

REPORT

FIRST STEERING COMMITTEE MEETING

PROJECT ON REGIONAL MANAGEMENT

OF

FRUIT FLIES IN THE PACIFIC

Nadi, Fiji : 15-16 September, 1997

(Reference : RAS/97/331 - RMFFP Report No. 3)

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INTRODUCTION

The Project on Regional Management of Fruit Flies in the Pacific (RMFFP) (RAS/97/33) was initiated on 22 May, 1997. It was set up to adopt a regional approach to the management of fruit flies. Establishing effective, regional quarantine surveillance, as early warning systems to record incursions or establishment of exotic fruit fly species is being given high priority. The RMFFP will design and document emergency response procedures to eradicate outbreaks of exotic fruit flies. The project will also transfer technologies on field control of fruit flies developed during the first two phases of the project to all Pacific Island countries and territories (PICTs). A specific multi-disciplinary approach to managing fruit flies in PNG has already been initiated. Training of national staff and the appointment of an Entomologist (Fruit Flies) within the Plant Protection Service of the South Pacific Commission (SPC) will guarantee the sustainability of activities on fruit flies within the region. Involvement of the private sector will facilitate continued funding of research and quarantine surveillance and increase the prospects of sustainability.

A Steering Committee was set up to ensure that the needs of, and inputs from, the PICTs are taken into account during the process of developing work plans. This report constitutes the minutes of the first meeting of the Steering Committee for the RMFFP held in Nadi on 15-16 September, 1997.

PURPOSE AND COMPOSITION OF STEERING COMMITTEE (Agenda Item 2)

It was agreed that the purpose of the Steering Committee is to:-

- review and advise on project activities to be performed;
- recommend changes to project activities in accordance with national and regional needs and within the scope of the Project Document;
- recommend time-frames for the commencement and completion of activities; and
- comment on national human and financial resources required to perform the activities.

As stated in the Project Document (page 27), the Steering Committee will consist of:-

- representatives from the donor agencies, AusAID, UNDP and the New Zealand Government;
- two representatives from each of four sub-regional Groups (see below); and
- a representative from each of FAO (implementing agency), SPC (executing agency) and the project management.

The sub-regional Groups are made up as follows, with the countries underlined representing their Group:-

- Group 1 - PNG, Solomon Islands, Vanuatu.

- Group 2 - Fiji, Tonga, Samoa, American Samoa, Tuvalu, Tokelau, Niue and Cook Islands.
- Group 3 - FSM, Marshall Islands, Kiribati, Commonwealth of Northern Mariana Islands, Guam, Palau and Nauru.
- Group 4 - French Polynesia, New Caledonia and Wallis and Futuna.

The New Zealand Government could not be represented due to heavy commitments of staff at the High Commission and the Forum Secretariat meeting. The FSM Government representative did not attend. A representative from Nauru attended on Nauru's request because of the proposed eradication programme for melon fly and Oriental fruit fly to start in 1998 in Nauru. Attachment C contains a list of the delegates who attended the meeting.

SUMMARY OF DISCUSSIONS AND RECOMMENDATIONS

A revised agenda is attached as Attachment A.

The Chief Technical Advisor of the RMFFP (CTA) provided to the Governments of all PICTs in advance, a tabulated list of project activities that may be carried out in each country. A revised version of this is attached as Attachment B. The original list formed the basis of discussion at this meeting.

Agenda Item 1 : Adoption of Agenda

Two items were added to the Agenda:

- Under Emergency Response Plan, a presentation on Generic Incursion Management Plan (GIMP).
- Agenda Item 6 changes to 'National Staff Commitment/Availability' and 'Summary of Recommendations and the Date of the Next Steering Committee Meeting' changes to Agenda Item 7.

Agenda Item 3 : Presentation - Fruit Flies in the Pacific : What are the problems? What are the solutions

The CTA summarized the importance of fruit flies globally and regionally. Over 4,500 species of fruit flies (family Tephritidae) occur worldwide, with about 50 species being categorised as major pest species. More than 30 species are classed as minor pest species. Of the 50 major pest species, 22 occur in the Pacific region.

