

THE QUINCE MOTH *EUZOPHERA BIGELLA* ZELL.

(*LEP. PHYCITIDAE*) IN IRAN

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Summary

The quince moth *Euzophera bigella* Zell. is a new known insect pest of pomaceous fruits and walnuts in Iran. The importance of this insect pest was masked for many years by codling moth *Carpocapsa pomonella* L. due to the similarity of their type of injury, shape and certain biological significances. In 1964 it was observed for the first time in a rearing cage of codling moth containing wormy apples collected from Karaj vicinities. It was also observed by author in Utah State University, Logan, USA, from crab apples in the same way.

Specimens from these insects were sent to Dr. W. Sauter in Zurich and was identified as *Euzophera bigella* Zell. (*Lep. Phycitidae*). -

So far this insect is collected from Tehran, Mazandaran, Khorassan, and Azarbaiejan vicinities and most probably is widely distributed in Iran.

The adult is a grayish brown moth 17-20 mm. wing spread and 9 mm. long. Maxillary palpi is held upward and the body is held oblique at rest, having head and thorax upward. The front wing is narrow, triangular with two wavy bands reversed V shape on first half and W shape on the second half, from the base. The hind wing is grayish with long silvery fings.

The pupal period is about 7-15 days, depending the climatic and seasonal conditions. Under Israel natural conditions the quince moth produce 5 generations per year, but it has about 3 to 4 generations under Karaj climatic conditions.

When apples and pears are attacked by both codling moth and quince moth together, the population density of codling moth larvae is higer in early season and is decreased rapidly from mid summer. So about 70-80 percent of wormy fruits in that time are due to quince moth. The quince fruits usually remain quite late on the trees and they are about the only available fruit in fall, so they will be infested severely by quince moth regardless of the temperature and photoperiod reduction. While codling moth adults will lay eggs from which diapausing larvae will emerge when temprature fall below 60 F. and day lenth below 12 hours (Wglessworth, 1961).

Distribution

This insect is collected from Tehran, Mazandaran, Khorassan and Azarbaiejan vicinities and most probably is widely distributed in Iran.

Natural Enemies

Up to now four different species of Ichneumonid, Braconid and Chalcid wasps are collected from larvae and pupae of quince moth. Most of them are collected from hibernating larvae and cocoons. Several species of Anthocorid bugs are found in empty cocoons under the barks. Two microbial diseases are identified from hibernating larvae. The population, dynamics, natural enemies and their importance are under investigation.

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