

### **Ban on betel nut exports may be lifted**

Preliminary results of testing for fruit fly hosts in Palau indicate that members of the Oriental fruit fly complex do not attack betel nut. Fernando Sengebau, Palau Director of Agriculture, presented the results at a one-day meeting on Quarantine Harmonization and Trade at the FSM Consulate in Guam. This finding may lead to the lifting of the ban on exports of betel nut from Palau to FSM, said Konrad Englberger, Coordinator, Plant Protection Micronesia (PPM). However, further technical advice will be sought from stakeholders before the ban is lifted.

Currently, Palau is seeking funds to eradicate two fruit fly species, *Bactrocera philippinensis* and *B. occipitalis*. Fruit flies prevent the trade of fresh fruit and breadfruit from Palau to other Micronesian states.

The meeting was attended by Ishmael Lebehn from FSM, Herman Francisco and Fernando Sengebau from Palau, Fredrick Muller from Marshall Islands, Konrad Englberger, Secretariat of the Pacific Community (SPC), and Andrew Fagolur, an observer from Yap Quarantine. The meeting also recommended including Guam and CNMI in the quarantine harmonization and trade facilitation discussions and identifying funding sources for acquiring suitable quarantine facilities and equipment to facilitate export/import inspection and treatment.

### **Resurrecting microscopes**

Werner Willi (*right*) visited PNG on a microscope rescuing mission at both the University of Technology, Department of Agriculture, in Lae Province and at NARI in Bubia.

On inspecting the microscopes, Werner found that they all were infected with fungus – some extensively. With assistance from Luke Philips, Werner dismantled each microscope, and cleaned, lubricated, reassembled and adjusted the mechanical components. They also cleaned the optical components and collimated the binocular tubes.

Most significantly, Werner managed to assemble an AUD \$150,000 microscope that had been sitting in pieces since it was donated.

Microscopes that were beyond repair were dismantled and working parts were kept as spares.

Werner also conducted a seminar at the university on the proper care of microscopes, covering how to set them up, and operate and maintain them.

Keeping microscopes clean and well-maintained is essential to ensure that test results are not compromised through contamination.



### **Stow-away eggs cause quarantine concern in FSM**

Two eggs — believed to be from pigeons or seabirds — were discovered on board a boat in FSM, raising concerns over the possible introduction of Asian influenza.

The eggs were found on a container on a cargo boat on 22 July.

Quarantine officers, Moses Asher and Petring Albert, acted quickly when notified of the discovery, engaging the help of Konrad Englberger, Coordinator, Plant Protection Micronesia.

The situation was regarded as high risk because Asian influenza, also known as “bird flu”, is present in Korea, and wild birds such as pigeons and seabirds are known carriers of this flu.

While the exact origin of the eggs was not known, it was concluded that they most likely came from Korea where the container was loaded. According to the ship’s captain, the container on which the eggs were found came from Busan, Korea. As the container had been stored below deck, it was unlikely that the eggs were laid during the voyage.

The ship had also visited ports in Japan, CNMI, Guam and Pohnpei.

### **LRD hooks up with APEN**

The Australasia Pacific Extension Network (APEN) extended an invitation to SPC’s Land Resources Division to take part in a forum to initiate national policies and strategies to improve support for the large number of young professionals dealing directly and indirectly with Australia’s farmers and rural communities. The forum was the culmination of a national Leadership Series for young professionals working in agriculture and natural resource management in roles such as industry development officers, field officers, coordinators, educators and trainers. The series is an initiative of APEN and is sponsored by the Australian government’s Department of Agriculture, Fisheries and Forestry.

The forum brought together key decision makers, experienced professionals and young people involved in agriculture and natural resource management from all sectors including government, research and development organisations, agribusiness, and private consultants and researchers.

APEN represents people whose job involves facilitating change in regional communities. It has over 500 members across Australia and beyond and is the leading organisation for professionals working with people to manage change in agricultural and natural resource management communities.

Stephen Hazelman, LRD Extensionist, who attended the APEN Forum, commented that the “P” in APEN needed strengthening. The planned November 05 Extension Summit in Tonga is a start on consolidating and addressing Pacific extension activities, and developing a dialogue with APEN will be a step forward in addressing extension issues in the Pacific.

Dr John James, President of APEN, will attend the Extension summit and will give a presentation on increasing the professionalism of extension workers. Following the summit, similar activities are planned for Tonga to enhance and promote the profile of extension work there.

