

BIOLOGY OF Meloboris collector (HYMENOPTERA : ICHNEUMONIDAE)
A SOLITARY ENDOPARASITOID OF Agrotis segetum
(LEPIDOPTERA : NOCTUIDAE)

Said Mir Khan

Department of Entomology, Faculty of Agriculture,
Gomal University, D.I. Khan.

Received 26-05-90

Accepted 18-08-90

ABSTRACT

The adults of Meloboris collector (Thunberg) emerged from the cocoons by making a circular hole. Two days old males mated with one day old females. The females mated only once in their life time, while the males mated with several females before death. The mating period lasted for an average of 13.6 seconds. At $20 \pm 2^{\circ}\text{C}$, $25 \pm 2^{\circ}\text{C}$ and $30 \pm 2^{\circ}\text{C}$, 60 - 70 % relative humidity, 14 : 10 hours light : dark regime, the females started eggs laying after 5.7, 3.5 and 3.2 days and laid 163, 284 & 145 eggs during oviposition period, which lasted for 24.7, 24.5 & 17.4 days, respectively. The female parasitoids found their hosts by responding to the feces of the caterpillars. Post-oviposition period of the females lasted for 6.5, 5.3 & 2.6 days, respectively at the above mentioned environmental regimes. The incubation period of eggs was 5, 4, and 3 days; larval period lasted for 13.4, 9.2, 8.0 days, while cocoon (prepupal + pupal) stage of males lasted for 10.3, 7.4 and 6.3 days, and of females for 12.4, 8.0 and 7.5 days. The life of adult males and females varied from 29.8, 22.3, 16.8 and 36.2, 27.9, 18.6 days, in respect of the above mentioned temperatures.

INTRODUCTION

Cutworm Agrotis segetum (Schiff) is a destructive pest of vegetables, field crops, fruit & forest plants and grasses at