Elephant weevil management in blueberries

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Risk period

The optimum time for elephant weevil *Orthorhinus cylindrirostris* control is from September through to February when the adults emerge and climb onto the upper branch of the blueberry plants to mate. Egg laying lasts from September to February and peaks in October. The timing of the elephant weevil life cycle in blueberries can be seen in Figure 1.

Pest identification and damage

The adult elephant weevil is brown grey with a long slender snout and long forelegs, they are approximately 20mm long. The body has thick black or brown scales, and the antennae are clubbed and form an L shape with a distinct elbow (Figure 2).

The larvae grow to about 16mm in length and are creamy in colour with no legs and have a brown head. The damage to blueberry plants is caused by the larvae. The larvae hatch and feed by boring tunnels through the stem, crown, and roots of the plant. As the larvae exit the plant to mature, they leave large holes around the base of the plant (Figure 3).

Management

Cultural and physical

Monitor for damage signs which appear as bore holes in the wood. Remove and thoroughly destroy all infested bushes and material to prevent emergence of any weevils from the infested bushes. Removing and destroying adults will help break population cycles. Practices that reduce stress (such as fertilisation and irrigation) are essential during periods of drought to reduce the susceptibility of bushes.

Biological

A braconid wasp has been identified at elephant weevil infested vineyards, but confirmation of a parasitoid host relationship was not made from actual rearing. Further work in this area needs is required.

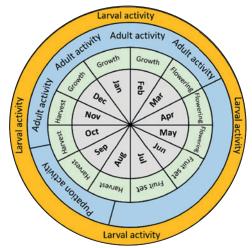


Figure 1.
Elephant weevil lifecycle in southern highbush blueberries





Figure 2 & 3. Adult elephant weevil with damage which appears as exit holes in the crown and stem of plants
Photo credit: Weevil - © tjeales, some rights reserved (CC BY-SA) &

Damage - Maurizio Rochetti, Costa

Chemical

The chemical options for controlling elephant weevil are outlined in Table 1. Chemical treatment is most effective when the adults emerge and climb onto the upper branches or recently pruned plants.

Table 1. Current approved chemical options

Active constituent	Insecticide group	Activity	WHP (days)	Effect on beneficials
Bifenthrin PER84972	3A	Contact	1	High
Indoxacarb PER 13289	22A	Ingestion	3	High*

^{*} Dangerous to bees. DO NOT apply when bees are actively foraging.

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