

BRIEF COMMUNICATION

ANASTATOIDEA SP. (HYMENOPTERA : EUPELMIDAE) A NEW
PUPAL ENDOPARASITOID OF THE LAC
PREDATOR, *EUBLEMMA AMABILIS* MOORE
(LEPIDOPTERA : NOCTUIDAE)

C. P. MALHOTRA, P. SEN & A. BHATTACHARYA

Division of Entomology, Indian Lac Research Institute,
Namkum P. O., Ranchi, India 834 010

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Anastatoidea sp. (Hymenoptera: Eupelmidae) has been recorded for the first time as pupal endoparasitoid of the most serious lac predator, *Eublemma amabilis* Moore, from three lac crops from Bihar and Orissa. The role of allied species has also been discussed.

(Key words: *Anastatoidea* sp., pupal endoparasitoid, *Eublemma amabilis*)

Eublemma amabilis Moore is a serious predator of the lac insect, causing about 30 per cent damage to the lac crops (MALHOTRA & KATIYAR, 1975). Although it has two larval ectoparasitoids of regular occurrence, record of an endoparasitoid has not so far been made, which may perhaps be rare, due to the cryptic life style of the caterpillars which prepare tough galleries and domes for their concealment.

Of the various species of the genus, *Anastatoidea*, records of *Anastatoidea indica* has been made from the lac caged from the host plant, namely, *Butea monosperma* (Lam.) Taub., at this Institute, although its exact role could not be known (VARSHNEY, 1976); of *A. brachartoniae* Gahan as a primary larval/pupal parasitoid of coconut pests, namely

Artona (Brachartona) catoxantha Hampson (GAHAN, 1927) and *Nephantis serinopa* Meyrick (JOY & JOSEPH, 1976) as well as a secondary pupal parasitoid of *Degeeria albiceps* Macquart, *Ptychomyia remota* Aldrich, *Apanteles* sp., *Apanteles artoniae*, *Goryphus* sp. & *Ptychomyia* sp. (GAHAN, LOC CIT; FERRIERE, 1940); whereas that of *A.* sp. as a larval parasitoid of *Caloptilia* sp. a borer of *Stylsosanthes* spp. (CHACON & CALDERON, 1979).

From the above available evidence it appears that the role of the species of the genus *Anastatoidea* have not been clearly established since these have been reported mainly as larval/pupal primary parasitoids whereas *A. brachartoniae* is known to be a primary parasitoid as well as a secondary parasitoid.

Although the present authors recorded the Parasitoid *A.* sp. from various localities, such as the Institute plantation, Barguttu (Ranchi) and Jaipatna (Orissa) from broodlac caged from jethwi¹ aghani² and baisakhi³ lac crops from time to time, its actual role, could only

1. Lac crop on *kusmi* lac hosts; crop inoculated in Jan./Feb. and matures in June/July.
2. Lac crop on *kusmi* lac hosts; crop inoculated in June/July and matures in Jan./Feb.
3. Lac crop on *rangeeni* lac hosts; crop inoculated in Oct./Nov. and matures in June/July.

be clearly established when it emerged from two field collected pupae of the lac predator *Eublemma amabilis* in the laboratory during the year 1981. A total number of 60 parasitoids have been collected from the above crops, of which 18 were males.

Since the parasitoid appears to be rare and of localized occurrence, a thorough search for building up a nucleus culture for artificial rearing in the laboratory is considered necessary so that its potentialities as a biotic agent for the control of this very serious lac predator could be assessed.

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REFERENCES

- CHACON, P. & M. CALDERON (1979) Some aspects of the biology and possible biological control of *Caloptilia* sp. a borer of *Stylosanthes* sp. *Revta colomb. Entomol.*, 5 (3/4), 27—34.
- FERRIERE (1940) On some parasites and hyperparasites of *Artona catoxantha* Hamp. *Bull. ent. Res.*, 31, 131—139.
- GAHAN, A. B. (1927) Miscellaneous descriptions of new parasitic Hymenoptera with some synonymical notes. *Proc. U. S. nat. Mus.*, 71, 1—39.
- JOY, P. J. & K. J. JOSEPH (1976) *Anastatoidea brachartoniae* Gahan, a new pupal parasite of *Nephantis serinopa* Meyrick. *Entomon*, 1 (2), 199—200.
- MALHOTRA, C. P. & R. N. KATIYAR (1975) Control of *Eublemma amabilis* Moore a serious predator of the lac insect, *Kerria lacca* (Kerr.). Screening of insecticides for their safety to the lac insect. *Indian J. Ent.*, 37 (4), 385—396.
- VARSHNEY, R. K. (1976) A checklist of insect parasites associated with lac. *Oriental Ins.*, 10 (1), 55—78.