



New record of *Canthecona parva* (Distant) (Heteroptera: Pentatomidae) as a predator of *Hypena quadralis* (Walker), a pest of Antamul, *Tylophora indica* (Burm. f) Merr.

V. SRIDHAR and B. JHANSI RANI

Division of Entomology and Nematology

Indian Institute of Horticultural Research

Hessaraghatta Lake Post, Bangalore 560 089

E-mail: vsridhar@ihr.kar.nic.in

ABSTRACT: Predation by a pentatomid bug, *Canthecona parva* (Distant) on *Hypena quadralis* (Walker), a pest on the medicinal plant, *Tylophora indica* is reported.

KEY WORDS: *Canthecona parva*, *Hypena quadralis*, predatory bug, *Tylophora indica*

Antamul, *Tylophora indica* (Burm.f) Merr. is an important medicinal plant grown in India and used in the treatment of bronchial asthma. A semilooper, *Hypena quadralis* (Walker) (Lepidoptera: Noctuidae) has been recorded as an important pest on this plant (Shivananda and Jhansi Rani, 2001). The larvae feed on the leaves, flowers and sometimes tender fruits and cause heavy foliage loss in case of severe infestation.

The pest appeared in severe form on *T. indica* during July-October, 2002 at the farm of Indian Institute of Horticultural Research, Bangalore. A pentatomid bug, *Canthecona parva* (Distant) (Heteroptera: Pentatomidae) was observed feeding on the larvae of this pest in the field. Another pentatomid, *Eocanthecona furcellata* (Wolff.) has been reported to be predaceous on many lepidopteran larvae like *Amsacta albistriga*, *Spilosoma obliqua*, *Spodoptera exigua*, *S. litura*, *Earias* sp., *Utetheisa pulchella* and *Helicoverpa armigera* (Nayar *et al.*, 1976; Nair, 1986; Bhadauria *et al.*, 1999).

In order to study the predacious behaviour of *C. parva* adult, five each of mature (third and fourth instars) and immature larvae (second instars) of *H. quadralis* were kept together in a round plastic box of 12cm diameter and two adult predators were released into it. Fresh leaves of *T. indica* were kept in the box as food for *H. quadralis* larvae. The predator was constantly observed for its behaviour while attacking the *H. quadralis* larvae and the duration of the feeding was recorded.

Initially, the predator stalked the *H. quadralis* larva from a distance of few centimeters and made few futile attempts (for about 15-20 minutes) for attacking the prey. In due course, the predator pierced the rostrum into the prothorax or posterior abdominal segments (3rd to 5th from the last) in case of mature larvae and almost in the middle of the abdomen in young larvae. The predator paralysed the host within 10-15 minutes, probably by releasing some chemicals. Similar observations were recorded in case of predation by *C. furcellata* on *Spilosoma obliqua* (Bhadauria *et al.*, 1999).

While sucking the body fluids from the prey, the predator kept the antennae perpendicular to the body and positioned itself away from other larvae by ascertaining its rostrum position undetached. At times, the bug continued sucking body fluids from other parts of the prey (prothorax, middle and anal segments). *C. parva* fed for about 2.5 – 3.0 hours in case of mature larva and 50-60 minutes on young larva of *H. quadralis*.

This is the first record of *C. parva* predation on *H. quadralis* and further studies are needed to establish its efficiency biocontrol agent.

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