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SHORT COMMUNICATION

On the *Avicularia* (Araneae: Theraphosidae: Aviculariinae) species from Uruguay

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Abstract. The taxonomic status of four species of *Avicularia* Lamarck 1818 described from Uruguay: *Avicularia anthracina* (C.L. Koch 1842), *Avicularia alticeps* (Keyserling 1878), *Avicularia parva* (Keyserling 1878) and *Avicularia tigrina* (Pocock 1903) is discussed. The holotypes and/or original descriptions of these species were examined, and two taxonomic synonymies are needed, which are presented herein. *Avicularia anthracina* is transferred to *Grammostola*, resulting in *Grammostola anthracina* (C.L. Koch 1842) new combination and is considered a senior synonym of *Grammostola mollicoma* Ausserer 1875 new synonymy. Likewise, *Avicularia parva* is transferred to *Catumiri* Guadanucci 2004, where it is placed in the synonymy of *Catumiri uruguayense* Guadanucci 2004 new synonymy. *Avicularia tigrina* and *Avicularia alticeps*, originally described in the genera *Ischnocolus* Ausserer 1875 and *Pterinopelma* Pocock 1901, respectively, are herein considered nomina dubia since their types are presumed lost.

Keywords: Taxonomy, *Eurypelma*, *Mygale*, *Ischnocolus*, *Pterinopelma*

To date, the known Uruguayan theraphosid fauna comprises 18 species of the genera *Acanthoscurria* Ausserer 1871, *Eupalaestrus* Pocock 1901, *Grammostola* Simon 1892, *Catumiri* Guadanucci 2004, *Homoeomma* Ausserer 1871, *Lasiadora* C.L. Koch 1850, *Plesiopelma* Pocock 1901 and *Avicularia* Lamarck 1818 (Platnick 2010). Uruguay is a well-sampled country (Pérez-Miles et al. 1993), with many taxonomic studies on the family (Schiapelli & Gerschman de Pikelin 1964, 1970; Gerschman de Pikelin & Schiapelli 1972; Pérez-Miles 1992; Guadanucci 2004), being one of the best known theraphosid faunas in the world, even though some questions remain to be resolved. One of these questions is the presumed presence of *Avicularia* species in Uruguay, inconsistent with the known geographic distribution of the genus, which is otherwise limited to Southeastern Brazil (Bertani & Fukushima 2009). Four *Avicularia* species are described from Uruguay (Platnick 2010): *Avicularia anthracina* (C.L. Koch 1842), *Avicularia alticeps* (Keyserling 1878), *Avicularia parva* (Keyserling 1878), and *Avicularia tigrina* (Pocock 1903) (Platnick 2010).

Avicularia anthracina was described by C.L. Koch (1842) as *Mygale anthracina* but was later transferred to *Eurypelma* C.L. Koch 1850 by C.L. Koch (1850). After this transfer, the species name has rarely been cited except in arachnological catalogs (Roewer 1942, 1955). *Avicularia tigrina* was originally described as *Pterinopelma tigrina* Pocock 1903. Simon (1903) considered the genus *Pterinopelma* Pocock 1903 a junior synonym of *Eurypelma* C.L. Koch 1842. *Avicularia parva* and *Avicularia alticeps* were described by Keyserling (1878) in *Ischnocolus* Ausserer 1875. According to Simon (1903), the American species of *Ischnocolus* described by Ausserer and Keyserling were, in general, immature *Eurypelma* C.L. Koch 1850 or *Lasiadora* C.L. Koch 1850. The author clearly affirmed that *Ischnocolus parvus* Keyserling 1878 is an immature specimen of *Eurypelma*, but he did not do the same for *Ischnocolus alticeps* Keyserling 1878. However, both were cited as a species of *Eurypelma* by later authors (Roewer 1942). All the four species were included in *Eurypelma* until Raven (1985) proposed the synonymy of *Eurypelma* with *Avicularia* Lamarck 1818, establishing several new implicit combinations, among them *Avicularia anthracina* (C.L. Koch 1842), *Avicularia parva* (Keyserling 1878), *Avicularia alticeps* (Keyserling 1878) and *Avicularia tigrina* (Pocock 1903). These four Uruguayan species are revised and their

taxonomic position reinterpreted as part of a taxonomical revision of the speciose genus *Avicularia*, which is being carried out by the authors.

