

NOTICES OF CERTAIN FULGOROIDEA, II: THE GENUS TROBOLOPHYA

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SIX TEXT FIGURES

In 1913, Melichar¹ described a new genus, *Trobolophya*, of the family Dictyopharidæ, based upon a single specimen collected in Java by Jacobson. Just before this I had sent to Melichar a Philippine representative of the same genus, which he referred to as being the same as the Javan species.² After 1913 I discovered that this genus is widely and commonly distributed in the Philippines in several species, and that it occurs in western Malaysia as far north as Penang Island, Straits Settlements. In making a careful study of the accumulated material, it appears that the Javan species is quite distinct from any known Philippine form.

It is hard to explain why so generally distributed a genus, with some of the species very common, remained unknown to science until 1913, unless it be due to the fact that the species are montane and arboreal; though this is only in so far as my experience goes.

External anatomical features in this genus are difficult to appraise at their true comparative value since, as in many Derbidæ and other fulgorids, high and thin margins may incline one way or the other in drying, and partial collapse of certain areas may occur. It is thus very important to have ample series of specimens for study, and in most cases I have obtained these. The genitalia will, as in other Fulgoroidea, undoubtedly furnish characters of great diagnostic value, but in this case would require dissection and special preparation

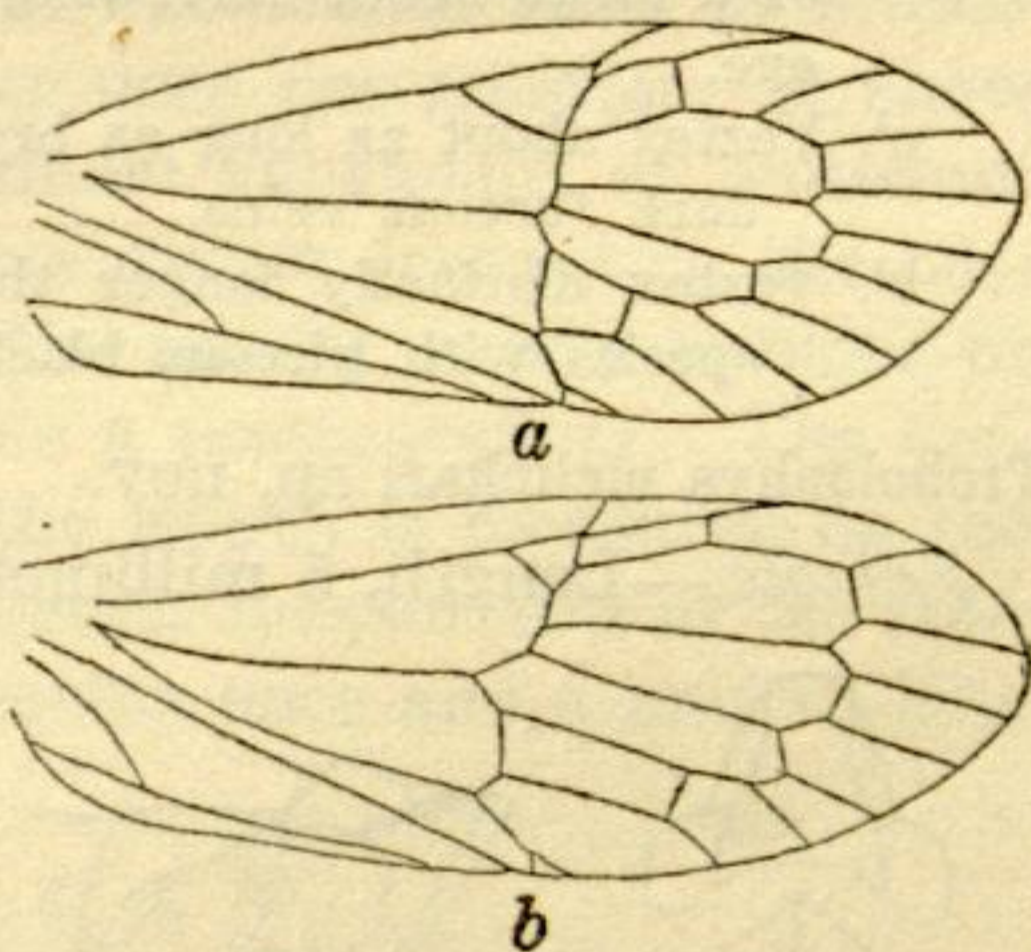


FIG. 1. a, *Trobolophya philippinensis* sp. nov., tegmen; b, *T. melichari* sp. nov., tegmen.

