AMERICAN MUSEUM NOVITATES

Number 1081

Published by
THE AMERICAN MUSEUM OF NATURAL HISTORY
New York City

July 17, 1940

TWO NEOTROPICAL AGRIONINE DAMSELFLIES (ODONATA) FROM MTS. DUIDA AND RORAIMA

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The species here described were collected by Dr. J. G. Myers in 1932. Both are important additions to the known American odonate fauna. One represents a new genus, whose nearest relative is the African genus *Phaon*. The other is not entirely new, but is the male of a puzzling genus that has hitherto been known from a single female specimen in the American Museum collection, that was described by the senior author in these Novitates.

We now have adequate material for illustrating the adults of both genera, but knowledge of the immature stages is still wholly lacking.

IRIDICTYON, NEW GENUS

Allied to Phaon, with similar bronze and black coloration and diaphanous wings. Form slender with excessively thin and long-spined legs. Claws minutely toothed. Wings broad with dense venation, and stigma entirely lacking. Arculus strongly angulated, with its sectors arising from a common point. Quadrangles almost six times as long as wide, and similar in fore and hind wings. Male caudal appendages about as long as the 10th segment. Female ovipositor short and broad, hardly surpassing the 9th segment. Between the veins M_1 and M₂ there are three extra sectors that increase in length to rearward, and between each pair of these there are other submarginal sectors before reaching the very minute cells at the wing margin. Behind vein Cu2a there are about four cell rows in the hind wing. The gaff (fused portion of veins Cu2 and 1st A beyond the quadrangle) is much longer and stronger than in Phaon.

This genus is easily distinguished from *Phaon* by the more proximal origin of vein M_2 , which arises about six or seven cells before the subnodus, and by more copious venation in all parts of the wing. It differs from *Vestalis* in having the arculus broken at the point of origin of its sectors, in having the basal radial cell open (not closed by fusion of the veins M_{1-3} and R_1 beyond the arculus: it is closed in Vestalis), and by having the supplementary sectors between the principal veins mainly free

from these veins (not appearing as branches of them).

GENOTYPE.—Iridictyon myersi, new species.

Iridictyon myersi, new species

Length of abdomen: \circlearrowleft , 51-53 mm.; \circlearrowleft , 52. Hind wing: \circlearrowleft , 39-41; \circlearrowleft , 52. This is a very beautiful slender, bronzy green and black species with delicately tinted iridescent wings. Head green on face and dorsum and clothed with black hairs. Ocelli yellowish; eyes and antennae fuscous: rear of head and underside including mouth-parts black.

Sides and dorsum of the entire thorax shining bronzy green with sutures and carinae margined by black. The black hairs that thinly clothe the front are longer than those on the face. Under parts of thorax black, becoming pruinose in old males.

Legs long and slender, uniform black. Spines of the femora and tibiae very long and thin and numerous. Tarsi clothed with short close pubescence. Hind tibiae 9 mm. long, strongly bowed outward; middle and front tibiae less bowed and a little shorter. Claws with a very minute tooth beneath very near the tip.

Wings hyaline with black veins, the membrane with iridescent violet reflections. A very narrow border of fuscous tinges the rear margin of the wing. Antenodal veins about 60 in the fore wing. There are about seven crossveins in the quadrangle.

Abdomen black except for the dorsum of the first segment, which is shining bronzy green washed lightly with gold. The dorsum of the second segment has strong violet reflections, and there is a tinge of the same color on the black of the slightly enlarged terminal segments. Segment 2 is hardly as thick as 1, and only a little thicker than the four segments that follow it. The relative length of segments 7 to 10 is about in the ratio of 10:6:4:3, and the appendages are about as long as the 9th segment. Segment 10 is slightly carinate above in its apical half, and slightly so each side opposite the base of the inferior appendages.

The superior appendages of the male are subclavate as viewed from above and incurved, with a few rather strong spines on the outer side of the curve and with a tuft of black hairs at the tip. In lateral view they are obclavate, somewhat regularly narrowed outward from a

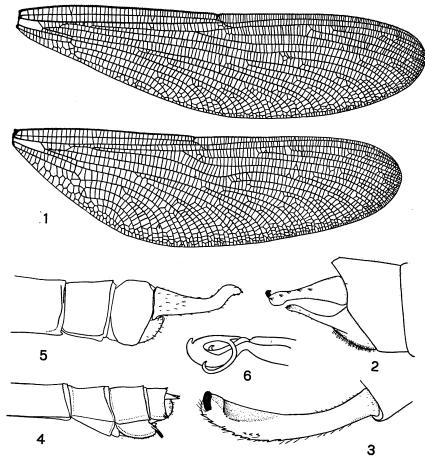


Fig. 1. Wings of *Iridictyon myersi*.

Fig. 2. End of abdomen of the male, viewed from the side.

Fig. 3. Superior appendage in oblique upper and lateral view.

Fig. 4. End of abdomen of female of same in lateral view.

Fig. 5. End of abdomen of male of *Rimanella arcana* in lateral view.

Fig. 6. Penis of the same.

broad base almost to the somewhat knobbed tip. The tip bears a minute longitudinal carina above. The inferior appendages are broad at base, laterally compressed there, straight thence outward and almost parallel sided to their slightly incurved tips.

Female.—Similar in coloration of body and legs, but the wings are lightly tinged with fuscous throughout most of the membrane, and crossed by an oblique band of milky white color just beyond the nodus. This band ends on the tips of veins M_3 and M_4 . Segment 10 is half as long as 9, and bears three sharp terminal spines at the end of the mid-dorsal and lateral carinae. The rather stout appendages are about as long as 10 and taper to a sharp point. The palp is about as long as the ovipositor is wide.

Types.—A single pair, o' No. 3043 and $\$ No. 3040, type and paratype, respectively, from the upper Ireng River, Pakaraima Mountains, British Guiana. A o' No. 3111 from Mazaruni Hd. and another o' from Mt. Roraima, paratypes, from the same mountains. Dr. J. G. Myers, collector.

Rimanella arcana Needham

NEEDHAM, 1933, Amer. Mus. Novitates, No. 664, pp. 3-5, female only (as *Rima arcana*). NEEDHAM, 1924, Entomological News, XLV,

p. 50 (name changed to *Rimanella*).

MALE.—Length, 48-49 mm. Abdomen, 37-38 mm.; hind wing, 29 mm.

Color dull greenish black and brown. Head, thorax and legs as described for the female. Labrum greenish yellow with a median brown spot on its anterior margin.

Wings hyaline. Postnodal crossveins 14-20 in the fore wings, and 14-17 in the hind wings; the first and second series not matching in either fore or hind wings.

Abdomen dull reddish brown with the greenish black above confined to segment one, the apices of two to seven, eight except for a narrow basal pale ring, and all of nine; ten pale. The penis as in figure 6 is non-lestid in form. Terminal appendages reddish brown, black at their apices; inferiors rudimentary; superior much longer than the tenth segment (figure 5).

Two males from Mt. Roraima, Venezuela, J. G. Myers, collector.

The types of both these species will be deposited in The American Museum of Natural History.