

TERMINAL REPORT

(MAY 1997 – DECEMBER 2000)

**FAO/AusAID/UNDP/SPC
Project RAS/97/331 on:**

REGIONAL MANAGEMENT OF FRUIT FLIES IN THE PACIFIC

Part 6: STEERING COMMITTEE RECOMMENDATIONS

IMPLEMENTATION OF RECOMMENDATIONS FROM STEERING COMMITTEE MEETINGS AND MID-TERM REVIEW

FIRST STEERING COMMITTEE MEETING 15-16 SEPTEMBER 1997

1. Trapping and Host Surveys. 1.1. Quarantine surveillance be established and maintained in all PICTs so that trade in fresh fruits and vegetables is not jeopardized. **IMPLEMENTED.** 1.2. Quarantine surveillance for fruit flies be based on, at least, trapping and regular surveys of high risk fruits and vegetables. **IMPLEMENTED.** 1.3. The RMFFP will act as a focal point for obtaining confirmations of identification of fruit flies from PICTs, when necessary. **IMPLEMENTED.** 1.4. The CTA of the RMFFP will provide on request estimates of the cost of running continuous quarantine surveillance. **PARTLY IMPLEMENTED.** 1.5. The Plant Protection Advisor of SPC will follow up on the status of the proposed review of Animal Health Quarantine legislation in the hope that this may provide guidance to assist PICTs that have outdated or no legislation to permit quarantine surveillance and emergency response activities to take place effectively. **PARTLY IMPLEMENTED.**
2. Protein Bait Spray. It is recommended that Tonga and Fiji continue be the focal points of Protein Bait Spray development and the technology be transferred to other PICTs once results are finalized. **IMPLEMENTED,** Vanuatu has since also become a focal point.
3. Pest Advisory Leaflets. 3.1. It was recommended that generalized advisory leaflets of species be produced with countries focusing on production of leaflets that would include species present and control measures. Including the control will be useful to Quarantine and Extension Officers. **NOT IMPLEMENTED,** because PAL format has been changed in subsequent meeting. 3.2. It is recommended that the RMFFP hires a professional photographer to compile photographs of as many species of Pacific fruit flies as possible. **IMPLEMENTED.**
4. Promotion of bagging techniques: It is recommended that the use of physical barriers, such as paper bags, be demonstrated and actively promoted as means of controlling fruit flies in all PICTs. **IMPLEMENTED.**
5. Host Status Testing: 5.1. It was recommended that Australia (AQIS) be approached to obtain a response on the acceptance or non-acceptance of the non-host status testing procedure and results. **PARTLY IMPLEMENTED,** but no clear response from AQIS up to now. 5.2. The committee recommended that AQIS representatives be invited to Fiji to discuss this concept and other issues related to quarantine treatments and procedures relevant to the export of fresh fruits and vegetables. **NOT IMPLEMENTED.**
6. Heat treatments: 6.1. The committee recommended that heat tolerance studies be carried out on economically important species of fruit flies in FSM, Solomon Islands, Vanuatu, PNG, and Samoa, and that these data be combined with data from Cook Islands, Fiji, Tonga, Hawaii, and Australia to form the basis for a regional database. **PARTLY IMPLEMENTED,** data generated in Vanuatu and Samoa, no further work on regional database. 6.2. The committee also recommended that the RMFFP will assist the PICTs with technical backstopping on quarantine issues and may, if requested by governments, take part in the negotiation protocols. **ONGOING.**

