

# Eksplorasi dan Uji Keragaan Parasitoid Penggerek Buah Kapas *Pectinophora gossypiella* Saunders (Lepidoptera: Gelechiidae)

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## ABSTRACT

Pink bollworm, *P. gossypiella*, is a main pest of cotton that causes boll damage up to 70%. Recommended IPM has not effectively control this pest. The use of parasitoids of this pest is one of strategy to manage this pest population as using chemical control is expensive and caused secondary pest. This research objective is to study some biological aspects of pink bollworm parasitoids by doing exploration of the parasitoids in cotton growing areas and testing the potential candidates as biocontrol agents. The activity was conducted from April – December 2001. The research was conducted in two steps: survey and laboratory tests. The survey was conducted in East Java (Asembagus and Lamongan), Central Java (Brebes) and South Sulawesi (Bone) by collecting pink bollworm eggs and identifying the emerged parasitoids. Laboratory tests were done in Biological Control Laboratory of ITFCRI, Malang, consists of reproductive performance aspects. We found two and five species of egg and larval parasitoids, respectively. Parasitism level of egg was 81% by *Trichogrammatoidea* spp. and that of larva was 24% by *Apanteles* sp. These two parasitoids are predominant and found in all cotton growing areas. *Trichogrammatoidea* spp. have opportunity to be used as biocontrol agent in release program, while *Apanteles* sp. would have valuable role in conservation approach.

**Key Word:** *Gossypium hirsutum*, *Pectinophora gossypiella*, *Trichogrammatoidea*, *Apanteles*