

ODONATA TYPE SPECIMENS PRESERVED IN THE MUSEO DE LA PLATA, ARGENTINA

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Type collection preserved at Museo de La Plata includes 105 specimens of Odonata (6 holotypes, 1 neotype, 6 allotypes and 96 paratypes), representing 13 names belonging to Coenagrionidae (5), Lestidae (1), Megapodagrionidae (1), Aeshnidae (4), Gomphidae (1) and Libellulidae (1). Preservation status and label details of primary types are stated.

INTRODUCTION

The Museo de La Plata was inaugurated in 1888 by the naturalist Francisco P. Moreno. This Museum houses a large entomological collection, where Coleoptera, Diptera, Hymenoptera and Hemiptera are the orders better represented. Odonata studies in this Museum begun in the 1960s with the work of Luis A. Bulla on systematics of Coenagrionidae, and in the 1980s Alberto Rodrigues Capítulo studied representatives, mainly from Buenos Aires and Entre Ríos provinces. In the late 1980s, Javier Muzón carried out odonatological research on Argentinean Lestidae and Coenagrionidae and later, together with Natalia von Ellenrieder, Pablo Pessacq and Federico Lozano, on all Argentinean odonates. The odonatological collection deposited at the Museo de La Plata is the largest in Argentina, hosting nearly 5,000 specimens (a small portion pinned), brought together mostly in the last 20 years.

Odonata richness of Argentina is low (with approximately 270 species recorded) if compared with other South American tropical countries, but its diversity encompasses both neotropical and subantarctic components. The richest areas are those of Paranaense and Yungas rainforests (Misiones, Corrientes, Jujuy, Salta and

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Table I
Type specimens preserved at the Museo de La Plata collection

Name	Author	Date of publication	Original genus	Genus currently accepted	Holotype	Neotype	Allotype	Paratypes
<i>bruchi</i>	Navás (von Ellenrieder & Garrison)	1924 (2006)	<i>Oxyagrion</i>	<i>Oxyagrion</i>	-	♂	-	-
<i>garrisoni</i>	von Ellenrieder & Muzón	2006	<i>Andinagrion</i>	<i>Andinagrion</i>	♂	-	♀	40 ♂, 2 ♀
<i>hartei</i>	Muzón & Lozano	2005	<i>Acanthagrion</i>	<i>Acanthagrion</i>	-	-	-	2 ♂
<i>silviae</i>	Bulla	1971	<i>Argentagrion</i>	<i>Homeoura</i>	♂	-	-	-
<i>tennesseii</i>	Mauffray	1999	<i>Oxyagrion</i>	<i>Oxyagrion</i>	-	-	-	1 ♂, 1 ♀
<i>juritzai</i>	Muzón	1994	<i>Lestes</i>	<i>Lestes</i>	-	-	-	1 ♂
<i>meridionale</i>	De Marmels	2001	<i>Teinopodagrion</i>	<i>Teinopodagrion</i>	♂	-	-	1 ♂
<i>brevicercia</i>	Muzón & von Ellenrieder	2001	<i>Aeshna</i>	<i>Rhionaeschna</i>	-	-	♀	2 ♂, 2 ♀
<i>fassifrons</i>	Muzón & von Ellenrieder	2001	<i>Aeshna</i>	<i>Rhionaeschna</i>	-	-	♀	1 ♂, 7 ♀
<i>obscura</i>	Muzón & von Ellenrieder	2001	<i>Aeshna</i>	<i>Rhionaeschna</i>	-	-	-	1 ♂
<i>tinti</i>	von Ellenrieder	2000	<i>Aeshna</i>	<i>Rhionaeschna</i>	♂	-	♀	3 ♂, 1 ♀
<i>noval</i>	Rodrigues Capitulo	1984	<i>Cyanogomphus</i>	<i>Tibialgomphus</i>	♂	-	♀	-
<i>ringueleti</i>	Rodrigues Capitulo	1988	<i>Micrathyria</i>	<i>Micrathyria</i>	♂	-	♀	21 ♂, 6 ♀
					Total	6	1	6
								96

Tucumán provinces); on the other hand, Patagonian odonates show high levels of endemism (MUZÓN & VON ELLENRIEDER, 1998).

