THE LIFE HISTORY AND CONSUMPTION HABITS OF CYRTORHINUS LIVIDIPENNIS REUTER (HEMIPTERA: MIRIDAE)¹

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The life history and consumption habits of Cyrtorhinus lividipennis Reuter were studied using the different stages of Nephotettix virescens (Distant).

The incubation period of eggs ranged from 6 to 9 days (7.56 \pm 0.64 days), usually 6 days. The durations of nymphal stadia are as follows: first stadium, 2-4 days (2.93 \pm 0.58 days), usually 3 days; second stadium, 2-4 days (3.06 \pm 0.57 days), usually 3 days; third stadium, 3-5 days (3.96 \pm 0.57 days), usually 3 days; and fourth stadium, 3-4 days (3.60 \pm 0.51 days), usually 3 days. The longevity of males ranged from 7 to 25 and of females from 5 to 21 days.

The predator nymph consumed an average of 7.45 host eggs or 1.35 host nymphs per day for a period of 14 days. The adult male predator consumed an average of 10.41 eggs or 4.69 nymphs or 2.45 host adults per day for a period of 10 days, while the female consumed 10.01 eggs or 4.75 nymphs or 2.25 adults per day for a period of 10 days.

Cyrtorhinus lividipennis Reuter is a predator of the brown planthopper, Nilaparvata lugens (Stal) and the green leafhopper, Nephotettix virescens (Distant), two of the most destructive insect pests of rice.

It has been currently observed that when leafhoppers and planthoppers are abundant, generally no crops may be harvested. The usual chemical method of control has not always prevented crop damage but to some extent may have even magnified the problem through the development of insect resistance to the chemicals and the elemination of the hopper's natural enemies. Except for a few observations from IRRI, there has been no intensive study in the Philippines concerning the role of C. lividipennis in controlling planthoppers and leafhoppers and various factors associated with the effectiveness of the predator as a control agent.

Though widely distributed, C. lividipennis has not yet been collected above 2,000 feet (Woodward, 1957).

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