



## Description of the final instar larva of *Progomphus joergenseni* Ris (Eiprocta: Gomphidae)

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### Abstract

The final instar larva of *Progomphus joergenseni* is described and illustrated for the first time based on specimens collected in Río Negro Province, northern Patagonia, Argentina. Right mandibular molar crest shows an extreme reduction in the number of teeth with no intermediates between teeth a and b. Antennal, leg and paraprocts morphology suggest a close relationship with the species included in the *Pygmaeus* group, but *P. joergenseni* differs from them because of its larger size and longer anal pyramid.

**Key words:** Odonata, Patagonia, Argentina, *Progomphus*, larva

### Resumen

Se describe e ilustra por primera vez el último estadio larval de *Progomphus joergenseni* a partir de especímenes recolectados en la provincia de Río Negro, Patagonia septentrional, Argentina. La cresta molar de la mandíbula derecha se encuentra reducida y no presenta dientes intermedios entre a y b. La morfología de las antenas, patas y paraproctos sugiere una relación más cercana con aquellas especies que integran el grupo *Pygmaeus*, de las que se diferencia por su mayor tamaño y su pirámide anal más larga.

**Palabras clave:** Odonata, Patagonia, Argentina, *Progomphus*, larva

The American genus *Progomphus* Selys, recorded from southern Canada to northern Patagonia in Argentina, is composed of 67 species (Garrison *et al.* 2006). At present, the final instar larva of 29 species has been described. In Argentina the genus is represented by nine species (von Ellenrieder & Muzón, 2008); the final instar larva of three of them is described, *i.e.*, *P. phyllochromus* Ris and *P. complicatus* Selys by suppositon and *P. lepidus* Ris (Needham 1941; Santos 1968; Limongi 1983).

*Progomphus joergenseni* Ris, the southernmost species of the genus, is a typical andean species, distributed in arid and semi arid habitats from Peru (Chosica, near 860 m.a.s.l.) to Bolivia (Cochabamba, 2600 m.a.s.l.), Chile and Argentina (Salta, Tucumán, Mendoza, San Juan, Río Negro and Neuquén provinces, from 2400 to 600 masl) (Belle 1973; Paulson 1977; Muzón *et al.* 2005; Garrison *et al.* 2006; von Ellenrieder & Garrison 2007; von Ellenrieder & Muzón 2008). Von Ellenrieder & Muzón (2008) erroneously stated that this species was endemic to Argentina. Within its geographical range in Argentina, *P. joergenseni* is apparently in sympatry with *P. complicatus*, *P. phyllochromus* and *P. kimminsi* Belle in the Yungas biogeographical region; nevertheless, in this area (Salta and Tucumán provinces), *P. joergenseni* inhabits arid biotopes typical of higher altitude, such as high altitude grasslands, whereas *P. complicatus* and *P. kimminsi* inhabit foothills and mountain jungles and *P. phyllochromus* mountain jungles and forests (von Ellenrieder & Garrison 2007). The aim of this paper is to provide a description and diagnosis of the larva of *P. joergenseni* based on specimens collected in Río Negro Province, northern Patagonia.