LABORATORY STUDIES ON THE EFFECTIVENESS OF *CYRTORHINUS LIVIDIPENNIS* (HEMIPTERA : MIRIDAE) AS A PREDATOR OF *NILAPARVATA LUGENS* (HOMOPTERA . DELPHACIDAE)

F. R. Devarajah *and* **G. F. Rajendram**
(*Dept. of Zoology, University of Jaffna*)

Culture techniques for rearing *Cyrtorhinus lividipennis* Reuter, a predator of *Nilaparvata lugens* (Stal) were described by Devarajah and Rajendram who also reported that *C. lividipennis* first instar nymphs fed only on eggs, while the second to fourth instar nymphs preyed on eggs and nymphs, and the adults attacked all stages of *N. lugens*. The present paper describes the results of experiments carried out to evaluate the effectiveness of *C. lividipennis* as a predator of *N. lugens* under laboratory conditions.

C. lividipennis males consumed an average of 2.8 eggs and the females 3.53 eggs of *N. lugens* per day. The adult male consumed an average of 0.23 first, 0.16 second, 0.13 third, 0.12 fourth or 0.09 fifth instar nymphs while the female consumed 0.28 first, 0.21 second, 0.16 third, 0.13 fourth or 0.10 fifth instar host nymph per day.

The first, second, third and fourth instar predator nymphs consumed an average of 1.21, 2.35, 2.93 and 3.04 host eggs per day, respectively.

The present studies indicate that *C. lividipennis* is an effective predator of *N. lugens*, particularly of the eggs and young nymphs.

Reference

1. Devarajah, F. R. *and* Rajendram, G. F. *Proc. Sri Lanka Assn. Advmt. Sci.* **37** (1) 47–48 (1981).