

Evaluation of Bio-intensive Integrated Pest Management Strategies against Sugarcane Borer Complex

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ABSTRACT

One of the major biotic production constraints encountered by sugarcane growing farmers was infestation by sugarcane borers *viz.*, early shoot borer, internode borer and top shoot borer. Over reliance on synthetic pesticides to manage the sugarcane borer complex may lead to ecological adversity, health related tribulations and unintended consequences hampering the sustainability of the production system. Realizing this, studies on bio intensive pest management (BIPM) strategies in sugarcane were undertaken at four locations of Krishna district, Andhra Pradesh during the year 2019. The results inferred that the field release of *Trichogramma chilonis* @ 50,000 ha⁻¹ at 30 DAP and two times after node formation at an interval of 7 days in combination with installation of pheromone traps @ 20 ha⁻¹ for mass trapping at 30 DAP till harvest had registered comparatively less infestation of sugarcane borers. The cumulative per cent dead hearts (7.28) by early shoot borer and per cent incidence (19.15) and intensity of internode borer (1.45) was found to be minimum in BIPM adopted fields as against highest in control plots with 39.47 per cent dead hearts by early shoot borer, 50.52 and 5.81 per cent incidence and intensity of internode borer infesting sugarcane. The chemical based components and farmers practices also registered less infestation of borer complex in sugarcane and are at par to BIPM based management strategies. Hence, it can be witnessed that the prioritization of bio intensive pest management components for sustainable agriculture is the need of the hour.

Keywords: BIPM, Sugarcane borers, *T.chilonis* and Traps.