¹ Notes Leyden Mus. 36 (1913) 92.

² Loc. cit.

which would be a considerable undertaking in itself. The species so far recognized may be separated as follows:

Synopsis of the species of Trobolophya.

- a*¹. Intraocular portion of vertex, on median line, less than one-third length of anteocular; viewed from side, lateral margin of vertex highly arched at base; outer anteapical cell long and narrow, inner anteapical three times as long as broad (fig. 1, *b*) tegmina transversely banded..... *melichari* sp. nov.
- a*². Intraocular portion of vertex, on median line, about as long as anteocular; viewed from side, lateral margin of vertex not so highly arched at base; outer anteapical cell broad, inner little longer than broad (fig. 1, *a*); tegmina never transversely banded.
- b*¹. Angle between lateral margins of vertex and front, as viewed from side, more than a right angle, and with the black spot roundish, not reaching eye.
- c*¹. Clypeus, in side view, strongly raised above the level of the front. *penangensis* sp. nov.
- c*². Clypeus, in side view, not or very little raised above level of front.
- d*¹. Lateral spot of vertex large; veins of tegmina fuscopiceous. *jacobsoni* Mel.
- d*². Lateral spot of vertex small; veins of tegmina piceous black. *montana* sp. nov.
- b*². Angle between lateral margins of vertex and front, as viewed from side, a right angle or less, and with the black spot in the form of a large band, narrowing eyeward, and nearly or quite reaching eye.
- c*¹. Vertex about as long as broad at base; smaller, paler species with dark fuscous veins..... *philippinensis* sp. nov.
- c*². Vertex distinctly longer than broad at base; larger, dark green species with piceous black veins..... *benguetensis* sp. nov.

Trobolophya melichari sp. nov. Fig. 2, *a*, *b*.³

Female.—Length, 5 millimeters. Pale greenish, legs stramineous, becoming entirely stramineous with a darker scutellum in drying. The lateral black marks on head show through on vertex as two parallel lateral lines on apical half and as black spots at basal angles. Tegmina hyaline, veins fuscous; a narrow, irregular, curved, smoky band passes

