

Reproductive Success and Damage Potential of Tobacco Thrips and Western Flower Thrips on Cotton Seedlings in a Greenhouse Environment¹

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ABSTRACT A greenhouse study was performed to assess the damage and reproductive potential of two thrips (Thysanoptera: Thripidae) species on cotton, *Gossypium hirsutum*, seedlings grown under relatively cool temperatures. The reproductive potential of tobacco thrips, *Frankliniella fusca* (Hinds), was greater than that of western flower thrips, *Frankliniella occidentalis* (Per-gande), on two cotton varieties (Deltapine 436 RR[®] and Stoneville 474[®]). Plant biomass measurements and visual plant damage ratings performed on the last day of the study suggested that the damage potential of tobacco thrips was less than that of the western flower thrips. No differences in the reproductive potential of either thrips species were observed between the two cotton varieties used in the experiment. The results of this study confirm the importance of thrips identification because damage to cotton seedlings may be a function not only of population sizes, but also of the thrips species involved.

KEY WORDS Thysanoptera, Thripidae, *Frankliniella fusca*, *Frankliniella occidentalis*, *Gossypium hirsutum*, early-season injury

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