

## MANAGEMENT PROGRAMMES AND CHALLENGES IN RED PALM WEEVIL (RPW) CONTROL IN THE ASIA PACIFIC REGION

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The red palm weevil (RPW) *Rhynchophorus ferrugineus* (Olivier) is a devastating pest of palms and is reported to attack more than dozen palm species worldwide. The weevil was found in India as early as 1891, however it was only in 1906 that it was recognised as a deadly insect pest in coconut palms. RPW has been found in many countries in Asia-Pacific region such as India (1891), China (1998), Malaysia (2005), Thailand, Indonesia, Philippines, Vietnam, Japan and others.

Although the weevil was first reported on coconut *Cocos nucifera* from South Asia, during the last two decades it has gained a foothold on date palms *Phoenix dactylifera* in several Middle Eastern countries from where it has moved to Africa and Europe, mainly due to the movement of infested planting materials. In the Mediterranean region, RPW also severely damages *Phoenix canariensis*. Currently, the pest is reported in 15% of the coconut-growing countries and in nearly 50% of the date palm-growing countries.

Integrated pest management (IPM) strategy has been employed in several countries (India, Malaysia) to manage the RPW. At present, use of food baited pheromone traps in both surveillance and mass trapping programmes form a key component of the IPM strategy against RPW. Early detection of infestation in the field is important for the success of any RPW-IPM programme. Quarantine system is also in place to control the movement of the planting material from the infested country. Strict pre- and post-entry quarantine regimes is essential to make sure only pest-free and certified planting material can be transported. Insecticide is also being used to control the RPW by applying through trunk injection and soil drenching.

Training must be provided for the quarantine officers to ensure that they recognize the RPW as well as the symptoms of infestation as they are the key persons to confiscate and destroy the infested planting material before it enter the country. Public awareness is also another important tool to engage the public to share their responsibility by not bringing into the country the planting materials from the infested country.

It is very challenging to manage the RPW once it is established in the area. Commitment from individual governments is very crucial to ensure the success of the control and eradication programmes. The IPM programme can be strengthened by intensifying the search for effective natural enemies, breeding of tolerant or resistant palm varieties to the pest, development of biocontrol techniques and fabrication of a RPW infestation detector.