

FEEDING POTENTIAL OF LADY BIRD BEETLE *CHEILOMENES SEXMACULATA*, FABRICIUS (COLEOPTERA: COCCINELLIDAE) ON COTTON MEALY BUG *PHENACOCCLUS SOLENOPSIS* (TINSLEY) UNDER CHOICE AND NO CHOICE CONDITION OF LABORATORY

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Abstract: An experiment was conducted to determine the feeding potential of lady bird beetle, *cheilomenes sexmaculata* (Fab.) on cotton Mealy bug, *Phenacoccus solenopsis* under choice and no choice condition in the laboratory at Department of Agricultural Entomology, Navsari Agricultural University, Navsari during July–August, 2016. The results revealed that *C. sexmaculata* was mostly preferred eggs of *P. solenopsis* as compared to nymph and adult of mealybug. The per day prey consumption rate of larval and adult stage of *C. sexmaculata* were varied from 35.00 to 44.00 (Av. 38.80±2.18) and 25.58 to 27.03 (Av. 26.38±0.35) eggs, 13.00 to 18.33 (Av. 14.97±1.47) and 15.52 (Av. 14.83±0.45) nymphs, and 9.67 to 14.00 (Av. 11.58±1.14) and 10.95 to 12.79 (Av. 12.02±0.40) adults of mealybug, respectively in no choice condition. In free choice feeding, grub of *C. sexmaculata* preferred eggs of mealybug more as compared to adult and nymph stage of mealybug. Which indicated by consumption of 65.55 ± 16.63 eggs, 10.75 ± 3.78 nymphs and 5.70±1.75 adults out of 82.00±21.04 (mixed stage) by larvae and 490.55±53.39 eggs, 139.35±15.56 nymphs and 93.25±7.72 adults out of 723.15±3.15 (mixed stage) by adult of *C. sexmaculata* on mealybug.

Keywords: *Cheilomenes sexmaculata*, *Phenacoccus solenopsis*, Feeding potential

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