The Odonata of Argentina: state of knowledge and updated checklist

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An updated checklist of the 282 species of Odonata known to occur in Argentina is presented along with distributional information by province and ecoregion. Ten new records for the country and 87 new provincial records are provided. At present, 17 species of Odonata are considered endemic to Argentina, and distribution maps for each of them are provided. Information on larvae and conservation status according to the IUCN Red List of Threatened species is also provided; there are still 98 larvae unknown and 169 species unassessed.

Keywords: Zygoptera; Anisoptera; dragonfly; damselfly; new records

Introduction

The insect order Odonata includes conspicuous freshwater insects with hemimetabolous cycles that inhabit a wide variety of aquatic habitats including some water saturated terrestrial ones. Odonatology in Argentina began at the beginning of the twentieth century with collecting trips made by European museums (Calvert, 1909; Navás, 1917, 1920, 1927a, 1927b, 1928; Ris, 1904, 1913, 1918, 1928). These first contributions recorded approximately half of the current known diversity. However, advances on this group remained slow and sporadic; in 1947 and 1948 Fraser provided the first list of species for Argentina based on bibliography and material deposited in the collection of the Fundación Miguel Lillo (Tucumán). It was not until the 1970s, with the contributions of L.A. Bulla (1970, 1971, 1972, 1973a, 1973b, 1973–74), the first Argentinean Odonatologist, that the knowledge of Odonata started to develop steadily.

Traditionally, the main focus of odonatology in Argentina has been taxonomy; ecological papers on Odonata are very few (Campos, 1994; Muzón, Rodrigues Capitulo, & Jurzitza, 1990; Ramos, Lozano, & Muzón, 2017; Rodrigues Capitulo, 1981, 2000; Weigel Muñoz, Ramos, & Muzón, 2019), so collections were intended to broaden the knowledge of alpha diversity of the country. In 1992, Rodrigues Capitulo published the first modern checklist, which included 224 species grouped in 11 families. Subsequently, in 1998, Muzón and von Ellenrieder provided a...
new catalog clarifying the situation of many previous erroneous citations and registering for the first time for the country 37 species and four families. In 2008, von Ellenrieder and Muzón updated the specific inventory and provided a new list with 256 species within 15 families; they included 14 undescribed species.

Argentina is a vast country (mainland area of 2,780,400 km²) located in southern South America. It is subdivided into 23 provinces and one autonomous city, Buenos Aires, which is the federal capital of the nation (Figure 1A). Climatic conditions range from subtropical with hot weather in the north to subantarctic in the far south. Consequently, there is a wide variety of ecoregions within the country; according to Brown and Pacheco (2006), there are 18 ecoregions including the marine platform (Figure 1B). Its latitudinal extent, topography and complex geological history provide a wide variety of ecological conditions that determine a complex biota. There are two main faunistic components, a neotropical one in the north and center of the country between 34° and 36° S, where the southernmost limit of many widespread American genera is found (e.g. Acanthagrion, Argia, Hetaerina, Erythemis, Miathyria, Micrathyria, Perithemis, Tauriphila, and Tramea), and a subantarctic one in the south that includes many remarkable Patagonian endemics (e.g. family Neopetaliidae) (Muzón, Pessacq, & Lozano, 2014).

In this contribution we provide a revision of the state of knowledge of the order Odonata in Argentina and include an updated checklist of the species recorded up to December 2018.
Materials and methods

The taxonomic treatment follows the latest classification schemes (Carle, Kjer, & May, 2015; Dijkstra et al., 2013). It is important to mention that members of former families Protoneuridae and Pseudostigmatidae are now included within Coenagrionidae, and the genus *Gomphomacromia*, now considered Synthemistidae, was previously included within Corduliidae.

For each species the following information is provided:

- **IUCN Category.** Information was obtained from the Red List of Threatened Species. Abbreviations follow those provided by the IUCN and are included between [] after name of species; [NA] stands for “Not Assessed”.
- **New records for the country are indicated with an *.**
- **Provincial records.** Acronyms used as follows: BUE: Buenos Aires; CAT: Catamarca; CHA: Chaco; CHU: Chubut; CBA: Córdoba; COR: Corrientes; ENT: Entre Ríos; FOR: Formosa; JUJ: Jujuy; LAP: La Pampa; LAR: La Rioja; MEN: Mendoza; MISIONES: Neuquén; RIO: Rio Negro; SAL: Salta; SJU: San Juan; SLU: San Luis; SCR: Santa Cruz; SFE: Santa Fe; SGO: Santiago del Estero; TIE: Tierra del Fuego; TUC: Tucumán. When acronyms are in italics it indicates a provincial record in which there is no certainty on locality; underlined acronyms indicate that it is a record either published after the checklist of 2008 or published before but not included in it, references indicated between (); bold type acronyms are new provincial records, with locality information coded and added between () (see list of localities below).
- **Ecoregions.** The scheme follows the proposal by Brown and Pacheco (2006). Ecoregions with odonatological records are indicated between () after provincial records. Abbreviations as follows: ALT: Altos Andes; BPA: Bosques Patagónicos; CHH: Chaco Húmedo; CHS: Chaco Seco; CYM: Campos y Malezales; DIP: Delta e Islas del Paraná; EPA: Estepa Patagónica; ESP: Espinal; EST: Esteros del Iberá; MLM: Monte de Llanuras y Mesetas; MSB: Monte de Sierras y Bolsones; SEL: Selva Paranaense; PAM: Pampa; PUN: Puna; YUN: Yungas.
- **Larval description (L).** References for larval descriptions are indicated between { }
- **Additional information is provided if necessary.**

Unless stated otherwise the specimens are deposited in de Laboratorio de Biodiversidad y Genética Ambiental (BioGeA) Collection. Other collections/databases mentioned: CSCA (California State Collection of Arthropods, Sacramento, CA, USA), FML (Fundación Miguel Lillo, Tucumán, Argentina), Manzo Database (Ramiro Manzo Database), RWG (Rosser W. Garrison Personal Collection), USNM (National Museum of Natural History, Washington, DC, USA), NvE (Natalia von Ellenrieder Personal Collection).

List of localities for new provincial records mentioned in this contribution (Figure 2):

**BUE 1:** Del Medio stream over NR 9 (–33.3301°S, –60.3032°W), 20 m asl, col. Muzón, Lozano, del Palacio & Ramos, 18 February 2015.

**BUE 2:** Pergamino stream (–34.0455°S, –60.1947°W), 32 m asl, col. Muzón, Lozano, del Palacio & Ramos, 20 February 2015.

**BUE 3:** Unnamed stream over PR 41 (–34.0712°S, –59.5076°W), 17 m asl, col. Muzón, Lozano, del Palacio & Ramos, 20 February 2015.

**BUE 4:** Avellaneda, CEAMSE, coast of Rio de La Plata (–34.6787°S, –58.2802°W), 6 m asl, col. Muzón, 3 February 2016.

**BUE 5:** Avellaneda, CEAMSE, quarry (–34.6825°S, –58.2845°W), 3 m asl

**BUE 5a:** col. Muzón, Lozano & Ramos, 6 December 2012.

**BUE 5b:** col. Muzón, Lozano & Ramos, 27 December 2012.

**BUE 5c:** col. Muzón, Lozano & Ramos, 3 January 2013.
Figure 2. Map showing localities of new records.

BUE 5d: col. Muzón, Lozano & Ramos, 17 January 2013.
BUE 5e: col. Muzón, Lozano & Ramos, 5 February 2013.
BUE 5f: col. Muzón, Lozano & Ramos, 29 December 2014.
BUE 5g: col. Muzón, 3 February 2016.
BUE 6: Club de Pesca Lima, pond (−33.9740°S, −59.1773°W), 5 m asl, col. Muzón, 11 January 1995.
BUE 7: del Burro pond (−35.6942°S, −57.9219°W), 6 m asl, col. Bulla, November 1967.
BUE 8: Pergamino, Maguire stream and NR 8 (−33.9665°S, −60.2734°W), 47 m asl
BUE 8a: col. Muzón & Pessacq, 15 January 2002.
BUE 8b: col. Muzón, Lozano, del Palacio & Ramos, 19 February 2015.
BUE 9: Quilmes (−34.7238°S, −58.2628°W), 33 m asl, col. Lutz, 12 March 2015.
BUE 10: Tigre, Complejo Tabú Delta on Antequera river (−34.3213°S, −58.5850°W), 9 m asl, col. Muzón, Lozano, del Palacio, Weigel Muñoz & Lutz, 13–15 January 2014.
CHA 1: Pozo de la Gringa (−25.3246°S, −60.9891°W), 133 m asl, col. Muzón, Lozano & Ramos, 16–19 February 2008.
CHA 2: Bermejito river, −25.2842°S, −60.9750°W), 132 m asl, col. Lambruschini & Lozano, 18 February 2008.
CHA 3: Río Negro 1 km of Chaco National Park (−26.8106°S, −59.5986°W), 81 m asl, col. Lozano & Lambruschini, 23 February 2008.
CHA 4: Río Negro near Colonia Elisa and PR 9 (−27.0766°S, −59.4573°W), 67 m asl, col. Lozano & Lambruschini, 23 February 2008.
CHA 5: Route 5 50 km from Puerto Lavalle (−25.8633°S, −60.4635°W), 110 m asl, col. Lozano & Lambruschini, 20 February 2008.
CBA 1: Tanti (−31.3541°S, −64.5837°W), 996 m asl, col. Bulla & Grosso, February 1968.
CBA 2: Villa María (−29.9114°S, −63.7256°W), 341 m asl, col. Flint Jr., 9 October 1973, USNM
COR 1: Mburucuyá National Park, El Portillo stream on PR 86 (−28.0364°S, −58.1093°W), 67 m asl, col. Muzón, Lozano & Ramos
COR1a: 29 November 2010.
COR1b: 30 January 2012.
COR 2: Chimiray stream on PR 94 (−28.0910°S, −55.7066°W), 76 m asl, col. Muzón, Lozano & Ramos, 2 February 2012.
COR 3: Pay Ubre Grande stream on PR 29 (−29.0281°S, −58.1744°W), 65 m asl
COR 3a: col. Muzón & Pessacq, 21–23 February 2003.
COR 3b: col. Pessacq, 9–11 October 2004.
COR 3c: col. Muzón & Lozano, 12–13 March 2010.
COR 3d: col. Muzón, Lozano & Ramos, 26–27 November 2010.
COR 3e: col. Muzón, Lozano & Ramos, 27 January 2012.
COR 3f: col. Muzón, Lozano, Ramos & del Palacio, 27 January 2013.
COR 4: Pond on PR 22 (Tamboríto de Tacuarí) (−27.7400°S, −56.9941°W), 120 m asl, col. Muzón, Lozano & Ramos, 31 January 2012.
COR 5: Estancia El Dorado, main house (−28.7428°S, −58.1267°W), 54 m asl, col. Pessacq & Muzón, 20–21 February 2003.
COR 6: Estancia San Nicolás, Carambolas stream (−28.1846°S, −57.4429°W), 61 m asl
COR6a: col. Muzón & Lozano, 16–17 March 2010.
COR6b: col. Muzón, Lozano & Ramos, 27–28 November 2010.
COR 7: Garaví, pond on PR 94, south entrance of Garaví (−28.2254°S, −55.8000°W), 100 m asl, col. Muzón & Lozano, 11 December 2009.
COR 8: Garaví, small ponds on PR 94 (−28.2290°S, −55.8096°W), 140 m asl
COR 8a: col. Muzón & Lozano, 11 December 2009.
COR 8b: col. Muzón, Lozano & Ramos, 2 February 2012.
ENT 1: Delta del Paraná, El Brasilero stream, Quinta Arco Íris (−33.7841°S, −58.5505°W), 9 m asl
ENT 1a: col. Lutz, 25 November 2012.
ENT 1b: col. Pagano, 8 March 2014.
ENT 1c: col. Muzón, Ramos, del Palacio & Lutz, 30–31 March 2014.
ENT 1d: col. Lutz, 8–10 February 2015.
ENT 1e: col. Jensen, 7 March 2015.
ENT 2: Ibicuy, Islas Malvinas camping site (−33.7798°S, −59.1721°W), 30 m asl, col. Muzón & Lozano, 6–9 November 2006.
ENT 3: El Palmar National Park, Los Loros stream (−31.8630°S, −58.2292°W), 19 m asl, col. Rodrigues Capítulo, 23 November 1982.
ENT 4: El Palmar National Park, La Glorieta, Palmar stream (−31.8874°S, −58.2742°W), 25 m asl
ENT 4a: col. Muzón, ix.1987.
ENT 4b: col. Muzón, Lozano & del Palacio, 29 January 2013.
ENT 5: El Palmar National Park, grassland (−31.8818°S, −58.2483°W), 40 m asl, col. Muzón, 20 September 1985.
ENT 6: Pre-Delta National Park, La Azotea stream (−32.1216°S, −60.6332°W), 12 m asl, col. Lozano, Garré, Lambruschini, Ramos & Weigel Muñoz, 23–25 November 2006.
ENT 7: Pre-Delta National Park, La Manga stream (−32.1325°S, −60.6756°W), 14 m asl, col. Lozano, Garré, Lambruschini, Ramos & Weigel Muñoz, 24 November 2006.
ENT 8: Pre-Delta National Park, Park Ranger’s house, pond (−32.1216°S, −60.6332°W), 12 m asl, col. Lozano, del Palacio & Manzo, 4 April 2014.
ENT 9: Villa Paranacito, surroundings of Top Malo camping site (−33.7186°S, −58.6808°W), 206 m asl, col. Muzón & Lozano, 27–29 November 2018.
LAP 1: Catriló, 14.03 km of Catriló, NR 5 (−36.4321°S, −63.4958°W), 131 m asl, col. Latini, 27 October 2017.
LAP 2: Chapaleufú, 9.94 km of Coronel Hilario Laos (−35.1139°S, −63.9314°W), 142 m asl, col. Latini, 24 January 2017.

