

XXIV DESCRIPTION OF A MINUTE
HYMENOPTEROUS INSECT FROM
CALCUTTA

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On August 25th while I was examining some microscopic specimens in oil of cloves, a minute insect appeared in the field of vision, having fallen into the oil as minute insects often do. An examination showed that this little animal, which is perhaps the smallest insect yet known, belonged to the family Myrmaridæ and was related to the species described and figured by Westwood¹ as *Alaptus excisus*. I have therefore ventured to describe it as the type of a new species of the same genus, for it is unlikely that it will be discovered by any professed student of the Hymenoptera, or, indeed, by anyone not engaged in microscopical work in India.

Alaptus magnanimus, sp. nov. (Plate xxiii.)

Size very minute (length 0·21 mm.; expanse, including wing fringe, 0·85 mm.).

Head viewed from above short and broad, the anterior margin appearing truncate owing to the fact that the anterior face is vertical; viewed from in front deep. Antennæ minutely hairy, with nine joints (in the ♂); the basal joint subcylindrical, tapering slightly at the tip, bending upwards and outwards from its point of origin, which is situated far forward on the head; second joint much shorter, pear-shaped, with the narrow end proximal; third and fourth joints subcylindrical, the latter much the shortest in the antenna; the other joints (fifth to ninth) pear-shaped, narrower at the base than at the tip, gradually increasing in size. Eyes large, elongately oval, separated by more than their own transverse diameter, curved when viewed from the side. Three ocelli, one close to the inner margin of each eye and one in the middle of the vertex; a minute bristle in front of each of the lateral ocelli. (The mouth parts are not visible in the type.)

Thorax.—Pronotum transverse, angulate, almost linear, produced at either side and bearing at the tip of the projection a bunch of minute hairs. Mesothorax much longer, transversely lozenge-shaped but with the posterior angle replaced by a broad concavity. Scutellum narrow, especially in front; the anterior margin depressedly convex forwards; a single bristle on either

¹ *Trans. Linn. Soc. Lond.*, Zool. (2), vol. i, p. 586, pl. lxxiii, figs. 10, 11 (1879).

side of the disk near its centre. Postscutellum imperfectly separated, transverse, band-like, with a single bristle on either side. Metanotum large, transverse, with the anterior margin sinuous and the posterior convex. (The ventral surface and the sides are concealed in the type.)

Wings.—Fore wings long and slender with the tip obliquely rounded; the base very narrow, becoming somewhat dilated just behind the point at which the marginal fringe commences on the posterior margin. The hairs that form this fringe numbering about 45, long and slender, becoming shorter towards the base of the wing on both margins, the longest (at the tip) being rather less than half as long as the wing without the fringe; within the fringe, near the edge of the wing, a row of minute bristles, and two similar bristles near the centre of the disk; on the anterior surface a single long bristle at the widest part of the wing. Posterior wing almost linear, very little dilated distally; the tip narrowly rounded; the fringe without an inner row of bristles, consisting on the anterior margin of 5 short hairs followed, distally, by about 20 long ones, and on the posterior margin of about 11 moderate hairs, which are only a little longer at the distal end than towards the base; the basal half of the posterior margin bare; a minutely serrated ridge runs down the middle of the distal half of the wing.

Legs moderately long, with the femora, tibiæ and tarsi subequal; the tarsi minutely hairy, consisting of 5 subequal joints and bearing two minute claws at the tip. The tibiæ of the middle and hind legs clothed with minute recumbent hairs and bearing a pair of small bristles at the tip; those of the middle legs bearing a single, longer bristle on the anterior surface.

Abdomen (♂) stout and rounded; the sides clothed with scale-like hairs; the first dorsal segment bearing a single bristle on either side near the posterior margin; the penultimate segment with a pair of unequal bristles on either side, the longer bristle being posterior to and nearer the middle of the segment than the shorter one.

Remarks.—As the specimen was not discovered until it had fallen into clove oil, which had rendered it partially transparent, I cannot describe its coloration in detail. The head (including the antennæ), the thorax and the abdomen appear, however, to have been dark in colour, and the limbs pale. The wing fringes have evidently been dark also, and it is just possible to detect a faint white band running round those of the fore wings at a short distance from the base of the hairs. Unfortunately both antennæ were broken in mounting the specimen, but notes were taken on their structure before this occurred. In the type (Reg. No. $\frac{2502}{16}$ of the Indian Museum insect register), which is mounted on a glass slide for microscopic examination, only the first two joints remain *in situ*, with the third to sixth joints of one antenna free. Except the left fore wing, the wings have also become separated, but all are preserved.