Agri. Res. J. Kerala, 1973, 11 (1)

NEW RECORD OF CO CCINELLAARCUATA FABRICIUS (COLEOPTERA: CO CCINELLIDAE) AS A PREDATOR OF NILAPARVATA LUGENS STAL IN KERALA

Large numbers of Coccinella arcuata adults were found feeding on the nymphs of Nilaparvata lugens, a very devastating pest of paddy which occurred in different parts of Ke ala during 1972-73 and 1973-74. In laobratory studies it was seen that the first, second and third instar nymphs of the pest were consumed by adult predator, the average consumption being 20 per day. The life cycle of the beetle was short, lasting for 20-22 days only. The adults lived for a long period of about 35 days. They could easily be reared on alternate hosts in the absence of N. lugens, Aphis craccivore Koch. and Rhopalosiphum maidis Fitch, were suitable for the mass multiplication of this predator in the labortory C arcuata which is reported on N. lugens for the first time, appears to have potentialities as an effective biological control agent against the pest.

C. arcuata was reported earlier as a predator of sugarcane aphids in Hawaii (Agee and Swezey, 1919) and of Aphis maidis in Guam (Swezey, 1940). The authors express their gratefulness to the Director, Commonwealth Institute of Entomology, London for identifying the predator.

REFERENCES

Agee, H. P. and Swezey, O.H. 1919 Director's report. Rept. Committee in charge Expt. Sta. Hawaiian Sugar Plant. Assocn. for the year ending 30 th Sept. 1919. Honolulu. pp. 7-49

Swezey O.H. 1940 A survey of the Insect pests of cultivated plants in Guam. *Hawaii* Plant. Rec. 44. 151-182.

Division of Entomology, College of Agriculture, Vellayani.

c c. ABRAHAM,
KUNJAMMA p. MATHEW,
N. M. DAS

(M, S received on 18-3-1974)