Citrus fruit borer

What is the citrus fruit borer?
The citrus fruit borer (*Citripestis sagittiferella*) is a serious exotic pest of citrus that causes direct damage to fruit through the feeding activities of larvae. Larvae cause damage by tunnelling into fruit, producing deformation and premature rotting. This leads to reduced yield and quality as well as loss of market access.

![Larval with damaged fruit and frass](image)

What does it look like?
Larvae of the citrus fruit borer are reddish-yellow in colour transitioning to a darker reddish-brown towards pupation. At their largest, larvae grow to be about 18-21 mm in length. Adults are grey-brown moths approximately 10 mm in length with a wing span of 27 mm. The wings of adult moths are yellowish-brown at the front mottled with darker scaled markings, while the hind wings are almost transparent.

![Wing of Citrus fruit borer moth](image)

What can it be confused with?
The sting marks left on fruit rind by fruit flies could be confused with the pock marks left by newly hatched citrus fruit borer larvae burrowing into the fruit. Fruit fly larvae (maggots), however, can be easily distinguished from citrus fruit borer larvae because the maggots are much smaller (6-8 mm) and are white or pale yellow in colour. Also, fruit fly larvae do not produce the loosely woven silken tube within the fruit.

The citrus fruit borer could also be confused with the orange fruit borer (*Isotenes miserana*), present in Queensland, NSW and NT, however the larvae of this borer are coloured brown on top, light grey underneath with a pair of brown stripes along the body.

![Citrus fruit borer moth on leaf](image)
What should I look for?

Look for deformed fruit which is prematurely rotting and dropping. On closer inspection of fruit, the rind will be pock marked and there could be frass or gumming outside the hole. Egg clusters may be observed on the underside of citrus fruit as well as silken tubes woven loosely around larvae as they burrow into the pulp of the fruit. Larvae may be observed dropping to the ground on silken threads in order to burrow into the soil to pupate. In addition, larvae are fast moving and will jump or twist when touched or disturbed.

How does it spread?

Adult citrus fruit borer moths are strong flyers, particularly in the evening. It is possible that wind could disperse the moths over longer distances. Eggs, larvae and pupae can be transferred to different regions on plants and plant products as well as in soil.

Where is it now?

Citrus fruit borer is not known to occur in Australia. However, it is currently found in some of our closest neighbours, including Indonesia, Malaysia, Singapore, Vietnam and Thailand.

How can I protect my orchard from the citrus fruit borer?

Check your orchard frequently for the presence of new pests and unusual symptoms. Make sure you are familiar with common citrus pests so you can tell if you see something different. Keep records of anything unusual and ensure that all staff and visitors adhere to orchard biosecurity and hygiene practices.

If you see anything unusual, call the Exotic Plant Pest Hotline

**EXOTIC PLANT PEST HOTLINE**

1800 084 881

Orange fruit damaged by larva

Citrus fruit borer larva