MEN 1: Aguanda stream, Paso de las Carretas, Route 153 (−34.0003°S, −69.0208°W), 1180 m asl, col. Muzón & Pessacq, 6 December 2005.

MEN 2: Malargüe (−35.4759°S, −69.5317°W), 1400 m asl, col. Muzón, Scheibler & Ramos, 16 December 2007.

MEN 3: Potrerillos, ditch (−32.9625°S, −69.1845°W), 1372 m asl, col. Scheibler, April 2002.

MEN 4: Uspallata, Uspallata stream on NR 7 (−32.5893°S, −69.3512°W), 1830 m asl

MEN 4a: col. Muzón, 27–29 January 2004.

MEN 4b: col. Muzón, 4 March 2005.

MEN 5: Apóstoles, PR 10, km 13, pond (−27.9154°S, −55.6394°W), 140 m asl, col. Muzón & Lozano, 10 December 2009.

MIS 1: Anyico stream on NR 14 (−27.6645°S, −55.6089°W), 150 m asl

MIS 2: León stream on PR 10 (−27.9325°S, −55.6178°W), 120 m asl, col. Muzón, Lozano & Ramos, 24 February 2012.

MIS 3: Ponds on PR 2, km 34 (−27.9041°S, −55.4270°W), 180 m asl, col. Muzón & Lozano, 9 December 2009.

MIS 4: Iguazú (−25.6025°S, −54.5692°W), 180 m asl, col. Tomski & Willink, 4 November 1973.

MIS 5: Leandro N. Alem (−27.6066°S, −55.3236°W), 315 m asl, col. Biraben, 29 November 1957.

MIS 6: Cruce Caballero Provincial Park, “Caraya Path” (−26.5056°S, −53.9983°W), 580 m asl, col. von Tschirnhaus, 12 March 2012.

MIS 7: Cuña Pirú Provincial Park, Cuña Pirú stream (−27.0864°S, −54.9537°W), 200 m asl, col. von Tschirnhaus, 20 March 2011.

MIS 8: Esmeralda Provincial Park, flooded area near Florida stream (−26.8916°S, −53.9138°W), 437 m asl, col. del Palacio, January 2016.

MIS 9: Salto Encantado Provincial Park, Salto la Olla (−27.0627°S, −54.8411°W), 325 m asl, col. von Tschirnhaus, 2011.

MIS 10: Saltos del Moconá Provincial Park, Yaboti stream (−27.1456°S, −53.9075°W), 299 m asl, col. von Tschirnhaus, 11 February 2011.

MIS 11: Saltos del Moconá Provincial Park, Oveja Negra stream, Salto Horacio (−27.1410°S, −53.9239°W), 189 m asl, col. Muzón, Lozano & Samways, 17 November 2011.

MIS 12: Uruguaí Provincial Park, 24 km SW’ of Andresito (−25.8570°S, −54.1631°W), 280 m asl, col. von Tschirnhaus, J., 2011.

MIS 13: Uruguaí Provincial Park, Destacamento de Gardaparques 101, 15 km S of Andresito, pond (−25.8109°S, −54.0136°W), 355 m asl

MIS 14: Uruguaí Provincial Park, Destacamento de Gardaparques Uruzú, 30 km SE of Andresito, Yatebo stream (−25.8833°S, −54.2167°W), 270 m asl, col. von Tschirnhaus, 5–6 March 2011.

MIS 15: Uruguaí Provincial Park, Destacamento de Gardaparques Uruzú, 23 km SW of Andresito, Playita stream (−25.8572°S, −54.1677°W), 280 m asl, col. von Tschirnhaus, 21–23 February 2011.

MIS 16: Posadas, Itá Provincial Park (Urquiza and Tomás Guido) (−27.3592°S, −55.9106°W), 89 m asl, col. Tejeda Cejas, 9 December 2010.
MIS 18: San Ignacio, Loreto, Yabebiry stream (–27.2832°S, –55.5331°W), 103 m asl
MIS 18a: col. Tejeda Cejas, 12 May 2010.
MIS 18b: col. von Tscharnhaus, 25 January 2011.

MIS 19: San Ignacio (–27.2583°S, –55.5392°W), 162 m asl, col. Biraben, August 1946.

SAL 1: NR 81 ponds with Pistia (–23.5203°S, –62.7819°W), 225 m asl, col. von Ellenrieder, 30 November 2007, NvE.

SAL 2: NR 81 ponds with riparian vegetation (–23.4519°S, –62.9319°W), 240 m asl, col. von Ellenrieder, 30 November 2007, NvE.

SAL 3: Unnamed stream 15 km SE of Isla de Cañas (–22.9256°S, –64.5758°W), 706 m asl, col. von Ellenrieder, 8 December 2008, CSGA.

SAL 4: Unnamed stream 20 km SE of Isla de Cañas (–22.9583°S, –64.5556°W), 661 m asl, col. von Ellenrieder, 8 December 2008, CSGA.

SFE 1: Del Medio stream, 3 km S of General Gelly (approx. 9 km N of Mariano Benítez) (–33.6172°S, –60.5842°W), 53 m asl, col. Muzón, Lozano & Ramos, 18 February 2016.

SFE 2: Capitán Bermúdez (–32.8167°S, –60.7167°W), 3 m asl, col. Macía, February 1984.

SFE 3: Garay, Leyes River (–31.4638°S, –60.5404°W), 18 m asl, col. Manzo, Manzo Database.

SFE 4: Garay, Delta of the Leyes River (–31.4602°S, –60.5492°W), 15 m asl, col. Manzo, 23 March 2015, Manzo Database.

SFE 5: La Capital, El Escondido (–31.6492°S, –60.5743°W), 15 m asl, col. Manzo, 2013–2015, Manzo Database.

SFE 6: La Capital, Del Medio lagoon (–31.6397°S, –60.4744°W), 16 m asl, col. Manzo, 2013–2015, Manzo Database.

SFE 7: La Capital, El Chajacito lagoon (–31.6639°S, –60.4933°W), 14 m asl, col. Manzo, 2013–2015, Manzo Database.

SFE 8: La Capital, La Chancha lagoon (–31.7530°S, –60.7633°W), 11 m asl, col. Manzo, 2013–2015, Manzo Database.

SFE 9: La Capital, La Ferranda lagoon (–31.6435°S, –60.5740°W), 12 m asl, col. Manzo, 2013–2015, Manzo Database.

SFE 10: La Capital, La Ferranda lagoon (–31.6540°S, –60.5283°W), 15 m asl, col. Manzo, 2013–2015, Manzo Database.

SFE 11: La Capital, Las Garzas lagoon (–31.7178°S, –60.7276°W), 11 m asl, col. Manzo, 2013–2015, Manzo Database.

SFE 12: La Capital, Madrejón Don Felipe North Colastine (–31.6564°S, –60.6009°W), 10 m asl, col. Muzón et al., 5 April 2014.

SFE 13: La Capital, Recu lagoon Ciudad Universitaria (–31.5746°S, –60.5214°W), 16 m asl, col. Manzo, 2013–2015, Manzo Database.

SFE 14: La Capital, Reservorio Las Vacas, Leyes stream (–31.5736°S, –60.5250°W), 19 m asl, col. Manzo & Manzo, 27 October 2013, Manzo Database.

SFE 15: La Capital, Reservorio UPCN North Colastine (–31.6256°S, –60.6152°W), 20 m asl, col. Manzo, 7 February 2015, Manzo Database.

SFE 16: La Capital, South Colastine (–31.6613°S, –60.6029°W), 9 m asl, col. MFA, Manzo Database.

SFE 17: La Capital, Ubajay Stream (–31.5762°S, –60.5114°W), 8 m asl, col. Manzo, 16 March 2014, Manzo Database.

SFE 18: La Capital, Urban Zone Santa Fe City (–31.6167°S, –60.7124°W), 15 m asl, col. Guittart (in light trap), Manzo Database.

SFE 19: San Jerónimo, La Chancha lagoon (–31.8188°S, –60.7083°W), 13 m asl, col. Manzo, 2013–2015, Manzo Database.
Results

The following list includes a total of 282 species, grouped in 86 genera and 14 families.

ANISOPTERA

AESHNIDAE

Anax amazili (Burmeister, 1839): [LC]; BUE, CAT (Rodríguez, Gómez, & Molineri, 2014), CHA, COR, ENT, LAP, MIS, SAL, SFE, SGO, TUC (CHH; CHS; CYM; DIP; ESP; EST; PAM; SEL; YUN) — L [Calvert, 1934; Rodrigues Capitulo, 1981].

Anax concolor Brauer, 1865: [LC]; MIS (SEL) — L [Geijskes, 1968].

Andaeschna rufipes (Ris, 1918): [LC]; JUJ (YUN) — L [De Marmels, 1982a, 1992a].

Castoraeschna decurvata Dunkle & Cook, 1984: [NA]; CBA, ENT (CHS; ESP; PAM) — L [Rodrigues Capitulo & Jurzitza, 1989].

Castoraeschna januaria (Hagen, 1867): [NA]; MIS (SEL) — L [Not described].

Coryphaeschna adnexa (Hagen, 1861): [LC]; BUE (8b, 9), CHA, COR, ENT, FOR (von Ellenrieder, 2010), JUJ, MIS, SAL, SFE, TUC (CHH; CHS; CYM; DIP; ESP; EST; PAM; YUN) — L [Calvert, 1956; Santos, 1970a].