Fruit flies in the region are responsible for significant losses to fresh fruit and vegetable production. For example, 97-100% of capsicum and chilli may be lost to fruit fly damage in Tonga; over 90% of guava in Vanuatu and FSM; and 70% of breadfruit in some islands of Kiribati. Reduction of this damage to less than 10% will greatly increase fruit and vegetable availability for local consumption or overseas markets, positively affecting poverty alleviation and rural employment. The presence of fruit flies adversely affect overseas trade.

Fruit flies breach quarantine barriers regularly and there is evidence that the frequency of incursions is increasing as tourist movements increase. Outbreaks in the Pacific in the last 5-10 years includes Oriental fruit fly in Nauru (1985), Palau (1996) and French Polynesia (1995-96), Mediterranean fruit fly in New Zealand (1996), papaya fruit fly into PNG (1992) and into Australia (1993) and melon fly into Nauru and Western Province of Solomon Islands (1984-85), into Guadalcanal and several other Provinces (1995) and into Torres Strait Islands (1997). The increased interceptions justify the RMFFP's regional approach to fruit fly management.

Options for field control of fruit flies, based on destruction of crop residues, bagging of fruit, the use of protein bait sprays and conserving levels of parasitism were presented. Delegates were also briefed on options for quarantine treatments, based on area of freedom, non-host status of fruits and vegetables at specific stages of maturity and forced hot air treatment.

Agenda Item 4.1 - 4.5 : Trapping and Host Surveys

Table 1 summarizes the number and distribution of trapping sites in the PICTs. This information was collated during the meeting from reports by delegates and indicates the deficiencies in quarantine surveillance regionally.

Table 1: Numbers and distributions of fruit fly trapping sites in the Pacific Island countries and territories (September, 1997).

| Country | Number of Trap Sites | No. of Islands Covered |
|------------------|-----------------------------|-------------------------------|
| Cook Islands | 27 | 6 |
| Fiji | 64 | 4 |
| Tonga | 25 | 5 |
| Samoa | 32 | 2 |
| FSM | 54 | 6 |
| Solomon Islands | 64 | 23 |
| Vanuatu | 38 | 11 |
| American Samoa | | |
| CNMI | 200 (3) | 3 |
| French Polynesia | 169 (1) | 5 |
| Guam | 10 (2) | 1 |
| | 20-25 (3) | 1 |
| Kiribati | 3 | 1 |
| Marshall Islands | | |
| Nauru | 5 (4) | 1 |
| New Caledonia | 45 | 3 |
| Niue | (5) | |
| Palau | 1 | 1 |
| Papua New Guinea | 50-60 (6) | 1 |

Pitcairn

Wallis and Futuna

4-5 (7)

2

Notes:

- (1) - The large number of trapping sites is a result of the eradication programme for Oriental fruit fly.
- (2) - Methyl eugenol traps.
- (3) - Cue-lure traps.
- (4) - Part of the Agriculture Development Programme being carried out by the Republic of China (Taiwan) Agricultural Technical Mission.
- (5) - Cue-lure traps were established but not methyl eugenol - needs to be confirmed.
- (6) - Traps set up by ACIAR and RMFFP and by the AQIS North Australian Quarantine Strategy.
- (7) - Traps were set up, but probably need to be re-established.

Countries that currently carry out host surveys either for fauna cataloguing or quarantine surveillance are Cook Islands, FSM, Fiji, Solomon Islands, Tonga, French Polynesia, New Caledonia, Samoa and Vanuatu.

Comments by Group delegates on quarantine surveillance in their respective countries and sub-regions were made and the major points are summarized below:-

- Guam - Quarantine surveillance is ongoing using Cure-lure and methyl eugenol. There is a need to increase the number of trimedlure trap sites. Emergency response planning, including provision of stockpiles of supplies (traps and lures) has been commenced. Host fruit surveys have not been commenced due to lack of staff and laboratory facilities.
- Tonga - Quarantine surveillance is now funded by the Government. It is **recommended** that the RMFFP purchase bulk supplies of traps and lures and that countries purchase these from the RMFFP at cost plus freight.
- PNG - Very strong support was given for quarantine surveillance because of limited knowledge on fruit flies in PNG, the large number of species in PNG and the wish to begin trade in fresh fruits and vegetables.
- New Caledonia - Not having quarantine surveillance in Wallis and Futuna is of concern because of the presence of fruit fly species in Wallis and Futuna that are not in New Caledonia. In response to a question on the need to count all flies in traps, it was **agreed** that quarantine surveillance trap catches are of higher priority than those used for seasonal abundance studies. Consequently, providing every fly in each trap catch is examined carefully, there is no need to count the numbers of each species in each trap catch. It was **recommended**, however, that quality control measures to ensure that staff, who are sorting trap catches, maintain a high level of competency. Exotic fruit fly specimens should be planted in trap catches 3-4 times per year under controlled conditions to ensure staff are capable of identifying the exotic species.

