



Pacific Pest Info

Pest & Quarantine Information
SPC Plant Protection Service

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Contents

1. Review of the Queensland Fruit Fly Eradication Program in Cook Islands	1
2. High Temperature Forced Air (HTFA) for Samoa & Vanuatu.....	1
3. Orchid weevil in American Samoa	2
4. Information on International Atomic Energy Agency (IAEA)	3
5. PPS Extension.....	3
6. Pest List Database (PLD)	3
7. Plant Protection Service Staff travel.....	4

1. Review of the Queensland Fruit Fly Eradication Program in Cook Islands

Ema Tora Vueti

The review of the Queensland Fruit Fly eradication program in Cook Islands was conducted by Consultant, Mr. Allan Allwood on 15-19 April. This review assessed the current status of the program and the activities undertaken, and the quarantine requirements of the program, and recommended activities that would carry the program to completion. During the review the Emergency Response Plan for fruit flies in Cook Islands was assessed and recommendations for the revision of the ERP were made. The consultant found the overall program very promising and concluded that it has been the result of implementing a timely, well organised, emergency response. He said that it has also been the value of the hands-on training on eradication techniques, development and implementation of an ERP in Nauru that has prepared staff for this outbreak.

2. High Temperature Forced Air (HTFA) for Samoa & Vanuatu

Ema Tora Vueti

A semi-commercial HTFA unit was installed at the Atele Research Centre in Samoa in March. This unit, designed by Dr. Mike Williamson of Quarantine Technologies International, will be used also for research by Ministry of Agriculture Research Division staff. They have already examined the treatment of breadfruit. A HTFA chamber was installed in Port Vila, Vanuatu early this month. The Au Bon Marché Company in

Vanuatu funded the chamber and an associated pack-house facility.

[HTFA is an alternative to fumigation as a means of destroying eggs and larvae of pests, especially fruit flies, in crop commodities for export. It consists of a chamber in which the commodity is subjected to air heated gradually to a controlled maximum temperature and held there for a controlled time. Probes inserted into the largest fruits monitor the internal temperature of the fruit. Editor.]

3. *Orchid weevil in American Samoa*

Mark A. Schmaedick, *Entomologist, American Samoa Community College*

The orchid weevil, *Orchidophilus aterrimus* (Waterhouse) (Coleoptera: Curculionidae), has been found on Tutuila Island, American Samoa. Steven Lingafelter of the US Department of Agriculture Systematic Entomology Laboratory confirmed the identification. The weevils were first noticed in February 2002 infesting a small collection of dendrobiums in the Malaeimi Valley. Subsequent surveys revealed that the weevils are widespread on the island and found mainly on orchids in the yards and small shadehouses of hobbyist growers. Weevils were not found in more intensively managed commercial operations.

O. aterrimus occurs in Japan, Singapore, Philippines, Thailand, Malaysia, Indonesia, Hawaii, and Australia. Kalshoven (1981) listed the orchid genera *Arachnis*, *Cattleya*, *Coelogyne*, *Cymbidium*, *Cypripedium*, *Dendrobium*, *Paphiopedilum*, *Phalaenopsis*, *Renanthera* and *Vanda* as hosts of *O. aterrimus* in Indonesia and Malaysia, and Swezey (1945) gave *Dendrobium*, *Vanda*, *Phalaenopsis*, *Renanthera*, *Cymbidium*, *Angraecum*, *Saccolobium*, and *Spathoglottis* as potential hosts in Hawaii.

The pale, legless orchid weevil larvae bore inside stems for about four months before pupating in the stems (Mau 1984). The adult weevils leave a 1-2 mm exit hole in the stem upon emergence. The weevils are black, 3.5 - 6 mm long with an elongate snout and can live up to a year (Mau 1984). The adults can often be seen in orchid leaf axils but tend to drop from the plant if disturbed.

Because the weevil is already widespread on Tutuila, eradication is regarded as not practical. Growers are being advised to destroy infested plants and use insecticides to protect remaining plants if the problem persists.

