مركـز التميز البحثي في النخيل والتمور Date Palm Research Center of Excellence



1-لمحة موجزة عن سوسة النخيل الحمراء

The red palm weevil, Rhynchophorus ferrugineus (Olivier) (Coleoptera: Curculionidae) is a key insect pest of palms (Arecaceae) worldwide. In the Middle East, the weevil was first detected in UAE in 1985, and two years later it was found in Gatief in Saudi Arabia. The weevil then gained a foothold on date palm quickly expanding both its geographical and host range. The large-scale movement of infested planting material for both farming and ornamental gardening, coupled with difficulties in detecting infested palms along with weak enforcement of quarantine regulations largely contributed to the spread of R. ferrugineus. Red palm weevil is designated as an A2 pest in Europe, recommended for regulation as a quarantine pest by EPPO. Currently, the pest is reported from nearly 50 countries in diverse ecosystems in Europe, Africa, Asia, Central America and the Caribbean and is a threat to nearly 40 palm species globally. Losses in the GCC countries of the Middle-East due to the removal of severely infested palms during 2009 were estimated to range from 5.18 to 25.92 million USD at 1 and 5% infestation, respectively. In the autonomous community of Valencia in Spain, around 20,000 Canary Island palms were killed by weevil during 2004-2009, corresponding to a loss of an estimated 16 million. Recently, the Food and Agriculture Organization of the UN has designated R. ferrugineus as a category-1 pest in the Middle East and North Africa (NENA) region where it is a threat to the livelihood security of date palm farmers in rural communities the sustainability of the environment due to the excessive use of insecticides to control it. In March, 2017, FAO organized a 'Scientific and High-Level Meeting on the Management of RPW' and through the 'Rome Declaration' called for the urgent need to combat R. ferrugineus by collaborative efforts and commitments at the country, regional and global levels to stop the spread of this devastating pest.

2-برنامج مكافحة سوسة النخيل الحمراء

Rhynchophorus ferrugineus is currently managed in several countries employing large area-wide control programs using an aggregation-sex pheromone (ferrugineol) based IPM strategy that mainly revolves around inspecting palms to detect infestation and trapping of adult weevils using food baited pheromone traps. The strategy also includes preventive and curative chemical treatments, removal and disposal of severely infested palms, implementing phytosanitary measures to ensure movement of pest-free planting material and periodic validation of the IPM strategy using GIS aided decision-making tools to assess the spatial and temporal spread of the pest. The management program which is executed by the Ministry of Environment, Water and Agriculture collaboration of King Faisal University commenced in 1993-94 and updated in 2012.



3-دليل تنفيذ برنامج مكافحة سوسة النخيل الحمراء في واحة الأحساء



Positioning of red palm weevil pheromone traps using GIS aided decision-making tools to assess the spatial and temporal spread of the pest.



Training of farmers and raising their awareness about the red palm weevil by the Date Palm Research Center of Excellence, King Faisal University