Survey for Incidence of *Maruca vitrata* (G.) (Pyralidae: Lepidoptera) and its Natural Enemies on Greengram and other Alternative Hosts in Main Pulse Growing Tracts of Khammam District, Andhra Pradesh

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ABSTRACT

The survey conducted for two consecutive years (2009-10 and 2010-11) in the twenty major greengram growing mandals of Khammam district during rabi, at different growth stages of pulses from randomly selected five farmer's fields revealed that, apart from greengram Maruca vitrata infestation was noticed on two weed hosts, Physalis minima and Abutilon sp and cultivated hosts viz., Blackgram, Redgram, Cowpea and Groundnut. The larval incidence was ranged from 5 to 25 larvae per twenty five plants in different growth stages, i.e. bud initiation, flowering and podding stages. The year wise data on flower infestation was ranged from 10- 50% and 10- 45%, whereas pod damage was ranged from 20-38 and 19–32 per cent respectively. Among the surveyed mandals, Khammam Urban (33.25%), Penubally (33.0%), Gundala (32.75%), Kamepally (32.5%), Chintakani (32.0%) and Thirumalayapalem (32.0%) mandals recorded the highest pod damage, whereas the lowest pod damage was recorded in Kalluru (19.5%), Bonakal (22.75%), Singareni (23.75%), Bhadrachalam (24.25%) and Garla (25.0%) mandals. Among the natural enemies, only spiders and coccinellids were recorded. Larval and pupal parasitoids or entomopathogens were not recorded in the Maruca infested pulse crops. Among the coccinellids, Chilomenus sexmaculata species only observed in Pulses ecosystem. Among the spiders, Oxyopes sp., Oxyopes javanus, Tetragnatha javana, Thomisus sp., Chrysilla sp., spiders were observed in Blackgram ecosystem. Neoscona theisi, Telemonia dimidata (male and female), Curba sp., Salticius sp., Chrysilla sp., spiders were observed in pigeonpea (redgram) ecosystem. Oxyopes sp., Argiopes anasuja (Thorell) and Peucetia viridana spiders were observed in greengram.

Key words: Alternative hosts, *Maruca vitrata, Rabi,* Natural enemies.