

## **Incidence of *Tuta absoluta* (Meyrick) (Lepidoptera: Gelechiidae) in selected sites in Badulla district of Sri Lanka**

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Tomato leaf miner, *Tuta absoluta* (Meyrick) is considered as one of the major pests of tomato in most of the tomato growing countries. The damage is caused by larvae, feeding on leaves and fruits of tomato. Damage on fruits reduces yield by 80-100% which severely affect the export market and super market sales. *T. absoluta* shows a high rate of reproduction and short life cycle, making them very dominant in the infested tomato fields. As this pest became apparent recently, there is no much basic information are available. This study was conducted with the objective of recording the pest incidence in open and protected tomato fields. The susceptible growth stages of tomato crop, susceptible varieties and potential host plants were also observed during the survey in selected area. Accordingly, there was a significant ( $P<0.05$ ) difference between open and protected fields in terms of level of infestation. The incidence of *T. absoluta* in protected fields was significantly higher than that of in open fields. Furthermore, all the four varieties surveyed in these two regions were found infested by *T. absoluta* and the damage was observed in every growth stage. Tomato was found as the main host plant for *T. absoluta* in surveyed area while eggplant (*Solanum melongena*) was recorded as a potential host plant under the laboratory conditions.

**Key words:** Host plants, Protected farming, Susceptible varieties, Tomato, *Tuta absoluta*,