7. Emergency Response Planning: 7.1. The committee recommended that the RMFFP develop a framework for ERPs for the region, that the PICTs be responsible for the documentation of their own ERPs with technical assistance from the RMFFP and SPC, which role should be one of facilitation and harmonization. **IMPLEMENTED AND ONGOING.** Fiji ERP is a model and PICTs in various stages of advancement. 7.2. To initiate a quick response in the event of an outbreak of an exotic fruit fly species, the committee recommended that the CTA identifies a method of setting up small stockpiles of supplies and materials that are readily available to all PICTs on the basis of replacement. **IMPLEMENTED:** stockpile purchased and will be stored at Koronivia Station in Fiji Islands. 7.3. The committee recommended that planning for a regional training on fruit fly eradication be done in Nauru. **IMPLEMENTED.**
8. Data entry and analyses: The committee recommended that , as the database using R-base software is not a user friendly program and, as a consequence, is not readily usable by PICTs, it should be simplified to a spreadsheet format and adopted for all future data input regionally. **IMPLEMENTED.**
9. Manual on Fruit Flies, Proceedings of Symposium and Scientific Papers: 9.1. The committee recommended that national staff be strongly encouraged to publish results of research in reputable scientific journals. **PARTLY IMPLEMENTED.** 9.2. The committee recommended that the CTA approaches ACIAR to obtain reference collections of fruit flies from the PICTs for each country, provided that curation facilities are available. **IMPLEMENTED.** ACIAR provided collections to Vanuatu, Solomon Islands and PNG, and RMFFP has put together reference collections that will soon be distributed to PICTs.
10. Training: 10.1. The committee recommended that there is a need for training on Pest Risk Analysis (PRA), but this needs to be practical, hands-on training using practical examples of how to conduct PRAs at various levels. **IMPLEMENTED,** SPC-PPS ran a PRA workshop in 1999. 10.2. The committee recommended that the Peacesat "Flynet" sessions be expanded to include all countries that have the facility. **NOT IMPLEMENTED,** as most Peacesat stations are no longer functional.
11. Consultancies. The committee recommended a consultancy to assess the economic impact of the adoption of fruit fly management techniques on production and export of fruit and vegetables and on the alleviation of poverty and rural unemployment. **IMPLEMENTED.**
12. Enhancement of technical capacity/sustainability. Several countries recommended that national staff trained in fruit flies may be used for technical backstopping in other countries on a short term basis and, at the same time, gain valuable international/regional experience in fruit fly work. **IMPLEMENTED.**

SECOND STEERING COMMITTEE MEETING (4 MARCH 1998)

The Steering Committee recommended that:-

1. Training on fruit fly techniques and management for Nauru national staff be conducted after April, 1998. **IMPLEMENTED,** in late 1998 and 1999.
2. Dried specimens of Oriental fruit fly and melon fly be provided to all quarantine services so that these specimens can be purposely placed in trap catches for auditing quarantine surveillance trapping systems. **NOT IMPLEMENTED.**
3. Professor Richard Drew of Griffith University, Brisbane, continue to be the reference entomologist for the identification of exotic fruit fly specimens for the PICTs. **IMPLEMENTED.**
4. The commitment to quarantine surveillance by Governments and Administrations of the PICTs be on-going and of a high priority. **IMPLEMENTED.**
5. The RMFFP urgently arrange for high quality photographs of the economically important fruit fly species to be taken in Fiji, Tonga, New Caledonia, Solomon Islands, Samoa and later in the Cook Islands, Nauru and PNG. **IMPLEMENTED.**
6. The RMFFP and New Zealand's MAF Regulatory Authority develop a Memorandum of Understanding related to supply, on a replacement basis, of materials to commence an Emergency Response should an exotic fruit fly outbreak occur in a PICT. **NOT IMPLEMENTED,** instead RMFFP has purchased a stock-pile stored in Fiji.