- Nauru - Trapping was carried out during January - February and September - October in 1995 by the Republic of China (Taiwan) Agricultural Technical Mission to Nauru. The data from the trapping will be requested and forwarded to the CTA for assessment. It was strongly **recommended** that staff from Nauru receive placement training on fruit flies in Fiji before the end of 1997.

The Committee recognizes that, although SPC will facilitate the maintenance and continuity of quarantine surveillance, there needs to be a mandate for quarantine surveillance as an on-going activity in all PICTs in the long term. PICTs that export fresh fruits and vegetables subscribe to slogan 'No Quarantine Surveillance; No Export of Fresh Commodities' or 'Quarantine Surveillance Opens One Gate to Export'. The Steering Committee strongly **recommended** that quarantine surveillance be established and maintained in all PICTs so that trade in fresh fruits and vegetables is not jeopardised.

The Committee further **recommended** that:

- Quarantine surveillance for fruit flies be based on, at least, trapping and regular surveys of high risk fruits and vegetables.
- The RMFFP will act as a focal point for obtaining confirmations of identification of fruit flies from PICTs, when necessary.
- The CTA of the RMFFP will provide on request estimates of the cost of running continuous quarantine surveillance.
- 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.

Agenda Item 4.6 - 4.8: Protein Bait Spray

Country reports from Tonga and Fiji on protein bait spray development were presented. The report from Tonga indicated that a final field trial using protein bait spray made from modified waste yeast from the local brewery on capsicum will be completed at the end of November, 1997. In Fiji, more work on the modification of brewery waste yeast involving the removal of the bitterness from waste yeast will be completed by end of 1997. Field trials on guava will be carried out in early 1998 during the guava season. There is a need for the Fiji Government to replant guava for use as indicator crop for attractancy trials and the testing of the protein bait.

Countries interested in production of protein bait spray from brewery waste are New Caledonia, Cook Islands, Vanuatu, PNG, Samoa, Guam, Niue, Solomon Islands. New Caledonia requested technical information on the waste yeast modification process for their local brewery. This information is contained in a paper written by Dr. Annice Lloyd (QDPI),

which is included in the Proceedings of the Regional Symposium on the Management of Fruit Flies in the Pacific. The Proceedings will be available in early October, 1997.

The Committee **recommended** that Tonga and Fiji continue to be the focal points for work on the modification of brewery waste yeast into a protein autolysate for testing at a bait to control fruit flies in fruit and vegetable crops.

It was further **recommended** that, as the technology becomes available, it is transferred to all PICTs for adoption, where appropriate.

Agenda Item 4.9 : Pest Advisory Leaflets

The Committee **recommended** that Pest Advisory Leaflets on the following common pest species be produced (similar to the leaflet on Mango Fruit Fly):

| <u>Pest Species</u> | <u>Person(s) Responsible</u> |
|--|------------------------------|
| <i>Bactrocera xanthodes</i> (regional) | E. Tora Vueti |
| <i>Bactrocera passiflorae</i> (regional) | E. Tora Vueti |
| <i>Bactrocera tryoni</i> (regional) | R. Amice |
| <i>Bactrocera cucurbitae</i> (regional) | M. Vagalo et al. |
| <i>dorsalis</i> complex (regional) | A.Allwood/R.Drew |
| <i>Bactrocera facialis</i> | V. Heimoana |

Timeframe : Draft by mid-November, 1997; Final by 31 December; and printing and distribution by 31 January, 1998.

