STUDY ON THE IDENTIFICATION OF WHITEFLY (HEMIPTERA: ALEYRODIDAE) SPECIES AND THEIR ASSOSIATED PARASITOIDS IN SELECTED FRUIT CROPS

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2007

ABSTRACT

Whitefly (family: Aleyrodidae) is one of the most potentially detrimental pests in the world. It is a worldwide pest causing yield losses and economic injury in many crop species. It is a identify as serious insect pest in the Battticaloa district of Sri Lanka which attacks numerous fruit crops, vegetables, ornamental, medicinal and wild crops.

Fruit crop found in the Agronomy farm of Eastern University Sri Lanka was considered as a sample unit. Five banana plants and five guava plants were randomly selected in the Agronomy Farm of the Eastern University Sri Lanka. Infested leaves with whiteflies were separately collected in polyethylene bags. The pupae and pupal cases of whiteflies were brushed out from the leaves and they were taken to identify the whitefly up to their species level. Characteristics of each pupa were carefuly observed to identify with the help of reference collection and taxonomic catalogues of whitefly.

The parasitized whitefly pupae were reared in vials until the emergence of the parasitoid. After the emergence of adult parasitoid, characteristics of each adult were observed under the microscope and identified to species level with the taxonomic key and pictorial key.

It was found that, the Spiraling whitefly *(Aleurodicus dispersus)* was the whitefly species in the fruit crops Guava *(Psidium guajava* L.*)* and Banana *(Musa paradisiaca* L.*)* grown in Agronomy farm of Eastern University Sri Lanka. Three Hymenopterans parasitoids of Spiraling whitefly, namely *Encasia guadeloupae Eretmocerus mundus* and *Encasia cibcensis* were identified.

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