonies are large and metres below the surface, and this generally makes knockdown chemistry relatively ineffective and delivers an instant but short lived control.

Timing of control is important as many of the baits are easily degraded by rainfall and will only be taken into the nest when temperatures favour ant foraging / activity. Bait efficacy will also be determined by the feeding pattern at the time, test baits using tuna or pet food and or honey are a good way to test the appetite for sugar or protein.

Apart from baits most ant active products are very destructive to Bees, extreme care must be taken particularly with OP and neo-nicotinoid chemistry.

Products commonly registered

<u>Product</u>	<u>Active</u>	<u>Class</u>	<u>Comment</u>
Bugmaster	Carbaryl	Knockdown / Carbamate	Fast knockdown
Distance Plus	Pyriproxifen	IGR Bait	No activity on adults – colony destruction over time
<u>Ascend SC 200</u> Regent 200 SC Recruit 100SC Termidor 100 SC	Fipronyl	Knockdown / residual - NeoNic	Both knockdown and colony destruction

Seek advice from local EPA, Agriculture department or similar for Locally registered products

Ant Bait carrier is as follows

25 kg Poulenta

2.5 kg Cerevite (high protein wheat germ cereal)

1L corn or fish oil

Green food dye

Insecticide mix bulked to 1 L with water (follow Label Directions of chosen chemical)

Mix cerevite and Poulenta in a cement mixer thoroughly

Add 500 ml of oil whilst mixing (best done with a hand sprayer to mix well.

Add 150 ml green food dye and insecticide + water mix using sprayer whilst mixing

Apply at 2.5 kg per ha using a small turf seed spreader or similar. This can be achieved at aprox 10 km per hour on a quad or similar

Dissolved honey or glucose may be added to this mix if ants are taking sugar bait