

**Effect of Honey, Sugar and Protein Diets on Longevity of *Trichogramma brassicae*
(Hym.: Trichogrammatidae) with and without Host Eggs**

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Abstract

Trichogramma spp. are used in biological control. In this study, the effect of adult feeding on sugar and protein diets on longevity of *Trichogramma brassicae* Bezdenko was tested. The experiment was conducted with ten treatments, each in five replications in a completely randomized design. Treatments included of honey; honey and host eggs; honey and yeast; honey, yeast and host eggs; sucrose; sucrose and host eggs; sucrose and yeast; sucrose, yeast and host eggs; host eggs; and control (no diet). The experiment was carried out in a constant temperature room (T= 25 ± 2°C, RH= % 60 ± 5, 16 L:8 D). Results showed that adult parasitoid feeding had a great effect on their longevity and the various diets were significantly different (%1). Honey compared with other diets increased the longevity of adults to 8 days whereas protein diet did not improve the longevity of adults. Also longevity was decreased from 6.6 and 5.2 days in honey with protein and sucrose with protein treatments to 4.4 and 3 days in these treatments with host eggs, respectively. Therefore, the type of diet influences the longevity of adult parasitoids.

Key words: longevity, *Trichogramma brassicae*, diet.

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