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Description of the last instar larva of *Forcepsioneura sancta* (Hagen in Selys 1860) (Odonata: Protoneuridae)

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The Neotropical genus *Forcepsioneura* Lencioni 1999 is composed of six described species (Garrison *et al.* 2010) endemic to the Brazilian Atlantic forest (Machado 2001; Garrison *et al.* 2010). The knowledge of the immature stages is restricted to the inclusion of the genus in two keys of Protoneuridae genera (Costa *et al.* 2004; Neiss & Hamada 2012) and brief comments on labium characters (Costa *et al.* 2004), without formal description. Here we describe the last instar larva of *Forcepsioneura sancta* (Hagen in Selys 1860) based on specimens collected in Rio de Janeiro State, Brazil.

Forcepsioneura sancta (Hagen in Selys 1860)

(Figs. 1–9)

Protoneura sancta Hagen in Selys 1860: 34 (sp. nov., female description).

Psaironeura sancta, Williamson 1915: 620 (*Psaironeura*, gen. nov., comb. nov.).

Phasmoneura ciganae, Santos 1968: 221–226 (sp. nov., male and female description).

Phasmoneura sancta, Machado 1999: 37–38 (synonymy with *P. ciganae*).

Forcepsioneura ciganae, Lencioni 1999: 129, 132–136 (*Forcepsioneura*, gen. nov., comb. nov.; keys; cercus, genital ligula and wing illustrations and scannings).

Forcepsioneura sancta, Machado 2000: 132–133 (species included in *Forcepsioneura* key); Machado 2001: 845, 847–849, 853 (species included in *Forcepsioneura* key; diagnostic characters; cercus and prothorax of topotype illustrations); Pessacq 2008: 518–521, 523, 527 (species included in phylogenetic analysis); Garrison *et al.* 2010: 359–360 (illustration of male pronotum, genital ligula and cercus); Neiss & Hamada 2012: 38, 42 (additional comments and included in genera larval key).

Last instar larva description (Figs. 1–9). *Head* (Fig. 1) about 2.15 times as wide as long, posterolateral margins slightly concave or straight, occipital lobes rounded, not protruding laterally and covered with several thick spines. Posterior margin concave. Antenna seven-jointed; third flagellomere the longest, slightly shorter than first and second flagellomeres together. Premental articulation reaching first coxae; prementum (Fig. 2) short and broad, triangular, about 1.1 times as long as wide, anterior margin convex and slightly crenulated, with two long premental setae on each side and none, two, four or eight very short and thin setae posterior to the long ones; sides with a row of short spine-like setae at distal third. Palp (Fig. 3) with the typical curved end hook, with five (85%) or six (15%) long setae, external margin with no setae; apical margin with two or three small teeth on its inner side, irregularly crenulated on its external side, inner margin clearly crenulated on its apical half, barely crenulated on its basal half; movable hook slender and sharp, about half the length of external margin. Mandibular formula (Figs. 4a,b) (*sensu* Watson 1956) L 1+2 345 y ab; R 1+2 345 y a. *Thorax*: pronotum rounded laterally. Wing pads reaching middle length of S4. Legs light brown, irregularly covered with small hair-like setae. Femur I–III with a row of sparse, short spine-like setae on its dorsal and ventral margins, even more sparse on ventral margin, absent in two specimens. Tibia II–III with a row of sparse, short spine-like setae on ventral margin, absent in one specimen.

Abdomen: cylindrical, coloration light brown, without visible markings. Male cerci and gonapophyses as in figs. 5–6; with a dorsal row of distal spine-like setae on S7–10 more sparse or absent on segments 1–6. Female gonapophyses (Fig. 7) exceeding posterior margin of sternite 10, lateral valvae sharply pointed. Lateral caudal lamellae (Fig. 8) light brown, lanceolated, more than six times as long as wide, apex rounded or acute; without nodus or transverse suture;