BIO-ECOLOGY AND PARASITIZATION PERFORMANCE OF Trichogramma evanescens REARED ON EGGS OF Sitotroga cerealella IN LABORATORY CONDITION

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Extended Summary

The study was conducted in laboratory of the Department of Entomology at Sher-e-Bangla Agricultural University, Dhaka, Bangladesh during the period from April, 2010 to January, 2011 to find out performance of the Trichogramm evanescens egg parasitoid in parasitizing the eggs of rice moth, Sitotroga cerealella and the effect of weather factors on its biology and parasitization. The experiment was laid out in Complete Randomized Design (CRD) with five replications. The freshly laid eggs (87.60% hatching) were better than long day stored host eggs for using in rearing of Trichogramma evanescens egg parasitoid to ensure the maximum culture of the parasitoid. The rate of parasitization increased with the increase of the number of Trichogramma release and the maximum (91.40%) was achieved by the release of 80 Trichogramma for 100 host eggs. The larval period, pupal period and life cycle from egg to adult ranged from 2.20 to 3.80, 2.00 to 3.60 and 4.20 to 7.40 days, respectively depending on the seasonal variations from September 2010 to January 2011, where longest period was observed in September, 2010 on which the higher mean temperature (30°C) and relative humidity (85.00%) were recorded that ensured minimum parasitization rate (64.40%) of host eggs; conversely shortest period was observed in January, 2011 and on which the lower mean temperature (23.0°C) and relative humidity (69.00%) were recorded that enhanced the maximum parasitization rate (84.00%) of host eggs in the laboratory conditions.



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