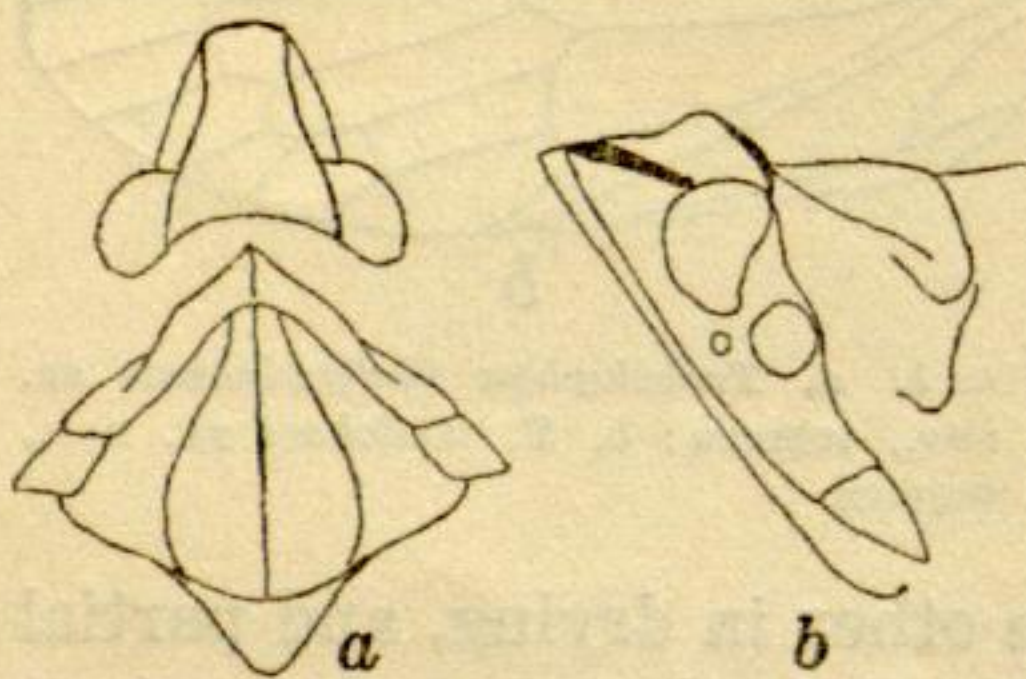


FIG. 2. *Trobolophya melichari* sp. nov.; *a*, vertex, pronotum, and scutellum; *b*, head, side view.

from stigma to near apex of clavus.

LUZON, Laguna Province, Mount Maquiling: Tayabas Province, Malinao. MINDANAO, Davao (coll. *Baker*). Differs from

³ Characters given in the synopsis are not repeated in the following descriptions.

all other known species of the genus in form of head, venation, and coloration, and constitutes a distinct section of the genus. Named for Dr. L. Melichar, the founder of the genus.

Trobolophya penangensis sp. nov. Fig. 3, a, b.

Female.—Length, 6 millimeters. Head and legs stramineous, thorax sanguineous, abdomen pale green; lateral spots of head scarcely showing through on vertex; anterior tibiae with outer border piceous. Tegmina hyaline, veins fuscous.

Penang Island, Straits Settlements (coll. Baker). Near to *T. jacobsoni* but distinct in form of clypeus and in coloration.

Trobolophya jacobsoni Mel.

Melichar's detail drawings (pl. 3, fig. 1, 1c) are very diagrammatic. For instance, the drawing shows the lateral margins of vertex parallel throughout, which is not true for any species of the genus. Also, the position of submedian keels of scutellum are never as shown. Melichar does not mention, or show in his drawing, that the narrow caudal appendage of scutellum is separated by a distinct transverse carina connecting the posterolateral margins of scutellum; the caudal moiety is more or less concave and possibly represents a postscutellum. The vertex is nearly as long as broad, if the length is measured on the median line only; but Melichar evidently measured it at the side, or length over all, since he says "vertex once and a half as long as wide at base."

Trobolophya montana sp. nov. Fig. 4, a, b.

Female.—Length, 7 millimeters. Body deep green, head and legs stramineous; frontal and scutellar carinae and outer margins of fore tibiae piceous; spots on sides of head scarcely showing through on vertex. Tegmina hyaline or slightly milky clouded, longitudinal veins piceous, costa and cross veins pale fuscous.

Male.—Length, 6 millimeters. Coloring paler.