The type collection deposited at the Departamento Científico Entomología houses 105 specimens (Tab. I), preserved in plastic envelopes or pinned, referable to the Coenagrionidae, Lestidae, Megapodagrionidae, Aeshnidae, Gomphidae and Libellulidae.

MATERIAL AND METHODS

The names are listed alphabetically under each family, followed in parentheses by their original generic assignment. If different from the original name, the currently accepted name is provided. For primary types the preservation and orthography of labels are stated. Label lines are separated by a “//”, handwriting is in italics, and type of label is stated as follows: red [a], white with blue frame [b], white with black frame [c], white [d], yellow [e], red with black frame glued on white envelope card [f], white envelope card [g], red glued on white envelope card [h], white envelope card with red frame [i].

LIST OF TYPES

COENAGRIONIDAE

bruchi NAVÁS (*Oxyagrion*), 1924: 315-332, fig. 13. VON ELLENRIEDER & GARRISON 2006: 362-374, figs 1-3, 6-10, 13-21, 23-25. Neotype designation.

- Neotype ♂ (in envelope). Labels as follows: [i] ARGENTINA: Salta Prov.: Lesser, A° de piedras sin nombre (emerged // in lab. 10/9/2005) // 23 September 2005 // Latitude: 24°40'56"S, Longitude: 65°28'40"W, Elevation: 1312 meters // Collected by: N. von Ellenrieder // (ex NVE Collection) MLP Collection; [g] *MLP 5209 / 1*
- Preservation: Well preserved.

garrisoni VON ELLENRIEDER & MUZON (*Andinagrion*), 2006: 205-214, 222, figs 1a, c, e, g, 2a-c, 3a, 4a, d, 5a-f, 6a-d, g, h, 9a-b, 10a, d, g, j, 11.

- Holotype ♂ and allotype ♀ (in the same envelope). Labels as follows: [i] ARGENTINA, Salta prov., Río Caldera, about 5 km S Campo Alegre // Dam, side stream with macrophytes [in copula] [HOLOTYPE / & ALOTYPE] // 11 November 2005 // Latitude: 24°35'41"S, Longitude: 65°22'10"W, Elevation: 1419 meters // Collected by: R.W. Garrison & N. von Ellenrieder // MLP Collection; [g] *MLP 5206 / 1-2*
- Paratype series (in envelopes): Argentina, Salta province: 38 ♂, 2 ♂ ♀ in tandem, Castellanos, Lesser.
- Preservation: All types well preserved.

hartei MUZÓN & LOZANO (*Acanthagrion*), 2005: 179-182, figs 1-8.

- Paratype series (in envelopes): 2 ♂ Ecuador, Prov. Morona-Santiago, Bomboiza.
- Preservation: Well preserved.

silviae BULLA (*Argentagrion*), 1971: 49-55, figs 1-6.

- Holotype ♂ (pinned). Labels as follows: [a] MUSEO DE LA PLATA // HOLOTIPO // *Argentagrion silviae* Bulla; [b] *Caaguazu // Paraguay // 10/31/70 // Bulla col.*; [b] 3484.
- Preservation: Holotype glued to cardboard, abdomen broken at 0.3 basal segment III, left forewing broken at postnodal level, left middle and hind leg and right mid leg complete, envelope with the rest of the wing and foreleg.
- Currently accepted name: *Homeoura silviae* (GARRISON, 1991).
- Comment: this species is known only from the holotype.

tennesseni MAUFFRAY (*Oxyagrion*), 1999: 165-170, figs 1-6.

- Paratype series (in envelopes): Two specimens from Ecuador, Napo, as follows: 1 ♂ Baeza; 1 ♀ El Chaco.
- Preservation: Well preserved.

LESTIDAE

juritzai MUZÓN (*Lestes*), 1994: 297-302, figs 1-2.

