ISSN 0326-1778 (Impresa)
ISSN 1853-6581 (En Línea)

HISTORIA NATURAL

Tercera Serie | Volumen 8 (1) | 2018/95-98

FIRST RECORD OF THE FAMILY DEINOPIDAE AND THE GENUS *Deinopis* MACLEAY, 1839 (ARANEAE, DEINOPIDAE) IN THE PROVINCE OF BUENOS AIRES, ARGENTINA

Primer registro de la familia Deinopidae y el género Deinopis *MacLeay, 1839 (Araneae, Deinopidae) en la provincia de Buenos Aires, Argentina*

Cecilia S. Gabellone[1], Pablo Addamo[1], Luis Giambelluca[1], Guillermo R. Reboredo[1] and Alda González[1]

[1]Centro de Estudios Parasitológicos y de Vectores (CEPAVE) (CONICET - UNLP), Blvd. 120 e/ 61 y 62 (1900), La Plata, Argentina. csgabellone@cepave.edu.ar

AZARA
FUNDACIÓN DE HISTORIA NATURAL

Universidad Maimónides

INTRODUCTION

The family Deinopidae C.L. Kock, 1850 has a broad distribution in tropical and subtropical ecosystems worldwide (World Spider Catalog, 2018). In Argentina it is registered in the northeast of the country (Figure 1) (Schiapelli y Gerschman de Pikellin, 1957; Ávalos *et al.*, 2007; Rubio y Moreno, 2010; Escobar *et al.*, 2012), where exists the presence of gallery forests (Cabrera y Willink, 1973). Schiapelli and Gerschman cited the family for the first time in 1957 for the province of Misiones, describing a new species, *Deinopis amica*. Laborda *et al.*, (2012) reported the first record for Uruguay. They collected individuals of *D. amica* on the Uruguay River islands and coast, close to Fray Bentos City, which was, until now, the southernmost limit of the family (Figure 1).

According to Dippenaar-Schoeman and Jocqué 1997, the diagnostic characteristics of the family are: medium-sized spiders, bodies usually elongated, eight eyes in three rows and posterior median eyes enlarged, abdomen with one or two humps, entelegyne, cribellate, front legs long and slender, three-clawed tarsi. In the field, they can be recognized for their small, rectangular and expandable web, held by the front legs (Brescovit *et al.*, 2002; Dippenaar-Schoeman and Jocqué, 1997). They are known as ogre-faced spiders or net-casting spiders.

In this work, we report the first record of the family Deinopidae in the Province of Buenos Aires, Argentina. It is also the southernmost record for the family in South America.

Figure 1 - Geographic distribution of *Deinopis* in Argentina and Uruguay. At the left, a picture showing the place where the new record was obtained.

MATERIALS AND METHODS

The specimen was captured by suction with G-Vac during a spider survey in Punta Lara Natural Reserve (34°47′28.22″S, 57°59′55.05″W; Figure 1). We used the original description of the genus provided by MacLeay (1839) and the genus description of Coddington *et al.* (2012) to identify the specimen, which was deposited in the arachnological collection of Museo de La Plata, Argentina (MLP-Ar, L. Pereira curator).

RESULTS

Specimen studied. *Deinopis* MacLeay, 1839, juvenile, Punta Lara Natural Reserve (34°47′28.22″S, 057°59′55.05″W), 28/04/2017, CEPAVE Arachnology laboratory, MLP-Ar 20100 (Figure 2).

Authors assume that it probably refers to the species *D. amica* because of the characteristics indicated by Schiapelli and Gerschman de Pikelin (1957): the body is brownish, the prosoma has a dorsal medial-longitudinal light band, and two humps of the abdomen are clearly visible. The body size is 3.066 mm total length; carapace length: 1.229 mm and carapace width: 0.839 mm; abdomen length: 1.837 mm. Legs present black spots, formula 1, 2, 4, 3. The PME are less than a diameter apart and enlarged. There is a fringe of setae beside the PME. Abdomen cylindrical, many times longer than wide.

