Home | About Us | Success Stories | Farmers Association | Farmers' Innovation | Publications | Contact

Search

Bio control:: Mass production::Parasitoids

Mass production of Goniozus nephantidis

Introduction

- Goniozus nephantidis is the most widely used parasitoid of Opisina arenosella. It is a sturdy gregarious larval or prepupal ectoparasitoid.
 The female practices maternal care of eggs and larvae. The host larvae are parasitized and the parasitoid even feeds on host body fluid.
- The parasitoid is also capable of suppressing the population by merely stinging and paralyzing 1st 2nd instar larvae. *G. nephantidis* is the most common and effective parasitoid of late instars caterpillars of O. arenosella in several parts of the country.
- The parasitoid is being mass multiplied and released in Karnataka, Kerala and several other states.

Production procedure

- The parasitoid is multiplied on Corcyra cephalonica larvae in diffused light. A pair of parasitoid is introduced in tube (7.5 x 2.5 cm).
- The adults are provided honey in the form of small droplets on wax coated paper. After a preoviposition period of six days one healthy last instar larva is provided in a vial.
- The larvae parasitized and containing eggs of G. nephantidis are removed regularly from the vials till the death of the female. Such larvae are kept in accordion type strips of paper in plastic boxes which are covered by muslin cloth.
- Considering the fecundity as 20-50, the female is capable of parasitizing 6-7 larvae in three oviposition spells each separated by 4-5 days.
- The life cycle of the parasitoid is completed in 10-14 days (incubation 24-36 hrs, larval feeding 36-48 hrs, prepupal stage 48-60 hrs and cocoon period 48 to 56 hrs + resting adult inside the cocoon 108-128 hrs).



Goniozus nephantidis

Home | About Us | Success Stories | Farmers Association | Publications | Disclaimer | Contact Us

© 2016 TNAU, All Rights Reserved.