

Egg parasitoids of *Cnaphalocrocis medinalis* (Guenee): the first record of *Trichogrammatoidea bactrae* Nagaraja and *Trichogrammatoidea nana* Zehntner (Hymenoptera: Trichogrammatidae) in Sri Lanka

K.S. Hemachandra^{1*}, A. Polaszek² and M.C.D. Perera³

¹Department of Agricultural Biology, Faculty of Agriculture, University of Peradeniya, Sri Lanka

²Division of Terrestrial Invertebrates, Natural History Museum, London SW7 5BD, UK

³Postgraduate Institute of Agriculture, University of Peradeniya, Peradeniya, Sri Lanka

The rice leaf folder, (RLF) *Cnaphalocrocis medinalis* (Lepidoptera: Pyralidae) is one of the pests attacking rice foliage. Defoliation damage caused by RLF larvae demands the implementation of control measures, usually the application of insecticides. This practice results the disturbances to the colonizing natural enemies in rice ecosystem. Hence, use of non-chemical strategies to manage RLF will enhance the colonization of natural enemy community in rice ecosystem. Therefore, biological control of RLF was suggested using egg parasitoids. As a first step of this endeavour, identification of naturally existing egg parasitoids is necessary. The objective of this study was to identify the egg parasitoids of RLF in rice ecosystem. The eggs of RLF were collected at weekly intervals over different durations in thirteen selected rice fields in Kandy, Anuradhapura and Kurunegala districts. The collected eggs were reared individually until emergence of parasitoid adult or the host larvae in clear plastic vials under laboratory conditions. The emerged parasitoid adults were dissected and slide mounted for microscopic examination to identify the species using taxonomic keys. The identities were verified by Natural History Museum, London. Two species of Trichogrammatidae parasitoids were found parasitizing the eggs of RLF: *Trichogrammatoidea bactrae* Nagaraja, *T. nana* Zehntner. Both species were not reported in Sri Lanka as per the Universal Chalcidoidea database, NHM, London. Characteristics of genitalia of both species well match with the original species description. *T. bactrae* was found in Megodakalugamuwa, Hindagala, Ihalawela, Penideniya, Ganegoda and Wathurakumbura (Kandy district) and Mahailuppallama (Anuradhapura District). *T. nana* was found only in Penideniya (Kandy district).

Key words: *Cnaphalocrocis medinalis*, *Trichogrammatoidea bactrae*, *Trichogrammatoidea nana*

siril.hemachandra@gmail.com