

## MANAGEMENT PROGRAMS AND CHALLENGES IN RPW CONTROL IN EUROPE

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The Red Palm Weevil (RPW) *Rhynchophorus ferrugineus* (Olivier, 1790), has become a pest of cultivated palms for a relatively long time (Milne, 1918; Simmonds, 1925; Faleiro, 2006). The RPW host plant moved from coconut to alternative host date palm and Canary palm thereby causing severe damages by killing thousands of *Phoenix dactylifera* L. and *P. canariensis* in the EU-Mediterranean area. The RPW is now considered a quarantine pest by EPPO and regulated in member countries as a pest of limited distribution (A2 pest).

Following its first outbreak in Spain (1996) and a mass importation of date palm trees in the 2000s from infected areas to Europe, the RPW has been invading the EU countries where palms are cultivated. The most of the infested plants belong to *P. canariensis* Hort., the main ornamental palm on the EU-Mediterranean coast. Despite all the efforts and resources provided by the National and EU plant protection organizations (PPO), the ability of RPW to spread and the lethal interactions with its host plants, turn the weevil into a serious pest for economically relevant palms in the southern EU countries. Canary Islands PPO was the only one able to eradicate the pest and the last foci were declared free from RPW in May 2016.

The other EU-Infested countries experimented various preventive and curative control actions, based on traditional and innovative technologies; however, no preventive or curative control means has been found to be fully effective. In this context, the cut down and disposal of symptomatic palms was suggested to minimize the side effects of severe infestations. Unfortunately, this suggested action was not effective, considering that the RPW adults disperse before the evidence of the infestations. Additionally, the difficulties in RPW-infested plant early detection with the weak quarantine procedures and the inefficient awareness programs, contributed to weevil rapid dispersion in *P. canariensis*.

Looking at RPW control experience in the old continent, it seems reasonable that an effective RPW control strategy shall originate from preventive and protective actions. Pest control will engage all the stakeholders by integrating effective control means into a shared Integrated Pest Management (IPM).

The strategy will target the pest, by strengthening the phytosanitary measures, considering the key-point analysis in the weevil life-table, evaluating the pest population density and dynamic, the host plant density and the RPW ability to induce a protective environment.