LUZON, Nueva Vizcaya Province, Imugan (coll. Baker),

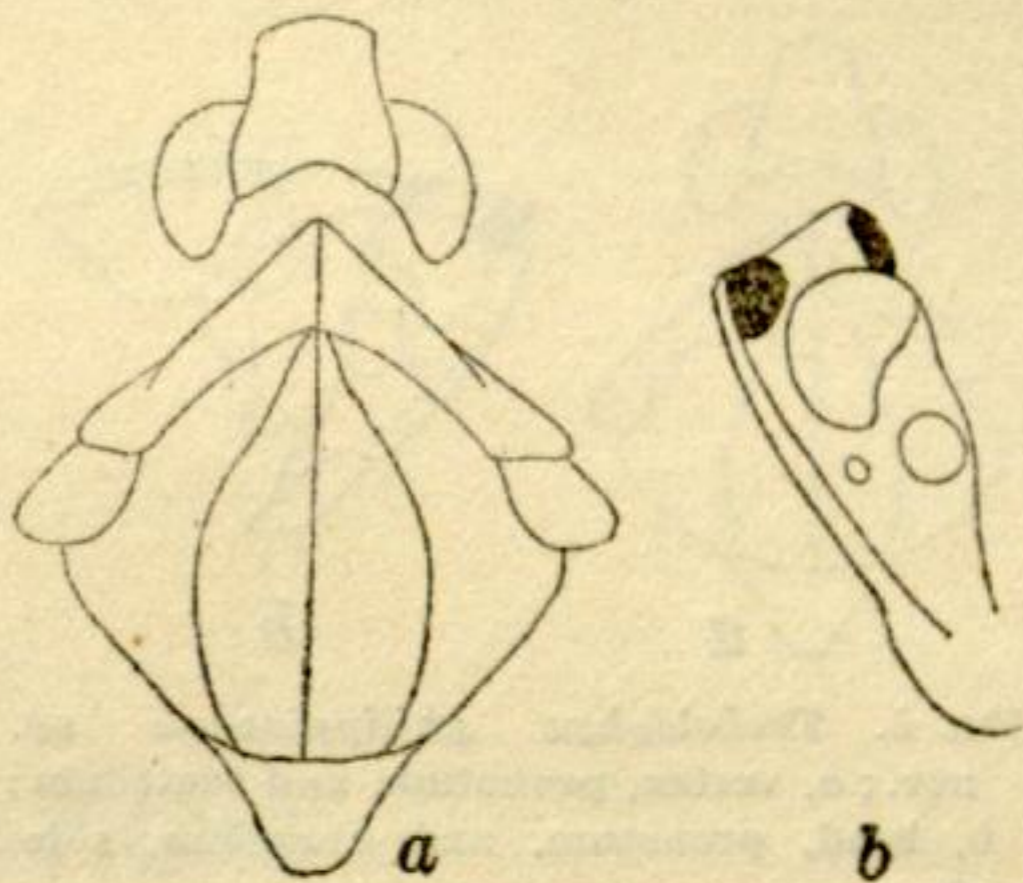


FIG. 3. *Trobolophya penangensis* sp. nov.; a, vertex, pronotum, and scutellum; b, head, side view.

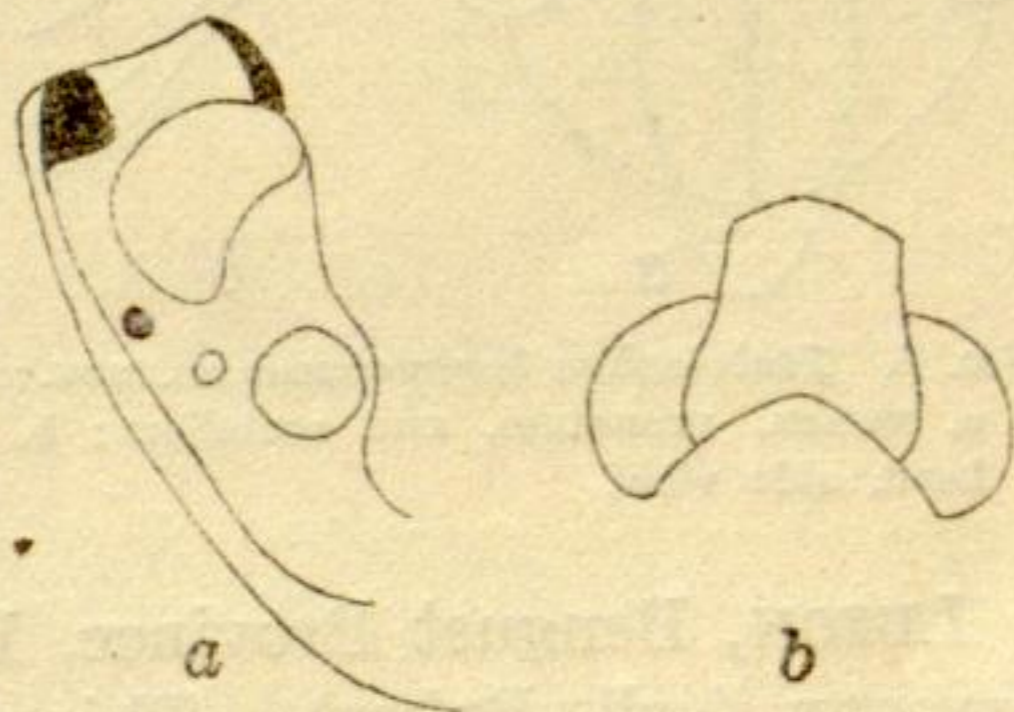


FIG. 4. *Trobolophya montana* sp. nov.; a, head, side view; b, vertex.

abundant. A slightly smaller, paler form is abundant on Mount Banahao, Laguna, Luzon; this form has also been encountered at Malinao, Tayabas, Luzon.

