

**8th Pacific Plant Protection Organisation Board Meeting
and
16th Regional Technical Meeting on Plant Protection**

SUMMARY REPORT

Tanoa International, Nadi, FIJI
21–25 September 2015

8th Pacific Plant Protection Organisation Board Meeting

**&
16th Regional Technical Meeting on Plant Protection**

Summary report

Prepared by the Pacific Community



Suva, Fiji, 2015

15th REGIONAL TECHNICAL MEETING ON PLANT PROTECTION

SESSION 9

Welcome

The 15th Regional Technical Meeting on Plant Protection was officially opened by the PPPO Chairman. The Chair thanked all those in attendance and said that the representatives can look forward to a fruitful week of discussion.

Election of Meeting Chair (Research)

The members unanimously nominated Mr. William Wigmore (Director Research – Cook Islands) to be the meeting Chair.

SESSION 10

Emerging Pests and Pest Management

10.1a Status of Guam Coconut Rhinoceros Beetle

Presenter: Dr Aubrey Moore

- Coconut Rhinoceros Beetles (CRB) were first detected in 2007; the Guam bio-type is genetically different from the Pacific biotype in that it is attracted to light at night.
- The CRB-Guam biotype is involved in new invasions in Hawaii; Port Moresby area of PNG; Honiara area of Guadalcanal, Solomon Islands; and may be the cause of increased damage in Palau.
- Adults feed on liquid/sap.
- First discovered in Tumon Bay not far from Guam International Airport.
- US\$600,000 budget each year on eradication activities lead by the University of Guam (UoG) and donor partners like APHIS.
- Guam CRB resistant to all available OrNV isolates.
- Actively trapping using various methods like Tekken fish net traps (no need for pheromone) keeps 65% of beetles in container, and the Mark-Release-Recapture.
- Current tactics of trapping, sanitation, and application of Metarhizium may reduce local damage, but will do little to prevent an island-wide population explosion because most breeding sites are inaccessible (in jungle and/or on military bases).
- Worst case: adults kill trees and larvae feed on dead trees.

RECOMMENDATION: Urgently find and introduce a density-dependent biocontrol agent for the CRB-Guam biotype to prevent massive destruction of Guam's palms and to lower the risk of CRB-Guam invading other islands.

10.1b Emerging Important Arthropod Pests

Presenter: Dr. Maclean Vaqalo

- Under NZ Aid Programme, SPC–AgResearch carried out CRB damage surveys in conjunction with virus, *Oryctes nudivir* (OrNV) levels in Samoa, Fiji and PNG.
- Avoid spreading with movement of soil compost, infested areas to beetle-free areas.

- Urgent need to update pest data. Conduct pest surveillance in member countries. Can be split into sub-regions with more capable countries assisting other countries: PNG can assist neighbours in pest surveys.

ACTION: There is urgent need to setup a proper website for PPPO ASAP before the next meeting.

ACTION: Pest surveys required to update national pest lists.

Group 4 Management of African tulip

- African tulip is a threat to infrastructure, biodiversity, forestry and agriculture
- HOAFS requested SPC to lead management in 2006 and again in 2008.
- Two-phase research approach needed.
 - i. Phase 1, Genetic matching of invasive populations of the tree with native populations in Africa. This has been partially completed. Of the three subspecies in Africa only one is in the Pacific islands. A mite (*Aceria* sp.) is one potential biological control, host ranging in Rhodes University. Several other potential biological control agents are available
 - ii. Phase 2: funding is needed to complete parts of Phase 1 and Phase 2 which will include continue host-specificity testing, field releases of proven biocontrol agents and monitoring in a number of countries where approval is given. The project will be at least 3-5 yrs for *at* least one biocontrol agent to be released.
- Herbicide use is limited, recommended only in farming situations
- Wood utilization is encouraged but will promote the proliferation of the weedy tree and populations will continue to persist from re-growth at harvested sites and seeds blown from difficult to access forest populations.

Coconut Rhinoceros Beetle

Presenter: Dr. Aubrey Moore

- Guam biotype is more invasive than PanPacific biotype and resistant to virus biological control and has invaded Guam, Port Moresby areas of PNG, Hawaii, Honiara, Solomon Islands and Palau, after no movement for 30 years.
- Behaviorally different from the Pacific genotype. Resistant to the biocontrol virus and is far more damaging. Not attracted to beetle lures, only about 1% caught so cannot be used as effective control.
- Developed a Work Plan
- Program Organisation
- FAO is now helping Solomon Islands to manage the outbreak of rhinoceros beetles using the PanPacific virus, ineffective against G-biotype, *Metarhizium* fungus is a useful biological control agent but ineffective against the Guam biotype.

ACTION: PPPO and RTMPP request assistance from SPC to take the coordinating role to seek funding, establish and managed a programme to minimize impact from the newly discovered Guam biotype of coconut rhinoceros beetle.

Emerging Diseases

Presenter: Dr R. Davis (viruses, phytoplasma)