7. The eradication programme for fruit flies in Nauru commence in July, 1998, subject to availability of funding and commitment of the Nauru Government to establishing a Plant Protection and Agricultural Quarantine service or its equivalent. **IMPLEMENTED**, though Nauru quarantine service not yet active.
8. National plant protection staff, together with the RMFFP, actively encourage bagging of fruit as a technique for control of fruit flies and, where appropriate, demonstrate this technique at all levels of production. **IMPLEMENTED**.
9. National staff be trained in fruit fly technologies be used for technical backstopping in other countries e.g. Tonga staff for bait spray experiment in Niue, Fiji and New Caledonia staff in Vanuatu or Solomon Islands for generation of heat tolerance data of immature stages of fruit flies, and French Polynesia staff for the eradication effort in Nauru. **IMPLEMENTED**.
10. The RMFFP write to Governments and regional organizations to maintain PEACESAT sites and operators to assist with information exchange. **IMPLEMENTED**, but Peacesat stations no longer working in most PICTs.
11. The Chairperson of the PEACESAT 'FLYNET' session circulate the minutes of the session to all countries. **NO LONGER IMPLEMENTED**.
12. As Emergency Response Plans are developed, they be submitted to the respective governments to obtain commitments in principle to carry out a response in the event of an incursion or outbreak of an exotic fruit fly. **PARTIALLY IMPLEMENTED**.
13. Social impacts be included in the consultancy to determine the benefits of adopting fruit fly management practices on rural employment, poverty alleviation and food security at all levels of production. **IMPLEMENTED**.
14. The Standard for Determining non-Host Status as a Quarantine Treatment (MAF Regulatory Authority Standard 150.02.02) be used as a basis for the development of a regional standard, then taken to PPPO for approval as a regional standard and PPPO to submit it to IPPPC to endorse it as an international standard. **PARTLY IMPLEMENTED**.
15. The RMFFP continues to supply materials for culturing fruit flies to PICTs and that a sunset date be determined, December 1998, at which national Governments become responsible for their own purchasing. **PARTLY IMPLEMENTED**.

MID-TERM REVIEW 6-7 OCTOBER 1998

The reviewer recommended:

1. That the RMFFP and SPC actively encourage all PICTs to continue to support fully their activities in quarantine surveillance and fruit fly research and the regional approach to the control of fruit flies in the Pacific region. **IMPLEMENTED**.
2. That each national Government or Administration, in collaboration with the RMFFP and SPC, prepare Emergency Response Plans, Fruit Fly Procedures Manuals, and Fruit Fly Status Reports prior to the termination of the RMFFP project. **PARTLY IMPLEMENTED**.
3. That, to ensure ready availability of protein autolysate for fruit fly control within the Region, the RMFFP approach the private sector to establish additional commercial beer yeast waste conversion facilities. **IMPLEMENTED**.
4. That, to ensure current and potential importing countries have confidence in the quarantine procedures implemented by each PICT, these be audited from time to time by an appropriate organisation, e.g., New Zealand Ministry of Agriculture and Forestry – Regulatory Authority, Australian Quarantine and Inspection Service (AQIS), or Quarantine Authorities from the PICTs. **PARTLY IMPLEMENTED**.
5. That, in order to enhance food security and national wealth further, the RMFFP and SPC, in liaison with the Forum Secretariat where appropriate, continue to encourage PICTs to seek export opportunities for their horticultural produce. **IMPLEMENTED**, mostly by countries themselves.

6. That each PICT be encouraged by the RMFFP to develop cost benefit data applicable to fruit fly control for presentation to the Terminal Review of the current project. **PARTLY IMPLEMENTED.**
7. That the RMFFP and SPC continue to support Government and non-government extension activities to make commercial and village/subsistence sectors aware of the benefits of, and approaches to, fruit fly control. **IMPLEMENTED.**
8. That the RMFFP project, and when it ceases SPC, fosters the process of utilizing expertise now available within individual PICTs to assist with problems arising elsewhere within the PICT community. **IMPLEMENTED.**
9. That all workers within the RMFFP project and the national Governments continue to publish the results of their research in reputable journals. **PARTLY IMPLEMENTED.**
10. That the RMFFP, in association with ACIAR funded projects, consolidate the data relating to all aspects of the fruit fly projects which currently exist in several computerised data bases in one 'user friendly' database in a Pacific location (e.g., SPC), and protocols governing access to the data base be developed and agreed to by all parties, namely SPC, ACIAR, Griffith University, Queensland Department of Primary Industries and the national Governments and Administrations. **IMPLEMENTATION IN PROCESS.**
11. That, as a consequence of the breakdown of the PEACESAT communication facility, SPC investigate alternative means for the communication of fruit fly news, research and activities between the fruit fly workers of the Pacific countries and territories as a high priority. **IMPLEMENTED.** SPC-PPS has since established a pest information newsletter that is regularly released by email.
12. That in mid-2001, there be a comprehensive review to determine whether, in the absence of the RMFFP, individual countries have been able to sustain the necessary level of activity in fruit fly research and development and to determine what, if any, additional support may be necessary. **NOT IMPLEMENTED.**
13. That SPC explore the possibility of some additional financial support for the PNG program and perhaps programs in other PICTs after April 2000, e.g., Solomon Islands activities and the Palau eradication campaign for Oriental fruit fly, with appropriate organisations, e.g., AusAID, New Zealand Overseas Development Agency, ACIAR, the Australian Quarantine and Inspection Service. **IMPLEMENTED.**

