

## *Progomphus maculatus*, a new species from Venezuela (Odonata: Gomphidae)

by

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ABSTRACT. — *Progomphus maculatus* spec. nov. (♂ holotype: Río Mawarinuma, T. F. Amazonas, Venezuela) is described and illustrated after a unique specimen.

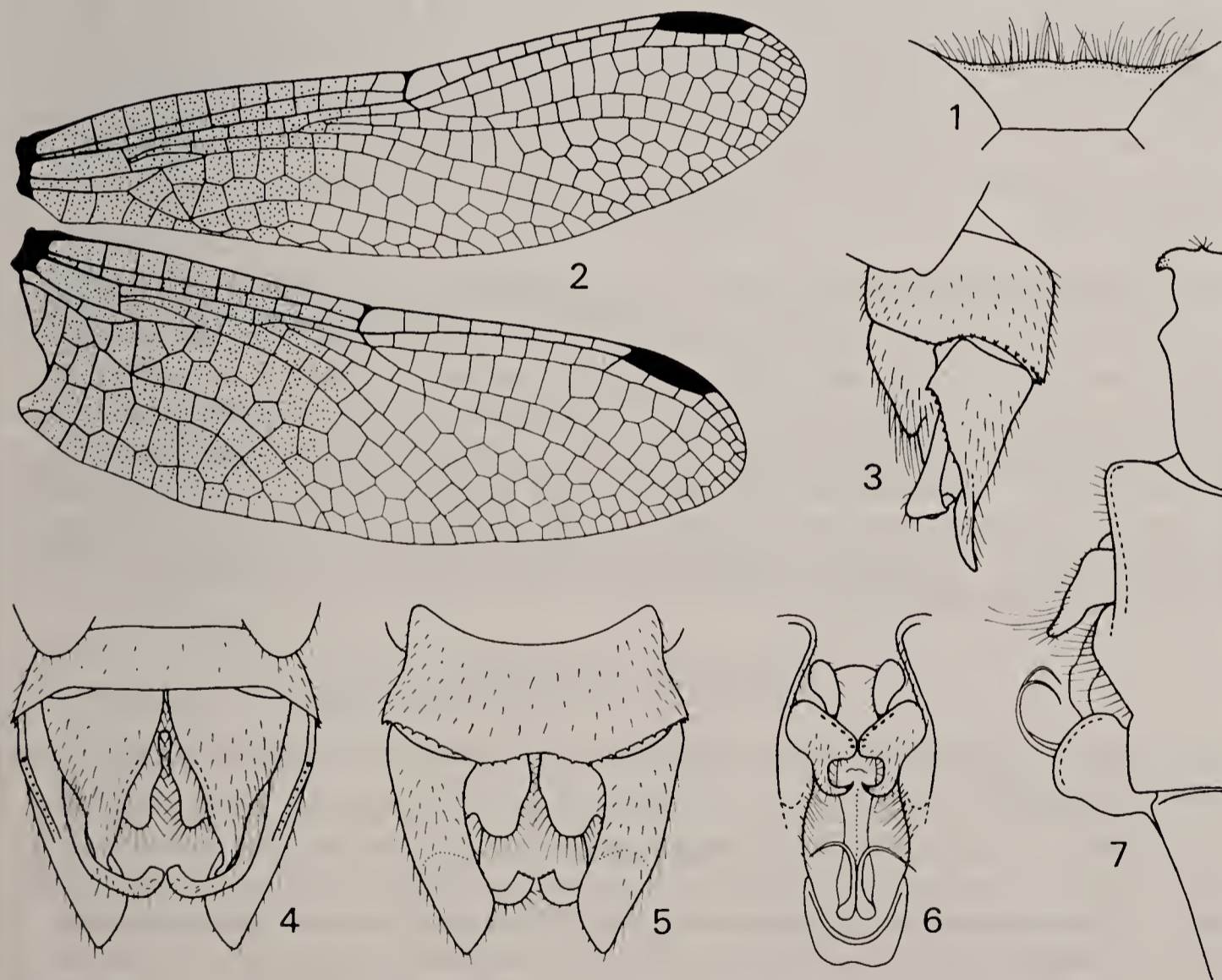
*Progomphus maculatus* spec. nov. (figures 1-7)

Material. — Venezuela: Territorio Federal Amazonas, Río Mawarinuma (140 m, 0° 55' N - 66° 10' W), 2-12 February 1984, 1 ♂ (holotype), A. Chacon & L. J. Joly leg.; it is in the collection of the Instituto de Zoología Agrícola, Universidad Central de Venezuela, Maracay.