PICT heads of extension have not met as a group for a long time and the link with APEN has provided valuable lessons for the LRD in promoting effective extension in the region.

### **Micronesian states develop draft ERPs**

Konrad Englberger, SPC Coordinator, PPM, helped organise a workshop at the University of Guam in June that was aimed at formulating emergency response plans (ERP) for the four Micronesian states, Guam, Palau, FSM and Marshall Islands. These states now have draft ERPs following the success of the workshop, which was facilitated by New Zealander Peter Wilkins.

The draft ERPs will next go to the national Emergency Response Committees for discussion before being finalized and endorsed.

The Pacific region is still free of many exotic pests and diseases and an ERP is designed to provide protection against potential pest threats by detailing the procedures to be following in the event of a national pest or disease outbreak. National disaster plans and government authorities are called into action when an ERP is activated.

Pests and diseases are a serious threat to the bio-diversity, agricultural systems, environment and socio-cultural activities of Pacific island countries.

### **Pacific Regional Seminar on Participatory Agricultural Extension, Tonga, 21-25 November, 2005.**

The Secretariat of the Pacific Community (SPC), in partnership with the Technical Centre for Agricultural and Rural Cooperation (CTA), is planning to convene a Pacific Regional Seminar on Participatory Agricultural Extension in Nuku'alofa, Tonga from 21 to 25 November, 2005. This seminar is aimed at reviewing approaches to agricultural extension over the last 30 years, highlighting the successes of participatory agricultural extension (PAE) approaches in the region, and exposing participants to highly successful and innovative participatory approaches particularly from Asia. These approaches include farmer field schools (FFS), participatory technology development (PTD) and participatory plant breeding (PPB). It is hoped that this will contribute to increasing support for PAE at the policy level.

As readers may be aware, on a global scale, on-farm participatory technology and information generation and dissemination have become an important new dimension of agricultural extension. The essential element of agricultural extension intervention is no longer the linear transfer of technology, but the facilitation of learning processes in rural communities, empowering people to make good decisions and thus improve their livelihoods in a sustainable way.

In PICTs ? unlike other regions of the world? the impact of participatory agricultural extension has been largely confined to project-based interventions with little sustainability. Although there have been localized successes, most PICTs still rely on traditional delivery of extension services.

The planned seminar, the first of its kind in the region, is expected to bring together heads of agricultural research and extension services from PICTs together with extension practitioners from the PICT region and beyond. Participants will be drawn from government and non-government sectors, and will include senior policy and decision makers and representatives of regional organisations such as FAO, non-state actors and farmer organisations.

The outcomes of the seminar are expected to include:

- acknowledgement of the status of PAE in the PICTs and its successes;
- increased awareness of the successes and benefits of FFS and PTD approaches to extension and their potential application in PICTs;
- development of guidelines for establishing PAE as an official institution;

- development of a regional framework to support the above process;
- improved awareness among agricultural educators of the status of PAE in PICTs and internationally, resulting in the development of relevant curricula at regional universities;
- strengthened linkages with PAE practitioners within and outside the region, such as in IIRR, RECFORTC, and the ETC Group.

### **Managing rhino beetle in Wallis and Futuna**

Rhinoceros beetle (*Oryctes rhinoceros*) continues to be a menace to coconut plantations and SPC is actively involved in the fight against it. Fereti Atu, LRD Taro Beetle Technician, recently visited Wallis and Futuna as part of efforts to manage the pest. He worked with local Wallisian technician, Aloï, to improve his skills in rhinoceros beetle management. In April, Aloï received pest management training at the SPC Biocontrol Workshop along with other technicians from the Pacific and he will now train others to apply the techniques he has learnt.

Proper field sanitation, monitoring using pheromone traps, and preparing beetle traps are among the skills required for good pest management.

The training in rhinoceros beetle management was carried out at the village of Lotolahi. New stocks of materials to service current pheromone traps were supplied and the importance of recording data collected at trap sites was emphasised to local staff.

### **Whitefly threat in FSM**

John Wichap, Plant and Animal Quarantine Officer, reports a new whitefly threat in Pohnpei. The whitefly is a potential threat to the culturally significant kava or sakau plant in FSM. Preliminary surveys reveal that the insect also attacks local spinach, hot-pepper plant, sweet potato and an ornamental plant, *Duranta erecta* or golden dewdrop.

The tiny whitefly, *Aleurotrachelus trachoides*, has no natural enemies on the island and spreads rapidly.

