Ent. Phyt. Appliq. 3 classed one enoisibate benedlesse overs bat al Vol. 48, No. 2 Diffusion Me ages Thou ou gas and to see on the work of the second tion was 270 for one female. Oviposition period was found to be up

# SOME COMPLEMENTARY STUDIES ON THE MORPHOLOGY AND BIOLOGY OF Dermestes maculatus DEGEER (1)

# M. D. SHAHHOSSEINI (2)

### SUMMARY

Dermestes maculatus damages numerous food materials such as dried (smoked) fish, condensed and dried whey and also hide, pelt, wood and some others.

## Some special morphological characters

Adult insect;

On the middle part of penultimate sternite a brown, round spot with yellow hairs is present. This spot is absent in the female (See figure 1 in Farsi text).

Larva;

The full-grown larva is 15.9 mm. long.

A larva, according to our numerous observations, molt 6-14 times, with an average of 7.

Pupa;

In the terminal part of the abdomen of the female pupa there exist two clear conical protuberances by the sides of the projection near the urogomphy, with the heads inclined to the outside of the body, while in the male these protuberances are very small and near together in the middle (See figure 3 in Farsi text).

#### Some aspects of life history

All studies were conducted in laboratory at 23-25 oc. and relative humidity of 80-90%.

<sup>(1)-</sup> Submitted for publication August 20, 1979.

<sup>(2)-</sup> Eng. Mohammad-Djavad Shahhosseini, Plant Pests and Diseases Research Institute, P.O Box 3178, Tehran, Iran.

In the above mentioned conditions one female can lay up to 29 eggs per day. An egg cluster has up to 17 eggs. Maximum egg production was 270 for one female. Oviposition period was found to be up to 73 days.

Larval period was 37-43 days (average; 40 days).

Pupal period was 12 days. Longevity of females is more than that of males. (To find all the details, see the tables 1, 2 and 3 in Farsi text represented in both Farsi and English languages).

#### REFERENCES

HINTON, H.E., 1945. A monograph of the beetles associated with stored products. British Museum, London.

MIRZAYAN, H., 1957. Insects of stored products in Iran (in Farsi, not published).

SEPASGOSARIAN, H., 1966. Storage pests of Iran and their control. University of Tehran, Pub. no. 1026.

with min 971 a string and the

A large according to our municrous observations, molt 6-14 unces,

Pupat

10

In the terminal part of the abdomen of the female pupe there exist two their conical protuberances by the sides of the projection near the unocomplet with the leads inclined to the outside of the body, while in the male these protuberances are very small and near together in the middle See figure 7 in Earst text.

Some aspects of life history

VALL tudies were conducted in laboratory at 23-25 oc. and relative humility of 80-90%.

11. Submitted for publication August 20, 1213.

(1) Eng. Mohammad-Disyad Shubberschu, Flam: Perts and Diseases Receptib Institute, (c) Res 2178 Televan Jean.