

**PHYLLOGOMPHOIDES JOAQUINI SPEC. NOV.,
A NEW GOMPHOIDINI FROM ARGENTINA
(ANISOPTERA: GOMPHIDAE)***

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The new sp. is described from 4 ♂ (holotype ♂ and all paratypes: Buenos Aires, Verónica, I-1938; deposited in MACN, Buenos Aires). It belongs to the *andromeda* group of J. BELLE (1984, *Tijdschr. Ent.* 127: 79-100).

INTRODUCTION

Forty *Phyllogomphoides* species are at present recorded in the Neotropical Region (BELLE, 1970, 1980, 1982, 1984, 1987, 1989; BROOKS, 1989; COOK & GONZALEZ SORIANO, 1990; DONNELLY, 1979; GLOYD, 1973; PAULSON, 1982; ST. QUENTIN, 1967). BELLE (1984) divided the South American species into 8 infrageneric groups, based on the peculiarities in the shape of the male caudal appendages and accessory genitalia and in the structure of the larval labium.

So far only *P. andromeda* (Selys) has been reported from Argentina (Misiones province) (JURZITZA, 1981). *Phyllogomphoides joaquinii* sp. n. is referable to the *andromeda* group of BELLE (1984) in having more or less tweezers-shaped male superior caudal appendages. The other members of the group are *P. cassiopeia* Belle, *P. andromeda* (Sel.) and *P. cepheus* Belle.

P. joaquinii sp. n. is the southernmost species of the genus. The locality where the specimens were collected is situated near the southern extreme of the Subtropical Marginal Forest, near Rio de la Plata, in Buenos Aires province.

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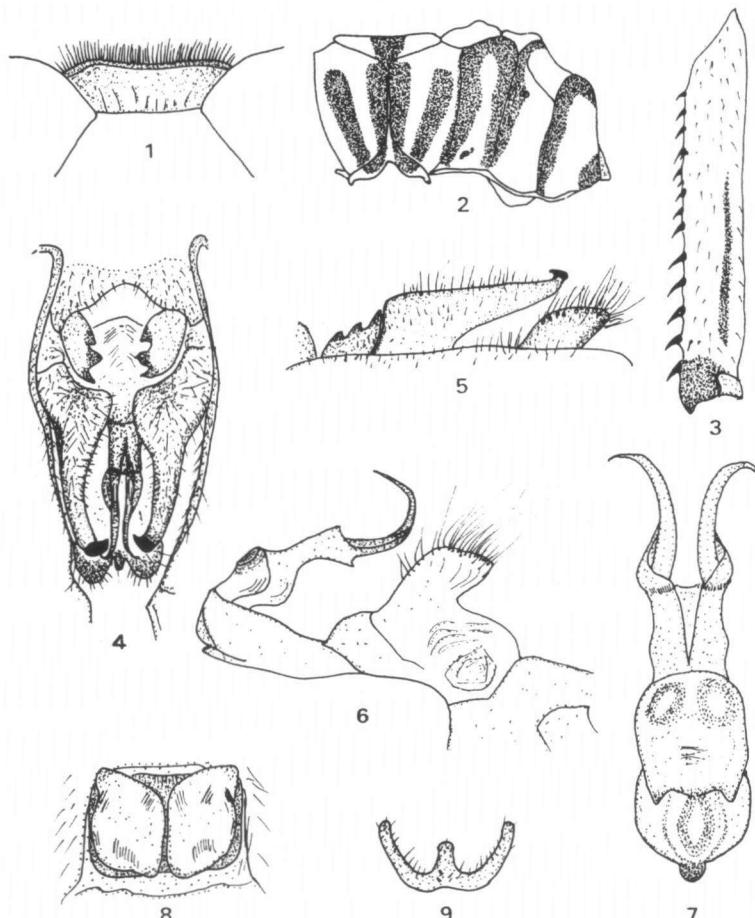
PHYLLOGOMPHOIDES JOAQUINI SPEC. NOV.

Figures 1-14

M a t e r i a l. — Holotype ♂: ARGENTINA, Buenos Aires, Verónica, I-1938, J.B. Daguerre leg.

— Paratypes: 3 ♂, same data (2 with broken abd.). — All deposited in Museo Argentino de Ciencias Naturales "Bernardino Rivadavia" (MACN).

E t y m o l o g y. — The species is named in memory of my father, Joaquim Rodrigues Capítulo (1910-1980).



Figs 1-9. *Phyllogomphoides joaquinii* sp. n., holotype male: (1) occipital plate, dorsal view; — (2) diagram of pterothorax; — (3) left posterior femur, left lateral view; — (4-5) accessory genitalia, ventral and lateral views; — (6-7) penis, lateral view, and ventral view of apical segment; — (8) valvules of abdominal segment 9; — (9) hood penile peduncle, caudal view.

D i a g n o s i s. — The species is similar to *P. andromeda* and *P. cassiopeia* from Paraguay, from which it differs in the pterothoracic pattern, secondary genitalia and caudal appendages. It is characterised by a cylindrical ventrobasal tubercle (0.34 mm) of the cerci, ending in a spur directed forward (Figs 10, 11, 14), and by the anterior hamuli bearing 3 medial teeth (Figs 4, 5). In lateral view, the posterior hamuli are similar to *P. regularis* (Sel.) (cf. BELLE, 1970: fig. 232).