Also, the Committee **recommended** that Pest Advisory Leaflets on Fruit Flies in specific countries be produced (similar to the leaflet on Fruit Flies and Their Control in Cook Islands):

| <u>Country</u> | <u>Pest Species</u> | <u>Person Responsible</u> |
|----------------------------|---|---------------------------|
| Fiji | <i>B. passiflorae</i> , <i>B. xanthodes</i> , <i>B. distincta</i> , <i>B. gnetum</i> , <i>B. sp. nr. Passiflorae</i> | E. Tora Vueti |
| New Caledonia | <i>B. curvipennis</i> , <i>B. psidii</i> , plus other species in English and French | R. Amice |
| Solomon Islands and PNG | Four species in Solomon Islands 12 - 14 species in PNG | see Agenda Item 4.28 |
| Tonga | <i>B. facialis</i> , <i>B. kirki</i> , <i>B. xanthodes</i> | V. Heimoana |

(Since the Committee met, the CTA has received several requests for information on the protein bait spray technique. The CTA will produce a regional Pest Advisory Leaflet, specifically on protein bait spraying).

Timeframe: Draft by 28 February, 1998; Final by 31 March; and printing and distribution by 30 April, 1998.

Agenda Item 4.10 : Promotion of Bagging Technique

The Committee recognized that this technique was very useful particularly at the village or subsistence level. It is also being tested in large scale mango production in Northern Queensland. It is **recommended** that the use of physical barriers, such as paper bags, be demonstrated and actively promoted as a means of controlling fruit flies in all PICTs.

Agenda Item 4.11 : Rearing and Releasing Parasitoids

Parasitoids for fruit fly eggs or larvae were released in Solomon Islands and FSM for melon fly and mango fruit fly respectively. Fiji may rear *Fopius arisanus* to release on Rotuma to reduce numbers of *B. kirki* during 1997-98. Parasitoid surveys and perhaps releases will be done in PNG during 1997-1998.

Agenda Item 4.12 - 4.14 : Fruit Fly Colonies and Biological Studies

Fiji, Tonga, Samoa, Solomon Islands, Vanuatu and FSM have established colonies of economic species of fruit flies. Cook Islands are in the process of resurrecting its colonies. New Caledonia established its colonies under Government funding and these are being maintained under CIRAD-FLHOR. It is **recommended** that these laboratory colonies be maintained.

The Committee **recommended** that colonies of economically important species of fruit flies be established in PNG and, if required for host-status testing, in French Polynesia before the end of 1997.

Agenda Item 4.15 : Host Status Testing

The non-host status of varieties of fruits and vegetables at specific stages of maturity may be regarded as a quarantine treatment by New Zealand quarantine authorities. To undertake these tests, approval from the Chief Plants Officer (NZ) must be obtained prior to the commencement of testing. PICTs must have viable laboratory colonies of fruit flies.

The Committee was informed that Fiji will conduct tests on rockmelons, zucchini and ripe chillies ('Red Fire' and 'Hot Rod') and will complete reports on test results on squash, pineapples, bitter gourd and cucumber and submit them to New Zealand by 31 December, 1997. Vanuatu will also submit reports on host status tests on squash, pineapple and cucumber to New Zealand 31 October, 1997. Solomon Islands has received approval to commence Host Status Testing of chillies, bush limes and pineapples.

The Committee **recommended** that the Australian Quarantine and Inspection Service (AQIS) be approached to obtain a response on the acceptance or non-acceptance of the non-host testing procedure and results. 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.

Agenda Item 4.16 - 4.17 : Heat Treatments

In the light of recent discussions between RMFFP and New Zealand Quarantine authorities, the concept of adopting generic treatments across several species of fruit flies and commodities is being seriously considered by New Zealand. Approval of this concept may mean that PICTs may only need to carry out heat tolerance studies of economic fruit fly species and, providing their species are less heat tolerant than a standard, say *B. melanotus*, then PICTs may not need to carry out expensive confirmatory tests. It may mean that a heat treatment that results in a fruit centre temperature of 47.2°C and is held at that temperature for 20 minutes, may be accepted across the Pacific for commodities destined for the New Zealand markets.

It is expected that heat tolerance studies will be carried out on about 25 fruit fly species in the region. A regional database on the heat tolerances of fruit flies may be set up in conjunction with USDA - Agricultural Research Service (USDA-ARS), Hawaii. A Memorandum of Understanding between the RMFFP (SPC) and USDA-ARS to collaborate and to exchange information freely is being discussed.

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 (if available) to form the basis for the regional database.

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 negotiations on quarantine protocols.

