

Parasitoids of melon flies infesting *Trichosanthes anguina* (snake gourd)

A G S Sammani* and D Ahangama

Faculty of Agriculture, University of Peradeniya, Peradeniya

Cucurbits grown as vegetables are damaged by melon flies causing economic losses prompting farmers to resort to heavy insecticide applications. A few efforts have been made for biological control of the pest by early attempts of importation and release of two pupal parasitoids, *Spalangia* sp. and *Dirhinus auratus* Ashmead from India in 1936. As the knowledge base on natural enemies of pests of vegetables in the island is not complete, a field survey was carried out to identify the natural enemies of melon flies infesting snake gourd, *Trichosanthes anguina* around Kandy. Samples of snake gourd fruits infested with melon flies and samples of soil from infected snake gourd fields were collected from farmers fields in Kapuliadda, Kandy District and were kept in rearing cages in the laboratory for the emergence of melon flies and parasitoids. Adult melon flies and parasitoids emerged were preserved as dry mounts and were identified using taxonomic keys and reference insect collection maintained at Horticultural Research and Development Institute, Gannoruwa.

Two melon fly species, *Bactrocera cucurbitae* Coquillett (Diptera: Tephritidae) and *B. near tau* (Diptera: Tephritidae) were found infesting snake gourd pods in this study. According to available literature, *B. near tau* is reported only from fruit species and not from cucurbits. Two larval parasitoids, *Psytalia fletcheri* (Silvestri) (Hymenoptera: Braconidae) and *Diachasmimorpha* sp. and the pupal parasitoid, *Spalangia* sp. were found parasitising melon fly species. Out of these three parasitoids, *Spalangia* sp. is an exotic parasite imported and released in 1936 and these results indicate the successful colonisation of the exotic parasitoid species in Sri Lanka.

Tel: 081-2380123