

**Effects of prey number and stage on the biology of *Cyrtorhinus lividipennis*
(Hemiptera: Miridae): A predator of *Nilaparvata lugens* (Homoptera: Delphacidae)**

ABSTRACT

When given 30 eggs of *Nilaparvata lugens* (Stal) daily, males and females of *Cyrtorhinus lividipennis* Reuter took 10.8 and 13.0 d, respectively, to develop from first instar. The males consumed 49.0 eggs and the females, 59.2 eggs. The mean body length of adult males was 2.6 mm and females, 3.1 mm; mean longevity was 9.6 d for the males and 14.4 d for the females. Lifetime egg consumption was 43.8 eggs by the males and 123.6 eggs by the females. Mean lifetime fecundity by unmated females was 34.0 eggs. When 20 or fewer eggs or 10 or fewer first-instar *N. lugens* were given daily as food, nymphal survival, adult longevity, and fecundity decreased. Individuals offered 20 or more *N. lugens* eggs consumed significantly more than those offered fewer eggs, but this did not result in a decrease in development time or in adult size. *C. lividipennis* adults that were fed daily with *N. lugens* nymphs (5 or 10 first, second, or third instars) also had a shorter life span and laid no eggs. Adults offered 10 second or third instars lived significantly longer than those on other regimes. Our results suggest that *C. lividipennis* nymphs need only small amounts of food to survive to adulthood under field conditions, especially at the beginning of the rice growing season, when *N. lugens* eggs are relatively scarce.