

Abstract

The palms trees are famous sights in Hadramout .in the first experiment a survey was conducted to identify palms and dates varieties and their quality. In addition to screen insect pest, diseases and animals that infest palms in Hadramout. The results show that the number of varieties were 65 and 28 in the valley and coast respectively. The variety Hamra was adominant in Hadramout valley (35%) .The excellent varieties were Megraf, Medini and Gazaz (28.6%). The variety Suqutry was a dominant in Hadramout coast (39%) .The excellent variety was Bafhid (26%).The productive palms in Hadramout valley represent 46% , and the unproductive palms 26% ,and the male palms 2% .In Hadramout coast were 22% ,4% and ,48% respectively .The results revealed that the most important inscet pest was the red palm weevil (*Rhynchophorus ferrugineus* (Olivier)) reaching an infestation of 65% and 67% in the valley and cost of Hadramout respectively .The most important disease was the humid mould,with a percentage of spread (15%) and (65%) In Hadramout valley and coast respectively . Animal pests were negligible in Hadramout .

In the second experiment different stages of the weevil were described. The egg has acreamy colour 2,6mm. in length and 1,1mm in width .Larva is legless, has brown yellow colour with dark brown head, 50mm.in length and 20mm.in width .Pupa had a creamy colour changing to brown 35mm .in length

and 15mm.in width .Cocoon is brown to black colour and made of palm fibres ,60mm .in length and 30mm in width .The adult brown black in colour 35mm .in length and 14mm.in width .

In the third experiment, the life cycle was investigated .The female lays about 300 eggs inside the palm trunk, using different holes .The incubation period 2-5 days, The larval period 1-3 months. passing through 5 instars. Pupation period 14-12 days inside a cocoon .The adult lives about 3-4 months and the whole life cycle takes a bout 5-7 months .

In the fourth experiment, a test was made for the evaluation of three insecticides: Dimethoate 40% ,Lannate 90% and Cypermethrin 10% to control red palm weevil .All treatments proved effective .

Infestation percentage was reduced to 19,16% ,21,6 % and 17,5% by the three pesticides respectively in comparion to the control (70%). Also control efficiency was (53,7%) (21%) and (75%) respectively. Cypermethrin was significantly better ($P<0,05$) than Dimethoate and Lannate.