Coryphaeschna perrensi (McLachlan, 1887): [NA]; BUE, CBA, COR, JUJ, MIS, SFE, TUC (Rodríguez, Gómez, & Molineri, 2018) (CHS; CYM; DIP; ESP; EST; PAM; SEL; YUN) — L [Carvalho, 1992, 1993; Santos, 1969a].

Gynacantha adelae Martin, 1909: [NA]; JUJ, MIS, SAL, TUC (Rodríguez & Molineri, 2013) (SEL; YUN) — L [Not described].
Gynacantha bifida Rambur, 1842: [NA]; BUE, COR, JUJ, MIS, SFE, TUC (DIP; EST; PAM; SEL; YUN) — L [Carvalho, 1987].

Gynacantha convergens Förster, 1908: [NA]; CHA (von Ellenrieder, 2010), JUJ, SFE (16, 18), TUC (Rodríguez et al., 2018) (CHS; DIP; YUN) — L [Not described].

Gynacantha gracilis (Burmeister, 1839): [NA]; MIS (SEL) — L [Santos, 1973a].

Gynacantha mexicana Selys, 1868: [LC]; SAL (Rodríguez et al., 2018) (YUN) — L [Carvalho & Ferreira, 1989].

Limnetron antarcticum Förster, 1907: [NA]; MIS (SEL) — L [del Palacio & Muzón, 2014].

Remartinia luteipennis (Burmeister, 1839): [LC]; JUJ, MIS, SAL, TUC (Rodríguez & Molineri, 2013) (SEL; YUN) — L [Calvert, 1956: only R. luteipennis florida]. There are three subspecies described: R. luteipennis florida, R. luteipennis luteipennis, and R. luteipennis peninsularis; in Argentina only R. luteipennis luteipennis has been recorded.

Rhionaeschna absoluta (Calvert, 1952): [NA]; BUE, CAT, CHU, CBA, ENT, JUJ, LAP, LAR, MEN, NEU, RIO, SAL, SJU, SLU (1), SCR, SFE, SGO, TUC (ALT; BPA; CHS; DIP; EPA; ESP; MLM; MSB; PAM; YUN) — L [von Ellenrieder, 2001a].

Rhionaeschna bonariensis (Rambur, 1842): [NA]; BUE, CAT, CHA, CBA, COR, ENT, FOR, JUJ, LAP (del Palacio, Diez, & Latini, 2017), LAR, MEN, MIS, NEU (von Ellenrieder, 2001b), RIO, SAL, SJU, SLU (1), SFE, SGO, TUC (BPA; CHH; CHS; CYM; DIP; ESP; EST; MLM; MSB; PAM; SEL; YUN) — L [Rodrigues Capitulo, 1980; von Ellenrieder, 2001a]. The record from NEU (Lago Nahuel Huapi, Isla Victoria) was published by von Ellenrieder (2001b) but it was mistakenly assigned to RIO; therefore it did not appear in the checklist of 2008. The other record from RIO appears in von Ellenrieder (2001b): “Bahía San Matías” but the exact locality could not be georeferenced.

Rhionaeschna confusa (Rambur, 1842): [NA]; BUE, CBA, ENT, MEN, MIS, SFE, TUC (DIP; ESP; PAM; SEL; YUN) — L [von Ellenrieder, 2001a].

Rhionaeschna diffinis (Rambur, 1842): [LC]; CHU, NEU, RIO (BPA; EPA) — L [Calvert, 1956; von Ellenrieder, 2001a].

Rhionaeschna fissifrons (Muzón & von Ellenrieder, 2001): [NA]; CAT, SAL (ALT; CHS; MSB) — L [Not described].

Rhionaeschna haarupi (Ris, 1908): [NA]; CAT, MEN, SAL, TUC (MLM; MSB; YUN) — L [Not described].

Rhionaeschna pallipes (Fraser, 1947): [NA]; BUE, CAT, CBA, LAR, MEN, SAL, SLU (2), SFE, TUC (CHS; DIP; ESP; MLM; MSB; PAM; YUN) — L [von Ellenrieder & Muzón, 2003a].

Rhionaeschna planaltica (Calvert, 1952): [LC]; BUE, CAT, CBA, ENT (1c, 1d, 6), JUJ, MIS, SAL, TUC (CHS; CYM; DIP; MSB; PAM; SEL; YUN) — L [De Marmels, 1992b; von Ellenrieder, 1999].

Rhionaeschna psilus (Calvert, 1947): [LC]; SAL (YUN) — L [Calvert, 1956; Needham & Westfall, 1955].

Rhionaeschna variegata (Fabricius, 1775): [NA]; CAT, CHU, JUJ, LAR (Rodríguez et al., 2018), MEN, NEU, RIO, SAL, SCR, SJU (Rodríguez et al., 2018), TFU, TUC (ALT; BPA; EPA; MLM; MSB; PUN; YUN) — L [Muzón & von Ellenrieder, 1996; von Ellenrieder, 2001a].

Rhionaeschna vigintipunctata (Ris, 1918): [NA]; CAT, JUJ, LAR, SAL, TUC (CHS; MSB; YUN) — L [Rodríguez & Molineri, 2014].

Staurophlebia bosgi Navás, 1927: [EN B1ab(iii)]; BUE, ENT (Muzón, Lozano, del Palacio, Ramos, & Lutz, 2015) (DIP; PAM) — L [Bachmann, 1963]. The record from ENT (Delta del Paraná, arroyo El Brasilero, Quinta Arco Iris) was published by Muzón et al. (2015) but it was mistakenly assigned to BUE.

Staurophlebia reticulata (Burmeister, 1839): [NA]; COR, ENT (1b, 1d, 1e), MIS (CYM; DIP; ESP; SEL) — L [Geijskes, 1959: only S. reticulata reticulata]. There are three subspecies
described: *S. reticulata guatemalteca*, *S. reticulata obscura*, and *S. reticulata reticulata*; in Argentina only *S. reticulata reticulata* has been recorded.

*Triacanthagyna caribbea* Williamson, 1923: [LC]; JUJ (Rodríguez et al., 2018) (YUN) — L (Santos, 1973b).

*Triacanthagyna nympha* (Navás, 1933): [NA]; BUE, CHA (Ris, 1913; von Ellenrieder, 2010; von Ellenrieder & Garrison, 2003), COR, JUJ, MIS (CYM; DIP; PAM; SEL) — L (According to Garrison, von Ellenrieder, and Louton (2006) the larva was described by Carvalho (1988) as *T. ditzleri*). The record from Jujuy belongs to Fraser (1947); the single specimen was determined as *Gynacantha trifida* and no locality was mentioned.

**AUSTROPETALIIDAE**

*Hypopetalia pestilens* McLachlan, 1870: [LC]; CHU (Pessacq & Brand, 2009), RIO (Pessacq & Brand, 2009) (BPA) — L (Pessacq & Brand, 2009; Schmidt, 1941).

*Phyllopetalia apollo* Selys, 1878: [LC]; CHU (Pessacq & Brand, 2009), RIO (Pessacq & Brand, 2009) (BPA) — L (Not described).

*Phyllopetalia pudu* Dunkle, 1985: [LC]; CHU (von Ellenrieder, 2005), NEU, RIO (BPA) — L (Not described).

**CORDULIIDAE**

*Neocordulia setifera* (Hagen in Selys, 1871): [NA]; MIS (SEL) — L (Costa & Santos, 2000).

*Rialla villosa* (Rambur, 1842): [NA]; CHU, NEU, RIO (BPA; EPA) — L (Needham & Bullock, 1943).

**GOMPHIDAE**

*Aphylla dentata* Selys, 1859: [NA]; FOR (von Ellenrieder & Garrison, 2008a) (CHH; CHS) — L (According to Garrison et al. (2006) the larva was described by Belle (1964) as *A. simulata*). The record from Formosa was first published by von Ellenrieder & Garrison (2008a) despite being mentioned as a first record in von Ellenrieder (2010).

*Aphylla distinguenda* Campion, 1920: [NA]; BUE, ENT, FOR (von Ellenrieder, 2010), MIS, SFE (CHH; CHS; CYM; DIP; PAM) — L (Not described).

*Aphylla producta* Selys, 1854: [NA]; COR, MIS, SAL, SGO (CYM; ESP; SEL) — L (Belle, 1964; Needham, 1944).

*Aphylla theodorina* (Navás, 1933): [LC]; COR, MIS, SAL (Rodríguez et al., 2014) (CYM; EST; SEL; YUN) — L (Belle, 1992).

*Archaeogomphus densus* Belle, 1982: [NA]; MIS — L (Not described).

*Archaeogomphus infans* (Ris, 1913): [NA]; MIS (Ris, 1913) (CYM) — L (Not described). This species was originally described by Ris (1913) based on specimens from MIS (without exact locality) and Espirito Santo (Brazil). This species was never reported again from Argentina, and it was not included in the last checklist (von Ellenrieder & Garrison, 2008a). In this contribution this species was recorded for MIS (3).

*Cyanogomphus waltheri* Selys, 1873: [LC]; MIS (CYM; SEL) — L (Not described).

*Epigomphus paludosus* Hagen in Selys, 1854: [LC]; MIS, SGO (CHS; SEL) — L (Costa, 1986).

*Gomphoides praevia* St. Quentin, 1967: [NA]; MIS (SEL) — L (Not described).

*Neogomphus edenticulatus* Carle & Cook, 1984: [NA]; CHU, NEU (BPA) — L (Belle, 1992).

*Neogomphus molestus* (Hagen in Selys, 1854): [NA]; CHU, NEU (BPA) — L (Needham & Bullock, 1943).

*Phyllocycla argentina* (Hagen in Selys, 1878): [NA]; BUE, CBA, COR, ENT (9), JUJ, MIS, SAL, SFE, SGO (Rodríguez et al., 2018), TUC (Rodríguez & Molineri, 2013) (CHS; DIP; ESP; EST; PAM; SEL; YUN) — L (Rodrigues Capitulo, 1983a).
Phyllocycla basidenta Dunkle, 1987: [LC]; JUJ, SAL (YUN) — L [Not described].

Phyllocycla foliata Belle, 1988: [NA]; MIS (Belle, 1988) (SEL) — L [Not described].
This species was described by Belle from specimens collected by Jurzitza in Misiones (Parque Nacional Iguazú). However, it was not listed by von Ellenrieder and Muzón (2008).

Phyllocycla propinqua Belle, 1972: [NA]; ENT (Belle, 1988), MIS (CYM; PAM; SEL) — L [Needham, 1940]. This species was recorded by Belle (1988) from Entre Ríos. However, it was recorded only for Misiones by von Ellenrieder and Muzón (2008).

Phyllocycla vesta Belle, 1972: [NA]; BUE (PAM) — L [Not described].

Phyllocycla viridipleuris (Calvert, 1909): [LC]; BUE (8a), CHA (4), COR (3d), ENT, MIS, SAL (CHH; CYM; ESP; PAM; SEL) — L [Belle, 1992].

Phyllogomphoides andromeda (Selys, 1869): [LC]; MIS (SEL) — L [Belle, 1970].

Phyllogomphoides joaquini Rodrigues Capitulo, 1992: [VU B1ab(iii)]; BUE (PAM) — L [Muzón, Pessacq, & von Ellenrieder, 2006].

Progomphus aberrans Belle, 1973: [NA]; CBA, COR, ENT, MIS (DIP; PAM) — L [Not described].

Progomphus auropictus Ris, 1911: [NA]; MIS (SEL) — L [Not described].

Progomphus australis Belle, 1973: [NA]; ENT (PAM) — L [Not described].

Progomphus basistictus Ris, 1911: [NA]; MIS (SEL) — L [Not described].