Agenda Item 4.18 - 4.24 : Emergency Response Planning

A Workshop on Identification, Quarantine Surveillance and Eradication Planning for Fruit Flies was held in Cairns in May, 1996 under the auspices of the RMFFP, AusAID and ACIAR. The workshop recommended that Emergency Response Plans (ERPs) using New Zealand Standards be developed. Some PICTs commenced the development of ERPs (PNG, Tonga, Fiji, Cook Islands, New Caledonia, Guam). Solomon Islands is in the process of developing an ERP with the help of New Zealand MAF Regulatory Authority. Vanuatu is developing an ERP for pests and diseases under the Vanuatu Agricultural Security Project. Other PICTs need assistance in developing ERPs (American Samoa, Kiribati, Marshall Islands, Tuvalu, Tokelau, Palau, Niue, Wallis and Futuna, Nauru).

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, and that the CTA comment on and technically clear the ERPs for each country to ensure there is harmonization regionally. The role of SPC should be one of facilitation and harmonization.

The concept of Generic Incursion Management Planning (GIMP) (see Attachment D) was outlined by the SPC Plant Protection Advisor (PPA). This concept describes the various steps seen as necessary in planning measures to cope with outbreaks of pests and diseases. It stresses the importance of planning in a regional context, where PICTs will need to think globally, plan and respond regionally and implement nationally. In other words, to adopt a regional approach, the PICTs need to learn to do things together as outlined in GIMP - to prevent together, prepare together, respond together and recover together. The Committee **supported** this concept.

The biggest problem in the Pacific in planning for emergency responses is to obtain funding from Governments or donor agencies to purchase supplies and initiate actions quickly. Having the capacity to recognize that there is a problem (effective quarantine surveillance) and quick actions to define the outbreak and prevent the spread of the pest and disease (emergency response) is often the difference between a successful or unsuccessful eradication effort. The Committee **recommended** that, when ERPs are developed, they are submitted to national governments to obtain approval for the plan and for commitment to funds for eradication, if it is economically and technically feasible.

It was agreed that ERPs for pests and diseases should be included in the National Disaster Plans.

To initiate a quick response in the event of an outbreak of an exotic fruit fly, 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. SPC should have a responsibility for maintaining this stockpile in the long term.

The Committee was briefed on the eradication effort for Oriental fruit fly in French Polynesia. In this instance, the RMFFP provided technical advice, together with Prof. Richard Drew of Griffith University. The Government of French Polynesia funded the eradication programme. Lessons learnt from this exercise include the essentiality of having quarantine surveillance systems in place, the difficulty of running an eradication programme without an ERP in place and accepted by government, and the slowness in obtaining adequate funding to initiate an eradication programme.

A proposal to conduct training for as many PICTs as possible and, at the same time, eradicate Oriental fruit fly and melon fly from Nauru received unanimous support. The Committee **recommended** that planning for this regional training should commence in January, 1998 and the eradication exercise commence in April - May, 1998 and hopefully be completed by August, 1998.

The RMFFP has made no effort to assess the prospects for eradication of Oriental fruit fly from Palau, but the USDA-ARS has assessed the situation. RMFFP's role is one of offering technical advice and support at this stage.

Agenda Items 4.25 - 4.27 : Data Entry and Analyses

The Committee was briefed on the current status of the Pacific Fruit Fly Database. The database is currently housed at the Queensland Department of Primary Industries (QDPI), Brisbane. This was necessary as Prof. Richard Drew worked for QDPI and is the authority for confirming all identifications of fruit flies. As QDPI could not continue involvement with the ACIAR funded fruit fly work in the Pacific, due to commitments on the eradication of papaya fruit fly in Northern Queensland, and as Prof. Drew resigned to take up a position at Griffith University, ACIAR requested that the database be handed over to ACIAR and that it be deleted from computers in QDPI. Concern had been expressed that data may be used without the authority of the PICTs, RMFFP or ACIAR. The Committee **recommended** that the CTA urgently retrieve the database from QDPI (or ACIAR) and house it at SPC, with relevant PICTs receiving their own data.

The Committee **recommended** that, as the database using R-base software was not user friendly and, consequently, was not readily usable by PICTs, it should be simplified to a spreadsheet format and that this format be adopted for all future data inputs regionally.

Agenda Item 4.28: Pest Advisory Leaflets on Fruit Flies

For details of the list of Pest Advisory Leaflets to be produced during 1997-98, refer to Agenda Item 4.9 : Production of Pest Advisory Leaflets.