METHODS

All measurements are in millimeters and were obtained with a Mitutoyo calliper. We took leg and palp measurements from the dorsal aspect of the left side (unless appendages were lost or obviously regenerated). A Nikon SMZ1500 and a Leica MZ 125 dissecting microscope were used for illustrations (with a camera lucida attachment). Abbreviations: ALE = anterior lateral eyes, AME = anterior median eyes, ITC = inferior tarsal claw, PLE = posterior lateral eyes, PME = posterior median eyes, PMS = posterior median spinnerets, STC = superior tarsal claws. Specimens from the follow institutions were examined: BMNH— British Museum of Natural History, London; ZMB —Museum für Naturkunde, Berlin. Urticating hair terminology follows Cooke et al. (1972).

TAXONOMY

Catumiri parvum (Keyserling 1878) new combination (Fig. 1)

Ischnocolus parvus Keyserling 1878:611; Bonnet 1957:2305.

Eurypelma parvum Roewer 1942:241.

Catumiri uruguayense Guadanucci 2004:7, figs.10–15 new synonymy

Oligoxystre argentinense Costa et al. 2000:131 (misidentification);

Costa & Pérez-Miles 2002:571 (misidentification).

Avicularia parva Platnick 2010.

Material examined.—Holotype, immature male of *Ischnocolus parvus* from Uruguay, BMNH 1890-7.1.341. Holotype male (IBSP 9491) and paratype female (IBSP 9507) of *Catumiri uruguayense* from Lavalleja, Águas Blancas; Uruguay, F.Pérez-Miles leg., 22 November 1993.

The *Ischnocolus parvus* holotype is a small immature theraphosid specimen (carapace length 3.2 mm). Even though it has no fully developed genitalia, it exhibits some unusual theraphosid somatic characters such as the absence of any type of urticating hair, labium much wider than long (Fig. 1), few cuspules on maxilla (< 20), and absence of labial cuspules (Fig. 1). In the New World theraphosids,

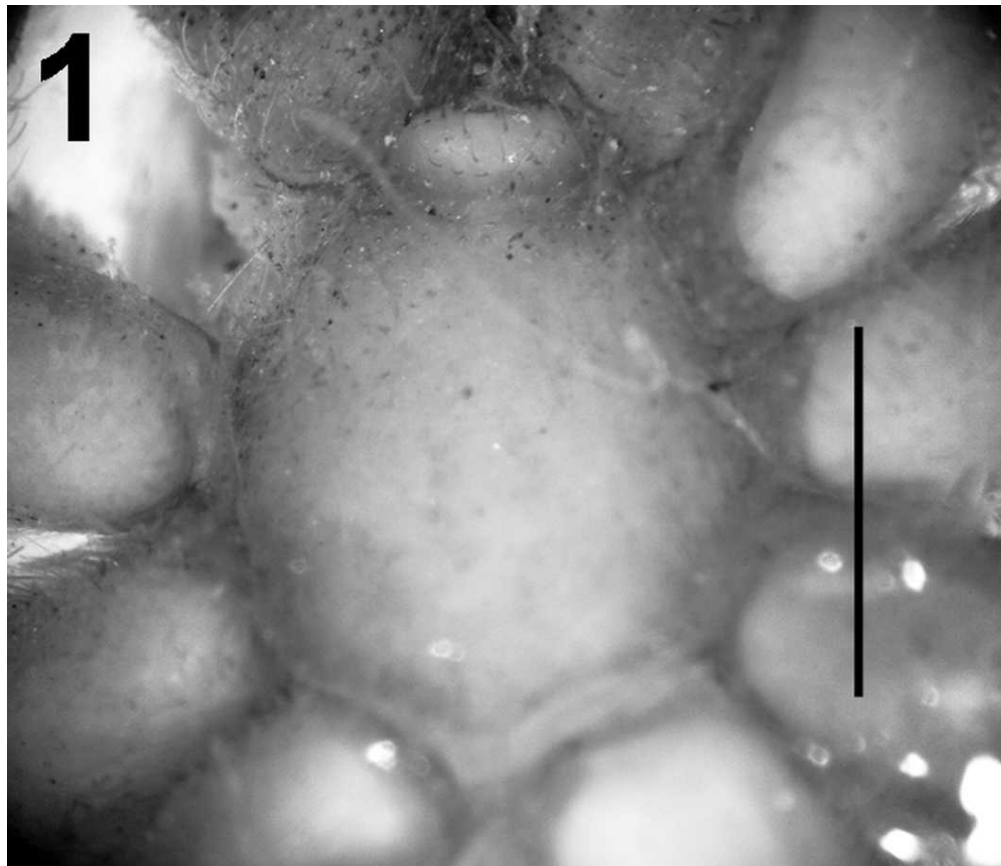


Figure 1.—*Catumiri parvum* (Keyserling 1878), holotype. Labium. Scale = 1mm.