Progomphus complicatus Selys, 1854: [LC]; CAT (Rodríguez et al., 2014), JUJ, MIS, SAL, TUC (CHS; SEL; YUN) — L [Santos, 1968a].

Progomphus costalis Hagen in Selys, 1854: [LC]; MIS (2a, 2b) (SEL) — L [Not described].

Progomphus joergenseni Ris, 1908: [NA]; CAT, CBA, LAR (Rodríguez et al., 2014), MEN, NEU, RIO, SAL, SJU, TUC (CHS; EPA; ESP; MLM; MSB; YUN) — L [Muzón & Lozano, 2011].

Progomphus kimminsi Belle, 1973: [NT]; JUJ, SAL, TUC (YUN) — L [Not described].

Progomphus lepidus Ris, 1911: [NA]; MIS (SEL) — L [Needham, 1941].

Progomphus phyllochromus Ris, 1918: [LC]; JUJ, SAL, SGO (Rodríguez et al., 2018), TUC (CHS; YUN) — L [Limonig, 1983].

Tibiagomphus noval Rodrigues, 1985: [NA]; ENT (PAM) — L [Rodrigues Capitulo, 1985].

Tibiagomphus uncutus (Fraser, 1947): [LC]; COR (3d, 3f), ENT, MIS (ESP; SEL) — L [Not described].

Zonophora diversa Belle, 1983: [NA]; MIS (SEL) — L [Not described].

LIBELLULIDAE

Brachymesia furcata (Hagen, 1861): [LC]; BUE (5a, 5b, 5c, 5d, 5e, 5f), COR, ENT, JUJ (Rodríguez et al., 2014), MIS, SAL, SGO, TUC (CHS; CYM; ESP; EST; PAM; SEL; YUN) — L [Geijskes, 1934; Needham, Westfall, & May, 2000].

Brachymesia herbida (Gundlach, 1889): [LC]; BUE (Ramos et al., 2017), CHA (1), COR, FOR (von Ellenrieder & Garrison, 2008a), MIS, TUC (Rodríguez et al., 2018) (CHH; CHS; CYM; ESP; EST; PAM; SEL; YUN) — L [Needham et al., 2000].

Brechmorhoga nubecula (Rambur, 1842): [NA]; JUJ, MIS, SAL, TUC (Rodríguez & Molineri, 2013) (SEL; YUN) — L [Santos, 1969b].

Brechmorhoga praedatrix Calvert, 1909: [LC]; MIS (SEL) — L [Fleck, 2004].

Brechmorhoga vivax Calvert, 1906: [NA]; JUJ, MIS, LAR (Rodríguez et al., 2018), SAL, TUC (MSB; YUN) — L [De Marmels, 1982b].

Cannaphila vibex (Hagen, 1861): [LC]; CAT, JUJ, SAL, TUC (CHS; YUN) — L [Limonig, 1991].

*Dasythemis esmeralda* Ris, 1910: [NA]; COR (8a, 8b) (CYM) — L [Not described].
Dasythemis mincki (Karsch, 1890): [LC]; CBA, ENT, MIS, RIO, SAL, SLU (CHS; EPA; ESP; PAM; SEL; YUN) — L [Carvalho, Werneck-de-Carvalho, & Calil, 2002; von Ellenrieder, 2007c]. There are two subspecies recognized, *D. mincki mincki* and *D. mincki clara* Ris, 1908, both of which have been found in Argentina. The former has been recorded only for MIS.

Dasythemis venosa (Burmeister, 1839): [NA]; COR (8a), MIS (CYM; SEL) — L {Carvalho et al., 2002}. Navás (1927b) mentions this species for CBA (Sierra de Cordoba) based on one female. This is likely to be a misidentification of *D. mincki*.

Diastatops intensa Montgomery, 1940: [NA]; CHA (2), CBA, COR, ENT, FOR (Montgomery, 1940; Ris, 1928; von Ellenrieder, 2010), MIS, SAL (von Ellenrieder, 2010), SFE (2, 12) (CHH; CHS; CYM; DIP; ESP; EST; PAM; SEL; YUN) — L [Costa, Souza-Franco, & Takeda, 1999]. The first record from Formosa was by Ris (1928) as *D. pullata*; Montgomery (1940) in his revision assigned this record to *D. intensa*. This information was not included in the last checklist (von Ellenrieder & Muzón, 2008). von Ellenrieder (2010) mentioned this species again for Formosa.

Diastatops obscura (Fabricius, 1775): [NA]; CBA, COR, MIS (CYM; EST; SEL) — L [Santos, Costa, & Pujol-Luz, 1993].

Diastatops pullata (Burmeister, 1839): [LC]; BUE, CHA, COR, SFE (DIP; EST) — L [Fleck, 2003].

Dythemis nigra Martin, 1897: [NA]; BUE, COR (2, 8b), JUJ, MIS, SAL, SLU, TUC (CHS; CYM; SEL; YUN) — L [De Marmels (1982b) as *Dythemis multipunctata*].

Edonis helena Needham, 1905: [NA]; COR (EST) — L [Not described].

Elasmothemis cannacrioides (Calvert, 1906): [NA]; JUJ, MIS, SAL, TUC (CHS; SEL; YUN) — L [Westfall, 1988].

Elasmothemis constricta (Calvert, 1898): [NA]; MIS (SEL) — L [Pujol-Luz, 1990].

Erythemis peruviana (Rambur, 1842): [LC]; CHA (Ris, 1913; von Ellenrieder, 2010), CBA, COR, FOR, MIS, SFE (CHH; DIP; EST; SEL) — L [Calvert, 1928; Klots, 1932; Needham & Westfall, 1955].

Erythemis plebeja (Burmeister, 1839): [LC]; BUE, CHA, COR, ENT, FOR, JUJ (Rodríguez et al., 2014), LAR (Rodríguez et al., 2018), MIS, SAL, SFE, SGO, TUC (CHH; CHS; CYM; DIP; ESP; EST; PAM; SEL; YUN) — L [Calvert, 1928; Klots, 1932; Needham & Westfall, 1955].

Erythemis vesiculosa (Fabricius, 1775): [LC]; BUE, CAT (Ris, 1928), CHA (Ris, 1913; von Ellenrieder, 2010), CBA, COR, FOR, JUJ, LAP (del Palacio et al., 2017), MIS, SAL, SFE, SGO, TUC (CHH; CHS; CYM; DIP; ESP; EST; MSB; PAM; SEL; YUN) — L [Klots, 1932; Needham & Westfall, 1955].

*Erythrodiplax amazonica* Sjöstedt, 1918: [NA]; MIS (9) (SEL) — L [De Marmels, 1992b].

Erythrodiplax anomala (Brauer, 1865): [NA]; MIS — L [Carvalho, Ferreira, & Nessimian, 1991]. Navás (1922) mentioned this species for BUE; since this is likely to be a misidentification the record from BUE has been removed.
Erythrodiplax atroterminata (Ris, 1911): [NA]; BUE, CAT, CBA, COR, ENT (Rodrigues Capítulo & Muzón, 1985), LAP (del Palacio et al., 2017), MIS, RIO, SAL, SJU, SLU, SGO (5a), TUC (1, 2) (CHS; CYM; EPA; ESP; EST; MLM; MSB; PAM; SEL; YUN) — L [Garré, Muzón, & Ardohain, 2008].

Erythrodiplax basalis (Kirby, 1897): [NA]; MIS, SGO (CHS; SEL) — L {Costa, Vieira, & Lourenço, 2001}.

Erythrodiplax castanea (Burmeister, 1839): [NA]; MIS (SEL) — L {Not described}.

Erythrodiplax chromoptera (Borror, 1942): [NA]; BUE (del Palacio & Muzón, 2019), COR, ENT (del Palacio & Muzón, 2019), MIS (CYM; ESP; PAM) — L [Not described].

Erythrodiplax connata (Burmeister, 1839): [NA]; CHU, MEN (1, 2, 3, 4a, 4b), NEU, RIO (ALT; BPA; EPA; ESP; MLM; MSB) — L {Lozano, Muzón, & del Palacio, 2011}.

Erythrodiplax corallina (Brauer, 1865): [NA]; BUE, CAT, CHU, CBA, COR, JUJ, LAP, LAR, MEN, NEU, RIO, SAL, SLU (1), SFE ( Förster, 1914; Borror, 1942), SGO, TUC (ALT; CHH; CHS; CYM; DIP; EPA; EST; MLM; MSB; PAM; YUN) — L [Garré et al., 2008].

Erythrodiplax famula (Erichson in Schomburgk, 1848): [NA]; MIS — L [Not described].

Erythrodiplax fusca (Rambur, 1842): [LC]; BUE, CHA, CBA (Navás, 1928), COR, ENT, MIS, SAL (Ris, 1918), SFE, TUC (Ris, 1918) (CHS; CYM; DIP; ESP; EST; MSB; PAM; SEL; YUN) — L {Santos, 1967}.

Erythrodiplax juliana (Ris, 1911): [LC]; MIS (SEL) — L {Carvalho et al., 1991}.

Erythrodiplax latimaculata (Ris, 1911): [NA]; MIS (SEL) — L {Costa et al., 2001}.

Erythrodiplax lativittata (Borror, 1942): [NA]; MIS — L [Not described].

Erythrodiplax lygaea (Ris, 1911): [LC]; COR (5), MIS (EST; SEL) — L {Costa et al., 2001}.

Erythrodiplax media (Borror, 1942): [NA]; BUE (2, 3, 4, 5 g, 8b), CHA (1), COR, ENT, FOR (von Ellenrieder, 2010), JUJ, MIS, RIO, SAL, TUC (CHS; CYM; DIP; EPA; ESP; EST; PAM; SEL; YUN) — L {Dalzochio, Périco, Renner, & Sahlén, 2018}.

Erythrodiplax melanorubra (Borror, 1942): [NA]; BUE, COR, ENT, JUJ, LAR (Rodríguez et al., 2014), MIS, SAL, SGO, TUC (CHS; CYM; DIP; MSB; PAM; SEL; YUN) — L {Limongi, 1991}.

Erythrodiplax nigricans (Rambur, 1842): [NA]; BUE, CAT, CHA, CBA (Zapata & Pereyra, 2016), COR, ENT, FOR (von Ellenrieder, 2010), JUJ, MIS, RIO, SAL, TUC (CHS; CYM; DIP; ESP; EST; PAM; SEL; YUN) — L {Muzón & del Palacio, 2016}.

Erythrodiplax ochracea (Burmeister, 1839): [LC]; BUE, CHA, FOR, MEN (Navás, 1924), MIS, NEU, SFE, SGO (Navás, 1922; von Ellenrieder, 2010) (ALT; CHH; CHS; CYM; DIP; EPA; EST; PAM; SEL) — L {Costa et al., 1991}.

Erythrodiplax pallida (Needham, 1904): [LC]; BUE (Muzón & von Ellenrieder, 1998, as Erythrodiplax sp.; del Palacio & Muzón, 2016), COR (von Ellenrieder & Muzón, 2008, as Erythrodiplax sp. 1; del Palacio & Muzón, 2016), ENT (von Ellenrieder & Muzón, 2008, as Erythrodiplax sp. 1) (DIP; ESP; EST; PAM) — L {Costa et al., 2001}.

Erythrodiplax paraguayensis (Förster, 1905): [LC]; BUE, CHA, CBA, COR, ENT, FOR, MIS, SAL (1, 2) (CHH; CHS; CYM; DIP; ESP; EST; PAM; SEL) — L {Muzón & Garré, 2005}.

Erythrodiplax unimaculata (De Geer, 1773): [NA]; MIS (12) (SEL) — L [Not described].

