

Management of Stem Borer, *Chilo Partellus* (Swinhoe) in Maize Through Inundative Release of *Trichogramma Chilonis* Ishii

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ABSTRACT

Inundative release of *Trichogramma chilonis* @ 1, 00,000/ha at weekly interval starting from 20 DAE in maize (hybrid - 30V92) was evaluated in a farmers' fields during *rabi* seasons of 2009-10 and 2010-11. Parasitoid released plots and chemical control plots were at par in recording shot hole damage (9.3 and 7.7 %), dead hearts (3.2 and 2.5%), *C. partellus* larvae (1.8 and 1.2/ plant) at 50 DAE and stem tunneling at harvest (22.3 and 18.4%) and were significantly superior than untreated control (19.6% shot hole, 10.8% dead hearts, 31.1% stem tunneling) and larval population (4.5 / plant). Similar trend in stem borer incidence was continued during *rabi* 2010-11. Two year mean grain yield in parasitoid release treatment (66.0 q/ha) and chemical control (73.5 q/ha) fields were at par, whereas, it was significantly lower in untreated control (43.7 q/ha). The net profit over control during *rabi* 2009-10 and 2010-11 in biocontrol package was Rs. 22125/- and Rs. 23780/- per ha as compared to Rs. 27745/- and 30095/- per ha in farmers' practice with cost benefit ratio of 1: 20.5, 1: 22.0, 1:8.9 and 1: 9.6, respectively

Key words: *Biocontrol, Inundative release, Chilo partellus, Maize, Trichogramma chilonis.*