

### **Solomon Island pest management activities**

SPC Entomologist Mr Sada N Lal and Fruit Fly Technician Mr Naca Waqa visited Solomon Islands in last December for consultation and collaboration on entomology activities. There were field visits to assess current insect pest problems faced by farmers in Solomon Islands. Two crops showed severe insect damage: slippery cabbage (*Abelmoschus manihot*), also known as Aibika or bele and watercress (*Rorippa nasturtium*) (photo). On slippery cabbage the major insect pest causing damage was the beetle *Podagrica basselae*. The beetle skeletonises the leaves. On watercress the diamond back moth (DBM) is the major pest and a serious concern. SPC Plant Protection Service discourages the use of conventional insecticides as they pollute water and endanger marine life. Management of both these pests will be addressed in a proposed Plant Protection Project for Solomon Islands to be supported by the Australian Centre for International Agricultural Research (ACIAR).

This year the Taro Beetle Management project is being extended to Solomon Islands. A site has been selected at Tetera Prison Farm and planting of trials will start in March. Assistance to fruit fly management will also be provided as and when necessary. For further information contact [SadaNL@spc.int](mailto:SadaNL@spc.int).



### **Developing an information system for taro pests**

An information and diagnostic package for taro pests in the Pacific is under development after the successful completion of a workshop for SPC staff at SPC Nabua. The workshop was the start-up for a new ACIAR-funded project called “*TaroPest: An information and diagnostics package for taro pests of the South Pacific*”. It is designed to be an information package that can be used by biosecurity officers, researchers and extension staff to allow them to easily access information they need that is designed appropriately. A preliminary version of the package is planned for completion in six months and SPC is looking forward to road testing the diagnostic system to PICTs. The team will particularly be looking for feedback on how easy it is to use the information system, appropriate design of the components and whether it serves the needs of users. Collaborating partners in the development of this information system include PNG’s National Agriculture Quarantine and Inspection Authority (NAQIA) and the Queensland University of Technology. As the technician on this project, SPC has recruited Mr Sarlesh Kumar, who has been with Koronivia Research Station plant protection section since 2000 and has work experience in both pathology and entomology. For more information contact the SPC project leader: [jacquiw@spc.int](mailto:jacquiw@spc.int).

### **SPC funded student projects**

Four students of the Fiji College of Agriculture received SPC funding to carry out final year projects. Short summaries of the projects are listed:

- i. Neem leaf extracts to control cabbage cluster caterpillar, *Spodoptora litura* and pests of tomato (Lepidopterans). Four treatments applied: 1kg, 2kg, 3kg of green neem leaves and control. The leaves were soaked overnight in five litres of water. The 3kg neem leaf extract showed best result in controlling the insect pests for both crops.
- ii. Quarantine Amnesty Bin analysis. This project looked into the contents of the Amnesty Bin at Nausori Airport after each international flight to determine what passengers were bringing into the country and in particular to isolate any fruit fly host material and observe under laboratory conditions any new exotic pests and diseases.
- iii. To determine the seasonality and relative abundance of diamondback moth, *Plutella xylostella*, and its associated parasitoids in crucifer crops. This is part of monitoring studies to find more information on the seasonality of cabbage pests and their natural enemies in the Pacific. Similar studies are being carried out in Sigatoka, Fiji, and in other PICT countries Samoa and Tonga. Studies will continue in 2005 supported by SPC.

### **ACIAR and PPS collaborate on plant protection research**

Managing pests remains a top priority for Pacific Island farmers. Research and development into integrated pest management need to be strengthened. ACIAR, a long-time research partner of SPC Plant Protection Service, has several research projects lined up for 2005 in collaboration with PPS. PPS is a proven entity and a leading authority on plant protection in the Pacific. It has the capacity and the resources to work in partnership with international agricultural organisations to meet the needs of PICTs for plant protection services. The following are some projects likely to start in 2005.