Idiapthe longipes (Hagen, 1861): [NA]; COR (CYM; EST) — L {Oldrini & Mascarenhas, 2005}.
Libellula herculea Karsch, 1889: [NA]; JUJ, MIS, SAL, TUC (Rodríguez & Molineri, 2013) (SEL; YUN) — L (De Marmels, 1982b, 1992b).

Macrothemis declivata Calvert, 1909: [NA]; MIS (SEL) — L (Salgado et al., 2013).

Macrothemis hahneli Ris, 1913: [LC]; JUJ, SAL, TUC (CHS; YUN) — L (von Ellenrieder, 2007c).

Macrothemis hemichlora (Burmeister, 1839): [LC]; MIS, SAL (Rodríguez et al., 2018) (SEL; YUN) — L (Salgado et al., 2013).

Macrothemis heteronycha (Calvert, 1909): [LC]; COR (CYM; EST) — L (Costa, Carriço, Santos, & Mascarenhas, 2010).

Macrothemis imitans Karsch, 1890: [LC]; CAT, CBA, COR, ENT, JUJ, LAR (Rodríguez et al., 2014), MIS, SAL, SGO, TUC (CHS; CYM; ESP; MSB; PAM; SEL; YUN) — L (Salgado et al., 2013).

Macrothemis inacuta Calvert, 1898: [LC]; CHA (2), COR (3e), FOR, JUJ (Rodríguez et al., 2018), SAL (CHH; CYM; ESP) — L (Novelo Gutiérrez & Ramírez, 1998).

Macrothemis marmorata Hagen, 1868: [NA]; MIS (SEL) — L (Not described).

Macrothemis tenuis Hagen, 1868: [LC]; MIS (SEL) — L (Salgado et al., 2013).

Miathyria marcella (Selys in Sagra, 1857): [LC]; BUE, CHA, CBA (Navás, 1922; Zapata & Pereyra, 2016), COR, ENT, FOR, JUJ (Rodríguez et al., 2014), LAP (del Palacio et al., 2017), LAR, MIS, SAL, SLU (1), SFE, SGO, TUC (CHH; CHS; CYM; DIP; ESP; EST; PAM; SEL; YUN) — L (Bick, 1953; Klots, 1932; Westfall, 1953).

Micrathyria artemis (Burmeister, 1839): [NA]; BUE, MIS — L (Not described).

Micrathyria athenais Calvert, 1909: [NA]; ENT, MIS (PAM; SEL) — L (Not described).

Micrathyria atra (Martin, 1897): [LC]; MIS, SAL (SEL; YUN) — L (Santos, 1978).

Micrathyria catenata Calvert, 1909: [LC]; COR, JUJ, MIS, SAL (CYM; SEL; YUN) — L (Not described).

Micrathyria dido Ris, 1911: [NA]; MIS (SEL) — L (Not described).

Micrathyria eximia Kirby, 1897: [NA]; COR (DIP) — L (Not described).

Micrathyria hesperis Ris, 1911: [NA]; CHA, COR, ENT, FOR (von Ellenrieder & Garrison, 2008a), JUJ (Rodríguez et al., 2014), MIS, SAL, SGO, TUC (CHS; CYM; DIP; ESP; PAM; SEL; YUN) — L (de Assis & Costa, 1994).

Micrathyria hypodidyma Calvert, 1906: [NA]; BUE, CHA, COR, ENT, FOR, JUJ, MIS, SAL, SFE (Navás, 1917), TUC (CHH; CYM; DIP; ESP; EST; PAM; SEL; YUN) — L (Santos, 1968b).

*Micrathyria iheringi* Santos, 1946: [NA]; COR (8b), MIS (14b) (CYM; SEL) — L (Not described).

Micrathyria longifasciata Calvert, 1909: [LC]; BUE, CHA, COR, ENT, FOR, JUJ, MEN, MIS (2e), SAL, SFE, SGO, TUC (CHH; CHS; CYM; DIP; ESP; EST; PAM; SEL; YUN) — L (Souza & Costa, 2002).

Micrathyria ocellata Martin, 1897: [NA]; CHA (1), JUJ, MIS (Jurzitza, 1981), SAL, TUC (Rodríguez et al., 2018) (CHS; SEL; YUN) — L (de Assis & Costa, 1994). There are two subspecies recognized, *M. ocellata ocellata* and *M. ocellata dentiens* Calvert, 1909. Only the latter has been found in Argentina.

Micrathyria pseudeximia Westfall, 1992: [NA]; COR, MIS (14b, 18b) (SEL) — L (Dalzochio, 2009a).

Micrathyria ringueleti Rodrigues Capitulo, 1988: [NA]; BUE (DIP; PAM) — L (Not described).
*Micrathyria spuria* (Selys in Therese, 1900): [LC]; COR, ENT (CYM; ESP; EST; PAM) — L [Souza & Costa, 2002].

*Micrathyria stawiarskii* Santos, 1953: [LC]; **MIS (14b)** (SEL) — L [de Assis & Costa, 1994].

*Micrathyria tibialis* Kirby, 1897: [LC]; COR, FOR, **SAL** (von Ellenrieder, 2010), SFE (13, 17) (CHH; DIP; EST) — L [Souza & Costa, 2002].

*Micrathyria ungulata* Förster, 1907: [NA]; BUE, CBA, ENT, JUJ, MIS, SAL, SLU (CHS; PAM; SEL; YUN) — L [Garré & Lozano, 2007].

*Micrathyria venezuelae* De Marmels, 1989: [NA]; JUJ, **MIS (14a, 15)**, SAL, TUC (Rodríguez & Molineri, 2013) (SEL; YUN) — L [Not described].

*Nephepeltia aequisetis* Calvert, 1909: [NA]; COR, FOR, **MIS (1)** (CHH; CYM; ESP) — L [Not described].

*Nephepeltia berlai* Santos, 1950: [NA]; COR (8a, 8b), **MIS** (von Ellenrieder, 2014) (CYM; SEL) — L [Dalzochio, 2009b].

*Nephepeltia flavifrons* (Karsch, 1889): [NA]; BUE (10), COR, ENT (5) (CYM; ESP; EST; PAM) — L [Not described].

*Nephepeltia leonardina* Rácenis, 1953: [LC]; SAL (Rodríguez et al., 2014) (YUN) — L [Not described].

*Nephepeltia phyrne* (Perty, 1833): [LC]; MIS (SEL) — L [De Marmels, 1990].

*Oligoclada haywardi* Fraser, 1947: [NA]; COR (8a), MIS (CYM; SEL) — L [Not described].

*Oligoclada laetitia* Ris, 1911: [NA]; BUE (10), COR (3e, 8b), ENT, FOR, MIS, **SAL** (von Ellenrieder & Garrison, 2008a) (CHS; CYM; DIP; ESP; PAM; SEL; YUN) — L [Souza, Costa, & Espindola, 2002].

*Oligoclada rubribasalis* von Ellenrieder & Garrison, 2008: [NA]; COR (1a, 5, 6a, 6b), ENT (von Ellenrieder & Garrison, 2008a), SFE (5, 6, 7, 8, 9, 10, 11, 13, 19, 20) (CHH; DIP; EST) — L [Not described].

*Orthemis aequilibris* Calvert, 1909: [NA]; SAL (YUN) — L [Fleck, 2003].

*Orthemis ambinigra* Calvert, 1909: [NA]; BUE, COR, ENT (1c, 1d, 4b, 9), MIS, **SAL** (von Ellenrieder, 2012) (DIP; ESP; PAM; SEL; YUN) — L [Not described].

*Orthemis ambrirufa* Calvert, 1909: [NA]; COR, ENT, MIS (PAM) — L [Not described].

*Orthemis cultriformis* Calvert, 1899: [NA]; MIS (SEL) — L [Carvalho & Werneck-de-Carvalho, 2005].

*Orthemis discolor* (Burmeister, 1839): [LC]; BUE, **CAT, CHA, CBA** (Navás, 1922), COR, JUJ, MEN, MIS, SAL, SLU, SFE, TUC (CYM; DIP; EST; PAM; SEL; YUN) — L [Not described].

*Orthemis nodiplaga* Karsch, 1891: [LC]; BUE, CAT, CHA, CBA (Zapata & Pereyra, 2016), COR, ENT, FOR, **LAP** (del Palacio et al., 2017), MEN, MIS, SAL, SLU, SFE, SGO, TUC (CHH; CHS; CYM; DIP; ESP; EST; MSB; PAM; YUN) — L [Rodrigues Capitulo & Muzón, 1990].

*Orthemis phillipi* von Ellenrieder, 2009: [NA]; **SAL** (von Ellenrieder, 2010) (CHS) — L [Not described].

*Pantala flavescens* (Fabricius, 1798): [LC]; BUE, CAT, CBA (Navás, 1922; Zapata & Pereyra, 2016), COR, ENT, FOR, **LAP** (del Palacio et al., 2017), MEN, MIS, SAL, SLU, SFE, **SGO (1, 2, 3, 4)**, TUC (CHH; CHS; CYM; DIP; ESP; EST; MSB; PAM; SEL; YUN) — L [Byers, 1941; Cabot, 1890; Geijskes, 1934].

*Pantala hymenaea* (Say, 1840): [LC]; CAT, CBA (Zapata & Pereyra, 2016), **LAP (2)**, LAR, MEN, MIS, SGO (Ris, 1913; von Ellenrieder, 2010), TUC (CHS; ESP; MSB; PAM; SEL; YUN) — L [Kennedy, 1923].

*Perithemis icteropectra* (Selys in Sagra, 1857): [LC]; BUE, ENT, MIS, SAL (CYM; DIP; PAM; SEL; YUN) — L [von Ellenrieder & Muzón, 1999].
Perithemis lais (Perty, 1833): [LC]; COR, MIS (CYM; ESP; SEL) — L [Costa & Régis, 2005].
Perithemis mooma Kirby, 1889: [NA]; BUE, CBA, COR, ENT, FOR (von Ellenrieder & Garrison, 2008a), JUI, MIS, SAL, SLU (1), SFE, SGO, TUC (CHH; CHS; CYM; DIP; ESP; EST; PAM; SEL; YUN) — L [Santos, 1973c; von Ellenrieder & Muzón, 1999].
Perithemis thais Kirby, 1889: [LC]; COR (1b, 8b), MIS (CYM; EST; SEL) — L [Spindola, Souza, & Costa, 2001].
Planiplax erythropyga (Karsch, 1891): [LC]; BUE, COR (Lozano, Muzón, & Scattolini, 2012), ENT (ESP; EST; PAM) — L [Not described].
Sympetrum gilvum (Selys, 1884): [NA]; CAT, CBA, JUJ, SAL, SLU, TUC (CHS; YUN) — L [Limongi, 1991].
Sympetrum villosum Ris, 1911: [NA]; CHU, NEU, RIO (BPA) — L [Muzón & von Ellenrieder, 1997].
Tauriphila argo (Hagen, 1869): [LC]; BUE (Navás, 1930), COR, MIS, SAL (von Ellenrieder, 2010) (ESP; EST; PAM) — L [Costa & de Assis, 1994?; Fleck, Brenk, & Misof, 2006].
Tauriphila risi Martin, 1896: [NA]; BUE, CHA, CBA, COR, ENT, FOR (von Ellenrieder & Garrison, 2008a), LAP (del Palacio et al., 2017), SAL (von Ellenrieder, 2010), SFE, SGO, TUC (CHH; CHS; CYM; DIP; ESP; EST; PAM; YUN) — L [Rodrigues Capitulo, 1996].
Tauriphila xiphea Ris, 1913: [NA]; COR, SAL (von Ellenrieder, 2010) (EST) — L [Not described].
Tholymis citrina Hagen, 1867: [LC]; JUJ, SAL, SFE (13, 14, 17), TUC (ALT; DIP; YUN) — L [Fleck, De Marmels, & Grand, 2004].
Tramea abdominalis (Rambur, 1842): [LC]; JUJ, MIS, SAL (SEL; YUN) — L [Cabot, 1890; Klots, 1932].
Tramea binotata (Rambur, 1842): [LC]; COR, MIS, SAL, SGO (Navás, 1922), SFE (Navás, 1930) (EST; SEL; YUN) — L [Needham et al., 2000].
Tramea calverti Muttkowski, 1910: [LC]; CAT, COR, FOR (von Ellenrieder, 2010), JUI, MIS, SAL (CHS; CYM; EST; YUN) — L [Souza, Costa, & Santos, 1999].
Tramea cophysa Hagen, 1867: [NA]; BUE, CAT, CHA (1, 2, 3, 5), COR, ENT, FOR, LAP (del Palacio et al., 2017), MIS, SAL, SFE (4, 13, 15, 21), SGO, TUC (CHH; CHS; CYM; DIP; ESP; EST; PAM; SEL; YUN) — L [Santos, 1968c].
Tramea rustica De Marmels & Ráicens, 1982: [LC]; MIS (SEL) — L [Not described].
Uracis imbuta (Burmeister, 1839): [NA]; BUE, MIS (CYM) — L [Not described]. Rambur (1842) recorded Uracis quadra (= Uracis imbuta) from “Buenos Ayres” without exact locality, but no other specimen of Uracis has been collected again in Buenos Aires.
Zenithoptera lanei Santos, 1941: [NA]; MIS (SEL) — L [Not described].