PNG and Solomon Islands will need to produce country Pest Advisory Leaflets on fruit flies because of the large number of species present. Solomon Islands commenced documentation of this in 1994-95 under the Regional Fruit Fly Project. Subject to identifications of new species, a draft should be completed in June, 1998 and printing and distribution by 31 August, 1998. Documentation in PNG will commence by July, 1998 and be completed by 31 December, 1998.

The Committee **recommended** that the RMFFP contract a professional photographer to compile photographs of as many species of Pacific fruit flies as possible.

Agenda Item 4.29 - 4.31 : Manual on Fruit Flies, Proceedings of Symposium and Scientific Papers.

The purpose of producing a Manual on Fruit Flies in the Pacific is to document procedures for trapping, fruit surveying, handling and preserving fruit flies, data entry, laboratory rearing of flies and parasitoids, field control methods, research on heat tolerance, development of quarantine treatments using heat or non-host status, quarantine surveillance, emergency response planning, and eradication into one volume for future reference. Much documentation has been done and

the production of the Manual will be completed by December, 1998. The Manual will be cleared technically by SPC and FAO.

The Committee was informed that the Proceedings of the Regional Symposium on Management of Fruit Flies in the Pacific held in October, 1996, has been printed and is now being distributed by ACIAR.

The Committee **recommended** that national staff be strongly encouraged to publish results of research into fruit flies in reputable scientific journals. For example, results of heat tolerance testing on immature stages by Tonga and Fiji need to be published in the Journal of Economic Entomology. Host records for all countries need to be published urgently. All papers will be under joint authorship, with the exception of taxonomic papers. Where appropriate, journals in the Pacific may be used for publication. The Committee **recommended** that the CTA approach ACIAR to obtain reference collections of fruit flies from the PICTs for each country, providing curation facilities are available.

Agenda Item 4.32 - 4.33 : Reporting

The Committee **agreed** that PICTs involved in the RMFFP would provide quarterly reports on activities and progress, i.e. at the end of March, June, September and December. In instances, where Governments have funded particular activities (see Attachment B), these countries are not obligated to provide reports, but, in a spirit of cooperation regionally, they are happy to do so.

The RMFFP will provide six monthly reports to SPC, UNDP, AusAID, FAO and the national governments.

Agenda Item 4.34 : Training

The Committee **endorsed** the need for further training in identification and control of fruit flies. SPC's policy on training is to focus on national or sub-regional workshops rather than large, cumbersome regional workshops. Workshops are scheduled in Solomon Islands (first quarter of 1998), in PNG (mid-1998) and in Vanuatu (early 1999). Similar workshops in Samoa at USP Alafua Campus and in FSM for northern islands countries using the College of Micronesia are planned for 1998. These sub-regional workshops will focus on train the trainer so that national training on recognition of fruit flies and control techniques can follow this.

The Committee **recommended** that there is a need for training on Pest Risk Analysis (PRA), but that this needs to be practical, hands-on training, using practical examples of how to conduct PRAs at various levels. The PPA (SPC) will liaise with the Pacific Plant Protection Organization (PPPO) to determine if PRA training can be run in conjunction with a proposed meeting of the PPPO in February, 1998 in Fiji.

Training on the eradication procedures being used in French Polynesia is planned for 24-28 November, 1997 in Tahiti. This training will focus on representatives from southern PICTs, with future training in Nauru targeting northern PICTs occurring in the first half of 1998.

PEACESAT 'FLYNET' sessions have been an invaluable and inexpensive method of communication between seven PICTs. The Committee **recommended** that the network be expanded to include all countries with an operational terminal. The absence of PEACESAT services in some countries and the breakdown of some terminals questions the value of this service in the long term. The Committee, therefore, **recommended** that the PPA (SPC) investigate other methods of communication.

Agenda Item 4.35 : Consultancies

The Committee, particularly PNG, commended the RMFFP for incorporating into the project review process, assessments of the economic impact of the adoption of fruit fly management techniques on production and export of fruits and vegetables and on the alleviation of poverty and rural unemployment. The Committee **recommended** that this study should include assessments of the economic benefits at all levels of production from subsistence to commercial levels. It was **recommended** also that the proposed SPC study on Crop Loss Assessments cooperate with the fruit fly study.

