



FIG. 4. Tubers in an *Anthoceros* sp. A tuber magnified to show the lighter contents of the cortical cells and the translucent storage cells in the centre and the rhizoids. $\times 196$.

germination experiments were not carried out in the present study to further elucidate the nature of the tubers. Goebel (1905) suggested that they may be of the nature of vegetative reproductive structures. He further regarded them as being transformed branches of the thallus whose ends have become swollen and filled with reserve food materials. So far as our present observations go we are inclined to accept this view of Goebel.

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TWO ECTOPARASITES OF THE BAT *ROUSETTUS LESCHENAULTI* DESM.

DURING our studies on bats in the island of Bombay, we came across a number of ectoparasites which are being studied here. Of particular interest were two Nycteribiids and Streblids (Diptera) which do not seem to have received enough attention in the past.

Phillips⁵ recorded some wingless Nycteribiids from frugivorous bats of Ceylon, but he did not get any Streblids. Thompson⁶ also recorded a number of these parasites from bats in India. MacCann⁴ has reported both these families from bats in and around Bombay and our results confirm his observations.

The anatomy of these interesting parasites has been worked out largely by Jobling^{1,2,3}. Very little work in this direction has, however, been done in India on these insects. The anatomy of these parasites is being studied here and the interesting results will be published elsewhere.

These two insects have been identified to be *Eucampsipoda hyrtli* Kolenati and *Nycteribosea gigantea* Speiser. They were collected from the wing membrane and the neck region of *Rousettus*.

Apart from the well-developed piercing mouth parts, there is a well-developed antennal gland with a number of branches. The thoracic segments, though varying in size, are heavily padded with stiff bristles. The legs have sensitive pads on the last tarsal joint, followed by a sharp bent claw. The appendages are so adapted that they could be tucked below the body in times of need. The first abdominal segment bears comb-shaped etenidia. The end segments are telescoped. The entire body is padded with stiff bristles and also a coat of thin hairs. The shape and locomotion are a perfect adaptation to the ectoparasitic mode of life.

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