

Investigation on flight activity of *Trichogramma brassicae* Bezd. (Hym., Trichogrammatidae) at different generations and temperatures of rearing

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Abstract

The flight is one of the most important character of insects which help them in their dispersion for finding the mate, food and etc. In *Trichogramma*, flight activity is important in both distribution and quality control assessment. The effects of three generations (18, 24 and 31) and three temperatures (20, 25 and 30±1°C) on flight activity of *T. brassicae* were studied in 12 replications under conditions 70±5 RH% and 16:8 L:D. The testing units consisted of a glass cylinder with 20cm height and 9cm diameter covered by black paper. The numbers of flying (on the top), walking (on the ring) and motionless individuals (on the floor) were counted. Data were analyzed as a factorial completely randomized design. Results showed that flying wasps decreased significantly as generation increased and increased significantly as temperature increased. The highest percentage of walking wasps were observed at 20°C for all generations and the lowest were calculated in generation of 31 for all temperatures. The highest percentage of no action wasps (on the floor) were recorded in generation of 31. The results showed that the flight activity of *T. brassicae* can be affected by generation and temperature and these factors must be considered for quality control assessment and augmentation of *Trichogramma* wasps.

Key words: *Trichogramma brassicae*, Flight activity, Generation, Temperature

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Received: 21 Apr 2009 - Accepted: 21 Oct 2009