THIRD STEERING COMMITTEE MEETING 9-10 FEBRUARY 2000

The Steering Committee recommended that:

1. RMFFP investigate the feasibility and costs of running separate meetings for the four sub-regional groups that make up the Steering Committee, combined with less frequent Steering Committee Meetings, in an effort to ensure that there is improved consultation on the fruit fly management needs of each PICT. The sub-regional meetings may have to piggyback on other sub-regional or regional technical meetings. **IMPLEMENTED.** It has been decided that Steering Committee Meetings will be run back-to-back with SPC meetings.
2. RMFFP implements the Work Plan for 2000, as submitted, with cognizance of the changes recommended below. **IMPLEMENTED.**
3. The Pest Advisory Leaflet on Fruit Flies in Vanuatu is translated into French. **IMPLEMENTED.**
4. The Work Plan for FSM is revised to reduce the activities to quarantine surveillance in all States, assessment of parasitoid establishment, and maintenance of two laboratory cages of mango fly for the purpose of rearing parasitoids. **IMPLEMENTED.**
5. The Work Plan for Solomon Islands be modified to focus on re-establishing quarantine surveillance in the Western Province islands, particularly in those islands adjacent to Bougainville, PNG, maintaining laboratory colonies at the Malaria Research Centre, undertaking relevant non-host studies, and field control using protein bait sprays and carrying out heat tolerance studies on the immature stages of *Dacus solomonensis*. **IMPLEMENTED.** Although political crisis has reduced activities to minimum level.

6. Solomon Island Government submits to SPC a proposal for quarantine surveillance for exotic fruit flies, with particular reference to the areas adjacent to the Solomon Islands-PNG border by 31 March 2000. **PARTLY IMPLEMENTED.**
7. RMFFP liaises with Prof. Drew of Griffith University, Brisbane, to encourage the completion and prompt publication of the taxonomic descriptions of the species of fruit flies in the Pacific region (particularly in Fiji, Samoa, Tuvalu, Tokelau, Vanuatu and Solomon Islands), whose identities are currently designated as 'Bactrocera new species near' (e.g., *B. new species near paraxanthodes*). **MOSTLY IMPLEMENTED.** Manuscripts for Vanuatu & Solomon Islands submitted to journals. *B. passiflorae* complex will be done once host records are available.
8. Data on the distribution of banana fruit fly (*B. musae*) in Vanuatu, Solomon Islands and the island provinces of PNG be verified and published as soon as possible. **IMPLEMENTED.** Confirmed absent from Solomon Islands and Vanuatu by supporting ACIAR data. Comprehensive survey in East New Britain done.
9. Regular host surveys of ripe banana and plantain fruits be carried out in Vanuatu, Solomon Islands and the island provinces of PNG to substantiate the absence of banana fruit fly from these areas and as part of quarantine surveillance. **PARTLY IMPLEMENTED.**
10. PICT Governments and Administrations assume the financial responsibility for national quarantine surveillance programmes as of 1 January 2001, with technical support from the RMFFP and other major partners. **PARTLY IMPLEMENTED,** in some PICTs.
11. SPC, in consultation with national Departments of Agriculture, actively promote the raising of the priority of Agricultural Disasters, created by the incursion of exotic fruit flies and other pests, to the same level of importance as that of Natural Disasters and that Agricultural Disasters be incorporated into the national Natural Disaster programmes to ensure adequate funding is available, when required. **PARTLY IMPLEMENTED.** SPC Plant Protection Service and Animal Health in process of getting a general ERP for all pests and animal diseases in place. Planning underway to have regional workshops in 2001 for Polynesian countries, French Territories, Micronesian and Melanesian countries.
12. RMFFP continues to actively provide assistance to PICTs in developing their national and regional public awareness programmes related to fruit flies, their management and their importance to fresh fruit and vegetable production and quarantine. **IMPLEMENTED AND ONGOING.**
13. RMFFP provides technical advice and support for the current fruit fly eradication programmes in French Polynesia and Nauru and for the possible future programmes in Palau, Guam and Commonwealth of the Northern Mariana Islands (CNMI). The assistance is to include economic feasibility studies for eradication of oriental fruit fly in Palau and melon fly in Guam and CNMI. **IMPLEMENTED.**
14. As a flow-on from the successful Nauru Fruit Fly Eradication Programme, the establishment of a small plant nursery to supply improved varieties of tropical fruit trees to the people of Nauru be strongly supported and that UNDP be approached for funding support. **IMPLEMENTED:** Tree nursery will be established by Nauru Secondary School students, with involvement from Nelson Tamakin.
15. SPC support the setting up on an Agricultural Quarantine Service in Nauru, including the training of three Quarantine Officers funded by the RMFFP. **IMPLEMENTED.** Awaiting confirmation by Secretary of Department of Industry and Economic Development. Funding support from Plant Protection in Micronesia and RMFFP.
16. RMFFP prepares a cost estimate for emergency responses and eradication programmes on a per square kilometre basis and provides the costs of, and contacts for, quarantine surveillance supplies to the PICTs by 31 March 2000. **PARTLY IMPLEMENTED.** Overall cost estimates and budgets provided for Palau, French Polynesia, Nauru and Fiji Islands.
17. RMFFP contacts Rhône Poulenc Rural (Australia) [now Aventis CropScience] for information on the commercial availability and cost of Fipronil and the Fipronil/Xanthane Gum formulations and actively encourage the registration of these formulations for male annihilation and protein bait sprays for fruit fly management, respectively. **ONGOING.** The Fipronil gel formulation will soon be registered for commercial use in Australia.

