

SHORT COMMUNICATIONS

**THE LARVA OF *PROGOMPHUS ABBREVIATUS* BELLE, 1973
FROM VENEZUELA (ANISOPTERA: GOMPHIDAE)**

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Description and illustrations are provided, based on exuviae material of Venezuelan provenience. Some field observations on the larval and adult stage are added.

INTRODUCTION

Progomphus abbreviatus was described by BELLE (1973) from a single male from Colombia. According to a personal information from the late Dr. J. Rácenis, the species is also common in Venezuela, though in his collection there are only a few adult specimens and no larvae. I found the species plentiful from April to October, 1979 (particularly so during July-September). It was observed together with *Aeshna rufipes* Ris (DE MARMELS, 1981), on a rocky rivulet that runs through a steep gorge of the Avila Mts., a part of the Costal Cordillera. The creek is bordered with gallery forest.

For metamorphosis, the larvae hardly ever climb more than a few millimeters out of water, on the side of some rock. Usually the abdomen remains in contact with the water surface, or even partly immersed. The emerging imagines, therefore, find themselves very often in a vertical position. One can usually find emerging insects around mid-morning.

The adults fly close to the ground, males usually sit down on stones near the water, often in shadow. Sometimes, and when copulating, they rest also on leaves of nearby bushes, in the sun.

Based on colour transparencies, some information on the adult coloration

can be provided. Both sexes are mostly dark brown to black. In the male, and eventually in the female, the yellow antehumeral stripes of the teneral turn light bluish in the mature individuals, the lateral stripes green, and the yellow markings of the abdomen whitish. The conspicuous yellowish spot on the dorsum of segment 7 is, in the female, divided by a black median line. The yellow lateral markings on segments 2 to 6, especially 2 to 4, are more extended in the female. The superior anal appendages are white-tipped in both sexes, and the lower part of the eyes is greyish blue.

DESCRIPTION OF THE EXUVIAE

Material. — 7 exuviae of both sexes: Venezuela, Quebrada Pasaquire, alt. 1000 m approx., Avila, Miranda; 26-VI-1979 and 3-VIII-1979. Collected by the author and preserved dry.

Relatively slender-bodied, broadest on segment 6. Colour yellowish brown to greyish brown, without any conspicuous markings. Total length (including anal pyramid) 18.2-19.5 mm; abdomen (including anal pyramid) 11.2-12.2 mm; greatest width of abdomen 4.5-5.0 mm; greatest width of head across eyes 3.5-4.0 mm; posterior femur 2.8-3.4 mm. Head triangular with concave occiput. Greater parts of head and body granulated. Three bare scars on

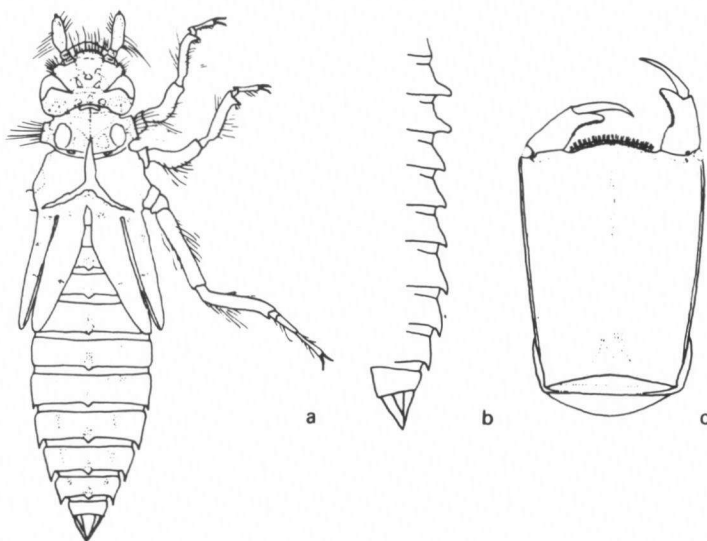


Fig. 1. *Progomphus abbreviatus* Belle, exuviae: (a) dorsal view; — (b) dorsal outline of the abdomen, left lateral view; — (c) labium, external view.

concave part of the occipital margin and two more in front of the (bare) ocelli. Lateral edge between eye and antenna, and free edge of labrum beset with long hairs. Clypeus prominent, bearing stronger but shorter bristles. Third segment of antenna flattened dorsoventrally, more than twice as long as broad and coated with long hairs, especially at its base. Fourth segment vestigial, knob-shaped. Mentum short, its hinge lies somewhere between front and middle coxae. Labium trapezoid to rectangular. Lateral margins of mentum almost straight. Length roughly $1\frac{1}{2}$ x the width at the base of the lateral lobe. Median lobe little convex, its free front with a pair of small median denticles, otherwise finely ribbed and fringed with palisade setae in a double series, short and long. Lateral lobe gradually tapering, blunt-tipped, its inner margin with some 10 to 12 serrately arranged truncate teeth, getting smaller towards the base. These teeth are not very well separated from each other. Movable hook slightly longer than outer border of lateral lobe.

Front and middle tibiae with strong burrowing hook. Middle coxae as far apart as front ones. Wing sheaths divergent to rearward, extending to posterior margin of segment 4. Abdomen with lateral spines on segments 6 to 9. The lateral spines on segment 7 to 9 are about equally long, on segment 6 shorter. Dorsal spines on segment 2 to 9, most prominent on segment 2 and 3, continuously more backwards directed posteriorly. Segment 10 shorter than 9. Segments 9, 8, 7 etc. do not differ very much from each other in length. Length of anal pyramid roughly as segment 9. Cerci two thirds the length of epiproct. Paraproct only slightly longer than epiproct.

DISCUSSION

It seems very likely that NEEDHAM's (1941) "Nymph No. 14", from Miranda, Venezuela belongs to *Progomphus abbreviatus*. However, the collection of J. Rácenis (Facultad de Agronomía, Maracay, Aragua) contains an imago of *P. phyllochromus* Ris from the same place: Estado Miranda (Petare, 900 m, 26-XI-1961, Bordon leg.), the larva of which is still unknown.

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