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SUPPLEMENTARY STUDIES ON *Euzophera bigella* Zell. IN IRAN (1975 - 1984)[1]

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SUMMARY

During ten years investigations on Quince Moth in two different regions in the vicinity of Tehran (altitudes and plains) we have found this insect xylophagous as well as fruit eater.

The winter is passed in two forms. The fruit eaters hibernate as the last instar larvae in their cocoons under the bark of the trunk and old branches of their host trees, while the xylophagous group of the population pass the winter in the form of different larval stages in their feeding sites including the bark and the cambial region of the trunks and branches.

The fruit eaters as well as the other group pass all the spring and a small part of summer as xylophagous, and this is the reason why there is not any fruit attacked by the larvae during the whole spring and the beginning of summer. That is only during the third decade of June (in the plains) and the third decade of July (in altitudes) that the fruit eating larvae begin to appear.

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We consider the whole population of this insect as a mass of two groups, one following the xylophagous regime duriny the whole year and the other one starting feeding on fruits from the summer on. The individuals of these groups change continuously their regimes.

The insect, as xylophagous, attack quince, apple, pear, plum, apricot and sweet cherry. It is strongly possible that the other fruit trees belonging to the family Rosaceae be attacked by this insect.

As fruit eating, we have found the larvae of quince moth in quince, apple, pear, walnut and pomegranate. The density of larvae in quinces is inferior to that of codling moth at the beginning of fruit eating activities, but at the end of summer and during the autum this insect appears as the dominant species. In apple and pear, it is always codling moth dominating *E. bigella*.

According to our research work during the winter 1983/1984 the hibernating individuals belonging to the group of fruit eaters have an obligatory diapause, in other words, the individuals collected at the beginning of the cold season suffered a high percentage of mortality in the laboratory, and the time necessary for the emergence of the moths was much longer than those collected later (See the Figures and the Tables in the Farsi text).

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