NEOPETALIIDAE

Neopetalia punctata (Hagen in Selys, 1854): [DD]; NEU (BPA) — L [Carle & Louton, 1994].

PETALURIDAE

Phenes raptor Rambur, 1842: [LC]; CHU (Muzón, Pessacq et al., 2014), NEU (BPA) — L [Schmidt, 1941; Needham & Bullock, 1943].

SYNTHEMISTIDAE

Gomphomacromia fallax McLachlan, 1881: [LC]; SAL (YUN) — L [Not described].
Gomphomacromia nodisticta Ris, 1928: [NA]; CAT, SAL, TUC (Rodríguez & Molineri, 2013) (MSB; YUN) — L [Not described].
Gomphomacromia paradoxa Brauer, 1864: [NA]; CHU, NEU, RIO (BPA; EPA) — L [Theischinger & Watson, 1984].
ZYGOPTERA
CALOPTERYGIDAE

*Hetaerina longipes* Hagen in Selys, 1853: [NA]; MIS (SEL) — L {Not described}.

*Hetaerina mendezii* Jurzitza, 1982: [DD]; MIS (SEL) — L {von Ellenrieder, 2007a}.

*Hetaerina proxima* Selys, 1853: [NA]; MIS (SEL) — L {Not described}.

*Hetaerina rosea* Selys, 1853: [NA]; BUE, CBA, COR, ENT, JUJ, MIS, SAL, **SFE (1, 4)**, SGO, TUC (CHS; CYM; DIP; ESP; EST; PAM; SEL; YUN) — L {Pessacq & Muzón, 2004; von Ellenrieder, 2007a}.

*Hetaerina sanguinea* Selys, 1853: [NA]; SAL (YUN) — L {Not described}.

*Mnesarete grisea* (Ris, 1918): [NA]; CAT, JUJ, LAR, SAL, TUC (CHS; MSB; YUN) — L {Garrison, 2006}.

*Mnesarete guttifera* (Selys, 1873): [LC]; MIS (CYM) — L {Not described}.

*Mnesarete lencionii* Garrison, 2006: [NA]; MIS (CYM) — L {Not described}.

*Mnesarete pruinosa* (Hagen in Selys, 1853): [NA]; MIS (SEL) — L {Muzón, von Ellenrieder, & Pessacq, 2001}.

*Mnesarete pudica* (Hagen in Selys, 1853): [NA]; MIS (CYM; SEL) — L {Guillermo-Ferreira & Bispo, 2012}.

COENAGRIONIDAE

*Acanthagrion aepiolum* Tennessen, 2004: [NA]; COR, ENT, JUJ (Rodríguez et al., 2018), MIS, SAL (CHS; CYM; ESP; EST; PAM; SEL; YUN) — L {Lozano, Garré, & Pessacq, 2007}.

*Acanthagrion ascendens* Calvert, 1909: [NA]; COR, MIS? (CYM; SEL?) — L {Geijskes, 1941}.

von Ellenrieder and Muzón (2008) removed this species from the checklist of Argentina based on the supposition of an allopatric distribution with *A. aepiolum*. However, Lozano (2013) found that some specimens from COR province were actually this species. Therefore, previous records of *A. ascendens* from MIS (Jurzitza, 1981) which were removed from the checklist by von Ellenrieder and Muzón (2008) were included with doubts here since its presence in COR makes its presence in MIS likely.

*Acanthagrion cuyabae* Calvert, 1909: [LC]; BUE (6, 7), **CHA (1, 3, 4)**, CBA (2), COR, ENT, FOR, MIS, SAL (von Ellenrieder, 2010) (CHH; CHS; CYM; DIP; ESP; EST; PAM; SEL) — L {Not described}.

*Acanthagrion floridense* Fraser, 1946: [LC: as *A. peruvianum*]; CBA, JUJ, MIS (Lozano, Rodríguez, & Molineri, 2017), SAL, SLU (Lozano et al., 2017), SGO, TUC (CHS; ESP; SEL; YUN) — L {Lozano et al., 2017}.

*Acanthagrion gracile* (Rambur, 1842): [NA]; COR, ENT, MIS, **SLU (1)** (CHS; CYM; ESP; PAM; SEL) — L {Anjos Santos et al., 2011}.

*Acanthagrion hildegarda* Gloger, 1967: [NA]; BUE, CBA, ENT, MIS, SFE (CHS; DIP; ESP; PAM; SEL) — L {Muzón, von Ellenrieder, & Pessacq, 2001}.

*Acanthagrion lancea* Selys, 1876: [NA]; BUE, CHA, **CBA** (Zapata & Pereyra, 2016), COR, ENT, FOR (von Ellenrieder, 2010), JUJ, MIS, SAL, SFE, SGO (von Ellenrieder, 2010), TUC (CHH; CHS; CYM; DIP; ESP; EST; PAM; SEL; YUN) — L {Anjos Santos et al., 2011}.

*Acanthagrion minutum* Leonard, 1977: [NA]; COR (CYM; EST) — L {Not described}.

*Acanthagrion temporale* Selys, 1876: [NA]; MIS (SEL) — L {Not described}.

*Aceratobasis nathaliae* (Lencioni, 2004): [NA]; MIS (7) (SEL) — L {Not described}.

*Aeolagrion philipi* Tennessen, 2009: [NA]; **CHA (3)**, FOR (von Ellenrieder, 2010) (CHH) — L {Not described}.

*Andinagrion garrisoni* von Ellenrieder & Muzón, 2006: [NT]; JUJ, SAL, **SGO** (Rodríguez et al., 2018), TUC (CHS; MSB; YUN) — L {von Ellenrieder & Muzón, 2006}.
Andinagrion peterseni (Ris, 1908): [NA]; BUE, CAT, CHU, LAP (del Palacio et al., 2017), MEN, NEU, RIO, SAL, TUC (ALT; BPA; EPA; MLM; MSB; PAM) — L [Bulla, 1973a].

Andinagrion saliceti (Ris, 1904): [NA]; BUE (PAM) — L [Not described].

Antiagrion grinbergsi Jurzitza, 1974: [LC]; NEU (BPA) — L [Not described].

Argentagrion ambiguum (Ris, 1904): [LC]; BUE, CAT (Ris, 1918), CHA, COR, ENT, FOR, MIS, SAL, SFE, TUC (CHH; CHS; CYM; DIP; ESP; EST; MSB; PAM; SEL; YUN) — L [Bulla, 1970].

Argia albitstigma Hagen in Selys, 1865: [NA]; ENT, MIS (SEL) — L [Not described].

Argia croceipennis Selys, 1865: [LC]; ENT (6), MIS (CYM; DIP; SEL) — L [Costa, Ravanello, & Souza-Franco, 2008].

Argia hasemani Calvert, 1909: [NA]; MIS (SEL) — L [Not described].

Argia joergenseni Ris, 1913: [NA]; CAT, CBA, JUJ, LAR (Rodríguez et al., 2018), SAL, SGO (Rodríguez et al., 2018), SJU, SLU, SFE (22), TUC (CHS; ESP; MSB; YUN) — L [von Ellenrieder, 2007b].

Argia jujuya Ris, 1913: [NA]; CAT, JUJ, SAL, TUC (YUN) — L [Molineri & Rodríguez, 2013].

Argia lilacina Selys, 1865: [NA]; MIS (SEL) — L [Not described].

Argia mollis Hagen in Selys, 1865: [NA]; MIS (SEL) — L [Not described].

Argia reclusa Selys, 1865: [NA]; MIS (CYM; SEL) — L [Not described].

Argia serva Hagen in Selys, 1865: [NA]; BUE (del Palacio, Lozano, & Muzón, 2018), COR (3a, 3b, 3c), ENT (3, 4a), MIS (DIP; ESP; PAM; SEL) — L [del Palacio et al., 2018].

*Argia tamoyo Calvert, 1909: [NA]; MIS (10, 13) (SEL) — L [Not described].

Argia yungensis Garrison & von Ellenrieder, 2007: [LC]; JUJ, SAL (CHS; YUN) — L [Geijskes, 1946; von Ellenrieder, 2007b].

Cyanallagma bonariense (Ris, 1913): [LC]; BUE, CBA, COR (Lozano et al., 2012), ENT, MIS (4) (CHS; CYM; DIP; ESP; PAM) — L [Bulla, 1973b].

Cyanallagma interruptum (Selys, 1876): [LC]; CHU, MEN, NEU, RIO, SCR (ALT; BPA; EPA; MLM) — L [Needham & Bullock, 1943; Bulla, 1973b].

Cyanallagma nigrinuchale (Selys, 1876): [NA]; MIS (SEL) — L [Not described].

Enallagma novaehispaniae Calvert, 1907: [LC]; JUJ, SAL, SGO, TUC (Rodríguez & Molineri, 2013) (CHS; MSB; YUN) — L [Novelo Gutiérrez, 2005].

Epipleoneura venezuelensis Rácenis, 1955: [NA]; ENT (Pessacq, 2014), SFE (3) (DIP) — L [Not described]. The record from ENT published by Pessacq (2014) is the same as the record from Entre Ríos mentioned as Epipleoneura sp. in the checklist of Argentina (von Ellenrieder & Muzón, 2008).

Homeoura chelifera (Selys, 1876): [NA]; BUE, CHA, COR, ENT, FOR, JUJ, MIS, SAL, SLU (2), SFE, TUC (CHS; CYM; DIP; ESP; EST; MSB; PAM; SEL; YUN) — L [Bulla, 1971a; Lozano, Muzón, & Torres, 2009; Needham, 1904].

Homeoura lindneri (Ris, 1928): [NA]; BUE, CHA, COR, ENT, FOR (Ris, 1928; von Ellenrieder, 2010), MIS (17, 18a, 18b), SFE (CYM; DIP; ESP; EST; SEL) — L [Lozano et al., 2009]. The first record from Formosa was by Ris (1928) as Acanthagrion lindneri. This information was not included in the last checklist (von Ellenrieder & Muzón, 2008). The first record from Formosa was by Ris (1928) as Acanthagrion lindneri. This information was not included in the last checklist (von Ellenrieder & Muzón, 2008). von Ellenrieder (2010) mentioned this species again for Formosa.

