

BERGINUS MAINDRONI AND OTHER BEETLES IN STORED LAC

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For over three years experiments have been in progress, using Sind brood lac for experimental cultivation and for the study of the associated parasites. About 2 lbs. of brood lac, *i.e.*, fresh stick lac, was received twice a year from Khattar Forest Range, Hyderabad Sind, where *Lakshadia sindica* is regularly cultivated on *Acacia arabica*. Among the beetles was found *Berginus maindroni* belonging to *Lyctidae*, previously classed among the *Colydiidae*. In the course of studies on various lacs it was found to be universally distributed, perhaps the one beetle, not absent from any lac

including those of Tonkin, Burma, Assam, India and Pakistan. Fig. 1 shows its appearance as seen from above. Its pupa was also studied, and Fig. 2 gives its ventral view, Fig. 3 its dorsal appearance, and Fig. 4 shows it sideways.

Its larva is a delicate roundish creature, which has not been illustrated so far. No proper study has hitherto been carried out to establish if this beetle larva is injurious to the living lac insect. The present study shows it to be a scavenger, feeding on half dead or dead lac insects.

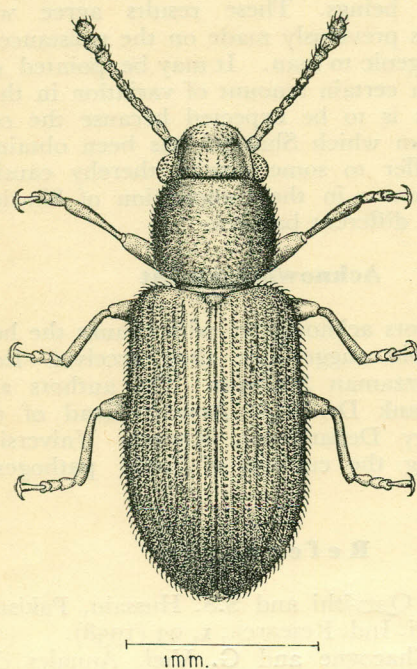


Fig. 1.—*Berginus maindroni*, adult beetle.

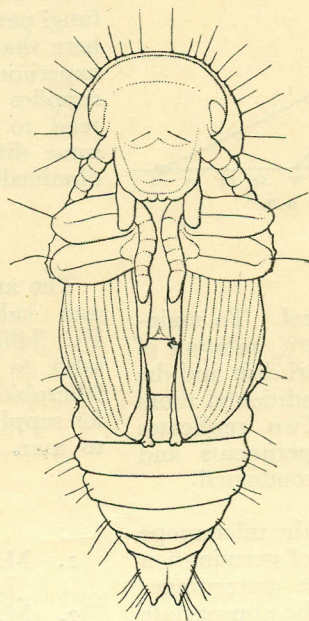


Fig. 2.—*B. maindroni*, pupa, ventral view.

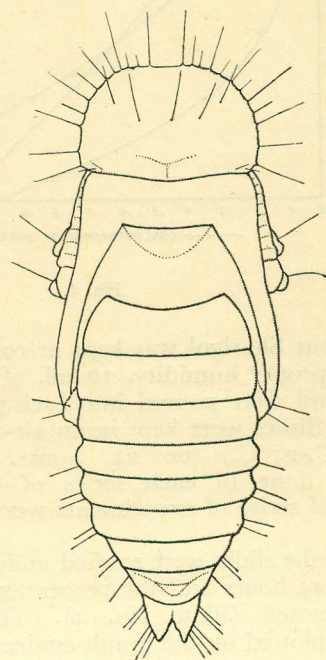


Fig. 3.—*B. maindroni*, pupa, dorsal view.

