

RESEARCH ARTICLE

Peak period of moth emergence, fecundity, egg viability, egg parasitism and factors influencing the extent of carryover from one season to another of sugarcane plassey borer, *Chilo tumidicostalis* Hampson (Lepidoptera: Pyralidae)

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SUMMARY

Field and laboratory experiment was conducted in Krishi Vigyan Kendra, Tinsukia, Assam during 2014-16 to investigate the peak period of moth emergence, fecundity, egg viability, egg parasitism in different generations of plassey borer, *Chilo tumidicostalis* and factors influencing the extent of carryover of the pest from one season to another. The pest completed five generations in a year. The average fecundity of *C. tumidicostalis* ranged between 88.0 to 136.0 eggs in different generations, the maximum being recorded in fifth generation during the 1st and 2nd week of October and the minimum in the second generation during the 1st and 2nd week of June. The emergence of moths in each generation continued for more than one week (7-12 days), but the maximum emergence of moths took place within a week. The maximum moths (56%) were observed to be emerged during second generation. Late harvesting of crop after second week of March made emergence easy for the moths which would lay eggs on the ratoon sprouts, October planted crops and late tillers that remained unharvested in the fields. The population of winter brood through late tillers would also contribute to the extent of carryover of the pest to the succeeding crop.

Key Words : Plassey borer, Peak period, Fecundity, Carryover

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