Male (holotype). — Total length 31.5 mm; abdomen 23.5 mm (incl. caud. app.); hind wing 17 mm; costal edge of pterostigma in fore wing 2.0 mm.

Head green. Frons with black hairs, no frontal ridge. Occipital plate convex, the posterior ridge fringed with pale brown hairs.

Prothorax green, the hind lobe orange-brown. Pterothorax green, darker on dorsum, becom-



Figs 1-7. *Progomphus maculatus* spec. nov., male holotype. 1, occipital plate; 2, right pair of wings; 3, tenth abdominal segment and caudal appendages, left profile view; 4, the same, ventral view; 5, the same, dorsal view; 6, accessory genitalia, ventral view; 7, lower part of first two basal segments of abdomen, right profile view, showing midventer tubercle on segment 1 and accessory genitalia on segment 2.

ing yellowisher towards venter and aslant hind border. Dorsum with faintly developed whitish green stripes, its pattern somewhat resembling that of *Progomphus brachycnemis* Needham (cf. Belle, 1966: fig. 9). First pale antehumeral stripe crescent-shaped and broadly confluent with pale collar. Second pale antehumeral stripe narrow below, becoming wider above and bordering a large part of the antealar sinus.

Third femur largely green, becoming brown at knee. Second femur brown, becoming darker at knee. First femur brown with green inner side. Tibiae, tarsi and claws brown. Third tarsus a trifle longer than third tibia. Third tibia two-thirds the length of third femur. Lamina tibialis on first tibia one-sixth the tibial length.

Base of wings yellow-brown to near nodus on fore wings and to nodus on hind ones. Pterostigma brown, surmounting 3-3½ cells. Basal subcostal cross-vein present, with the first and fifth antenodal beyond it thickened. Nodal index 7 : 11-11 : 8-8 : 9-9 : 7 in fore and hind wings, respectively. Intermedian cross-veins 4-4/3-3 in fore and hind wings, respectively. Supratrangulars open. All triangles and subtriangles two-celled with two rows following, and with an extra initial cell at hind angle of triangle in hind wing but with none in fore wing. Hind wings with five paranal cells, three postanal cells, two rows of cells behind Cu2 (in left hind wing with an extra cell for a third row), and a two-celled anal triangle with a partly developed cross-vein for a third cell.

Abdomen green-yellow on basal segments, becoming brown on middle and apical segments including caudal appendages but with upper part of apical two-fifths of superiors paler. Segments 3 to 7 with middorsobasal yellow spots, on 3 reaching to half-way the segment, on 4 to 6 successively shorter, and on 7 again larger and reaching to a point about a quarter the way along segment. Segment 1 with a small midventer tubercle. Accessory genitalia and caudal appendages shaped as shown in accompanying figures. Anterior genital hamule bent caudad, its chitinized black apex very acute and curved dorsad. Branches of inferior caudal appendage curved strongly mesad at level of supero-external anteapical tooth, the tips curved dorsad and ending in four minute, black, marginal denticles. Anal tubercle (lamina infra-analis) strongly elongated caudad.

This beautiful small gomphid keys out to *perpusillus* Ris when Belle's (1973) key for *Progomphus* is used. Both species have the third tarsus longer than the third tibia but *maculatus* is instantly recognizable by the large yellow-brown basal spots on the wings. In this respect *maculatus* approaches *Progomphus superbus* Belle. The occurrence of colours in the wings of gomphids is restricted to some South American genera only. The superior caudal appendages are of the usual form, i.e. blade-shaped. The inferior caudal appendage recalls that of *Progomphus montanus* Belle, and the anal tubercles those of *Progomphus kimminsi* Belle. The penis resembles greatly that of *Progomphus pygmaeus* Selys and its allies by the presence of a robust curved spine on the median segment.

#### ACKNOWLEDGEMENT

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