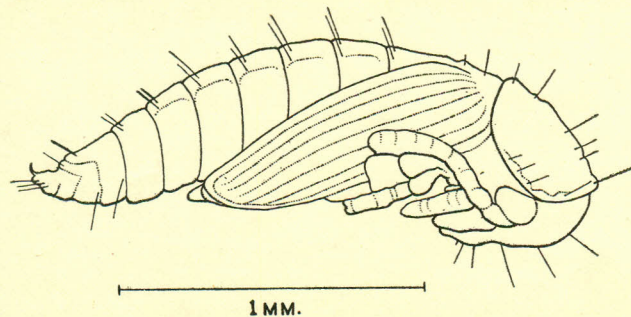
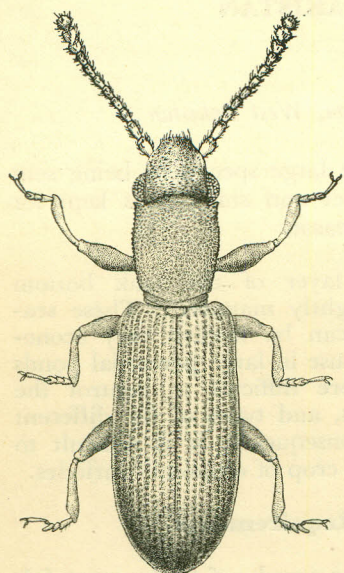
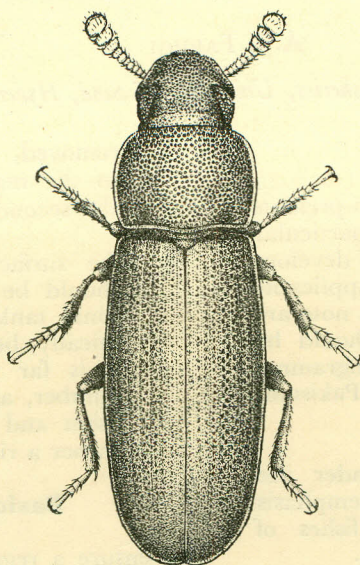
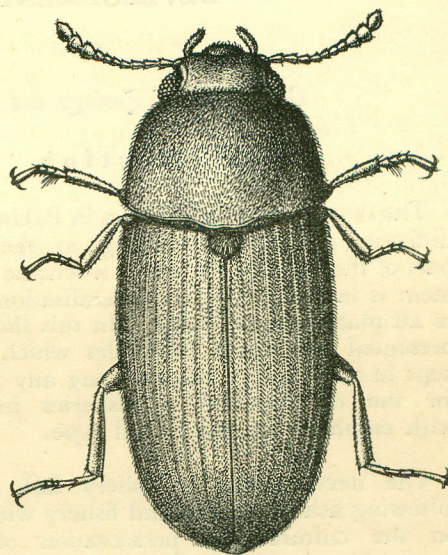


Fig. 4.—*B. maindroni*, pupa side view.

Fig. 5.—*Cathartus adrena*, adult beetle.Fig. 6.—*Tribolium ferrugineum*,
adult beetle.Fig. 7.—*Typhaea fumata*, adult beetle.

A similar beetle is *Cathartus adrena*, which is illustrated in Fig. 5. It has not yet been discovered in Sind lac, but the available record refers to very insufficient material, and since *Cathartus adrena* has been met with in most centres of lac cultivation in India, particularly from Mysore, it is very probable that Sind lac is also associated with it. Its pupa or larva has not been observed by any worker on lac, mainly because of the insignificant role it plays in the economy of lac cultivation.

When stick lac is stored, which means placed in heaps, a Tenebrionid beetle, *Tribolium ferrugineum*, Fig. 6, is found in great numbers. It is a saprophyte with a wide distribution, having been observed by the author even in Coca when a tin was left long unused. It is sure to be found with Sind lac when the stage comes of its being stored in some quantity. All these beetles have been recorded in other lacs by Imms and Chatterjee¹ before.

A much larger and active beetle, with its round worm-like larva even more active, is *Typhaea fumata*, of the family *Myctophagidae*, whose presence has not been reported by any other worker on lac. In Mysore, the author found it in such conspicuous numbers that he could not explain the absence of previous records, except on the basis that no special study had been devoted to the beetle pests of stored stick-lac. Its larva and pupae have been studied by the author. The insect is a universal saprophyte, being found even in old cigars, and, as such, is quite likely to appear in Sind lac on storage, and should be looked for in heaped lac.

Reference

1. A.D. Imms, and N.C. Chatterjee (1915) : *Biology of Tachardia lacca*. Ind. For. Mem. Vol. 3, Pt. 1.