Pacific Pests, Pathogens, Weeds & Pesticides - Online edition

Fiji fruit flies (170)

Summary

- *Bactrocera kirki* - guava, mango, avocado; *Bactrocera passiflorae* - guava, citrus, mango, kavika; *Bactrocera xanthodes* - breadfruit, jackfruit, papaya; many more hosts, and fruit fly species occur.
- Note, *Bactrocera kirki* is present only on Rotuma.
- Females need protein before they can lay viable eggs.
- Cultural control: bag fruit with paper or leaves; collect fallen fruit and destroy; harvest early (banana and papaya); some non-hosts, e.g., chilli, pineapple.
- Chemical control: use a commercial protein bait spray, e.g. *MPPIL*, Royal Tongalure or Bactrogel.

Photo 1. *Bactrocera kirki*.

Photo 2. Fiji fruit fly, *Bactrocera passiflorae*.

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

Common Name

There are seven fruit flies in Fiji: The species of economic importance are: (i) *Bactrocera kirki* (no common name), (ii) *Bactrocera xanthodes* (the Pacific fruit fly), (iii) *Bactrocera passiflorae* (Fijian fruit fly), (iv) *Bactrocera distincta*, and (v) *Bactrocera* species near *passiflorae*. *Bactrocera gnetum* and *Bactrocera obscura* are not of economic importance.

Scientific Name

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

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

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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[1]Information from Swaine G (1971) *Agricultural Zoology in Fiji.* Her Majesty's Stationery Office. London; and (information and photos) *Fruit flies in Fiji Islands* (2000), SPC Pest Advisory Leaflet 28. (https://lrd.spc.int/pest-advisory-leaflet?start=15); 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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