**Pseudosmittia adunca & P. joaquimvenancioid (Diptera: Chironomidae), first records from Argentina**

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**Pseudosmittia adunca & P. joaquimvenancii (Diptera: Chironomidae), primer registro de la Argentina**

**RESUMEN.** A partir de los ejemplares del género *Pseudosmittia* registrados en dos localidades de la provincia de Buenos Aires (Argentina), se extiende la distribución geográfica de *P. adunca* y *P. joaquimvenancioid*. Además, el nuevo material de *P. adunca* nos permite ampliar su diagnosis.


**ABSTRACT.** Based on specimens of the genus *Pseudosmittia* recorded from two localities of the province of Buenos Aires in Argentina, the geographic distribution of *P. adunca* and *P. joaquimvenancioid* is extended. In addition, the new material of *P. adunca* allows us to expand its diagnosis.


*Pseudosmittia* Edwards, 1932 is one of the largest and diverse genera within the Orthocladiinae, with worldwide distribution. Their representatives present terrestrial or semi-terrestrial habits and can be found on the borders of swamps, ponds and streams with vegetation (Epler, 2001). Andersen *et al.* (2010) reviewed this genus in the Neotropics, establishing 23 species and one morphotype. Later, Mauad *et al.* (2013) described a new *Pseudosmittia* species occurring in the pampean biogeographical province of Cabrera & Willink (1973).

Based on material collected in two localities of Buenos Aires province in Argentina, the geographic distribution of *Pseudosmittia adunca* Andersen *et al.* and *P. joaquimvenancioid* (Messias & Oliveira) is expanded. Furthermore, the study of the new specimens of *P. adunca* allows us to expand its diagnosis.

The studied specimens were mounted in Canada balsam following the procedures described by Paggi (2009). Morphological terminology and measurement standards follow Saether (1980). The material is housed in the collection of the Museo de La Plata, Argentina (MLP).

*Pseudosmittia joaquimvenancioid* (Messias & Oliveira, 2000)

**Material examined.** ARGENTINA: Buenos Aires Province, Junín, Río Salado, 34° 37’ 12.6” S- 60° 58’ 05.1” W, 30-III-2011, Sweep net, Donato, M. & Siri, A. cols, 1 male (MLP).

**Comments.** *Pseudosmittia joaquimvenancioid* is common in the Neotropical Region, the geographical distribution for this species is extended from Mexico, Costa Rica, Venezuela and Brazil (Andersen *et al.*, 2010). New material collected in Argentina allows us to extend its distribution to Buenos Aires, down to Río Salado as the southern border.
The Salado River, located at north-centre of Buenos Aires province is the most important effluent of Rio de La Plata catchment. It is characterized by high concentrations of phosphates and phytoplanktonic species showing the river’s eutrophication (Gabellone et al., 2005, 2013). The disturbance of this river could be related to the surrounding agricultural practice and to the waste waters from the urban area that flow into it. *P. joaquimvenanciai* is frequent in this kind of environments, since it has always been found at areas that displayed some kind of disturbance such as agriculture, urbanization, sedimentation, etc.

**Pseudosmittia adunca Andersen et al., 2010**

**Material examined.** ARGENTINA: Buenos Aires Province, Reserva Natural Integral Mixta Punta Lara, El Zanjón, 34° 47’ 33.8” S- 57° 59’ 52.5” W, 7-VIII-2013, Sweep net, Donato, M. col, 9 males (MLP).

Male (*n*=5 except when otherwise stated)

Total length 1.8–2.17 mm. Thorax length 0.55–0.75 mm. Abdomen length 1.23–1.42 mm. Total length/wing length 1.41–1.79 mm, wing length/profemur length 2.84–3.30 mm.


Thorax. Antepronotum with 1 lateral seta. Acrostichals 2. Dorsocentrals 8–10; prealars 4; supraalar 0. Scutellum with 6–7 setae.

Wing. Length 1.12–1.28 mm. VR 1.35–1.49. Brachiolum with 1 seta, other veins bare.

Legs. Width at apex of front tibia 22–27 μm; of middle tibia 22–30 μm; of hind tibia 22–37 μm. Lengths and proportion of legs in Table 1.


**Comments.** Thus far, *Pseudosmittia adunca* has been mentioned only for two localities of Santa Catarina State in northeast Brazil (Andersen et al, 2010). From the new material incorporated in this work, we can extend the geographic distribution of this species, and establish Punta Lara Reserve (Buenos Aires, Argentina) as its southernmost distribution.

Punta Lara Reserve has been of great interest for numerous scientists and naturalists long before its incorporation to the System of Protected Natural Areas of Buenos Aires province in 2007. This interest can be attributed to the habitat heterogeneity (rain forest, grasslands and wetlands) that encourages high diversity of floristic and faunistic species, and also to the cultural

### Table 1. Lengths (in μm) and proportions of legs of *Pseudosmittia adunca* (male, *n* = 5). Abbreviations: Femur (fe); Tibia (ti); Tarsomeres 1–5 (Ta1-5); Leg Ratio (LR), ratio of metatarsus to tibia; “Beinverhältnisse” (BV), combined length of femur, tibia, and basitarsus divided by combined length of tarsomeres 2–5; “Schenkel-Scheine-verhältnis” (SV), ratio of femur plus tibia to metatarsus.

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<th>ti</th>
<th>Ta1</th>
<th>Ta2</th>
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<th>Ta4</th>
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<th>LR</th>
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<tr>
<td>P1</td>
<td>378–430</td>
<td>347–473</td>
<td>166–205</td>
<td>71–95</td>
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<tr>
<td>P1</td>
<td>32–47</td>
<td>39–55</td>
<td>0.41–0.57</td>
<td>3.60–4.09</td>
<td>3.68–4.54</td>
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<td>P2</td>
<td>39–55</td>
<td>39–55</td>
<td>0.45–0.48</td>
<td>3.90–4.17</td>
<td>4.12–4.43</td>
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<tr>
<td>P3</td>
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<td>39–55</td>
<td>0.52–0.55</td>
<td>3.32–3.49</td>
<td>3.57–3.75</td>
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and historical importance of the location.

The Reserve has many animal and plant species that also occur in the Paranean rain forest of northeastern Argentina and Brazil. Across the Uruguay and Paraná rivers, the rain forest reaches its southernmost distribution in Punta Lara (Cabrera & Dawson, 1944). The species *P. adunca* is one of the so many species that shows this distributional pattern.

**ACKNOWLEDGEMENTS**

We would like to thank park ranger Juan Pablo Carricart of the Reserva Natural Integral Mixta Punta Lara. We also thank Mariano Donato for his contributions and suggestions. This paper is the Scientific Contribution N° 960 of the Institute of Limnology “Dr. R. A. Ringuelet” (ILPLA, CCT-La Plata, CONICET, UNLP).

**LITERATURE CITED**


