



No. 18

15 December 1997

**NEW FRUIT FLY INCURSION IN DARWIN, NORTHERN AUSTRALIA  
*BACTROCERA PHILIPPINENSIS***

On 15 December 1997, the Australian Quarantine and Inspection Service notified trading partners and other countries and territories in the Pacific region that an incursion of an exotic fruit fly was recorded in Darwin, Northern Territory of Australia. Initially, the species was identified by the Queensland Department of Primary Industries as Asian papaya fruit fly (*Bactrocera papayae* Drew and Hancock). Subsequently, on 18 December, specimens from traps in Darwin, examined by Professor Richard Drew of Griffith University, Brisbane, were identified as *Bactrocera philippinensis* Drew and Hancock.

*B. philippinensis* belongs to the *dorsalis* complex of fruit flies (family Tephritidae) and is closely related to Oriental fruit fly (*B. dorsalis* (Hendel)), Asian papaya fruit fly, and carambola fruit fly (*B. carambolae* Drew and Hancock). The *dorsalis* complex in South-East Asia and the Pacific comprises about 52 species. The distribution of *B. philippinensis* is limited to Philippines. It has been recorded from *Artocarpus* spp. (Moraceae), papaya (Caricaceae), *Syzygium* spp. (Myrtaceae), mango (Anacardiaceae), and wild fruits belonging to the family Sapotaceae. It is likely to have a wide host range, similar to that of Oriental fruit fly and, therefore, is a very serious pest species.

The specimens were collected from methyl eugenol baited traps that were part of the North Australian Quarantine Strategy, an early, warning quarantine surveillance system across Northern Australia. One specimen was recorded on 19 November, with a further two specimens being recorded from the same trap on 20 November. Up to 18 December, there were 79 specimens collected from traps in the Darwin area and one fly from Humpty Doo, 42km from the centre of the outbreak.

./2



A quarantine zone of 50km radius around the original detection was declared. Restrictions on the movement of host fruits and vegetables from the quarantine zone were imposed. A programme of male annihilation using methyl eugenol- and malathion-soaked compressed fibre-board blocks nailed to one host tree in each suburban house yard was commenced immediately. Protein bait spray has been applied to host plants in the incursion area.

An active public awareness campaign has been commenced. Sniffer dogs and x-ray machines are being used at bus depots and the airport to limit the movement of fresh fruits and vegetables from the quarantine zone.

There is very little direct traffic between the Northern Territory and the Pacific Island countries and territories, so there is a low risk of spread to this region. Nevertheless, quarantine vigilance needs to be maintained or even increased, particularly related to passenger arrivals and quarantine surveillance. The quick response to this incursion was possible only because of the effectiveness of the early warning provided by the quarantine surveillance system.

For further information, contact:

Allan Allwood  
Chief Technical Advisor  
Project on Regional Management of Fruit Flies in the Pacific South Pacific Commission  
Private Mail Bag  
SUVA  
Fiji  
Tel: (679) 400 344  
Fax: (679) 322 800 or (679) 370 021  
Email: [allwood@is.com.fj](mailto:allwood@is.com.fj) or [mariak@spc.org.fj](mailto:mariak@spc.org.fj)