- Paratype ♂ (in envelope): Brasil, Rondonia state, Fazenda Rancho Grande.
- Preservation: Abdomen broken between segments III and IV, left mid leg missing distal to trochanter, terminalia and genital ligula separated and coated for scanning microscopy study.

MEGAPODAGRIONIDAE

meridionale DE MARMELS (*Teinopodagrion*), 2001: 62-65, figs 75, 107, 130,

155, 182, 205, map 2.

- Holotype ♂ (in envelope). Labels as follows: [a] *Teinopodagrion* // *meridionale* ♂ // HOLOTIPO // det. DE MARMELS; [b] *Calilegua* // 1700 mt // 30-II-86 // col. Capitulo; [c] *Megapodagrion* // *macropus* // det. Muzón 87; [d] ILPLA // 1412; [e] Argentina, Calilegua (1700 m) // 30/II/86 // col. R. Capitulo // *Megapodagrion macropus* ♂ // det. Muzón 87; [f] MLP 5211 / 1.
- Paratype ♂ (in envelope): Argentina, Salta, Aguas Blancas.
- Preservation: Holotype: left forewing broken, left protarsus and right mesotarsus missing, left mid and fore leg missing distal to coxae. Abdomen of paratype broken in three portions but well preserved.

AESHNIDAE

***brevicercia* MUZÓN & VON ELLENRIEDER (*Aeshna*), 2001: 140-144, figs 3, 13, 20, 27, 34, 41, 50.**

- Allotype ♀ (in envelope). Labels as follows: [f] *Aeshna* (Marmaraeschna) *brevicercia* // Muzón & von Ellenrieder // Allotypus ♀; [g] QCAZ / ECUADOR // PICHINCHA STO DOMINGO // DE LOS COLORADOS // 24 JAN 1988 // I. Morales; [d] Fig. ♀ *cerci* & *ventral terga* // Muzón & von Ellenrieder // *Marmaraeschna revision*; [d] AESCHNA BREVIFRONS Hagen // det Bill Mauffray 1995 // ♀ F; [g] MLP 5212 / 2.
- Paratype series. Four specimens as follows: 1 ♂ Ecuador, Esmeraldas; 1 ♂ 1 ♀ Venezuela, Tamá; 1 ♀ Venezuela, Merida, El Valle.
- Preservation: Allotype: abdomen broken between segments IV and V, right fore leg missing distal to coxae and left mesotarsus missing, right mid leg broken distal to coxae (into glassine envelope together with abdominal segments V-X). Paratypes well preserved.
- Currently accepted name: *Rhionaeschna brevicercis* (VON ELLENRIEDER, 2003).

***fissifrons* MUZÓN & VON ELLENRIEDER (*Aeshna*), 2001: 148-150, figs 5, 11, 15, 22, 29, 36, 44, 50.**

- Allotype female (in envelope). Labels as follows: [f] *Aeshna* (Marmaraeschna) *fissifrons* // Muzón & von Ellenrieder // Allotipo ♀; [g] Argentina, Salta, Cafayate, // Quebrada Río Colorado // 29-III-1997 // Col. Ellenrieder; [d] Fig. ♀ *cerci* & *ventral terga* // & head // Muzón & von Ellenrieder // *Marmaraeschna revision*; [g] MLP 5213 / 2.
- Paratype series. Eight specimens as follows: 3 ♀ Argentina, Salta, Depto. Los Andes, Acay Chico; 2 ♀ Salta, Cafayate, Quebrada Río Colorado; 2 ♀ Salta, San Carlos, San Antonio; 1 ♂ Chile, Antofagasta province, Inacaliri.
- Preservation: Allotype: right protarsus and metatarsi missing, apex of hind wings broken. Paratypes well preserved.
- Currently accepted name: *Rhionaeschna fissifrons* (VON ELLENRIEDER, 2003).

***obscura* MUZÓN & VON ELLENRIEDER (*Aeshna*), 2001: 154-155, figs 7, 17, 24, 31, 38, 46, 50.**

- Paratype ♂ (in envelope): Bolivia, Dept. La Paz, Prov. Nor Yungas road to Coroico. Abdomen broken in three portions, but diagnostic characters well preserved.
- Currently accepted name: *Rhionaeschna obscura* (VON ELLENRIEDER, 2003).

