

SHORT COMMUNICATIONS

A NEW SPECIES OF *PERUVIOGOMPHUS* KLOTS, 1944 FROM
ECUADOR (ANISOPTERA: GOMPHIDAE)

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Received and Accepted February 23, 1979

P. pearsoni sp. n. (♂ holotype: Limoncocha, Prov. Napo) is described and illustrated. The affinities of *Peruviogomphus* (♀ described by ST. QUENTIN, 1973, *Annln naturh. Mus. Wien* 77: 335-363) with this species are discussed.

PERUVIOGOMPHUS PEARSONI SPEC. NOV.

Figures 1-8, 10

Material. — Ecuador: Prov. Napo, Limoncocha (lake edge), 2.X.1971, 1 ♂ (holotype), D.L. Pearson leg. It is preserved in the collection D.R. Paulson, Seattle, Washington, USA.

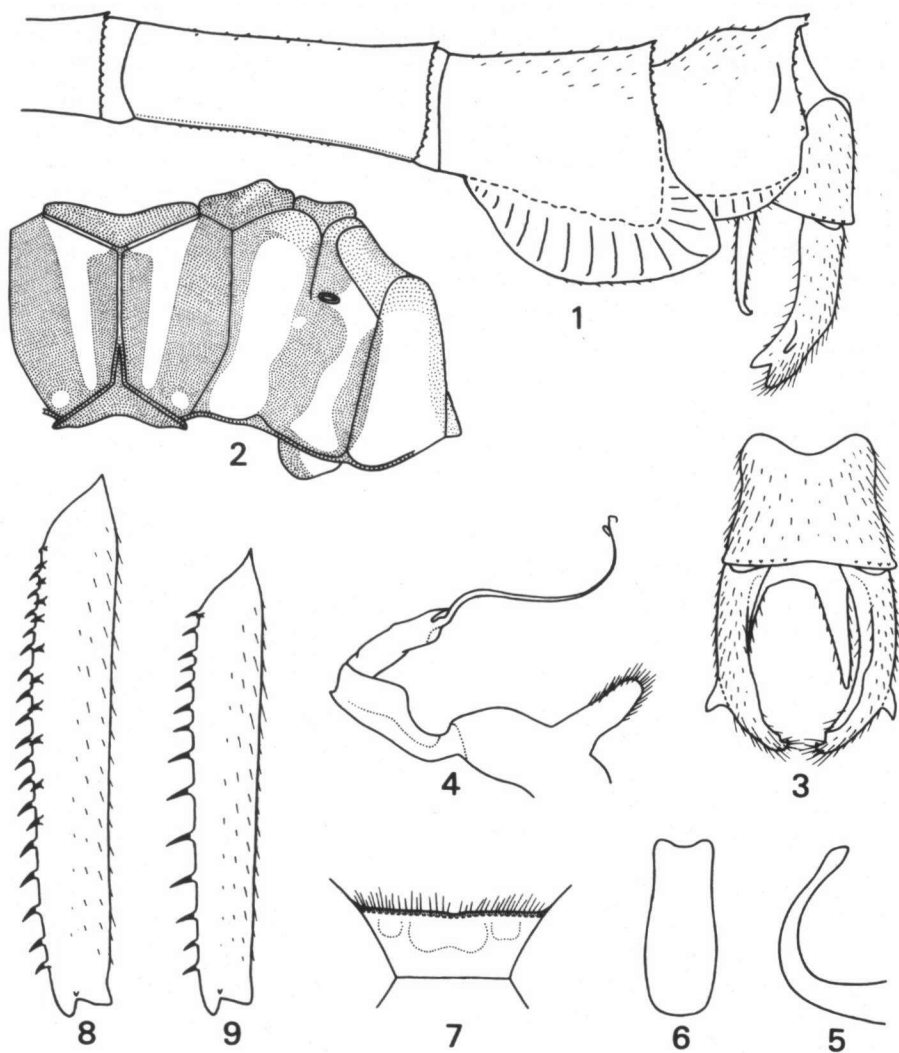
Male (adult holotype; abdomen broken between segments 3 and 4). — Total length 46 mm; abdomen 36 mm; hind wing 28 mm; costal edge of pterostigma in fore wing 3.0 mm.

Face, frons, vertex and occipital plate green but frontal ridge of frons and prominent ridge behind lateral ocelli paler. Vertex around middle ocellus and in front of lateral ocelli yellow. Anterior part of pedicels yellow. Frons low, its upper surface deeply concave in middle. Occipital plate concave, its hind margin slightly excised in middle and thinly set with short brown hairs. Rear of head brown, becoming pale green below. Labrum and adjacent mouth parts pale green.

Prothorax dark brown but posterior part of middle lobe green.

Pterothorax dark brown with green stripes and markings; its colour design shaped as shown in Figure 2.

Femora brown-yellow, the longest spines on outer anterior margin of third femora about a quarter the diameter of femur. Tibiae, tarsi and claws dark brown. Spines of outer anterior row of third tibiae and tarsi slightly modified.



