

**Reproduction Capacity and Sex Ratio of *Bracon hebetor* (Say)
(Hymenoptera, Braconidae), Parasitoid on *Galleria mellonella* (L.)
(Lepidoptera, Pyralidae)**

Mehmet Faruk GÜRBÜZ

M. Yaşar AKSOYLAR

Süleyman Demirel University, Science and Art Faculty, Department of Biology,
32260 Isparta, TURKEY, e-mail: mfg@fef.sdu.edu.tr

ABSTRACT

Bracon hebetor (Say), which is a gregarious and koinobiont larval parasitoid, was reared on the host *Galleria mellonella* (L.) (the Greater wax moth), under the laboratory conditions of $30 \pm 2^\circ\text{C}$, 55-60 % relative humidity (r.h.) and 12 (L:D) photoperiod. The hatching of the parasitoid continued for about 3.5 days. The pupal period was completed after the 8th day. The adult males have lived an average for 7.5 days, while the adult females have lived for 20 days. An adult female laid about 80.85 ± 05 eggs during its whole life and the sexual ratio was 1 : 1.83.

Key words: Braconidae, Parasitoid, *Bracon hebetor* (Say), sex ratio

INTRODUCTION

B. hebetor (Say) is a parasitoid which complete its larval development on different species of Lepidoptera larvae. It generally uses Pyralidae (Lep.) larvae as host (Hagstrum & Smittle, 1978; Hagstrum 1983). Most of the species Pyralidae (Lep.) are agricultural pests on some field crops and storage crops. The most important species of these pests are *Ephestia kuehniella* (Z.), *E. cautella* (Walk.), *G. mellonella* (L.), and *Achroia grisella* (F.). Chemical methods have been applied against these economically important species. However, since insecticide application is expensive and also damages the ecological stability, biological control studies have been researched for these harmful insects. *B. hebetor* is the larval parasitoid of these insects and biology of this parasitoid species has been investigated widely for biological control studies. It is a suitable species for studying