

Samoa fruit flies (169)

Summary

- *Bactrocera kirki* – abiu, avocado, guava, mango, noni, Malay apple, and more; and *B. xanthodes* – abiu, avocado, breadfruit, jackfruit, papaya, soursop, and more. Both, are of economic importance. A third, *B. distincta*, is a minor pest of star apple.
- 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., chilli, pineapple.
- Chemical control: use a commercial protein bait spray, e.g. *MPPIL*, Royal Tongalure or Bactrogel.

Common Name

There are seven species of fruit flies in Samoa. Two fruit flies are of major economic importance: *Bactrocera kirki* (no common name) and the Pacific fruit fly (*Bactrocera xanthodes*), a third, *Bactrocera distincta*, is a minor pest of star apple (*Chrysophyllum cainito*).

Scientific Name

Bactrocera kirki, *Bactrocera xanthodes*, *Bactrocera distincta*, *Bactrocera obscura*, *Bactrocera aenigmatica*, *Bactrocera samoae*, and a new species similar to *Bactrocera paraxanthodes*. *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 in Samoa.



Photo 1. *Bactrocera kirki*.



Photo 2. Pacific fruit fly, *Bactrocera xanthodes*.



Photo 3. Pacific fruit fly, *Bactrocera xanthodes*, laying eggs.



Photo 4. Fruit fly eggs.



Photo 5. Fruit fly larvae or maggots.



Photo 6. Fruit fly pupae.



Photo 7. Newspaper with edges folded and stapled to form a bag in which to insert fruit to protect it from fruit flies.



Photo 8. 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 Samoa* (2002), SPC Pest Advisory Leaflet 32 (<https://lrd.spc.int/pest-advisory-leaflet?start=10>); and from *Fruit fly control methods for Pacific island countries and territories* (2001), SPC Pest Advisory Leaflet 40. (https://lrd.spc.int/pubs/ca_view/469-pest-advisory-leaflets).

Produced with support from the Australian Centre for International Agricultural Research under project PC/2010/090: *Strengthening integrated crop management research in the Pacific islands in support of sustainable intensification of high-value crop production*, implemented by the University of Queensland and the Secretariat of the Pacific Community.

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