

Record of Parasites and Predators on Some Insect Pests in Meghalaya, India

N. S. AZAD THAKUR and R. N. BARWAL

ICAR Research Complex for NEH Region, Bishnupur, Shillong 793 013

An exhaustive list of parasites and predators of aphids was earlier compiled by Raychaudhuri *et al.* (1979) and Singh and Singh (1985) from North-Eastern India. During the course of survey for natural enemies of crop pests during 1986-87 in and around Shillong, Meghalaya some parasites and predators were recorded, which hitherto had not been reported from this area. The coccinellid predators, *viz.*, *Coccinella septempunctata*, *Oneopia sexareata* (Mulsant), *O. kirbyi* Mulsant, *Harmonia eucharis* (Mulsant) were found in abundance during March-April on higher hills. In the process of migration they fed upon different species of aphids *viz.*, *Myzus persicae* Sulz. on potato and tree-tomato, *Acyrtosiphon pisum* (Harris) on pea, *Aphis gossypii* Glov. on taro and tree-tomato, *Brevicoryne brassicae* Linn. on cabbage, *Rhopalosiphum maidis* Fitch. on maize and *A. craccivora* Koch. on beans. Among these, *C. septempunctata* was the principal predator. These aphids assumed serious proportions in the months of February and March, particularly on cabbage and mustard. Aphid multiplication was effectively suppressed by the migrating coccinellids from the valley areas of the north-eastern hill region. Another syrphid predator, *Episyrphus* sp. (Dip. : Syrphidae) was recorded on cabbage aphid, *B. brassicae* and it reduced the

pest population considerably during February-March.

Rice gallmidge *Orseolia oryzae* (Wood-Mason) a pest during August to October was recorded to be parasitised by *Platygaster* sp. (Hymen. : Platygastridae) in October. Other hymenopteran parasites, *viz.*, *Asaphes vulgaris* Walker (Pteromelidae), *Chrysocaris* sp. (Eulophidae), and *Apanteles phytometrae* Wilk, *Trioxys* sp. and *Dilyta subclavata* Forster (Braconidae), and the dipteran *Micropeza* sp. (Micropezidae) were recorded during winter season on *M. persicae*, *A. gossypii* and *Lipaphis erysimi* Kalt.

ACKNOWLEDGEMENT

The authors are grateful to the Director, ICAR Research Complex for NEH Region, Shillong and the Head, Division of Entomology for providing necessary facilities. Thanks are also due to the Director, CIE, London for identifying the parasites and predators.

Key words : Aphids, Rice gall midge, Parasites, predators, record.

REFERENCES

- Raychaudhuri, D. N., Dutta, S., Agarwala, B. K., Raha, S. K. and Raychaudhuri, D. 1976. Some parasites and predators of aphids in north-east India and Bhutan-II. *Entomon*, 4, 163-166.
- Singh, K. Chaoba and Singh, T. K. 1985. Aphidophagous coccinellids of north-eastern India : Manipur-I. *Entomon*, 10, 291-295.