AN ELECTRONIC SENSING DEVICE FOR RED PALM WEEVILS

A.A. Al-Janobi

Dept. of Agr. Engineering, King Saud University, Riyadh, Saudi Arabia.

Red palm weevil is one of the rapidly growing insects in date palm trees, which destroy thousands of trees every year and eventually cause great loss to farmers. Several attempts have been made to find a solution to eradicate this deadly insect but none has become fruitful. Because, the various methods adopted by researchers could not fully differentiate the defected trees caused by red palm weevils from the others. In this paper, we propose a portable non-destructive sensing system to locate the red palm weevils inside the trunk of the date palm trees in the field. The sensors in the system operate on T-ray, Acoustic emission, Step signal, and Eddy current. The system can be implemented in real time, which would help farmers to eliminate totally the deadly red palm weevils with no chance of spreading.