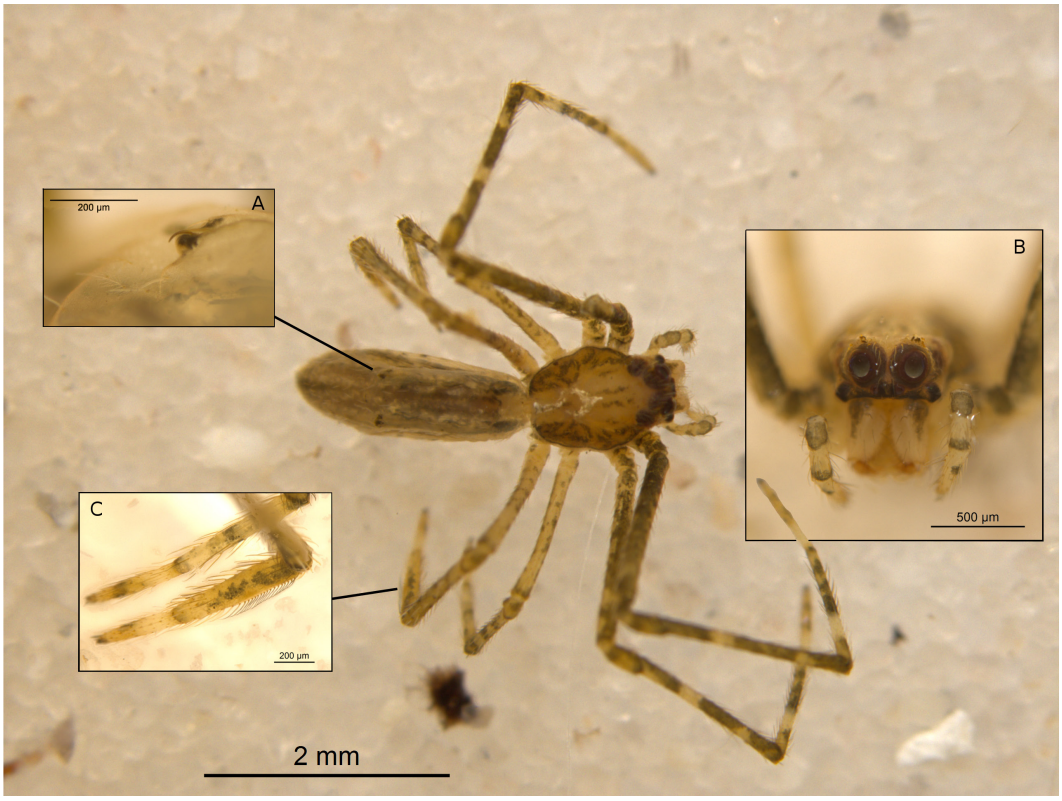

Figure 2 - Juvenile specimen of *Deinopis* from Punta Lara, Buenos Aires, Argentina. **A**, small hump in the abdomen covered by setae; **B**, typical eyes arrangement of Deinopidae in three rows; **C**, calamistrum.

DISCUSSION AND CONCLUSION

The Paraná River runs along through Misiones and Corrientes, dragging different materials that can serve as transport for the arthropods (Achaval *et al*., 1979; Ávalos *et al*., 2007; Guerrero *et al*., 2017). In the same way, the Uruguay River runs along Misiones, Corrientes, Entre Ríos and the west side of Uruguay. Along this river there are several islands with subtropical riparian vegetation. These islands are very important as dispersal route for flora and fauna between the Parana forest and the lower course of this river which is why they are being proposed as protected areas (Laborda *et al.* 2012). Within the spider survey of "Reserva Ecológica Costanera Sur", new records of well-known species from the Northeast of Argentina were found, which expanded their distributional areas towards the South due to the river system (Zapata and Grismado 2015; Guerrero *et al*., 2017). The vegetation of the Reserva Natural Punta Lara (gallery forest) is concordant with those of the previous literature record sites. This fact could support the existence of the biological dispersal route cited by Laborda *et al.* (2012).

