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A new orb-weaving spider from the Argentinean flooding pampas grasses: *Aculepeira morenoae* new species (Araneae, Araneidae)

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Abstract

A new species of the orb-weaving spider genus *Aculepeira* Chamberling & Ivie 1942, *A. morenoae* **new species**, is described and illustrated based on male and female specimens from the Argentinean natural flooding pampas grasses.

Key words: flooding grasses, new species, orb-weavers, spider taxonomy

Introduction

The spider genus *Aculepeira* Chamberlin & Ivie, 1942 (Araneidae) has an extensive distribution and comprises 23 species (Platnick 2012). Most of them occur in the New World (14 species), and the rest in Europe and Asia. Two species, *A. carbonarioides* (Keyserling 1892) and *A. packardi* (Thorell 1875), are widespread in the Holarctic region (Platnick 2012). Currently, only six species of *Aculepeira* are known from South America, of which three have found in Argentina *A. albovittata* (Mello-Leitão 1941), *A. travassosi* (Soares & Camargo 1948) and *A. vittata* (Gerschman & Schiapelli 1948), which is the southernmost distributed representative of the genus (Platnick 2012, Levi 1991).

Females of *Aculepeira* are recognized by the presence of an epigynum with a pointed scape, whose tip lacks the pocket that typifies the scape of the *Araneus*; males have a palp with a median apophysis bearing two filiform appendages (flagellae) on its proximal end, which are believed homologous to those found in the closely related *Metepeira* and *Kaira* (Levi 1977, 1991, 1993). A large boat shaped to disc-shaped conductor in ventral view is also shared with *Metepeira* (Levi 1977). Also, the structure of the copulatory organ is similar to that of *Araneus*, the conductor sits on the rim of the tegulum behind the median apophysis, there is no paramedian apophysis, and terminal and subterminal apophyses are present (Levi 1977, 1991). Even though Neotropical species of *Aculepeira* lack the ventral median white band found in the Holarctic *Aculepeira* and the above mentioned genera, they differ from those by having an oval, elongate, egg-shaped abdomen (Levi 1977, 1991).

Extensive taxonomic revisions of American *Aculepeira* were published by Herbert W. Levi, first in 1977 for the Nearctic species (including some Palearctic species), and finally in 1991 for the Neotropical and Mexican species. Driven by these revisions, subsequent contributions gradually provided new species to the knowledge of this spider group (Tanikawa 1994, Zhu & Wang 1995, Álvares *et al*. 2005, Guo & Zhang 2010).

As mentioned above, *Aculepeira* is a genus relatively well revised, but there are few studies concerning South American species, which increases the importance of contributions with detailed species descriptions from southern areas where there are diverse ecosystems but little known species (three in Argentina). Taxonomic papers should not be all or nothing; although not in a monographic context, single species description can be carried out to complement existing monographs, with the aim of expanding those revisions.

In a recent survey of the spider fauna from Campos del Tuyú National Park, in Eastern Buenos Aires, males and females of *Aculepeira* were observed and collected on its webs on flooding pampas grasses (*Paspalum* sp.), near of coastal lagoons. The examination of the specimens shows that, besides to have the mentioned diagnostic

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