

The fluctuation of egg population of sugarcane stem borers, *Sesamia nonagrioides* Lefebvre and its parasitism by *Platytenomus hylas* Nixon in relation to sugarcane phenology

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Abstract

Sugarcane stem borers are the most important pest of this crop in the world and Iran. We studied the fluctuation of eggs population of the stem borer *Sesamia nonagrioides* Lefebvre and its parasitism by *Platytenomus hylas* Nixon in Karoun Agro-Industry Company, (Khuzestan-Iran) in 2005-2006. This study was conducted in two years. In the first year a Ratoon field and in the second year a Plant field cultivated with variety of CP48-103 were selected for sampling program. Samples were taken weekly; numbers and percent parasitism of eggs, numbers of sugarcane stem and the height of plants were recorded in each sampling occasion. Results showed that there were more eggs in low density of sugarcane stems. The peak of the stem borer oviposition was in the mid of August 2005 in the Ratoon field, and it was in mid of June 2006 in Plant field. The percent parasitism increased with increasing the plant height in Ratoon and Plant fields. The peak of percent parasitism was 67.8 when the plant height was 96.2cm in Ratoon field in the beginning of July 2005, and 78.8 when the plant height was 78cm in Plant field in the mid of April 2006.

Key words: Sugarcane, Sugarcane stem borer, *Sesamia nonagrioides*, Parasitoid, *Platytenomus hylas*, Phenology

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