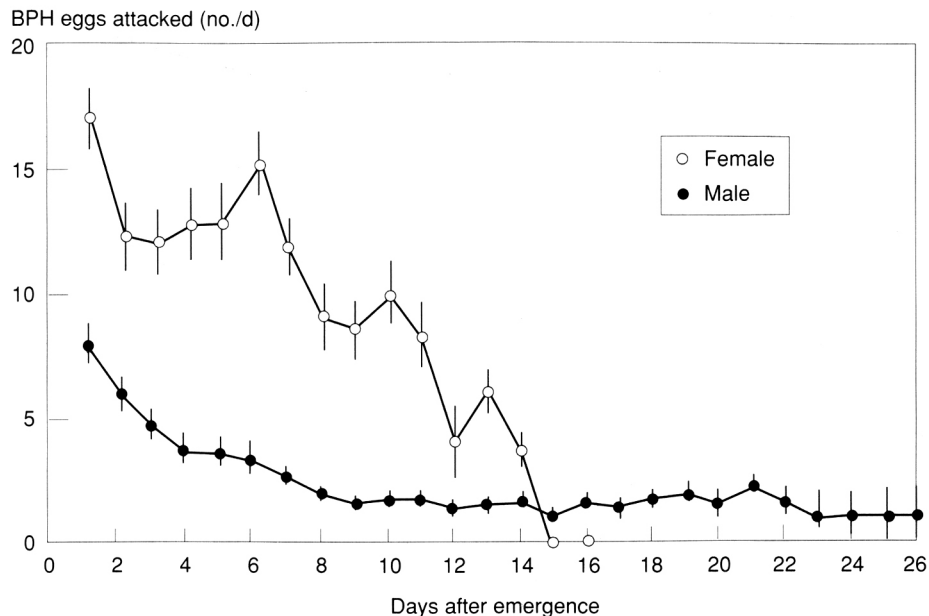


Predation of brown planthopper (BPH) eggs by *Cyrtorhinus lividipennis reuter*

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We measured mirid predator consumption of BPH eggs. Females had higher daily and total consumption of BPH eggs than males. But maximum longevity was shorter in females (16 d) than in males (26 d). Egg consumption by both females and males was highest 1 d after the mirid emerged.

Egg consumption by mirid females was relatively high the first week, then decreased (see figure). Total lifetime consumption by females was 143.68 ± 17



eggs; that of males was 61.23 ± 12.7 eggs. Average consumption per day was about 8.98 ± 1.06 for females and 2.36 ± 0.49 for males. ■

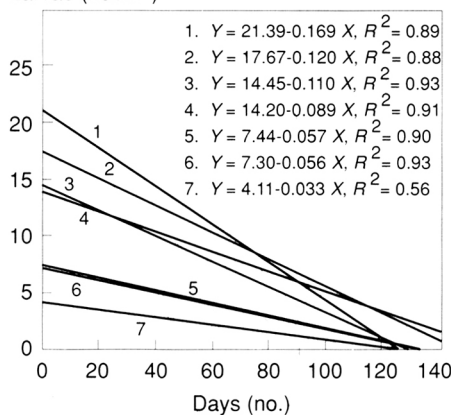
Predation of BPH eggs by *C. lividipennis* adults. Vertical lines are standard error of the mean. IRR1, 1988.

Survival of overwintering rice stem borer (SB) larvae in conventional and no-tillage wheat

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Survival of overwintering SB *Scirpophaga incertulas* Walk. and *S. innotata* Walk. larvae in wheat stubbles

Larvae (no./m²)



Survival of SB larvae in conventional and no-tillage wheat. 1, 2 = no tillage at Motra sites I and II; 3 = conventional tillage at Muslimanian; 4 = no tillage at Muslimanian; 5, 7 = no tillage at Quinke sites I and II; 6 = conventional tillage at Quinke.

(live larvae/m², 10 samples/plot) was monitored in no-tillage and conventional tillage wheat at 4 sites Dec-May 1987-88. Larvae density was higher in no-tillage wheat plots in Dec-Jan, but was almost equal in no-tillage and conventional tillage wheat plots at end of the larvae

hibernation period (Feb-Mar) (see figure).

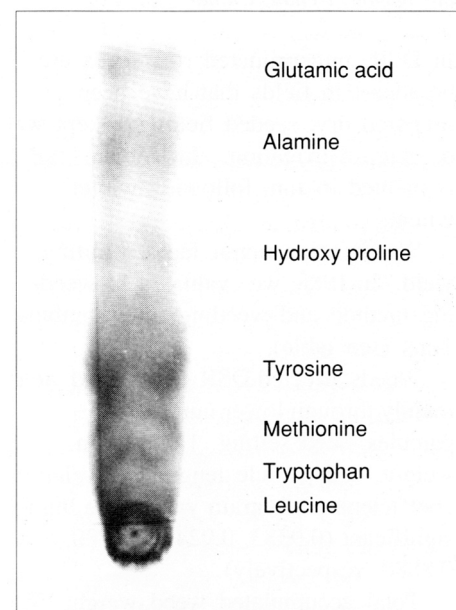
Regression analysis indicated a linear trend in larval mortality over time. Regression lines for both tillage systems were identical, indicating no significant difference in survival of larvae between tillage systems. ■

Protein accumulation in developing oocytes of *Nilaparvata lugens*

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Not much attention has been paid to the reproductive physiology of brown planthopper (BPH) *Nilaparvata lugens*. Protein content and free amino acids at different stages of ovary have been estimated, and the possibility of an antibody against the yolk protein in the ovary has been raised.

Female BPH possess a pair of telotrophic ovaries, and the oocytes develop in association with two kinds of supporting cells. An ovariole consists of a single



1. Free amino acids identified in the mature ovary (butanol:acetic acid:water solvent system).