Ischnura capreolus (Hagen, 1861): [NA]; BUE, COR, ENT, FOR (von Ellenrieder, 2010), JUJ, LAP (del Palacio et al., 2017), MIS, SAL, SFE, SGO (Navás, 1922), TUC (CHH; CHS; CYM; DIP; ESP; EST; PAM; SEL; YUN) — L [Geijskes, 1941].

Ischnura fluviatilis Selys, 1876: [LC]; BUE, CAT, CHA, CHU (Muzón, Pessacq et al., 2014), CBA, COR, ENT, FOR, JUJ, LAP (del Palacio et al., 2017), LAR, MEN, MIS, NEU, RIO, SAL, SJU, SLU (3), SFE, SGO, TUC (ALT; CHH; CHS; CYM; DIP; EPA; ESP;
Est; MLM; MSB; PAM; SEL; YUN) — L {Rodrigues da Fonseca & Pujol-Luz, 1999; von Ellenrieder & Muzón, 2003b}.

*Ischnura ultima* Ris, 1908: [NA]; BUE (Muzón, del Palacio, & Ramos, 2014), CBA, JUJ, MEN, SAL, TUC (ALT; CHS; EPA; MLM; MSB; PAM; YUN) — L {Muzón & Pessacq, 2005}.

*Leptagrion andromache* Hagen in Selys, 1876: [NA]; MIS (Muzón, Weigel Muñoz, & Campos, 2009) (SEL) — L {Muzón et al., 2009; Costa, Oldrini, & Anjos Santos, 2009}.

*Mecistogaster amalia* (Burmeister, 1839): [DD]; MIS (SEL) — L {Muzón, Weigel Muñoz, & Campos, 2010}.

*Mecistogaster lucretia* (Drury, 1773): [NA]; MIS (SEL) — L {Not described}. There are two subspecies described: *M. lucretia hauxwelli* and *M. lucretia lucretia*, in Argentina only *M. lucretia lucretia* has been recorded.

*Mecistogaster ornata* Rambur, 1842: [LC]; JUJ, SAL (YUN) — L {Ramírez (1995) only *M. ornata ornata*}.

*Mecistogaster selysi* Santos, 1956: [NA]; MIS (von Ellenrieder, 2013) (SEL) — L {Not described}.

*Neoneura confundens* Wasscher & van’t Bosch, 2013: [NA]; BUE (1), JUJ (Rodríguez et al., 2014), MIS (11), SAL (PAM; SEL) — L {Not described}.

*Neoneura ethela* Williamson, 1917: [NA]; COR, ENT, MIS (CYM; ESP; PAM; SEL) — L {Souza, Pepinelli, & Neiss, 2012}.

*Neoneura fulvicollis* Selys, 1886: [LC]; MIS (SEL) — L {De Marmels, 2007}.

*Neoneura sylvatica* Hagen in Selys, 1886: [NA]; MIS (SEL) — L {Not described}.

*Oxyagrion ablutum* (Calvert, 1909): [LC]; CAT, CBA, JUJ, LAR, MIS, SAL, SLU, TUC (CHS; MSB; YUN) — L {Pessacq, Muzón, & von Ellenrieder, 2005}.

*Oxyagrion basale* Selys, 1876: [NA]; MIS (CYM) — L {Bulla, 1973a; Costa, Souza, & Santos, 2000}.

*Oxyagrion brevistigma* Selys, 1876: [NA]; MIS (SEL) — L {Not described}.

*Oxyagrion bruchi* Navás, 1924: [LC]; CBA, JUJ, SAL, TUC (ESP; YUN) — L {von Ellenrieder & Garrison, 2006}.

*Oxyagrion chapadense* Costa, 1978: [NA]; BUE, CBA, COR, MIS (CHS; CYM; PAM; SEL) — L {Costa, Souza, et al., 2000}.

*Oxyagrion hempeili* Calvert, 1909: [NA]; BUE, CBA, MIS (CHS; PAM; SEL) — L {Bulla, 1973a}.

*Oxyagrion rubidum* (Rambur, 1842): [NA]; BUE, CHU, CBA, COR, ENT, JUJ, LAP (del Palacio et al., 2017), Mm, NEU, RIO, SAL, SLU (1), SFE, SGO, TUC (Rodríguez et al., 2018) (CHS; EPA; ESP; EST; MLM; PAM; YUN) — L {Needham & Bullock, 1943}.

*Oxyagrion terminale* Selys, 1876: [NA]; BUE, COR, ENT, MIS, SFE (CYM; DIP; ESP; PAM; SEL) — L {Bulla, 1973a}.

*Peristicta aeneoviridis* Calvert, 1909: [NA]; COR, ENT, MIS (CYM; DIP; ESP; PAM; SEL) — L {Schröder, Anjos-Santos, Rippel, & Pessacq, 2020}.

*Peristicta forceps* Hagen in Selys, 1860: [NA]; BUE, COR, ENT, MIS (ESP; PAM; SEL) — L {Pessacq, 2007}.

*Peristicta lizeria* Navás, 1920: [DD]; BUE — L {Not described}. According to Pessacq (2008) the identity of this species is doubtful, because its type material is lost and its original description is poor. This species could be a synonym of one of the other species of *Peristicta*. In the original description there is no reference to the exact locality, Muzón et al. (2015) believe that this species was collected in DIP or near DIP because most localities from Buenos Aires province, cited in Navás papers, correspond to DIP or towns close to the Paraná Delta front.
Protallagma titicaca (Calvert, 1909): [NA]; CAT (Rodríguez et al., 2018), JUJ, SAL (ALT; PUN) — L (Bulla, 1972).

*Telagron longum* Selys, 1876: [NA]; MIS (5), SAL (3, 4) (SEL, YUN) — L [Not described].

*Telebasis carmesina* Calvert, 1909: [LC]; MIS, SAL (SEL; YUN) — L [Not described].

*Telebasis griffini* (Martin, 1896): [LC]; COR, ENT, JUJ, MIS, SAL (DIP; EST; SEL; YUN) — L (Guillermo-Ferreira & Bispo, 2013).

*Telebasis inalata* (Calvert, 1961): [NA]; JUJ, SAL (Garrison, 2009; von Ellenrieder & Garrison, 2007) (YUN) — L [Not described].

*Telebasis obsoleta* (Selys, 1876): [LC as Helveciagrion obsoletum]; COR, FOR, MIS, SAL (von Ellenrieder, 2010) (CHH; CYM; ESP; EST; SEL) — L (Lozano et al., 2012).

*Telebasis simulacrum* (Calvert, 1909): [LC as Helveciagrion simulacrum]; COR (EST) — L [Not described].

*Telebasis theodori* (Navás, 1934): [NA]; MIS (SEL) — L [Not described].

*Telebasis willinki* Fraser, 1948: [LC]; BUE, CHA, CBA (Zapata & Pereyra, 2016), COR, ENT (1a, 1c, 2, 3, 6, 7, 8, 9), FOR, JUJ, SAL, SFE, TUC (CHH; CHS; CYM; SEL; YUN) — L (Bulla, 1970).

*Tigriagrion aurantinigrum* Calvert, 1909: [NA]; MIS, SAL (SEL; YUN) — L [Not described].

DICTERIADIDAE

*Heliocharis amazona* Selys, 1853: [NA]; MIS, SFE (CHH; CYM; SEL) — L (Geijskes, 1986; Santos & Costa, 1988).

LESTIDAE

*Archilestes exoletus* (Hagen in Selys, 1862): [NA]; MIS (SEL) — L [Dalzochio & Rodrigues, 2011].

*Lestes auritus* Hagen in Selys, 1862: [LC]; MIS (SEL) — L [Not described].

*Lestes bipupillatus* Calvert, 1909: [NA]; CHA, MIS (DIP; SEL) — L [Costa & Carneiro, 1994].

*Lestes dichrostigma* Calvert, 1909: [LC]; COR, JUJ, MIS, SAL, TUC (Rodríguez & Molineri, 2013) (CHS; CYM; SEL; YUN) — L [Muzón & Weigel Muñoz, 2007].

*Lestes forficula* Rambur, 1842: [LC]; COR (7), JUJ, MIS, SAL, SFE, TUC (Rodríguez et al., 2018) (CHS; CYM; SEL; YUN) — L (Calvert, 1928; Klots, 1932).

*Lestes minutus* Selys, 1862: [NA]; COR (4) (EST) — L [Not described].

*Lestes paulistus* Calvert, 1909: [LC]; COR, MIS (ESP; SEL) — L [Not described].

*Lestes pictus* Hagen in Selys, 1862: [NA]; COR, JUJ, MIS, SAL, TUC (Rodríguez & Molineri, 2013) (CYM; SEL; YUN) — L (Costa & Carneiro, 1994; Santos, 1972a).

*Lestes spatula* Fraser, 1946: [NA]; BUE, CAT, CHA, COR, ENT, FOR (von Ellenrieder, 2010), LAP (1), MIS, SAL, SFE (Fraser, 1948), SGO, TUC (Rodríguez & Molineri, 2013) (CHH; CHS; CYM; DIP; ESP; EST; PAM; SEL; YUN) — L (Muzón, 1993).

*Lestes tricolor* Ericsson, 1848: [NA]; MIS (SEL) — L (Costa & Carneiro, 1994).

*Lestes undulatus* Say, 1840: [LC]; BUE, CBA (1), ENT, LAP (del Palacio et al., 2017), MEN, MIS (6, 19), RIO, SFE (Navás, 1920) (BPA; CHS; DIP; EPA; ESP; MLM; PAM; SEL) — L (Muzón, 1997). The record from Santa Fe was provided by Navás (1920). However, no mention of this species was done by von Ellenrieder and Muzón (2008).

MEGAPODAGRIONIDAE

*Allopodagrion brachyurum* De Marmels, 2001: [NA]; MIS (SEL) — L [Neiss, Fiorentin, & De Marmels, 2011].

*Allopodagrion contortum* (Hagen in Selys, 1862): [LC]; MIS (SEL) — L [Not described].
Table 1. Species added since von Ellenrieder and Muzón (2008).

| Family             | Species                          | Type of record        |
|--------------------|----------------------------------|-----------------------|
| Aeshnidae          | Gynacantha mexicana              | Rodríguez et al. (2018) |
| Aeshnidae          | Triacanthagyna caribbea          | Rodríguez et al. (2018) |
| Austropetaliidae   | Phyllopetalia apollo             | Pessacq and Brand (2009) |
| Austropetaliidae   | Acanthagrion ascendens           | Lozano (2013)         |
| Coenagrionidae     | Aceraethobasis nathaliae         | New record            |
| Coenagrionidae     | Aeolagrion philippi              | von Ellenrieder (2010) |
| Coenagrionidae     | Argia tamoyo                     | New record            |
| Coenagrionidae     | Epipleoneura venezuelensis       | Pessacq (2014)        |
| Coenagrionidae     | Leptagrion andromache            | Muzón et al. (2009)   |
| Coenagrionidae     | Metaleptobasis selysi            | von Ellenrieder (2013) |
| Coenagrionidae     | Telagrion longum                 | New record            |
| Gomphidae          | Archaeogomphus infans            | New record            |
| Gomphidae          | Phyllocycla foliata              | Belle (1988)          |
| Gomphidae          | Progomphus costalis              | New record            |
| Lestidae           | Lestes minutus                   | New record            |
| Libellulidae       | Dasythemis esmeralda             | von Ellenrieder (2010) |
| Libellulidae       | Erythromelas carmelita           | New record            |
| Libellulidae       | Erythodiplax amazonica           | New record            |
| Libellulidae       | Erythodiplax pallida             | del Palacio and Muzón (2016) |
| Libellulidae       | Erythodiplax unimaculata         | New record            |
| Libellulidae       | Micrathyria iheringi             | New record            |
| Libellulidae       | Micrathyria stawiarskii          | New record            |
| Libellulidae       | Nephepeltia berlai               | von Ellenrieder (2014) |
| Libellulidae       | Nephepeltia leonardina           | Rodríguez et al. (2014) |
| Libellulidae       | Orthemis phillipi                | von Ellenrieder (2010) |
| Libellulidae       | Oligocera dubiaescala            | von Ellenrieder and Garrison (2008a) |

*Allopothagron erinys* (Ris, 1913): [DD]; *MIS* — L {Not described}. Record for Misiones in Ris (1913) but exact locality unknown.

