Monolepta khasiensis WE1SE AS A PEST OF ZINNIA

Adults of *Monolepta* spp. (Chrysomelidae: Coleoptera) are phytophagous insects. The species recorded so far in India as pests of crops are *Monolepta signata* on potato (Burt 1917), sugarcane (Fletcher 1919 and Pruthi 1936), colocasia and cotton (Ayyar 1940) and *M. erythrocephala* on walnut plum and apricot (Sharma and Bhalla 1961 and Chowdburi 1966).

Adults of a third species viz. *Monolepta khasiensis* were found for the first time to feed on the flowers of Zinnia in the Agricultural College **Farm**, Vellayani, Kerala, during September 1968. This beetle was found to feed on the petals of **the** plants, eating away the soft tissues of the upper surface leaving only the lower **epider**mis. As a result of this, the flowers lost their normal colour and the petals dried up. The beetles were found on the flowers in large numbers during early morning **hours** and in the evening.

The insect is about 5 mm long and 2.5 mm **broad**, bright brown in colour and with two black patches on each elytron, the apical patch being larger than the basal one.

Maulik (1936) recorded this insect as occurring in the hilly areas of Assam and Bombay.

The authors are grateful to the Director, Zoological Survey of India, Calcutta for the identification of the insect.

References

- Ayyar, T. V. R. 1940. *Handbook of Economic Entomology for South India*, pp. 251, 278 Government Press, Madras
- Burt, B. C. 1917. Report on the Agricultural Experiment Stations in the Central Circle, United Provinces, for the year ending 30th June 1917:88
- **Chowdhuri**, A. N. 1966. *Monolepta erythrocephala* (Chrysomelidae: Coleoptera) as leaf eating beetle of plum and apricot in **Himachal** Pradesh (a new record from Mandi district) *Sci. Cult*. 32 (8): 424
- Fletcher, T. B. 1919. Report of the Imperial Entomologist, *Scient. Reports*, *Agri. Research Inst. Pusa*, 1917-18: 84-116
- Maulik, S. 1936. The Fauna of British India, Coleoptera: 400
- Pruthi, H. S. 1936. Report of the Imperial Entomologist. Sci. Rep. Inst. Agric. Res. Pusa, 1934-35: 141-152
- Sharma P. L. and Bhalla, O. P. 1961. A survey study of insect pests of economic importance in Himachal Pradesh. *Indian J. Ent.* 26 (3): 318-331

Agricultural College,

M. J. THOMAS

Vellayani, Kerala State

C. C. ABRAHAM

Gametocidal action of insecticides

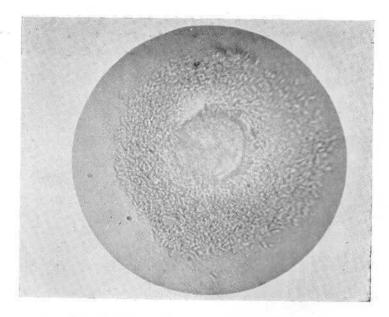


Fig. 3. Rice pollen treated with parathion

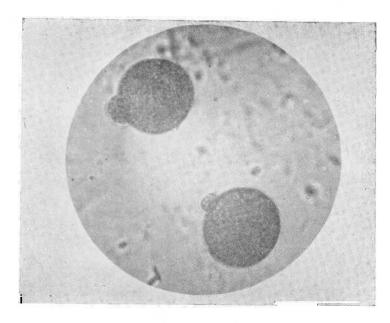


Fig. 4. Rice pollen treated with endrin

Gametocidal action of insecticides

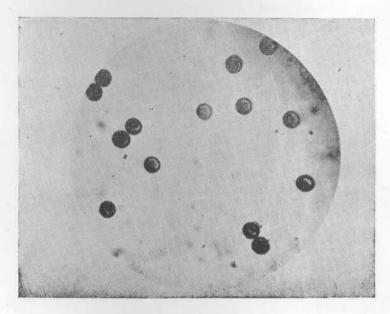


Fig. 1. Untreated rice pollen

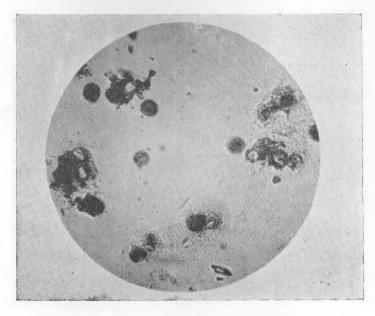


Fig. 2. Rice pollen treated with parathion