REFERENCES

Achaval, F., González, J.G., Meneghel, M. and Melgarejo, A.R. (1979). Lista comentada del material recogido en Costas Uruguayas, transportado por camalotes desde el río Paraná. *Acta Zoologica Lilloana*, 35, 195-200.

Ávalos, G., Rubio, G.D., Bar, M.E. and González, A. (2007). Arañas (Arachnida: Araneae) asociadas a dos bosques degradados del Chaco húmedo en Corrientes, Argentina. *Revista de Biología Tropical*, 55 (3-4), 899-909.

Brescovit, A.D., Bonaldo, A.B., Bertani, R. and Rheims, C.A. (2002). Araneae. En: J. Adis (Ed.), *Amazonian Arachnida and Myriapoda* (pp. 303-343). Sofia: Pensoft Publishers.

Cabrera, A.L. and Willink, A. (1973). *Biogeografía de América Latina*. Serie Biología, Monografía 13. Organización de los Estados Americanos, Washington.

Coddington, J.A., Kuntner, M. and Opell, B.D. (2012). Systematics of the Spider Family Deinopidae with a Revision of the Genus *Menneus*. *Smithsonian Contribution to Zoology*, 636, 1-61.

Dippenaar-Schoeman, A.S. and Jocqué, R. (1997). *African Spiders. An Identification Manual*. Plant Protection Research Institute Handbook, 9. South Africa.

Escobar, M.J., Ávalos, G. and Damborsky, M.P. (2012). Diversidad de Araneae (Arachnida) en la Reserva Colonia Benítez, Chaco Oriental Húmedo, Argentina. *Facena*, 28, 3-17.

Guerrero, E.L., Agnolin, F.L., Grilli, P., Suazo Lara, F.A., Boné, E., Tenorio, A.B., Derguy, M.R., Lucero, S., Chimento Ortíz, N.R., Milat, J.A., Nenda, S., Benedicto, M., Montalibet, E., Olmos, M., Barrasso, D. and Apodaca, M.J. (2017). Inventario de la fauna transportada por balsas de vegetación flotante en el Sistema fluvial del río de La Plata. *Revista del Museo Argentino de Ciencias Naturales*, 19(2), 177-183.

Laborda, Á., Montes de Oca, L., Useta, G., Pérez-Miles, F. and Simó, M. (2012). Araneae, Deinopidae, *Deinopis amica* Schiapelli and Gerschman, 1957: First record for Uruguay and distribution map. *Check List*, 8(6), 1301-1302.

MacLeay, W.S. (1839). On some new forms of Arachnida. *Annals of Natural History*, 2, 1-14.

Rubio, G.D. and Moreno, C.E. (2010). Orb-Weaving Spider Diversity in the Iberá Marshlands, Argentina. *Neotropical Entomology*, 39(4), 496-505.

Schiapelli, R.D. and Gerschman de Pikelin, B.S. (1957). La familia Dinopidae en la Argentina y una nueva especie del género *Dinopis* Mac Leay, 1839. *Revista de la Sociedad Entomológica Argentina*, 19, 63-68.

World Spider Catalog. (2017). *World Spider Catalog*. Natural History Museum Bern, online at http://wsc.nmbe.ch, version 18.0, accessed on August 7, 2017.

Zapata, L.V., and Grismado, C.J. (2015). Lista sistemática de arañas (Arachnida: Araneae) de la Reserva Ecológica Costanera Sur (Ciudad Autónoma de Buenos Aires, Argentina), con notas sobre su taxonomía y distribución. *Revista del Museo Argentino de Ciencias Naturales*, 17(2), 183-211.

Recibido: 01/06/2018 - Aceptado: 25/06/2018 - Publicado: 31/07/2018