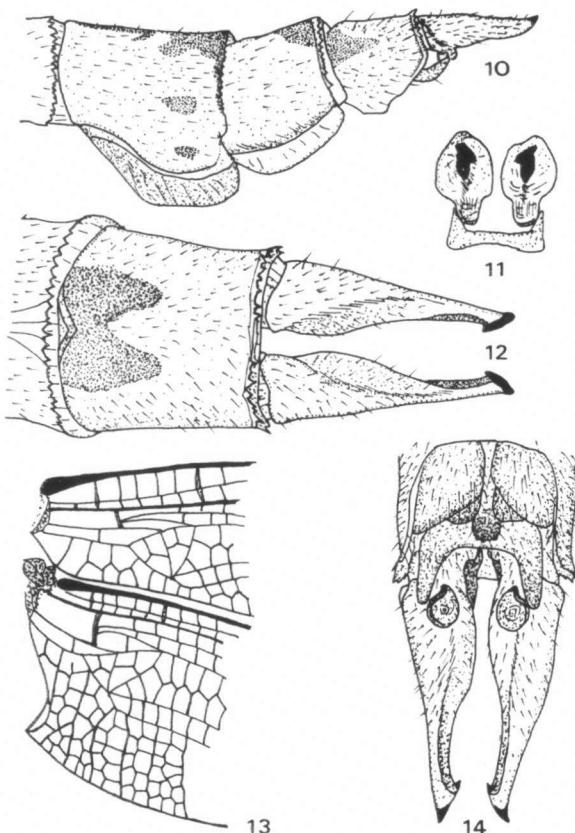
MALE (holotype). — **H e a d.** — Maximum width 8.2 mm. Face and labrum pale yellowish green, without black band along free border. Base of mandibles yellowish green; distally brown. Frons yellowish. Face and frons with pale yellow hairs. Vertex brown. Occipital plate largely yellow green. Posterior margin of occipital plate (Fig. 1) slightly rounded and fringed with yellow hairs. Posterior part of head brown, yellow green behind occipital plate. Labium and adjacent mouth parts pale yellow brown.

P r o t h o r a x. — Brown; posterior lobe black, yellow green on each side. Pterothorax brown (Fig. 2) with yellow green stripes as follows: middorsal carina green. First and second antehumeral stripe widening forward united with pale area of collar. Three well developed lateral yellow green stripes as in Figure 2. Humeral and lateral sutures brown.

L e g s. — Femur 3 mostly yellowish with narrow brown stripe on dorsal outer side and with black spot on distal tip. Spination black on outer angle of femur (Fig. 3); femora 1 and 2 with an inner dorsal brown stripe full length. Tibiae yellowish with black spination. Tarsi and claws black.

W i n g s. — Hyaline tinged yellow brown. Pterostigma pale brown. Wing venation. (Fig. 13). Nodal formula, fore wing 11-18:17-11; hind wing 11-13:13-11. Basal subcostal cross-vein present. Second primary antenodal cross-vein the sixth in right wing, the fifth in left wing. Intermedian cross-veins, fore wing 8, hind wing 6. Supratriangle in hind wing two-celled, in front wing open. Triangle in all wings three-celled with cross-veins triradiate from centre. Subtriangle in left fore wing two-celled; others three-celled with cross-veins triradiate from centre. Trigonal interspace starting with three cells (fore wings) or four (hind wings) followed by two rows of cells; five paranal cells in hind wings, five postanal cells; four-celled anal loop and anal triangle; area posterior to Cu₂ five cells wide.

A b d o m e n. — Pale brown with black markings; segment 1 with pale brown sides and dark brown dorsum; segment 2 with distal half of dorsum dark brown, sides and auricles pale yellow brown; segments 3 to 7 black on distal third; segment 8 with middorsum, distal margin and well developed lateral dilatations black; segment 9 with black spot on posterior middorsum; lateral dilatations (less developed) brown (Figs 10, 12). Valvules on abdominal sternite 9 subrhomboidal (Fig. 8). Segment 10 with forked spot on basal middorsum (Fig. 12). Anterior hamuli bearing three medial teeth (Figs 4, 5). Posterior hamuli very long, directed backward, reaching hood (Figs 4, 5) and ending in a black inward process. Hood



Figs 10-14. *Phyllogomphoides joaquinii* sp. n., holotype male: (10-12, 14) apical segments of abdomen and caudal appendages in lateral, posterior, superior and ventral views; — (13) basal right wing venation.

shown in Figure 9. Penis shown in Figures 6 and 7. Tip of penis bears a pair of median cornua, wide at base; each of these reaching to hood. Apical segment of penis in ventral view (Fig. 7) with a pair of semicircular clefts. Dorsal posterior margin of segment 10 denticulated at level of caudal appendages.

Cerci largely pale yellow brown with black distal spur. In dorsal view appendages almost straight like in *P. cassiopeia* (cf. BELLE, 1975; fig. 3), wide at basal two-thirds and with distal portion bearing a black hook (Fig. 12). In lateral view with a cylindrical ventrobasal tubercle (height 0.34 mm, wide 0.45 mm) ending in a spur directed forward (Figs 10, 11, 14). Inferior appendage brown curved upward (Fig. 10); in ventral view forked with branches widely separated and slightly divergent (Fig. 14).

Measurements (mm). — Total length 64.8. — Fore wing 39.6; — hind wing 37.6; — costal edge of pterostigma in fore wing 4.8. — Abdomen (incl. app.) 48.6; — dorsal length of segments 8th 4, 9th 2.4, 10th 2.8; — superior appendages 3.3; — hind femur 6.9.

Variation in paratypes. — Nodal formula: fore wing: postnodals left 9-11; right 10; antenodals left 16-18; right 18; hind wing: postnodals left 11-12; right 12-13.

FEMALE unknown.

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