NOTES ON *PARABASIS PRATTI*, A "MISLAID" NOTODONTID FROM NEW GUINEA

by HARRY K. CLENCH

When BETHUNE-BAKER (1904: 429, pl. 4, fig. 26) described the new genus and species, *Parabasis pratti*, from Dinawa, British New Guinea, he placed it, for some unaccountable reason, in the family Noctuidæ. It was so listed in the *Zoological Record* for 1904 (SHARP 1905: 267), but appears subsequently to have been nowhere referred to. GAEDE (1934) does not mention it in his catalogue of the Notodontidæ, nor does he (1930) list it in SEITZ. It is apparently not mentioned in any of HAMPSON'S volumes on the Noctuidæ (*Cat. Lep. Phalænæ*).

While arranging some Indo-Australian moths in the museum collection I found a pair of this striking and unmistakable insect: two males, one in excellent condition from the Kwimi River, S. of Hollandia, Dutch N. Guinea, 14.iii.1937 (W. STUEBER); the other, somewhat worn, from Uskwar, Bewani Mts., nr. Hollandia, 7.iii.1937 (STUEBER). These two differ from BETHUNE-BAKER's excellent colored figure only in minor particulars.

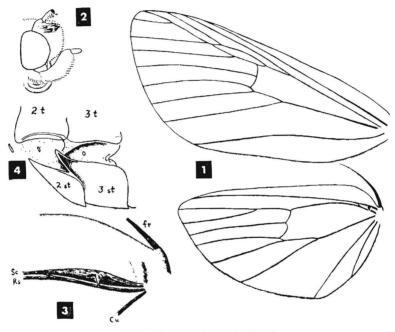
Some years later, JOICEY & TALBOT (1915: 300, pl. 12, fig. 11) described a second species, *felixi*, from two males and a female from the Angi Lakes, Arfak Mts. (Vogelkop), 6000 ft., Dutch N. Guinea. These authors failed to indicate in any way the family to which *Parabasis* belongs.

It may be useful to redescribe the important structural characters of this genus, since BETHUNE-BAKER'S description is too brief to be of much service. The following description, of course, is based on *P. pratti* and refers only to the male. The female appears to remain unknown.

Antennæ equally bipectinate to within about 20 segments of the tip, the longest rami about the length of four shaft segments; thence to tip, simple; shaft scaled dorsally, the rami unscaled. Antennal scape rather large, dorsally convex, lateroventrally excavated as a sort of eyecap, with a tuft of long hairs ventrally and mesially; the scape is black dorsally, yellow ventrally (not "with black sockets" as described by BETHUNE-BAKER). Palpi (fig. 2) densely scaled, upturned to below upper border of eye, the second segment long and sigmoid, the last segment short, deflexed. Proboscis present. Vertex and frons (fig. 2) densely covered with long, nearly erect scales. The legs are subapressedly scaled, save for the femora which all have ventral fringes of erect hairscales or scales. The fore leg has a lateral tuft of very long hair-scales, apparently arising on the trochanter and extending to the apex of the femur, which has a subapical dorsal transverse fringe of curved scales grasping the end of this tuft something after the fashion of a retinaculum. The hind tibia has two pairs of spurs of very unequal length, the inner spur of each pair being over twice as long as the outer, and nearly half as long as the tibia itself.

The venation is illustrated in the accompanying cut (fig. 1) and needs no further discussion, save for one point. In BETHUNE-BAKER's description appears the following: "close to the base of 8 [Sc] a short sharp spur is emitted at right angles to the vein." Unless a specimen is examined this is almost certain to be misinterpreted as a costad-directed spur vein or supernumerary even. This, however, is not at all the case. The spur he mentions is a most singular structure

(fig. 3), which leaves at right angles (or nearly so) to the lower surface of the wing itself, almost immediately curving posteriorly and ending in a sharp point. It is heavily sclerotized and almost completely hidden in the basal scaling of the under surface of the wing. It becomes visible on wetting the wing for venational study, but is best studied dry, when the scales around it can be carefully scraped away with a needle. The purpose of this curious structure remains unknown to me, though JORDAN (1923: 154) offers some interesting possibilities in his discussion of the notodontid cteniophore. He observed it, apparently usually or always in association with the cteniophore, in a number of different species of the family.



EXPLANATION OF FIGURES

Parabasis pratti Bethune-Baker, male.

- Fig. 1. Venation.
- Fig. 2. Profile of head.
- Fig. 3. Detail of base of hind wing under surface, to show the erect hook arising out of the base of vein Sc.
- Fig. 4. Second and third abdominal segments, viewed from the left, showing the cteniophore arising from the third sternite.

The cteniophore of JORDAN (*loc. cit.*) is well developed in *Parabasis* pratti (fig. 4). but presents several peculiarities. First of all, it appears to be a process of the third abdominal sternite, rather than the fourth as JORDAN found in other notodontids. Second, it is not armed with any spines at all, making the term "cteniophore" a misnomer in this particular instance. It arises out

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of the anterodorsal corner of the sternite, and is straight, tapering, directed anterodorsally. Its posterior or dorsal edge is a continuation of the dorsal border of the sternite, and its anterior or ventral edge a prolongation of the anterior edge of the sternite. The cteniophore is laterally (or posterolaterally) excavated, forming a long trough-like pocket which extends down the anterior edge of the sternite, becoming shallower and eventually disappearing.

Immediately below the cteniophore, the second sternite (cf. fig. 4) is in lateral view very shallow, due to a ventral excavation of considerable proportions.

References

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A NOTE ON GENITALIC STRUCTURE

Some years ago 1 noted with only passing curiosity a reference by WARREN (*Trans. Roy. Ent. Soc. London* 1944: p. 9) to the fact that the eighth segment should be regarded as a proper part of the male genitalic apparatus. Others may be as surprised as I have been to learn that WARREN's observation marks no mere academic theory, but that it is indeed advisable always to examine the eighth segment critically. Invariably, in the female anatomy, this segment is given over to modifications sexual in function, but I had presumed that almost invariably it is unspecialized in males. Recently, however, I made a preparation of an unknown butterfly species from Angola in which the segment is complexly elaborated and exceedingly bizarre. This male specimen additionally bore the full complement of parts on the ninth segment.

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