

THE BIOECOLOGY OF ALFALFA WEEVIL (1) AND ITS CONTROL IN KARAJ

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Alfalfa weevil is one of the most important pest of alfalfa in most parts of Iran. According to studies during the years 1971 - 76 in Karaj area with 1321 mts height, short and cold winter and along summer (minimum at coldest months between -4.4- 6.8 and maximum at summer time between 35-37 degree centigrades) we found that this insect overwinters as eggs and adults.

In early days of spring (March 22-24 in 74 and April 3-4 in 75) the eggs hatch and very tiny larvae begin to feed of young new emerged leaves.

At this time the adults are not still active and they are mostly under the debris in the alfalfa field. But with coming the warmer days at first month of spring, the adults gradually begin to go out from their winter habitat and after a little feeding they mate and lay their eggs (April 13 - 15), a few days after this time (7 - 8) these eggs hatch and the new hatched larvae and former larvae with the origin of winter eggs make a huge population of larvae which feed on leaves and stems of alfalfa and after a short time the damage appears very seriously, and this time alfalfa should be sprayed.

According to insect rearing under the cages in alfalfa field we got three generations which the third one takes a long time around 120 days. At fall in the case of favourable condition a considerable percentage of new emerged adults mate and lay eggs while some of them remain without mating and overwinter as adult.

Chemical control of alfalfa weevil in Karaj. (Comparison of materials)

In order to find the appropriate and non persistent insecticides the following materials have been tested during the years 72-73 in Karaj.

- 1) Malathion 57 % 2.5 - 3 lit/H
- 2) Diazinon 60 % 1 - 1.2 lit/H
- 3) Supracide 40 % 1 - 1.2 lit/H
- 4) Dipterex 80 % 2.5 k/H
- 5) Cidial 50 % 2 lit/H
- 6) Zolon 50 % 3 lit/H
- 7) Lebaycid 50 % 1.5 lit/H

1) *Hypera postica* Gill. (COL. CURCULIONIDAE)

2) Eng. J. Habibi, P. O. B. 167, Karaj, IRAN.

8) Gusathion M 20% 1.5 lit/H

of the materials tested for control of alfalfa weevil best results were obtained with:

1) Supracid 1,2 lit/H

2) Diazinon 1,2 lit/H

3) Malathion 3 lit/H

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