Parasitization by *Cotesia plutellae* on major insect pests of crops under laboratory conditions

RENU YADAV, NEELAM YADAV, RANJANA YADAV AND R.R. KATIYAR

*International Journal of Plant Protection* (October, 2010), Vol. 3 No. 2 : 293-294

**Summary**

The extent of parasitization of *Cotesia plutellae*, a solitary endo-parasitoid of lepidopterous pests was studied under the laboratory conditions on crop was pests. Ten pairs of adult male and female parasitoid, *Cotesia plutellae* were released on hundred second instar larvae of gram pod borer (*Helicoverpa armigera* Hubn.), tabacco caterpillar (*Spodoptera litura* Fabr.), Bihar hairy caterpillar (*Spilarctia obliqua* Walker) and rice moth, (*Corcyra cephalonica*). Next day the parasitized larvae were separated and reared on synthetic diet for a week. Fully fed parasitoid larvae left their host and spun creamy white cocoon near the host. Total number of parasitized and healthy larvae were counted and parasitization percentage of each species was observed separately. *C. cephalonica* larvae were severely parasitized (30%) followed by 20% in *H. armigera* and *S. litura* larvae. Least parasitization (10%) was observed in the larvae of *S. oblique*. The findings of this experiment may safely be utilized in the management of gram pod borer and tobacco caterpillar.

**Key words:**

Parasitization, *Cotesia plutellae*, Parasitoid, Pests

Accepted: August, 2010