***tinti* VON ELLENRIEDER (*Aeshna*), 2000: 347-352, figs 1-2, 5, 7, 9, 11, 13-14, 17-19, 23.**

- Holotype ♂ (in envelope). Labels as follows: [f] *Aeshna tinti* von Ellenrieder // Holotypus ♂; [g] CHILE, Antofagasta, El Loa prov., Tilopozo // 23°49' S 68°15' W / I-1996 // COLECCIÓN MUSEO DE LA PLATA; [d] Tilopozo, // Loa, CHILE // Enero-1996; [g] MLP 5215 / 1.
- Allotype (in envelope). Labels as follows: [f] *Aeshna tinti* von Ellenrieder // Allotypus ♀; [g]

CHILE, Antofagasta, El Loa prov., Tilopozo // 23°49' S 68°15' W // I-1996 // COLECCION MUSEO DE LA PLATA; [g] MLP 5215 / 2.

- Paratype series (in envelopes). Four specimens from Chile, Antofagasta, El Loa province, as follows: 2 ♂ Chiuchiu; 1 ♂ Calama; 1 ♀ San Pedro de Atacama.
- Preservation: Holotype: left hind leg in Eppendorf vial, free in the envelope. Allotype: right hind-wing broken at apex. Paratypes well preserved.
- Currently accepted name: *Rhionaeschna tinti* (VON ELLENRIEDER, 2003).

GOMPHIDAE

noval RODRIGUES CAPITULO (*Cyanogomphus*), 1984: 329-336, figs 1-14.

- Holotype ♂ (pinned). Labels as follows: [a] HOLOTIPO; [b] *P.Nac. El Palmar // ENTRE RIOS // XI-1982 // Col. R. CAPITULO*; [c] *Holotipo ♂ // ODONATA // GOMPHIDAE*; [c] *Cyanogomphus // noval RODRIGUES // CAPÍTULO 1984*; [c] *ninfa 23 // exhibia*; [d] 4215.
- Allotype (pinned). Labels as follows: [a] ALOTIPO; [b] *Arroyo Palmar // 24-11-82 // A. R. Capítulo*; [c] *Cyanogomphus // noval Rodrigues Capítulo, 1984*; [c] *Allotipo ♀ // ODONATA // GOMPHIDAE*; [d] 4215.
- Preservation: Holotype: Forewing and left cerci broken, right fore wing damaged at pterostigma level and glued at costal margin. Allotype: well preserved.
- Currently accepted name: *Tibiagomphus noval* (BELLE, 1992).
- Comment: RODRIGUES CAPÍTULO (1984) stated that the type series was deposited at the Instituto de Limnología “Dr. RA Ringuélet”, nevertheless it was deposited at the MLP collection many years ago.

LIBELLULIDAE

ringueleti RODRIGUES CAPITULO (*Micrathyria*) 1988: 409-418, figs 1-38.

- Holotype ♂ (pinned). Labels as follows: [a] HOLOTIPO; [b] *Pta Lara // 30-XI-84 // Col. Capítulo*; [white with pink and blue lines] *Micrathyria ringueleti // Rodrigues Capítulo // Holotipo ♂*; [d] 4216.
- Allotype (pinned). Labels as follows: [a] ALOTIPO; [b] *Pta Lara // 30-XI-84 // Col. Capítulo*; [white with pink and blue lines] *Micrathyria ringueleti // Rodrigues Capítulo // Allotipo ♀*; [d] 4216.
- Paratype series (pinned). 27 specimens from Argentina, Buenos Aires province, as follows: 10 ♂, 1 ♀ Punta Lara; 11 ♂, 3 ♀ Chascomús; 1 ♀ Estero Zapata; 1 ♀ Los Talas.
- Preservation: Holotype: left antenna missing, left hind wing broken at anal loop level, left hind leg missing distal to femur. Allotype: right mid leg lacking pretarsi. Paratypes well preserved.

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