absence of urticating hairs is characteristic of ischnocoline or some Amazonian aviculariine taxa. Since this specimen has well-developed spines on the legs, absent in Aviculariinae, the second option is discarded. The labium shape, absence of labial cuspules, and small number of cuspules on the maxillae are shared in South America by only two ischnocoline genera, *Oligoxystre* and *Catumiri*. *Oligoxystre* is not known from Uruguay or southern Brazil, so the unique ischnocoline genus so far known in Uruguay is *Catumiri* Guadanucci 2004, with a single species in the country, *C. uruguayense* Guadanucci 2004. Furthermore, the holotype of *Catumiri uruguayense* Guadanucci 2004 is morphologically consistent with the holotype of *Ischnocolus parvus* Keyserling 1878. So, we have decided to transfer *A. parva* to *Catumiri* and consider *Catumiri parvum* (Keyserling 1878) a senior synonym of *Catumiri uruguayense* Guadanucci 2004 **new synonymy**.

***Grammostola anthracina* (C.L. Koch 1842) new combination**
(Figs. 2–4)

Mygale anthracina C.L. Koch 1842:77, fig. 739; Simon 1892:172; Bonnet 1955:2992.

Eurypelma anthracina C.L. Koch 1850:73.

Eurypelma anthracinum Roewer 1942:238, 1954:1594.

Eurypelma mollicomum Ausserer 1875:198; Keyserling 1878:612, pl. 14, fig. 28

Citharoscelus mollicomus Pocock 1903:99.

Grammostola mollicoma Simon 1903:935; Strand 1907:35; Petrunkevitch 1911:68; Mello-Leitão 1923: 211; Bücherl, 1951:109, 172–183, 190, figs. 3.II, 28.II, 29, pls. I, II; Roewer, 1954:1508; Bücherl 1957:395, fig. 55; Schiapelli & Gerschman 1961:202, figs. 13, 14; Pérez-Miles 1989:264, figs. 1, 2, 6–8; Costa & Pérez-Miles 2002:571; Pérez-Miles 2006:9–11; Postiglioni & Costa 2006:71;

Costa & Pérez-Miles 2007:40; Panzera et al. 2009:92 new synonymy.

Phrixotrichus mollicomus Pérez-Miles et al. 1996:54, figs. 36, 37.

Avicularia anthracina Platnick 2010.

Material examined.—Holotype female of *Eurypelma anthracinum* C.L. Koch 1842 from Montevideo, Uruguay, Sello gen., ZMB-2040. *Eurypelma mollicomum* Ausserer 1875 holotype female from Uruguay, Keyserling collection BMNH 90.7.1.388.

Redescription.—*Female holotype*: Total length, not including chelicerae or spinnerets 44.0 (Fig. 2). Cephalothorax 19.9 long, 21.0 wide. Legs (femur, patella, tibia, metatarsus, tarsus, total): I: 16.10, 10.20, 11.90, 10.25, 6.80, 55.25; II: 14.86, 8.52, 12.17, 10.36, 6.77, 52.68; III: 13.85, 7.60, 9.31, 10.98, 6.52, 48.26; IV: 15.98, 8.41, 12.78, 15.17, 7.90, 60.24; palp: 11.31, 6.96, 7.56, –, 6.86, 32.69. Anterior eyes row procurved, posterior row recurved. Eyes sizes and inter-distances: AME 0.45, ALE 0.60, PME 0.33, PLE 0.60, AME–AME 0.49, AME–ALE 0.31, AME–PME 0.09, ALE–ALE 1.87, ALE–PME 0.50, PME–PME 1.37, PME–PLE 0.13, PLE–PLE 2.10, ALE–PLE 0.38. Eye tubercle: length 2.5, width 2.75; clypeus absent. Fovea: deep, procurved, 3.0 long. Cephalic area raised. Thoracic striae conspicuous. Labium: length 3.3, width 3.9, with approximately 110 cuspules. Maxillae: between 100–200 cuspules spread over internal face. Tarsi I–IV fully scopulate. Metatarsi I–III scopulate on apical half, metatarsi IV scopulate on apical ¼. Urticating hair types III and IV present. Stridulatory setae on proteral coxae I (Fig. 3). Color pattern: Cephalothorax and abdomen dark brown. Two long spermathecae with rounded apex (Fig. 4). Sternum and spinnerets damaged. Spines on all legs, but specimen too fragile for counting spination and disposition of spines in each leg and articles.



