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ON THE NATURAL CONTROL OF *EUBLEMMA AMABILIS* MOORE (NOCTUIDAE : LEPIDOPTERA) BY *ELASMUS CLARIPENNIS* CAM. (ELASMIDAE : HYMENOPTERA)

Five hymenopterous species are known to parasitise lac insect predator *Eublemma amabilis* in its various immature stages (Narayanan, 1962). However, larval parasites in nature are only two, *viz., Bracon greeni* Ash. and *E. claripennis* Cam. Of these, only the former has been considered worthy of utilisation as a biotic agent and released in fields, after rearing on a large scale (Negi *et al.* 1945).

According to Ferriere (1929 b) genus *Elasmus* Westw. is an economically important one as it attacks many destructive moths and contributes to a large extent to their control. As many as 7 species of this genus have been recorded from India alone parasitising important crop pests like *Platvedra gossypiella* Saund., *Sylepta derogata* F., and *Earias insulana* Boisd. Glover (1940) recorded *E. albomaculatus* Gahn. parasitising *Holcocera pulverea* Meyr. the other important predator of lac, as well.

E. claripennis was originally recorded by Ferriere (1929 a). Mahdihassan (1934) studied its biology and suggested that where lac and sugarcane are cultivated as a commercial enterprise this parasite may be of some importance.

At Indian Lac Research Institute (Anonymous, 1964) as many as seven generations were successfully reared on its natural host, when the average life period observed was 19.7 days (variation 11-34 days).

During August/September, 1970, the authors observed very low incidence of *E. amabilis,* as compared to the preceding years, at Kundri lac orchard (Distt. Palamau, Bihar) and while investigating the causes, detected the presence of *E. claripennis.* Critical examination of 377 predator galleries averaging 1.5 cm in length, from 100 lac bearing twigs of *palas* [*Butea monosperma* (Lamk.) Taub.], collected by randomization, revealed 91 per cent parasitisation. Three to ten immature stages of the parasite were observed per host.

This incidence of very high degree of parasitism clearly establishes the potentialities of this parasite as a powerful biotic agent in suppressing the population of *E. amabilis* in nature and opens up a new avenue for future work on behavioral manipulation, use of suitable alternate hosts and supplementing food sources for adults for ultimately augmenting the useful activities of this parasite in the lac orchards. Thus, *E. claripennis* can be utilised suitably in the integrated control schedules being chalked out for the control of *E. amabilis.*

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