18. RMFFP be responsible for regular technical editing and updating of information to be entered into the Pacific Fruit Fly WebSite, with inputs into the country pages being made by the PICTs. **ONGOING.**
19. The WebSite be modified to include pages on Success Stories and News Updates and a disclaimer to protect SPC and other contributors. **PARTLY IMPLEMENTED.**
20. PICTs investigate markets for fresh fruit and vegetables in a range of countries, as well as New Zealand, and that these investigations be done before establishing expensive facilities for forced hot air quarantine treatments. **PARTLY IMPLEMENTED.**
21. PICTs share the results of research into heat tolerances of immature stages of fruit flies and confirmatory quarantine heat treatments and the development of quarantine pathways or work plans for export of fresh commodities, to enhance the prospects for harmonization of treatment procedures and parameters, wherever possible. **IMPLEMENTED.**
22. In preparation for the possible introduction of forced hot air quarantine treatment technology into French Polynesia, RMFFP facilitates training of staff from French Polynesia in this technology in New Caledonia, subject to the agreement by the New Caledonia Chamber of Agriculture, or in other countries that have this technology, e.g., Cook Islands, Fiji, Tonga. **NOT IMPLEMENTED**, but may be carried out upon request by PICTs.
23. The Secretariat of the Pacific Plant Protection Organization (PPPO) facilitates access to Pacific Rim and other relevant markets for PICT fresh fruit and vegetables based on generic heat treatments and non-host status with authorities in the importing countries concerned. If appropriate, market access negotiations should involve other agencies such as the Forum Secretariat and its Trade Commissions and be addressed by raising the problems in gaining market access in the RPPO, ICPM and WTO forums. **PARTLY IMPLEMENTED.** Meeting with importing countries scheduled for March 2001, at PPPO meeting.
24. Samoa organizes training on fruit fly management for new staff from Samoa and American Samoa and from Niue and Cook Islands with support from the RMFFP, before 31 May 2000. The SPC Plant Protection Service will provide funding for participation from Cook Islands and Niue. **IMPLEMENTED.**
25. PICTs request staff, who have received overseas training on fruit fly management, to pass the newly gained knowledge onto other national staff, in order to improve national technical capacity, to avoid disruption to programmes caused by staff turn-over and to enhance the prospects of sustainability. **ONGOING.**