Figure 2.—*Grammostola anthracina* (C.L. Koch 1842) holotype female. General aspect. Scale = 10 mm.

Remarks.—The holotype has all characteristics of the genus *Grammostola*: two long spermathecae with rounded apex (Fig. 4), stridulatory setae on the prolateral coxae I (Fig. 3) and presence of urticating hairs type III and IV on dorsal abdomen. Consequently we have transferred the species to *Grammostola* Simon 1892. The dimensions and characteristics of the holotype of *Grammostola anthracina* match the holotype of *Grammostola mollicoma* Ausserer 1875 (examined). Thus, we

decided to propose *Grammostola anthracina* (C. L. Koch 1842) as a senior synonym of *Grammostola mollicoma* (Ausserer 1875) **new synonymy**.

Ischnocolus alticeps Keyserling 1878 nomen dubium
Ischnocolus alticeps Keyserling 1878:609; Bonnet 1957:2302.
Eurypelma alticeps Roewer 1942:238; 1955:1533.
Avicularia alticeps Platnick 2010.



Figure 3.—*Grammostola anthracina* (C.L. Koch 1842) holotype female. Stridulatory setae (arrows) on prolateral coxae I.

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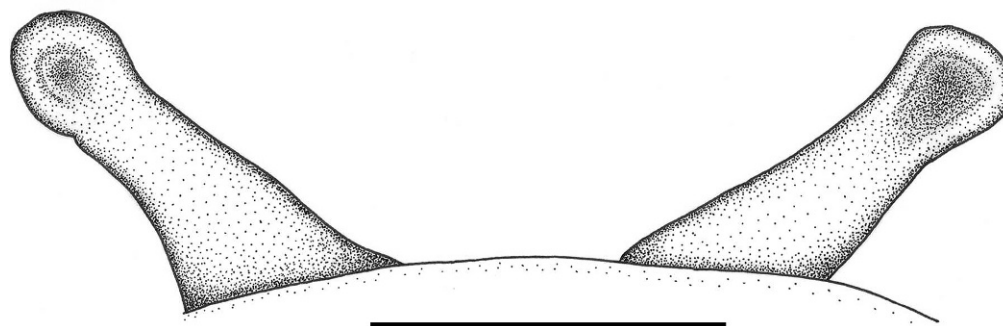


Figure 4.—*Grammostola anthracina* (C.L. Koch 1842) holotype female. Spermathecae, ventral. Scale = 1 mm.

Comments.—Holotype is herein considered lost. The holotype of *Avicularia alticeps* originally described in the genus *Ischnocolus* Ausserer 1875 was not found in the BMNH, where Keyserling's collection is housed. The authors have been in BMNH in different years and have never found the type. The curator also confirmed that the type is not there. Searches in other collections have also failed.

The description made by Keyserling does not contain any information that could allow us to identify the species. The author describes a female, but there is no characterization of its spermathecae. However, it is clear that it is not an aviculariine, since it has several spines on legs. As the species' identity is not clear, we consider the name *Ischnocolus alticeps* a nomen dubium.

***Pterinopelma tigrinum* Pocock 1903 nomen dubium**

Pterinopelma tigrinum Pocock 1903:109; Bonnet 1955:1830, 1957:3828.

Eurypelma tigrinum Simon 1903:937; Roewer 1942:242.

Avicularia tigrina Platnick 2010.

Comments.—Holotype is herein considered lost. The holotype of *Avicularia tigrina* originally described in the genus *Pterinopelma* Pocock 1901 was not found in the BMNH, where Pocock's collections are housed. Both the authors and the BMNH curator have searched for the type without success.

The description mentions that the type presents spines on its legs, which indicates it is not an aviculariine. The author mentions presence of plumose bristles on some appendages and color details, "upperside of patellae and tibiae with conspicuous pale yellow bands." The described characteristics are present in more than one Uruguayan theraphosine species, making it impossible to know the species described by the author. As the identity of species is not clear, we consider the name *Pterinopelma tigrinum* a nomen dubium.

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