Trobolophya philippinensis sp. nov. Fig. 5, a, b.

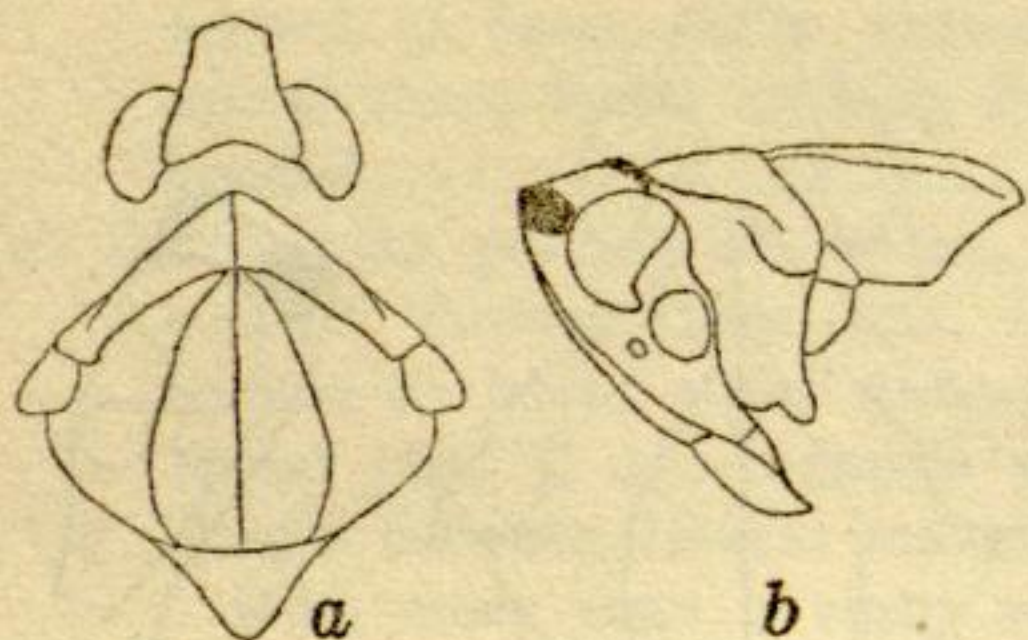


FIG. 5. *Trobolophya philippinensis* sp. nov.; a, vertex, pronotum, and scutellum; b, head, pronotum, and scutellum, side view.

Female.—Length, 5.5 millimeters. Pale green, head and legs stramineous; frontal and scutellar carinæ and outer margins of fore tibiæ fuscous; spots on sides of head showing through as small spots on vertex at outer anterior angles. Tegmina hyaline; longitudinal veins dark fuscous, darker basally and on clavus, cross veins and costa paler.

Male.—Length, 5 millimeters. Color paler.

LUZON, Laguna Province, Mount Maquiling and Mount Banahao (coll. *Baker*), common. A smaller, paler form occurs in the mountains of Benguet and Nueva Vizcaya. It is noteworthy that in the case of *T. montana*, a larger, deeper green form occurs in the northern mountains, and a smaller, paler form, on Maquiling and Banahao; while in the present species just the opposite is the case. This species is the one formerly referred to *T. jacobsoni* by Melichar.

Trobolophya benguetensis sp. nov. Fig. 6, a, b.

