

Egg and Larval Parasitoids of the Beet Armyworm *Spodoptera exigua* on Maize in Turkey

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The present study was conducted to determine egg and larval parasitoids of the beet armyworm *Spodoptera exigua* Hübner (Lepidoptera: Noctuidae), which is an important but sporadic pest in Turkey. High beet armyworm population levels were recently observed in fields of first and second crop maize in the southeast Mediterranean region of Turkey. The parasitoid species complex and its impact on the pest were analyzed in a 4-year study in first and second crop maize. The braconid larval parasitoids *Microplitis rufiventris* Kokujev, *M. tuberculifer* Wesmæl, *Meteorus ictericus* Nees, *Chelonus obscuratus* (Herrich Schäffer) (an egg-larval parasitoid), *Apanteles ruficrus* (Haliday); the ichneumonid larval parasitoids *Hyposoter didymator* (Thunberg) and *Sinophorus xanthostomus* Gravenhorst; and the egg parasitoid *Trichogramma evanescens* (Westwood) were found to be the natural enemies attacking the pest. Among the parasitoid species the solitary endoparasitoid *H. didymator* was the most prevalent species, being reared from 40.5% of the parasitized larvae found. Higher parasitism rates were recorded on first crop than on second crop maize in every year. Possible reasons for this difference in larval parasitism between two growing seasons include lower population of the pest and reduced insecticide applications in first crop maize fields which permitted higher parasitism. However, parasitoid activity was insufficient to counterbalance the population growth of the pest on subsequent second crop maize.

KEY WORDS: *Chelonus obscuratus*; *Hyposoter didymator*; *Meteorus ictericus*; *Microplitis* spp.; *Sinophorus xanthostomus*; *Spodoptera exigua*; parasitoids.

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