Agenda Item 4.36 - 4.37 : Enhancement of Technical Capacity/Sustainability

The Committee was briefed on the progress of recruitment on an Entomologist (Fruit Flies) with SPC to be trained in fruit fly technologies for three years and then take over the regional coordination of fruit fly activities when the RMFFP ceases in April, 2000. A decision on who will get this position will be known before 31 October, 1997.

While the Committee commended the RMFFP for providing, on a cost-share basis, postgraduate training, concern was expressed by some PICTs, particularly Solomon Islands, that there was difficulty in obtaining support for undergraduate training at overseas universities from donor agencies. As the current project does not provide financial support in this area (though the CTA has tried to obtain funding for undergraduate training from donor agencies), it was requested by the Solomon Islands delegate that donor agencies should reconsider this seriously in future projects. Indications from donor agency representatives suggest that this situation is unlikely to improve significantly and, in fact, may get worse, primarily due to the high cost of sending national staff to universities outside the PICTs.

The Vanuatu Government expressed concern about the prospects of recruiting a United Nations Volunteer (UNV) to replace the UNV, who will leave in December, 1997. The practicality and usefulness of recruiting a UNV for twelve months or less was queried. 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. This system would strengthen the regional approach and the

sustainability of activities. UNDP is currently compiling a list of professional Pacific Island staff, who could be used as experts in various fields, including agriculture and plant protection.

The Committee **recommended** that scholarship holders must be bonded in some way to ensure they return to their country after completion of studies.

Agenda 4.38 - 4.39 : Promotion of Private Sector Involvement in R&D and Quarantine Surveillance

The Committee was briefed on the intention of the RMFFP to develop a system whereby the private sector may fund research and development through industry levies and control the use of these levies through an industry advisory committee. This system already exists in PNG with cocoa, coffee and coconuts and in Fiji with ginger, so it is not a new concept. Setting up systems such as these will apply only to PICTs that export fresh commodities at this stage. A hypothetical example is that a papaya industry worth US\$1.0 million would provide US\$25,000 if levied \$0.01/kg for research and development.

Agenda Item 5 : Funding

The funding structure for the RMFFP was outlined. It is based on cost-sharing between AusAID and UNDP totaling US\$1.7707 million for three years in 22 PICTs. The New Zealand Government provided about US\$38,000 to supplement funding for training and development of quarantine treatments using heat or non-host status. The RMFFP commended those countries that are now fully funding their quarantine surveillance programmes (Fiji, Tonga, Cook Islands, Western Samoa).

The RMFFP will continue to provide UNV (Entomologists) in Solomon Islands (August, 1999), Vanuatu (June, 1999) and PNG (April, 2000). As well, the project will provide an additional two Graduate Entomologists for three years each in PNG, instead of appointing another UNV (Entomologist). It was **recommended** that any additional staffing requirements would need to be conveyed to the CTA by the end of October, 1997. The RMFFP cannot fund staff from its existing budget, but may be able to assist in identifying funding from donor agencies.

Agenda Item 6: National Staff Commitment/Availability

The Committee was briefed on the level of staff provided by the RMFFP. To ensure sustainability, national Governments have to take the responsibility for staffing the fruit fly related activities before the last year of the project. This approach is relatively easy to justify if countries are actively exporting fruits and vegetables, where quarantine surveillance is essential to maintaining overseas markets. For countries that are not exporting fresh commodities now, it is hoped that fruit fly activities under the RMFFP is an investment in the future and that these countries have a regional responsibility to monitor fruit flies.

Some countries acknowledged the provision of the UNV Entomologists by the RMFFP, but were concerned with long term sustainability due to government down-sizing or lack of funds

(e.g. Solomon Islands). Other countries required training of plant protection staff (e.g. Nauru). In general, PICTs had adequate staff available for essential fruit fly research and development activities, in spite of commitments to other plant protection activities.

Training of national staff was recognised as essential at the national and sub-regional level. Training at national institutions or regional universities is more appropriate and less expensive than at overseas venues.

Agenda Item 7 : Next Steering Committee Meeting

The Committee **recommended** that the next meeting of the Steering Committee is scheduled for February, 1998, providing it can be held back-to-back with the PPPO meeting or the Regional Technical Meeting on Plant Protection. If this is possible, the mid-term Review may be delayed to September, 1998, instead of June, 1998. In the meantime, countries should maintain communications with Group (sub-regional) representatives.

