Abstract

Aims: Egg parasitoids, *Trichogramma* are recognised as natural enemies of many lepidoptera pests worldwide. In Kenya, a number of indigenous parasitoids species have been recovered. We evaluated the relative preference (parasitism) by four *Trichogrammatid* egg parasitoid species/strains, namely, *T*. sp. nr. *mwanzai* (L), $_{T.}$ sp. nr. *lutea* (H), *T*. sp. nr. *mwanzai* (M) and *T*. sp. nr. *lutea* (M) for the African bollworm *Helicoverpa armigera* on two of its host plants, tomato and okra usually intercropped in smallholder farms in Kenya.
Study Design: Host parasitism on host plants.
Methodology: Evaluations of parasitism for *H. armigera* by *Trichogrammatid* species/strains on Tomato and Okra in bioassays in both laboratory and field cages, in choice and no-choice conditions were undertaken.
Results: In general, species/strains exhibited significant differences in parasitism for the host ($F=2.8$; $df = 3, 7$; $P= 0.05$) but neither the host plant nor host plant x species/strain interaction affected parasitism. Chi-square analyses showed no significant preference by species/strains between the two host plants although there was greater tendency by the parasitoids to go for *H. armigera* on okra than tomato.
Conclusion: The results give useful insights in planning for augmentation biological control of *H. armigera* in mixed farming agroecosystems. The four *Trichogrammatids* could effectively be used in augmentation programs in the tomato-okra cropping systems.