Appl. Ent. & Phytopath. Vol. 58. Nos: 1&2, Feb. 1992

BIOLOGY AND POPULATION FLUCTUATION OF POTATO TUBER MOTH PHTHORIMAEA OPERCULELLA (ZELLER) IN KARAJ

J. HABIBI and A. HESAN

Plant Pests and Diseases Research Institute

Summary

Potato tuber moth *Phthorimaea operculella* (Z.) (Lepidoptera: Gelechidae) was observed and introduced for the first time in Karaj in 1985.

It was a new pest for potato in Iran and because of its importance, investigations started immediately. The results showed that under the environmental condition of Karaj the insect had 5 generations per year, with a 33 days average longevity. This insect overwintered mostly as larvae inside the tubers in different depths of the soil. The maximum numbers of adults came from the infested tubers located in 10-20 depth of soil. The insect also damaged the eggplant, tobacco, tomato and some species of Solanaceae family such as *Solanum nigrum* and *Datura stramonium*.

References

BALACHOWSKY, A. S. 1966. Entomologie Applique A L Agriculture, Tome II: Lepidopteres Masson E T CIE, Paris, p: 370-381. HABIBI, J. 1985. The new and quarantine pest of potato in Iran. Plant Pests and Diseases Research Laboratory of Karaj. in Farsi. n. publish).

HABIBI, J. 1986. PTM, The new pest of potato. The Extention Service Organization Bulltin No. 230: 1-10.

HARRIS, P. M. 1982. The Potato Crop, Chapman and Hall London. P: 470-475.

VOERMAN, S. 1984. Integrated pest management.CIP,

Lima, Peru. P: 235-237.

Address of the authors:

Engs. J. HABIBI & A. HESAN. Plant Pests and Diseases Research Labratory. P.O.Box 488, Karaj 31585, Iran.