

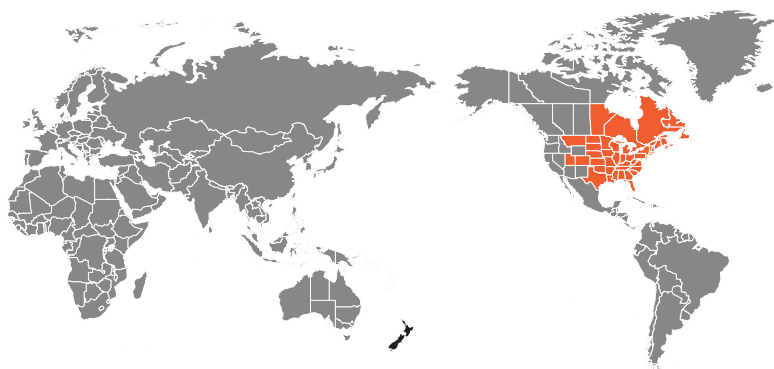
Plum curculio

Conotrachelus nenuphar

What is it? Plum curculio is a brownish-grey weevil (snout beetle) about 5mm long, with distinctive ridges on the back. It feeds on several species of summerfruit and pipfruit causing serious damage to the fruit. It is a quarantine pest in many countries including New Zealand, and where established, can be considered an active invader of fruit crops.

Distribution. Native to North America, in the US it is present in all states east of the Rocky Mountains, and the eastern provinces of Canada.

For current distribution go to <https://gd.eppo.int/taxon/CONHNE/distribution>



Morphology. Eggs are white, oval, about 0.6mm long and are laid in a cut on the fruit. The larva is white, curved and legless with a brown head, typically between 6-9mm long. The pupa is found in the soil and it varies between 4.5-7mm long. Adults are about 5mm long; a brownish-grey weevil with a small rough snout, coloured with black, grey and brown specs and four pairs of ridges on the forewings.

Biology. Plum curculio overwinters in plant debris, preferably under maple leaves. Depending on weather conditions they may have more than one generation a year. The eggs are laid in a cavity that the female bites into the skin of the fruit. As a result of this, the skin is cut into a distinctive crescent-shaped slit which partially surrounds the eggs. More than one larva can develop and feed in a single fruit, which usually drops prematurely. The time spent in the fruit varies from 15-18 days. When fully fed, the larvae leave the fruit and pupate in cells in the soil. The time spent in the soil depends on temperature and humidity but varies from 3-5 weeks, depending on weather.

Dispersal. Larvae can be transported in infested cherries, although contamination of packing material by adult weevils is considered the more likely pathway.

Symptoms. All main summerfruit crops are attractive hosts for this pest but apples are also widely affected. Symptoms are highly variable, however the main damage is caused by feeding and egg-laying. In spring time females lay eggs in young fruit, marking them with characteristic half-moon shaped scars (see photo). In spring and summer, the adults puncture the fruit causing round feeding scars (around 2-3mm wide). Adults can also cause marginal damage to leaves and blossoms. Larvae feeding causes internal pulp damage and exit holes on the skin. Most infested fruit rots and drops prematurely, although cherries rot on the trees.

Preventative measures:

- Become familiar with plum curculio in all its different life stages.
- Inspect any items that could harbour adults such as packing material or cartons.
- Monitor your orchard frequently and look for signs of plum curculio damage on the fruit.

Photo – E. Levine, The Ohio State University, Bugwood.org



23mm

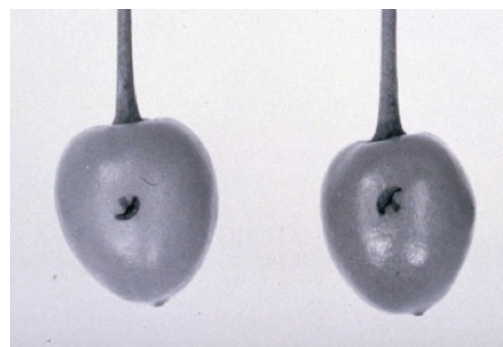
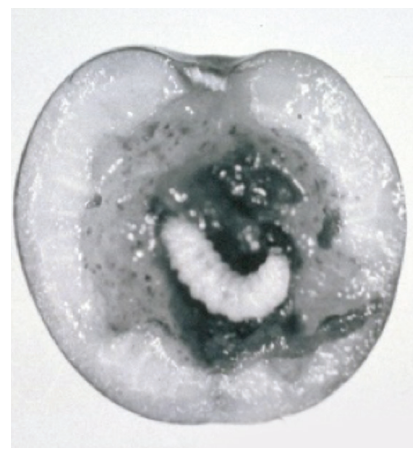


9mm



5mm

Familiarise yourself with the common pests and diseases in your orchard so you can distinguish them from the attack of exotic organisms.



Photos – P.J. Chapman, New York State Agricultural Experiment Station, Bugwood.org

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To report any suspected exotic organism, call MPI on:

0800 80 99 66