Figs. 1-8. *Peruviogomphus pearsoni* sp. n., holotype male: (1) Apical segments of abdomen and caudal appendages, left lateral view; — (2) diagram of pterothorax pattern; — (3) tenth abdominal segment and caudal appendages, dorsal view; — (4) penis, right lateral view; — (5) penis guard, right lateral view; — (6) the same, frontal view; — (7) occipital plate; — (8) left third femur, left lateral view (spines on inner side not drawn). — Fig. 9. *Peruviogomphus* sp., female from Serra do Navio. — Left third femur, left lateral view (spines on inner side not drawn).

Lamina tibialis of first tibiae one-fifth the tibial length.

Wings hyaline. Venation of wings dark brown including frontal margin of costa. Pterostigma brown-yellow, surmounting $3\frac{1}{2}$ -5 cells. Brace vein present. Basal subcostal cross-vein present. Antenodal and postnodal cross-veins of first series 13:18-16:11/11:14-13:12 in fore and hind wings, respectively. Second primary antenodal cross-vein the sixth. Intermedian cross-veins 8-9/6-6 in fore and hind wings, respectively. Middle fork strongly askew forward. Subtriangles uncrossed. Supratrangles crossed. Discoidal triangle in fore wings uncrossed and almost equilateral but the frontal side a trifle shorter. Discoidal triangles in hind wings once crossed and elongated in axis of wing. Trigonal interspace in fore wings starting with two cells against triangle followed by a single row of cells, that in hind wings starting with three cells against triangle followed by a single row of cells. Fore wings with a single row of cells in anal field and two rows of cells posterior to Cu2. Hind wings with four paranal cells (fourth paranal cell enlarged), three postanal cells, three rows of cells posterior to Cu2, and a four-celled anal triangle.

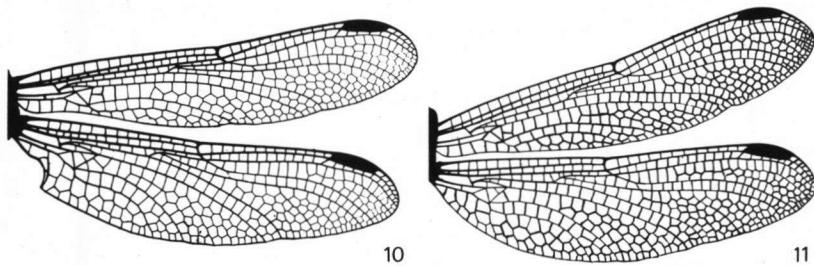


Fig. 10. *Peruviogomphus pearsoni* sp. n., holotype male. — Photograph of right pair of wings. — Fig. 11. *Peruviogomphus* sp., female from Serra do Navio. — Photograph of right pair of wings.

Abdomen predominantly dark brown. Segments 3 to 7 with middorsal line of yellow. Sides of segments 2 and 3 with yellow markings. Sides of segments 8 and 9 with brown-yellow markings. Accessory genitalia very similar to those of genotype (*P. moyobambus* KLOTS, 1944). Segments 8 and 9 with well-developed lateral dilatations, those of segment 8 broadly widening to rearward. Caudal appendages dark brown, shaped as shown in Figures 1 and 3.

DISCUSSION

The male of *Peruviogomphus pearsoni* is readily distinguished from that of *P. moyobambus* by its larger size, the very different shape of its caudal

appendages, and particularly by the well-developed lateral expansions of the eighth and ninth abdominal segments. The new species is dedicated to its discoverer.

ST. QUENTIN (1973) described a female of *Peruviogomphus* from Brazil (collected at Serra do Navio, Território do Amapá, in October 1957 by Lane) but he refrained from naming it since the corresponding male was unknown. This female is probably conspecific with *P. pearsoni* despite the widely divergent localities. The size is near enough, just a little smaller (abdomen 33 mm; hind wing 27.5 mm), and the venation of the wings agrees except in that the frontal side of the triangle in the fore wings is distinctly shorter (Fig. 11). Further, in characters other than those of sex it differs from the male of *P. pearsoni* as follows: (1) Occipital plate flat, its hind margin almost straight; — (2) a single row of spines on the outer anterior margin of third femora, the longest spines of this row about half the diameter of femur (Fig. 9); — (3) spines on outer anterior row of third tibiae and tarsi not modified. But differences in the conformation of the occipital plate and the armature of the legs are often found in the two sexes of gomphid species. The ultimate placement of the female of *Peruviogomphus* from Serra do Navio may well wait until further material becomes available.

ACKNOWLEDGEMENTS

My thanks are due to Dr. DENNIS R. PAULSON (Seattle) who has generously turned over the male of the new *Peruviogomphus* species to me for description herewith, and to Prof. Dr. ANGELO B.M. MACHADO (Belo Horizonte) for the loan of the female of *Peruviogomphus* from Serra do Navio.

REFERENCES

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