A CLAVICORN BEETLE ASSOCIATED WITH LAC

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Several years ago, the late Rao Bahadur C.S. Misra kindly made available to the author, a pound of fresh stick-lac, growing at Pusa, Bihar, on 'ber,' *Zizyphus jujuba*. The area, both geographically and ecologically, is similar to that of Rajshahi in East Pakistan, so that the present note may be of some interest for lac cultivation in the latter locality. The above-mentioned brood lac was received at Bangalore about the middle of Novemeber 1922. While dissecting individual lac cells, using a binocular microscope for immediate examination for anything requiring critical observation, the author came across pupae that appeared to be those of some unknown beetle. From this particular sample of lac some five pupae were collected, all after breaking the cells with a small sharp scalpel. The pupae were found externally to the bodies of lac insects but within their cells. No larva was found which could, otherwise, have been dissected to examine the stomach contents and ascertain the exact nature of the food and thus discover the relationship of the beetle to the lac insect. Its presence within the cell was however exactly the same, as for example, that of Silvanus Iyeri, a recognized beetle parasite of lac.[1]

Of the female pupae collected, one was laid on its back to expose its ventral appearance and Fig. 1 was drawn from it. Another was placed carefully sideways and its appearance is shown

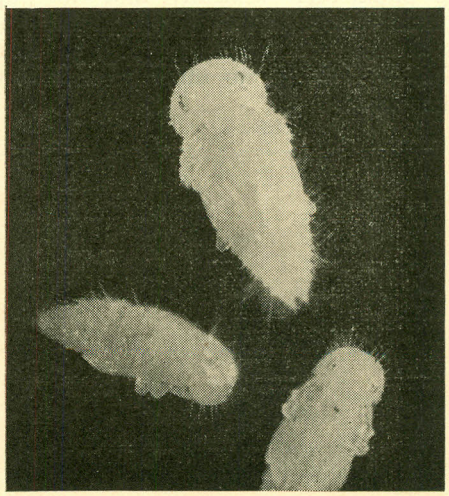

Fig. 5.—Macrophotograph of the clavicorn pupae, the larger shows the ventral view of the female, the smaller two represent the male.

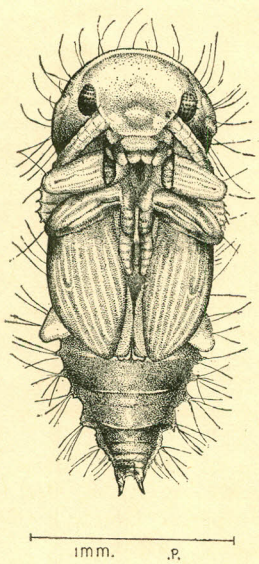

Fig. 1.—Female pupa of the clavicorn beetle, ventral view.

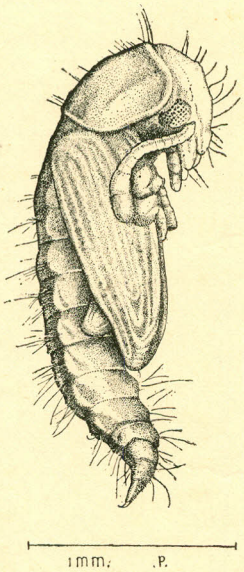

Fig. 2.—Same as Fig 1, side view.

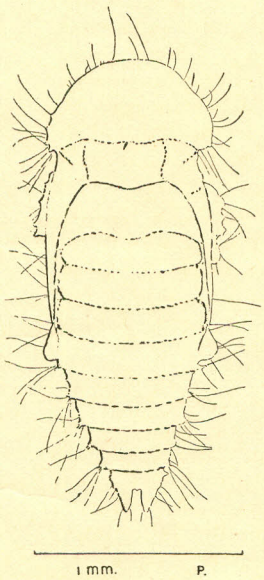

Fig. 3.—Same as Fig. 1, dorsal view.

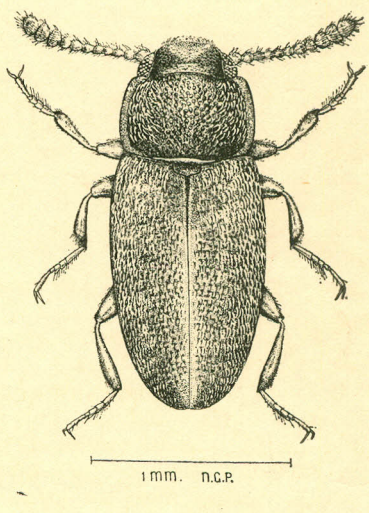

Fig. 4.—Female clavicorn beetle, adult, dorsal view.

in Fig. 2. These two pupae died, apparently due to outside atmospheric conditions, soon after the illustrations were made. Figure 3 shows a dorsal view of a third larva, which had to be left rather sketchy because of the short time for which the pupa could be exposed to the ambient condition if it was to survive till it could moult, which it did, and Fig. 4 was made from it. One female pupa, seen ventrally, and two pupae of the male insect were photographed on an enlarged scale as shown in Fig. 5. Excepting one female (Fig. 3) no other pupa survived to become adult.

Before the last World War, a specimen of this particular beetle was sent to a Coleoptera specialist, who could not, however, identify it with any known species. The specimen had become slightly mouldy, but none better could be obtained so far. This beetle was not observed again by the author in any lac, but it is hoped that workers in the Rajshahi region will have an apportunity of doing so.

Reference

1. Silvanus Iyeri, Current Sci. (India), **24**, 418 (1955).