‘If this situation is left unchecked, it could cause drastic economic loss to the kava industry,’ said Konrad Englberger, Coordinator, PPM.

Unfortunately, people moving infested planting material are helping to spread the insect pest, with estimates that it has spread to 10% of the island.

The tiny whitefly is found on the underside of the leaves of host plants where it feeds on sap, causing premature leaf drop. Infested leaves have a blackened appearance due to sooty mould.

The whitefly is now found in Kolonia and Nett.

‘We should all be very concerned and avoid moving or using infested planting materials, or infested sakau plants in traditional ceremonies, as this can spread whitefly,’ cautioned Englberger.

For now, the recommended method of control is to remove and burn infested plants and plant parts. Consideration is also being given to introducing the parasitic wasp, *Encarsia formosa*, to start a biocontrol programme.

### Screening taro beetle insecticides in Solomon Islands

Insecticide screening trials are continuing in Solomon Islands as part of the TBM (taro beetle management) project. Confidor, which has proved to be effective in the control of taro beetle, is being further evaluated at different rates and timing of applications. Two other insecticides, Bifenthrin (liquid formulation) and Force (granular), are being evaluated in parallel screening trials in an attempt to find alternative insecticides. This will enable applications to be rotated, avoiding the build-up of resistance.

The Solomon Islands' trial is being carried out at the Tetera Prison farm.

Similar insecticide screening trials are being carried out in Fiji and Vanuatu.

The TBM project is being coordinated by the LRD Plant Health group.

### Organic Farming Project on Savai'i

The Ulimasao Marist Centre for Special Learning on the big island of Savai'i in Samoa is a vocational institution offering agricultural training. There are two main programmes: a 2-year programme for youths 15 to 18 years of age, and the Second Chance 1-year programme for 19 to 30 year olds.

The Centre is the site of a SPC-PPS funded project promoting organic agriculture as an alternative and environmentally safe way of growing food crops for rural areas.

Students in the first category follow the agriculture programme. Each class has three allocated periods a week. Second Chance students "opt" to take agriculture as one of two options, which they take for the whole year. There are two groups, averaging around 13 students per group.

The Centre recently bought 'ava planting material. This is a long term aspect of the project, as it will be at least three years before harvesting. There is a constant shortage of 'ava in Samoa, indicating a heavy demand for this product. Prices are now around T\$6 - T\$7 a bag, going up to \$T8.00 on Upolu.

The Centre got the improved taro varieties numbers 14, 19, 20 and 21 from Nu'u Research Centre. The taro plants are now planted out for evaluation. The yam planting programme is progressing well with the crop now well established in the organic farm.

Produce currently planted in the organic farm: manioka, cucumber, tomatoes, laupele, wing beans (Pi lele), snake beans (Pi gata), red long beans (Pi mumu), egg plants, Chinese cabbage (3 varieties), chilly peppers, capsicum, spring onions, u'mala, pumpkin, bananas.

Development at the Organic Farm:

The assistant teachers and students have built a permanent seed house on the farm. Cost to the project was just for the poumuli posts and wire, the screening material was already available. Teachers and students provided the labour.



Local resistance to new crops is an issue. Case in point is the snake bean (*shown above*), a large and very nutritious bean, and a prolific producer. It was difficult to sell it through the local shops,

as villagers were not familiar with them, and were not willing to buy them. We have started giving seeds to students to plant at home, in the hope that this variety of bean becomes more acceptable. We have not seen these beans for sale at the market, either in Salelologa or Apia.

#### Staff Travel

Dates	Country	Staff	Activity
7-25 July	Marshall Is	Sada N Lal	IPM Seminar, entomology
11-15 July	Samoa	Immanuel Vyas	Compile BIF data
10-16 July 24-25 July 26-31 July	Wellington Auckland Christchurch	Sidney Suma	7 <sup>th</sup> FAO Roundtable NZ Biosecurity Attend NETS training seminar
23 July – 3 Aug	Samoa Niue Auckland	Nacanieli Waqa	Breadfruit export pathway Fruit fly surveillance
26-29 July 5 Aug	Fiji	Sada N Lal	IPM Workshop Nadi: Fiji Organic Association Meeting
15 Aug-2 Sept	Palau FSM Guam	Richard Davis	Plant virus disease survey
18-25 Aug	Australia	Salend Kumar	Ifoam Organic Congress
15 Aug – 2 Sept	Brazil	Sidney Suma	FAO Meeting

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