Attachment A

AGENDA

**STEERING COMMITTEE MEETING
REGIONAL MANAGEMENT OF FRUIT FLIES IN THE PACIFIC
Nadi, Fiji : 15 - 16th September, 1997.**

DAY 1 : 15 September, 1997

- | | | |
|----|---|--------------|
| 1. | Adoption of Agenda | 9.00 - 9.05 |
| 2. | Welcome and Purpose of Steering Committee (A. Allwood) | 9.05 - 9.15 |
| 3. | Presentation Fruit Flies in the Pacific - What are the problems? What are the solutions? (A. Allwood) | 9.15 - 10.30 |

MORNING TEA

- | | | |
|-----|--|---------------|
| | | 10.30 - 11.00 |
| 4. | Activities of RMFFP <u>Trapping and Host Surveys</u> | 11.00 - 12.30 |
| 4.1 | Trapping for faunal surveys | |
| 4.2 | Trapping for quarantine surveillance | |
| 4.3 | Host surveys for faunal surveys | |
| 4.4 | Host surveys for quarantine surveillance | |
| 4.5 | Host surveys for damage assessments | |

LUNCH

- | | | |
|------|---|--------------|
| | | 12.30 - 1.45 |
| | <u>Field Control</u> | 1.45 - 3.00 |
| 4.6 | Modification of brewery waste to protein bait | |
| 4.7 | Field testing of protein baits | |
| 4.8 | Farmer demonstrations of protein baiting | |
| 4.9 | Production of Pest Advisory Leaflets | |
| 4.10 | Promotion of bagging of fruits techniques | |
| 4.11 | Rearing and release of parasitoids | |

Quarantine Treatments

- | | | |
|------|---|-------------|
| | | 3.30 - 3.45 |
| 4.12 | Establishments of fruit fly colonies | |
| 4.13 | Maintenance of fruit fly colonies | |
| 4.14 | Biological studies (life cycles, development rates) | |
| 4.15 | Host status testing | |
| 4.16 | Generation of heat tolerance data | |
| 4.17 | Negotiations with importing countries | |

AFTERNOON TEA

- | | | |
|------|---|-------------|
| | | 3.45 - 4.00 |
| | <u>Emergency Response Planning</u> | 4.00 - 5.00 |
| 4.18 | Quarantine surveillance for fruit flies | |
| 4.19 | Quarantine awareness for fruit flies | |

4.20 Documentation of Emergency Response Plans/Generic Incursion Management Planning (GIMP)

4.21 Modification of Emergency Response Plans nationally

4.22 Eradication of fruit flies

4.23 Stockpiles of supplies for eradication

4.24 Workshops on eradication techniques

DAY 2 : 16 SEPTEMBER 1997

Data Entry and Analysis

9.00 - 9.30

4.25 Trapping

4.26 Host surveys

4.27 Heat tolerance testing

PUBLICATIONS

9.30 - 10.00

4.28 Pest Advisory Leaflets on fruit flies

4.29 Manual on Fruit Flies

4.30 Proceedings of Symposium on Fruit Flies in October, 1996

4.31 Scientific papers

MORNING TEA

10.15 - 10.45

Reporting

10.45 - 11.15

4.32 National activity reports (quarterly)

4.33 Project progress reports (half-yearly)

4.34 Training

11.15 - 12.30

LUNCH

12.30 - 1.30

Consultancies

4.35 Economic impact of adoption of fruit fly control technologies

1.30 - 1.45

Enhancement of Technical Capacity/Sustainability

1.45 - 2.15

4.36 Recruitment of SPC Entomologist (Fruit Flies)

4.37 Cost-sharing of two post-graduate scholarships

Promotion of Private Sector Involvement in R&D and Quarantine Surveillance

2.15 - 2.45

4.38 Levies to support research and quarantine surveillance

4.39 Private sector advisory groups

5. Funding

2.45 - 3.30

6. Staff Availability (National)

AFTERNOON TEA

3.30 - 4.00

7. Summary of Recommendations and Next Steering Committee Meeting 4.00 - 5.00

LIST OF PARTICIPANTS TO THE STEERING COMMITTEE MEETING TANOA INTERNATIONAL HOTEL, NADI : 15TH - 16TH SEPTEMBER, 1997.

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