#### *Weed management*

At two regional technical meetings on plant protection and biosecurity in March 2002 and March 2004, 11 countries rated mile-a-minute (*Mikania micrantha*) and giant sensitive plant (*Mimosa diplotricha*) among their top 10 worst weeds. The meetings further resolved for SPC to assist PICTs address major weeds of the region. As a result, SPC submitted a proposal to ACIAR to fund a major biocontrol project against these two weeds. Both *M. micrantha* and *M. diplotricha* were rated in the “most important” category and have good prospects for biocontrol. Three countries, PNG, Fiji and

Samoa, which rated both weeds highly, were chosen to be initial implementers of the proposed project as they showed initial interest and had suitable facilities to implement the activities.

A project development visit to Fiji, PNG and Samoa was carried out by Warea Orapa, Coordinator Weed Management, and Michael Day, an Entomologist based at Alan Fletcher Research Station, Queensland to establish linkages and discuss the proposed project on the two weed pests. Because of conflicting views on Mikania in Samoa, Samoa has officially opted to wait till the research work is completed in Fiji and PNG. In addition, the proposed project may concentrate only on Mikania biocontrol since field populations of the psyllid *Heteropsylla spinulosa*, released in these countries under the GTZ Biocontrol Programme in Fiji and Samoa in the mid-1990s and independently released in PNG (by Ramu Sugar in 1992), are established.

*Mikania micrantha* in PNG has long been regarded as a problem weed, especially in large plantation areas as well as smallholder farms on New Britain Island and several other areas. Support for a biocontrol project has been aired since 2002 by the National Agricultural Research Institute (NARI) and the Cocoa and Coconut Institute. For more information contact [WareaO@spc.int](mailto:WareaO@spc.int).

#### *Improved Plant Protection in Solomon Islands*

A project aimed to assist food security and to protect the country's subsistence food production will hopefully start shortly in Solomon Islands. The objective will be achieved through sustainable food production and pest management. The project is a collaboration amongst ACIAR, Solomon Islands Department of Agriculture (DAL), Kastom Garden Association (KGA -NGO), Vois Blong Mere (VBM-NGO) and SPC Land Resources Division through PPS, DSAP and RGC. Under this collaboration, for a group of key crops, the project will support pest surveys, training in pest identification, integrated pest management (IMP), sustainable management systems and introduction of biocontrol organisms, and evaluation of germplasm for pest and disease resistance.

Plant protection has been given high priority, as needs assessments through the use of participatory rural appraisals suggest that pests and diseases are on the increase, threatening the subsistence base of the country and rural livelihoods. The project combines the expertise of government and community-based organisations, to develop IPM strategies and provide training in IPM. For more information contact [StephenH@spc.int](mailto:StephenH@spc.int).

#### **Farmers encouraged to go organic**

A major development project in northern Viti Levu will benefit neighbouring farmers, who will be tasked to supply organic produce to the project. Yaqara will be the site of the multi-million dollar Studio City now being planned in this part of the Fiji islands. The Chief Executive of the Yaqara Development Project approached PPS and the Ministry of Agriculture, Sugar and Land Resettlement (MASLR) to help train local farmers to raise organic produce for sale to Studio City. PPS encourages non-chemical pest management strategies and thus was keen to help this initiative. Staff from both PPS and MASLR last December completed a consultative participatory rural appraisal to identify farmer problems and help address their needs in terms of technical training. Over 200 farmers attended the training. MASLR will continue the consultative process with the project developers to identify farmers who are willing to take part in this venture. For more information please contact [NacanieliW@spc.int](mailto:NacanieliW@spc.int).

#### **Fiji PLD refresher workshop**

A two-day refresher workshop on the Pest List Database (PLD) was held at the University of the South Pacific for 21 quarantine, plant protection, extension and research staff of Fiji's Ministry of Agriculture, Sugar and Land Resettlement (MASLR) from 27 to 28 January 2005. Mr Jainend Kumar, Director of Research of MASLR, officially opened the workshop.

The workshop focused on updating user knowledge of the PLD system plus demonstrating the new features of Version 2. Exercises and practical problems allowed the participants to get well acquainted with the Occurrences module of the new system within one day. Since the last Fiji PLD workshop, a pest survey has been carried by Landcare Research and these new records have now been incorporated into the Fiji PLD.

