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**BIOLOGY OF THE CAROB MOTH (*APOMYELOIS CERATONIAE*) A NEW PEST OF
PISTACHIO IN RAFSANJAN**

M. R. MEHRNEJAD

Agricultural Research Center of Kerman

Summary

During three years of investigation (1989-1991), it was found that carob moth, *Apomyelois ceratoniae* (Zell.), is an important pest of pistachio nuts in orchards and domestic storages, a pest had been formerly reported as pomegranate neck worm in Iran. It was collected from pistachio orchards in Rafsanjan, Ravar (Kerman province) and Ashkezar in Yazd province. Up to 10 percent of pistachio nuts was found to be infested by the pest at harvesting time in these areas.

Under natural conditions, the adults emerged late in April, but they attacked pistachio nuts when the hull started to crack late in July. Nuts infestation (increased) with increase in cracking shortly before the harvesting time. Its maximum activity found to be during september and October in Rafsanjan. This insect could not attack unsplitted hull nuts, how ever the larvae could penetrate uncracked shell through stem tips. It appeared that carob moth spend several generations on alternate hosts, mainly pomegranate, before pistachio nuts crack. Carob moth laid eggs only on hull splited nuts or in open wounds on the hulls (usually a single egg on each nut). the hatching larvae fed on the kernel. Larval and pupal periods were about 42 days and each larva consumed about 120 mg of fresh kernel. Under natural condition overwintering took place as larva in the nut remained on or under the trees, pupation took place in the nuts.

It was also observed that Quince moth, *Euzophera bigella* (Zell.) Could attack pistachio nuts, but with much less extent. They attacked pomegranate trees, the larvae

feeding under the barks of trunk and twigs.

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- Address of the author:
Eng. MOHAMMAD REZA MEHR NEJAD. Plant Pests and Diseases
Research Department, Agricultural Research Center of Kerman, P. O. Box 435,
Rafsanjan 77175, Iran.