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THE MOTHS POPULATION STUDY OF PEACH TWIG BORER *(Anarsia lineatella Zeller)* (1) IN GHAZVIN AND KARADJ FROM 1975-1980 (2)

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SUMMARY

The peach twig borer male moths population was studied in almond and peach orchards of Ghazvin and peach orchards of Karadj from 1975-80. The moths population was manipulated by water and sticky traps. The traps were baited with the synthetic pheromone capsule (Anamone)(R)of the female moths (Figs.1 and 2).The pheromones were changed every month. The traps were checked 2 or 3 times a week and the number of male peach twig borer moths was recorded. This investigation showed that although the water traps caught more moths than the sticky traps,but the use of standard sticky traps is recommended because their use is much easier and they are standardized(Table 1).

Fig. 3 demonstrates that although the numbers caught in water and sticky traps are different,but the flight trend is similar in both traps. The moths population density is about 2 times higher in almond orchards compared to the peaches (Table 1).

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(1)- Lep., Gelechiidae

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The number of moths caught in a trap for a night showed that the moths density was increasd from 1975-78 in Karadj peach orchards. The moths density in 1978 was 5.41 times higher compared to its density in 1975 (Table 2).

The insect has four generations of moth flight per year(Fig.4). The first flight starts at late April and peaks about late May. The 2nd,3rd and 4th generation flight peaks occur on early July, early Aug. and late September, respectively. Although the second, third and fourth generations overlap, but the peaks of flights are very clear and is very important in determining the spray time.

Fig. 5 showes that when it rains in a trace amount and the daily mean temperature is high, the number of moths caught in the traps was increased. The humid and warm climate is suitable for the moths flight activity.

The moths population density study from 1976-78 in Agricultural Training Center Peach Orchards(Fig.4) and in 1979 and 80 in College Peach Orchard(Fig.6) in Karadj revealed that the peaks of all the flights occurred almost at similar date during five years study.

The first spray programme is recommended when the overwintering larvae in the second instar begin their activities. This occurs when the trees are in the pink bud stage. The other spray programmes could be done if the pest density is economical and 7-10 days after each flight peak occurrence.

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