The second day of the workshop was spent trialling the demonstration site of the Regional PLD and gaining feedback from participants on its design and structure. Mr Mark Fuglestad of Landcare Research also introduced participants to some of the online Landcare databases which could become useful resources.

The workshop was coordinated by Ms Sarah Pene, PPS Information Assistant.

### **International Portal on Food Safety, Animal and Plant Health (IPFSAPH)**

The Food and Agriculture Organisation of the United Nations (FAO) has launched the Internet-based International Portal on Food Safety, Animal and Plant Health (IPFSAPH) (<http://www.ipfsaph.org/Biosec/En/default.jsp?language=en>)

The portal provides a means of accessing official information in this area, in order to facilitate safe trade, ensure food safety, and protect animal and plant health.

It contains over 15,000 records drawn from the World Trade Organisation (WTO), Convention on Biological Diversity (CBD), Codex Alimentarius Commission, Office International des Epizooties (OIE; World Animal Health Organisation) and the International Plant Protection Convention (IPPC), as well as official data from the United States and the European Union. In future, FAO plans to expand the portal to include details of developing country demonstration projects and otherwise broaden the information it provides.

*Typical questions* that users might be asking include:

- What standards exist for a particular commodity?
- What supporting scientific evaluations underpin the international standards?
- Which commodities have led to trade concerns being raised?
- What pests/diseases have been officially reported recently for a given country?

The IPFSAPH provides two main types of information:

- **Formal text** — international standards, national legislation and implementing regulations, notification, decisions etc.
- **Supporting materials** — official scientific evaluations, training materials, government-sponsored subject gateways.

Material in IPFSAPH is categorised in four ways:

- **commodity** — grouped according to the World Customs Organisation's harmonised system of commodity classification for agricultural and food commodities, e.g. meat and edible meat offal, edible vegetables, roots and tubers, and cocoa and cocoa preparations
- **cross-sectoral issue**, e.g. biotechnology, equivalence, diagnostic tests, and risk analysis
- **geography** — grouped according to country or region, or relevant to all countries
- **information source** — sorted according to the specific international organisation, standard-setting body or national government submitting the information.

FAO encourages people to visit the website and provide feedback to the project team; include use of the portal in capacity-building project work with developing countries; and identify countries with possible source sites for inclusion (e.g. official regulations, risk analysis).

## Staff travel

Dates	Country	Staff	Activity
22-28 January	Ovalau, Fiji	Fereti Atumurirava	Planting of Taro Beetle Management trials
25-28 January	Chuuk FSM	Konrad Englberger	On-the-job quarantine training: control of African tulip and biocontrol of Chromolaena
25-26 January	Ovalau, Fiji	Sada N. Lal	Planting of Taro Beetle Management trials
05-10 February	Tonga	Sada N. Lal, Jacqui Wright, Steve Hazelman, Warea Orapa, Richard Davis	Start up workshop on ACIAR Squash Project
07-12 February	Kosrae FSM	Konrad Englberger	On-the-job quarantine training: control of <i>Mikania micrantha</i> and Chromolaena biocontrol
14-17 February	Fiji	Richard Davis	CTA Biotechnology Workshop
15-17 February	Vanuatu	Sada N. Lal	Planting of Taro Beetle Management trials
15-20 February	Vanuatu	Warea Orapa	Progress on weed biocontrol
15-22 February	Vanuatu	Fereti Atumurirava	Planting of Taro Beetle Management trials
20-28 February	Samoa	Stephen Hazelman	Monitoring of PPS funded activities: Rhinoceros Beetle Public Awareness, plant protection training for extension staff and farmers, launch PPS funded organic project for the Marist Centre for Special Learning – Savaii, co-ordinate consultant with Samoa Papaya Seed Production with DSAP, Young Farmer projects – cross-visit to Tonga, Women in Business Vanilla Project and Samoa Gene Bank
28 Feb – 4 March	Niue	Richard Davis	Virus disease survey on vanilla and other crops

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