

Research Directions

Office of Research Services

Goodbye Fruit Fly

Professor Andrew Beattie from the Centre for Plant and Food Science is exploring practical solutions for fruit fly management in Papua New Guinea (PNG) in collaboration with chief investigator Mr Andrew Jessup from the NSW Department of Primary Industries and researchers from Queensland University of Technology and the National Agriculture Quarantine and Inspection Authority PNG, through funding from the Australian Centre for International Agricultural Research.



‘Fruit flies are a major pest of horticulture in the South Pacific’ says Professor Beattie. ‘They lay their eggs in fruit and vegetables where the larvae cause direct damage. In PNG, where growers are generally small holders who routinely market produce that is excess to family or village needs, fruit infestation can affect the grower’s income significantly. Fruit flies are also one of Australia’s major insect pests and several of PNG’s most important pest flies are also pests in Australia. This collaborative project will, therefore, benefit both PNG and Australian growers.’

Working closely with agricultural, quarantine, research, industry and community groups in Papua New Guinea, the project team aims to improve the yields and quality of common crops such as tomatoes, mangoes and bananas by implementing various strategies to control fruit flies. This will involve analysing crop and fruit fly distribution patterns, and testing control methods such as use of protein baits containing an insecticide, fruit tree netting, bagging of susceptible fruit, fly trapping and mineral oil sprays – the latter in conjunction with baits. The baits attract flies and their use minimises the amount of pesticides needed to prevent damage to crops while the mineral oils repel the flies. Economic assessments of single and combined fruit fly control strategies will also be undertaken.

The project will develop and implement a combination of control approaches to give the best biological and economic outcomes specifically for PNG conditions. This will improve the livelihood, health and social well-being of the people of PNG by increasing fruit and vegetable production volumes and increasing grower’s incomes. Knowledge gained through this research will be applicable to fruit fly issues in the Australian agriculture industry, and may assist in protecting Australia’s borders from further fruit fly invasions.

Project Title: Fruit fly management in Papua New Guinea

Funding has been set at: \$40,359

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