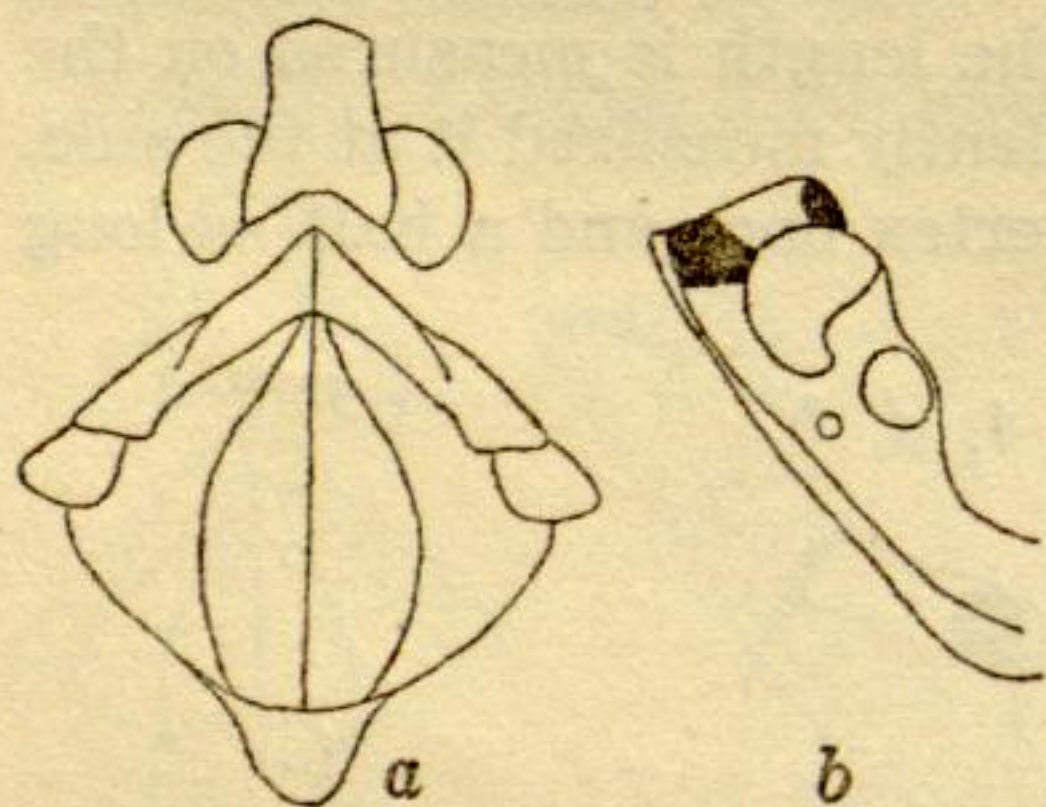


FIG. 6. *Trobolophya benguetensis* sp. nov.; a, vertex, pronotum, and scutellum; b, head, side view.

Female.—Length, 7 millimeters. Body, including head, deep green, sometimes with sanguineous tinting between scutellar carinæ; facial and scutellar carinæ concolorous; outer margin of fore tibiæ piceous. Lateral spots of head showing through as narrow black marks on vertex at anterolateral angles. Tegmina hyaline, stigma stramineous; veins, except costa, all piceous-black, darker basally.

LUZON, Benguet Province, Baguio: Nueva Vizcaya Province, Imugan (coll. *Baker*). This species might be readily confused with *T. montana* on superficial examination, as the two are of similar size; but they can be readily distinguished by the different form of head and by the markings.

ILLUSTRATIONS

TEXT FIGURES

- FIG. 1. *a*, *Trobolophya philippinensis* sp. nov., tegmen; *b*, *T. melichari* sp. nov., tegmen.
2. *Trobolophya melichari* sp. nov.; *a*, vertex, pronotum, and scutellum; *b*, head, side view.
3. *Trobolophya penangensis* sp. nov.; *a*, vertex, pronotum, and scutellum; *b*, head, side view.
4. *Trobolophya montana* sp. nov.; *a*, head, side view; *b*, vertex.
5. *Trobolophya philippinensis* sp. nov.; *a*, vertex, pronotum, and scutellum; *b*, head, pronotum, and scutellum, side view.
6. *Trobolophya benguetensis* sp. nov.; *a*, vertex, pronotum, and scutellum; *b*, head, side view.