

Biology of *Phenacoccus solenopsis* Tinsley on *Bt* cotton

Sanjeev Kumar and J.S. Kular

Department of Entomology, Punjab Agricultural University, Ludhiana-141004, Punjab, India, E-mail: sanjeev4111982@rediff.com

Abstract: Biology of mealy bug, *Phenacoccus solenopsis* Tinsley studied on cotton hybrid RCH 134 under screen house conditions for two seasons. The pest was ovo-viviparous with three nymphal instars preceding adult stage. The total life cycle was completed in 33.40 days (range=27-40). The incubation period for both sexes varied from 1-2 days. The first instar lasted for 5.20 and 4.60 days (range = 4-6) in female and male, respectively. In female, second instar was 5.40 days (range = 4-7) and third instar lasted for 6.30 days. Adult longevity was 15.30. The females laid 3-4 ovisacs with 359.20 young ones through its life—cycle. In males, the total life cycle was completed in 19.50 days (range 15-23). The duration of 2nd and cocoon stage was 4.70 and 6.90 days. Adult longevity was only for 1-2 days. This study is very useful in the identification of various stages of *P. solenopsis* and can be further used to investigate the life table of this pest at different constant temperature to know its distribution in different regions of Punjab.

Key Words: Phenacoccus solenopsis, biology, Bt cotton