

Identification of whitefly colonies in selected medicinal crops

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At present, whitefly is one of the serious pests in Sri Lanka, which attacks numerous crops including medicinal crops. Whiteflies infest the plants by sucking the sap from phloem and severe infestation kills the plant. A few numbers of whiteflies is enough to transmit the viruses. It is very difficult to control this insect pest as they have developed resistance to several groups of insecticides. The increasing demand for insecticide free products and self defense of consumers from toxicity of insecticides force the cultivators to take bio-control strategy to minimize the whitefly outbreaks by using parasitoids. Parasitoids are species specific. Therefore, effective control of whiteflies is only attained by the correct identification of the whitefly species.

Three medicinal plants *Solanum trilobatum*, *Eucalyptus globulus*, and *Syzygium cumini* were identified as the host-plant of whitefly in the Batticaloa district during the study period. Whitefly infested leaves were collected from which non-parasitized pupae and pupal exuviae were separated to identify the whiteflies species. Morphological characteristics were recorded to identify the whitefly species. Two whitefly species namely, *Trialeurodes vaporariorum* (Westwood) and *Trialeurodes abutiloneus* (Haden) were identified as the pest of those selected medicinal plants. *Solanum trilobatum* and *Eucalyptus globulus* were the host of *Trialeurodes vaporariorum* and *Syzygium cumini* was the host of *Trialeurodes abutiloneus* in the Batticaloa district.

Key words: Medicinal crops, Bio-types, Whitefly, Parasitoids, Pupal exuviae

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