References

- Kalshoven, L. G. E. 1981. Pests of crops in Indonesia. Revised and translated by P. A. van der Laan and G. H. L. Rothschild. P. T. Ichtar Baru - Van Hovee, Jakarta.
- Mau, R. F. I. 1984. Development of the orchid weevil. Proceedings of the Hawaiian Entomological Society 24: 293-297.
- Swezey, O. H. 1945. Insects associated with orchids. Proceedings of the Hawaiian Entomological Society 12: 343-403.



Fig. 1. *Orchidophilus aterrimus* (a) adult (b) larva

4. Information on International Atomic Energy Agency (IAEA)

Emu Tora Vueti

The IAEA serves the United Nations family as the global forum for scientific and technical co-operation in the peaceful uses of atomic energy. Its aim is to accelerate and enlarge the contribution of atomic energy to peace, health and prosperity and within this context it assists research on, and development of, practical application of atomic energy for peaceful uses. In our area of interest it is active in research in the generation of sterile insects for suppression and eradication of such pests as fruit flies and testes flies. Support is given to member countries through technical cooperation projects in association with the Food and Agriculture Organisation (FAO). More information on the IAEA and its insect pest control programme is available at the Internet site: <http://www.iaea.org/programmes/nafa/d4/index.html>

5. PPS Extension

Stephen Hazelman

Discussions were held with Ministry of Agriculture officials of **Samoa** and **Vanuatu** on SPC-PPS Extension activities in the each of the countries. Extensive pest and disease participatory surveys with the Samoan Advisory Service and farmer groups are now planned for August this year.

The SPC PPS **Plant Protection Curriculum** for school agricultural science was introduced to Fiji last year and is in the final stages of implementation there. This month its uptake in Samoa was discussed with Mr. Gauga Wong, Principal Education Officer. Samoa has officially requested its implementation, through the office of the Director of Education.

Liaison between the **USP School of Agriculture, Alafua**, Samoa, and the PPS was explored in a meeting with Dr. Adama Ebenebe, Lecturer in Plant Protection at Alafua. Areas for collaboration between SPC-PPS and USP were examined, and agreement was reached on assisting a final year student conducting an insect survey on ornamentals in Samoa. Assistance with the identification of insect pests would be available through the Ministry of Agriculture with SPC funding support. The list of PICTs pest and diseases priority areas as developed at the recent RTMPP meeting in Nadi, Fiji, was provided to the School of Agriculture, to support the choice of curriculum topics. Still at the USP Alafua Campus, discussions were held with Dr. Lafitai Fuatai, Head of Agriculture Education and Extension of USP on extension methodologies used in the region.

In **Fiji** initial discussions have been held with the Quarantine Service on areas for collaboration as Fiji prepares to host the 2003 South Pacific Games.

6. Pest List Database (PLD)

Dick Vernon

Niue has become the latest country to take on this system. The Director of Agriculture, Sauni Tongatule, took delivery of a newly developed Niue PLD with 690 local pest occurrence records already in place. Ten staff from the Department of Agriculture, Forestry & Fisheries attended a presentation of the system given by Mana'ia Halafihi, Head of Information, MAF, Tonga.* Three quarantine staff, Crispina Konelio, Charlene Funkaki and Juliean Siligi, then attended a 2-day workshop in the use of the system. They identified a number of reports with pest occurrence data which they are now adding to the records already in the system.

**SPC acknowledges with thanks the permission given by Haniteli Fa'anunu, Director of Agriculture and Forestry, Tonga, for a member of his staff to assist with this workshop.*

In **Samoa** some new features, requested at the RTMPP meeting in Nadi, Fiji, in March, were added to the system already operating in the Quarantine Service led by Kirifi Pouono, Assistant Director (Quarantine and Regulatory). New features include a facility to track interceptions at ports and airports. The system was also introduced to the research and extension staff at the Nu'u Crop Development Centre. Research staff will operate the system there. Extension staff will assist in pest survey work and have been provided with a digital camera to assist with pest identification at the farmer level.

7. *Plant Protection Service Staff travel*

M. Kora.

Month	Dates	Country	Staff	Purpose
May	17-24	PNG	Ema Tora Vueti	Review of ACIAR PNG Fruit Fly Program
June		Tokelau	Jacqui Wright and Sada Nand Lal	Pest survey and biocontrol agent release
July	6 - 10	Cook Islands	Eric Mckenzie Richard Davis	Disease survey

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