

Effects of a Neem-based Insecticide on Different Immature Life Stages of the Leafminer *Liriomyza sativae* on Tomato

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The effects of the commercially available neem insecticide NeemAzal-T/S[®] (neem) (1% azadirachtin) on *Liriomyza sativae* (Diptera: Agromyzidae) were studied on tomato in Bangkok, Thailand. Neem emulsions were sprayed on the aerial plant parts at five concentrations (from 0.001% to 0.010% a.i.); different aged residues (0, 1, 3, 5, and 7 days) were tested, in both controlled environment rooms and in greenhouses. Irrespective of the residual age of the application, no significant effects on oviposition or egg hatch were detected. However, neem drastically increased larval mortality at the higher concentrations tested. The L1 and L2 larvae were most susceptible. Irrespective of concentration, larval mortality or inhibition of adult eclosion decreased much faster in greenhouses than in controlled environments with artificial light. Nevertheless, our results suggest that neem has potential to control *L. sativae* in netted greenhouses.

KEY WORDS: NeemAzal-T/S[®]; *Liriomyza sativae*; oviposition; egg hatch; mortality; adult eclosion.

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