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## ***Camellia: Root weevils***

*Use Integrated Pest Management (IPM) for successful plant problem management.*

### ***Biology***

Root weevils are small flightless beetles with a snout. The adults are black or mottled and approximately 1/4" long, depending on species. They feed on the leaves by crawling up the stems and chewing semicircular or irregular notches on the leaf margins. Adults begin feeding around June to August, depending on the species, but adult feeding does little damage. Larvae are white, legless grubs about 1/4"-3/8" long and are found in the soil around the roots of affected plants. They feed on the roots and can girdle and destroy roots, causing decline or death of plants.

### ***Management Options***

#### **Non-Chemical Management**

- ~ Using a flashlight at night, hand-pick and destroy the nocturnal adult beetles.
- ~ Apply beneficial nematodes which kill the larvae. They are used as a soil drench in moist soils over 52 F (late summer to early fall in western Washington). Use sufficient water and do not apply in direct sunlight.

*Select non-chemical management options as your first choice!*

#### **Chemical Management**

***IMPORTANT: Visit Home and Garden Fact Sheets for more information on using pesticides***

Apply when first signs of notching are noticed on new leaves. Monthly application may be needed. Cease after first hard frost. Beneficial nematodes can be ordered from certain nurseries. They can be applied to control the larval stage if soil temperatures are warmer than 52 degrees F. Do not apply nematodes in direct sunlight and be sure soil is saturated with water before application.

**Listed below are examples of pesticides that are legal in Washington. Always read and follow all label directions.**

- ~ Bonide Systemic Insect Control
  - active ingredient: acephate
  - EPA reg no: 239-2461-4
- ~ Naturalis L
  - active ingredient: *Beauveria bassiana*
  - EPA reg no: 53871-9
- ~ Safer Brand BioNEEM Multi-Purpose Insecticide & Repellent Conc [Organic]
  - active ingredient: azadirachtin
  - EPA reg no: 70051-6-42697
- ~ This list may not include all products registered for this use.

*Camellia: Root weevils*

*Images*



~ Caption: Root weevil larval damage  
~ Photo by: A.L. Antonelli



~ Caption: Adult root weevil damage  
~ Photo by: E.P. Breakey



~ Caption: Root weevil larvae  
~ Photo by: A.L. Antonelli