

Primefact

European earwig

September 2024, Primefact PUB24/845, first edition

Kevin Dodds, Development Officer – Temperate Fruits, Batlow, NSW

Jessica Fearnley, Development Officer – Temperate Fruits, Orange, NSW

European earwig (*Forficula auricularia*) has a very broad host range, feeding on a variety of horticultural and broadacre crops. Earwigs can be particularly damaging in stone fruit crops, including cherries, where they feed on stems and fruit.

Pest identification

Adult European earwigs are dark brown with yellow-brown legs and shoulders. They are 12–24 mm long and have thin, segmented antennae with a pair of pincers at the rear of the body. European earwig males have longer curved pincers and females have straight pincers (Figure 1).

Damage

European earwigs will feed on foliage, leaving irregularly shaped holes. In fruit trees, most economic loss occurs from the earwigs feeding on the fruit, causing shallow depressions that can be the perfect host for brown rot. In cherries, significant damage can occur when earwigs feed on the stems of developing fruitlets.

Monitoring

Monitoring for European earwigs can include physically inspecting the fruit and leaves as well as trapping. When inspecting fruit, look closely among fruit clusters as the adult earwigs will use these areas as shelter, particularly during daylight. Earwig activity can also be monitored by placing sections of rolled corrugated cardboard in the tree canopy and checking once or twice a week for the pest. Adult earwigs will use the cardboard rolls as shelter, making them easy to find. Monitoring pest activity can help with the timing of spraying and/or baiting programs.

Management

Cultural and physical: practising good farm hygiene will prevent the introduction and spread of European earwig. Generally, European earwig will seek shelter during the day within the tree canopy and among fruit clusters, so keeping canopies open and thinning fruit to singles (where appropriate) will help reduce the potential for fruit damage. Removing pruned branches from around the base of trees will remove alternative nesting sites. Removing drooping branches that are touching the ground will prevent earwigs from accessing the trees. Reducing the height of weeds in the inter-row will reduce shelter options for the earwigs.



Figure 1. Adult European earwigs, male (left) and female (right).

Biological: currently there are no known natural predators of the European earwig. Some birds and lizards will feed on earwigs, but this is unlikely to significantly reduce populations. In apple and pear orchards, European earwig is considered a beneficial insect because it predares on woolly apple aphids.

Chemical: check the [APVMA PubCRIS database](https://portal.apvma.gov.au/pubcris) for registered controls (<https://portal.apvma.gov.au/pubcris>).

Acknowledgements

The authors would like to thank Dr Amanda Warren-Smith for her editorial and publication skills in producing this Primefact.



© State of New South Wales through Department of Primary Industries and Regional Development 2024. You may copy, distribute, display, download and otherwise freely deal with this publication for any purpose, provided that you attribute the Department of Primary Industries and Regional Development as the owner. However, you must obtain permission if you wish to charge others for access to the publication (other than at cost); include the publication in advertising or a product for sale; modify the publication; or republish the publication on a website. You may freely link to the publication on a departmental website.

ISSN: 1832-6668

Disclaimer: The information contained in this publication is based on knowledge and understanding at the time of writing (September 2024) and may not be accurate, current or complete. The State of New South Wales (including Department of Primary Industries and Regional Development), the author and the publisher take no responsibility, and will accept no liability, for the accuracy, currency, reliability or correctness of any information included in the document (including material provided by third parties). Readers should make their own inquiries and rely on their own advice when making decisions related to material contained in this publication.