

Pacific Pests, Pathogens and Weeds - Online edition

Tonga fruit flies (171)

Summary

- *Bactrocera kirki* - abiu, avocado, guava, mango, noni, Malay apple, and more; *Bactrocera facialis* - wide, on 29 families of vegetables/fruit crops (notably, chilli, capsicum, guava); *Bactrocera xanthodes* - abiu, avocado, breadfruit, jackfruit, papaya, soursop, and more.
- Females need protein before they can lay viable eggs.
- Cultural control: growing vegetables out of season; bag fruit with paper or leaves; collect fallen fruit and destroy; harvest early (papaya); some non-hosts, e.g., some chilli varieties and pineapple in Fiji.
- Chemical control: use a commercial protein bait spray, e.g. *MPPIL*, Royal Tongalure or Bactrogel.

Common Name

There are six fruit flies in Tonga. The species of economic importance are: (i) *Bactrocera facialis* (except the Niuas); (ii) Pacific fruit fly (*Bactrocera xanthodes*), (iii) *Bactrocera kirki*; (iv) *Bactrocera* species near *passiflorae* (Niuas only); and (v) *Bactrocera distincta*.

Scientific Name

Bactrocera facialis, *Bactrocera kirki*, *Bactrocera xanthodes*, *Bactrocera passiflorae*, *Bactrocera distincta*, and *Bactrocera obscura*. *Bactrocera xanthodes* is closely related to three other species. These are: *Bactrocera paraxanthodea* in New Caledonia, and *Bactrocera neoxanthodes* in Vanuatu, and a species not yet described from Samoa



Photo 1. *Bactrocera kirki*.



Photo 2. *Bactrocera facialis*.



Photo 4. Pacific fruit fly, *Bactrocera xanthodes*, laying eggs.



Photo 3. *Bactrocera xanthodes*.



Photo 5. Fruit fly eggs.



Photo 6. Fruit fly larvae or maggots.



Photo 7. Fruit fly pupae.



Photo 8. Newspaper with edges folded and stapled to form a bag in which to insert fruit to protect it from fruit flies.



Photo 9. Banana leaves used to wrap a fruit bunch to prevent attack by fruit flies, other pests, and to promote uniform ripening, in Papua New Guinea.

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Information (and photos) *Fruit flies in Tonga* (2001), SPC Pest Advisory Leaflet 41 (<https://lrd.spc.int/pest-advisory-leaflet/>); and from *Fruit fly control methods for Pacific island countries and territories* (2001), SPC Pest Advisory Leaflet 40. (https://lrd.spc.int/pubs/cat_view/469-pest-advisory-leaflets).

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