

THE BIOLOGY OF «GAZ PSYLLID» IN IRAN¹

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SUMMARY

Cyamophila dicora Log. overwinters as adult on the *Astragalus adscendens*. The host plants are usually covered by snow and some branches are exposed. The insect lives on both, and does not make use of special winter shelters. In spring, when the leaf buds start to grow, Gaz Psyllid begins its activity. After mating in May when the leaves are fully grown, the females lay their eggs on the upperside of the leaves. Eggs are laid singly or in cluster, alongside the main vein of the leaves. The number of the eggs in each cluster vary from 2 - 11, usually 5 eggs. Nymphs appear at the end of June and the overwintering adults die at this time. Nymphs feed inside the rolled leaves for some time and then scatter on the branches when the flowers appear. At the end of August, the nymphal wing buds appear and grow gradually. The egg laying period is about 55 days and the nymphal stage lasts 100 days. At the last nymphal stage when the wings of nymphs reach the first abdominal segment, they secrete the white sticky string - like manna called «Gaz or Gaz - Angebin». During the end of August to the beginning of October, the peasants collect the secretion by shaking or beating the host plant branches for making the special candy.

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Gaz - Psyllid has one generation per year. Healthy nymphs which have flat abdomen, are able to secrete the manna, while those with swollen abdomen parasitised by *Psyllaephagus* sp. (Encyrtidae, Hym.) cannot produce it. *Psyllaephagus* parasitises the psyllid nymphs up to 70% in some years.

REFERENCES

- AEINECHI, Y., NICKNEJAD, A. and SANEI, M., 1976. Gaz of Khounsar, the rich source of fructose, Journal of pharmacy college, Tehran university (in Farsi).
- BEHDAD, E., 1969. The Gaz of Esfahan, Dehghan - e - rooz, No. 4, 15 and 50 (in Farsi).
- GERAMI, B., 1981. The Gaz of Khounsar, Agricultural college. Esfahan Technical University, 1 - 21 p. (in Farsi).
- NICKNEJAD, A., 1976. The mannas of Iran, Ph. D. Thesis, Pharmacy College, Tehran University, 79 - 102 p. (in Farsi).
- SABETI, H., 1976. Forests, Trees and Shrubs of Iran. Agriculture and Natural Resources Research Organization of Iran, Tehran, 137 - 145, 59 p. and 722 - 741 (in Farsi).
- ZARRINKELK, N., 1960. The Gazs of Iran, Ph. D. Thesis, Pharmacy College, Tehran University, 27 - 34 p. (in Farsi).