*Heteragrion aurantiacum* Selys, 1862: [LC]; *MIS* (CYM; SEL) — L {Santos, 1968d}.

*Heteragrion triangulare* Hagen in Selys, 1862: [DD]; *MIS* (SEL) — L {Not described}.

*Teinfopagron meridional* De Marmels, 2001: [LC]; *CAT, JUJ, SAL, TUC (YUN) — L* {von Ellenrieder, 2006}.

**POLYTHORIDAE**

*Chalcopteryx rutilans* (Rambur, 1842): [LC]; *MIS* (SEL) — L {Santos & Costa, 1987}.

**Changes made since the checklist of von Ellenrieder and Muzón (2008)**

Since von Ellenrieder and Muzón (2008), one family (Synthemistidae) and 27 species have been added: two Aeshnidae, two Austropetaliidae, eight Coenagrionidae, three Gomphidae, one Lestidae, and 11 Libellulidae. From these, 10 are new records provided in this contribution (see comments below on each of these species), 15 species were recorded after the checklist of 2008, and two species were recorded before 2008 but omitted in that checklist (Table 1). In addition, eight species have changed their taxonomic status since the last checklist (Table 2). The family Synthemistidae is recorded for the first time in Argentina, due to the placement of *Gomphomacromia* within it in recent molecular studies (Carle et al., 2015).

Among the newly recorded species, *Acerathobasis nathaliae* was previously known from the Atlantic Forest of Brazil (von Ellenrieder & Garrison, 2008b). This species is not common; in fact, *A. nathaliae* was previously known only from its type locality: São Pablo, Jacarei, Fazenda
Table 2. Species that changed taxonomic status since von Ellenrieder and Muzón (2008).

| Name in checklist 2008        | Current name              | Reference                                                                 |
|-------------------------------|---------------------------|--------------------------------------------------------------------------|
| Acanthagrion ablutum          | Oxyagrion ablutum         | von Ellenrieder and Lozano (2008)                                       |
| Acanthagrion peruvianum       | Acanthagrion floridense   | Lozano et al. (2017)                                                    |
| Dythemis multipunctata        | Dythemis nigra            | Meurugey and Poiron (2011)                                              |
| Helveciagrion obsoletum       | Telebasis obsoleta        | Garrison (2009)                                                         |
| Helveciagrion simulacrum      | Telebasis simulacrum      | Garrison (2009)                                                         |
| Homeoura ambiguza             | Argentagrion ambiguza     | von Ellenrieder (2008)                                                  |
| Neoneura bilinearis           | Neoneura confundens       | Wasscher and Van ’T Bosch (2013)                                        |
| Telebasis limoncocha          | Telebasis griffini        | Garrison (2009)                                                         |

Santana do Rio Abaixo (Lencioni, 2004). Argia tamoyo is not a common species either, but it had a wider distribution range; it was previously known from Brazil and Bolivia (Lencioni, 2017).

Progomphus costalis has a wide distribution, where it has been recorded from Rio de Janeiro, Brazil, south to Uruguay (von Ellenrieder, 2009; von Ellenrieder, Molineri, & Emmerich, 2009).

Lestes minutus is a rare South American species; there are scattered records in Colombia, Suriname, Trinidad, Venezuela and Brazil (Bota Sierra, 2014; Costa, Souza, et al., 2000; Lencioni, 2017).

The libellulids Dasythemis esmeralda, Erythrodiplax amazonica, E. unimaculata, and Micrathyria iheringi are widely distributed in South America. The records herein provided expand the southernmost limit of their distribution range. Micrathyria stawiarskii has a more restricted range, previously known from Goias to Rio Grande do Sul states in Brazil.

Phyllocyba foliata was described by Belle (1988) from specimens collected by Jurzitza in Misiones (Parque Nacional Iguazu). However, this species was not listed by von Ellenrieder & Muzón (2008). Belle considered it to be very similar to P. argentina, which is sympatric with P. foliata. Therefore, it is important to revise the taxonomic status of this species.

Two species were removed from the checklist by von Ellenrieder and Muzón (2008): Aeolagrion inca and Micrathyria debilis. The former one was recorded for FOR based on a specimen collected in Estancia Guaycolec. This specimen belongs to A. phillipi. However, the identification was done prior to the description of A. phillipi (Tennessen, 2009). Micrathyria debilis is a common species in Central America. von Ellenrieder and Muzón (2008) mentioned this species for Entre Ríos and Santa Fe based on records provided by Fraser (1947). However, it has not been found again in these provinces and is likely to be a misidentification.

Endemic species of Argentina

There are 17 species endemic to Argentina (Table 3; Figure 3). Even though Patagonia has remarkable endemics at the regional level (e.g. Neopetalidae), there are no Patagonian endemics exclusive of Argentina, all having been also recorded in Chile (Muzón, Pessacq et al., 2014).

Allopodagrion erinys, Peristicta lizeria, Phyllocyba foliata and Progomphus australis are only known from their original description; little is known on their biology and habitat preferences.

Castoraeschna decurvata inhabits lotic environments with small waterfalls and sand bottoms. Adults are fast flyers and were seen patrolling at 1.5 m above the river. Final-stage larvae were collected in vegetated areas near the shores (Rodrigues Capitulo & Jurzitza, 1989). There are two disjunct areas where it has been recorded: one in Córdoba province and the other one in Entre Ríos province; both are within the ESP ecoregion. Further research is needed in order to
The Odonata of Argentina

Table 3. Endemic species of Argentina.

| Family               | Species                          |
|----------------------|----------------------------------|
| Aeshnidae            | Castoraeschna decurvata          |
| Aeshnidae            | Rhionaeschna haarupi             |
| Aeshnidae            | Rhionaeschna pallipes            |
| Aeshnidae            | Staurophlebia bosqi              |
| Coenagrionidae       | Andinagrion garrisoni            |
| Coenagrionidae       | Andinagrion peterseni            |
| Coenagrionidae       | Argia jujuya                    |
| Coenagrionidae       | Peristicta lizeria               |
| Gomphidae            | Phyllocycla foliata              |
| Gomphidae            | Phyllocycla vesta                |
| Gomphidae            | Phyllogomphoides joaquinii       |
| Gomphidae            | Progomphus auropictus            |
| Gomphidae            | Progomphus australis             |
| Libellulidae         | Oligoclada haywardi              |
| Libellulidae         | Oligoclada rubribasalis          |
| Megapodagrionidae    | Allopodagron eriyns              |
| Synthemistidae       | Gomphomacromia nodisticta        |

determine if this species has a disjunct distribution within Argentina or if it is present within intermediate areas.

*Rhionaeschna haarupi* occurs in marshy areas of Andean streams and rivers of the Pre-cordillera (mountain ranges lying before the Andes) where it has been found at elevations between 900 and 2015m. This species is very rarely seen in the field.

*Rhionaeschna pallipes* has a unique distribution among the species traditionally included within the former subgenus *Marmaraeschna*, as it is not restricted to the Andes (Muzón & von Ellenrieder, 2001); it has also been recorded in hilly areas of Córdoba and Buenos Aires. There are two old records in Santa Fe province in the Paraná river basin, but as there are no mountains there, Muzón and von Ellenrieder (2001) believe these records are questionable. This species inhabits rapidly moving waters. Larvae were found under stones and clinging to submerged roots of marginal vegetation in creeks (von Ellenrieder & Muzón, 2003a).

Members of the genus *Staurophlebia* are among the largest species of Argentine dragonflies (total length 80–95 mm). *Staurophlebia bosqi* is a rare species that has been recorded in a small area of the lower delta of the Paraná river. It inhabits streams within thick marginal forests of flood plains. It is very similar to *Staurophlebia reticulata*, the other congener recorded in Argentina; a taxonomic revision of these two is necessary in order to test their specific status.

The genus *Andinagrion* is almost exclusively distributed in Argentina; except for *A. saliceti* which has also been recorded in Uruguay, the other two known species of the genus, *A. garrisoni* and *A. peterseni*, are endemic to the country. *Andinagrion garrisoni* is known to occur in the Yungas (von Ellenrieder, 2009), whereas *A. peterseni* is more widely distributed within Argentina, found from Yungas south to Patagonia and east to Buenos Aires. These species inhabit lentic environments at stream edges in hilly areas with abundant aquatic vegetation.

*Argia jujuya* is also endemic to the Argentine Yungas; among the four species of *Argia* reported in the region (NW Argentina), *A. jujuya* occupies the smallest range and is not as frequent and abundant as other species (Molineri & Rodríguez, 2013). It inhabits lotic environments strongly vegetated with rooted aquatic and semiaquatic plants (Molineri & Rodríguez, 2013).

There are two endemic gomphids recorded from Buenos Aires: *Phyllocycla vesta* and *Phyllogomphoides joaquinii*. Both species are rarely seen in the field or in collections. Adults are very good flyers that inhabit lotic environments. Only the larva of *Phyllogomphoides joaquinii* has been described, and as other gomphids it was found burrowed in sandy bottoms.
Figure 3. Maps showing distribution of endemic species.

_Progommhus auropictus_ occurs in the Paranaense Forest in Misiones (von Ellenrieder & Muzón, 2008). Adults were seen flying in gallery forest streams with rocky substrate. Little is known on the biology of this species; the larva is unknown.

_Gomphomacromia nodisticta_ is a rare species endemic to the ecotone between the Monte de Sierras y Bolsones and Yungas ecoregions of the Brown and Pacheco (2006) scheme. It has been recorded at elevations between 2400 and 2700 m. This species inhabits mountain streams; the larva is still unknown.

_Oligoclada haywardi_ was described by Fraser (1947) from Misiones. It was not found again until 2009, when it was discovered in Corrientes; in 2011 and 2012 it was rediscovered in Misiones. Adults were collected while flying in gallery forest streams and in lentic environments near these streams. The larva is unknown. It is likely that this species is also present in Brazil.

Finally, _Oligoclada rubribasalis_ can be found at shallow marshes surrounding ponds and rivers, perching on leaves exposed to the sun in northeastern Argentina. Reproductive behavior was not observed, and the larva is still unknown (von Ellenrieder & Garrison, 2008a).
Provincial records

Since the publication of the checklist in 2008, a total of 237 provincial records have been added (Figure 4); of these, 150 were either published after the publication of the checklist of von Ellenrieder and Muzón (2008) or were published before and omitted in it (Table 4), and 87 are new provincial records added in this contribution.

Formosa, Salta, Tucumán and La Pampa are the provinces with more new records published since 2008; most of the records can be found in papers dealing with regional diversity (del Pacheco et al., 2017; Rodríguez et al., 2018; Rodríguez & Molineri, 2013; von Ellenrieder, 2010; von Ellenrieder & Garrison, 2007). Most of the new records added here are for Misiones and Corrientes (17 and 16 respectively); these are highly diverse provinces and have been intensively surveyed during the last decade. Santa Fe and San Luis follow with 10 new records each; in this case these provinces had been poorly studied and with few field samples in the area many novelties were found.

Figure 4. Number of new records per province. PR: Published records not included in Checklist 2008. NR. New records in this contribution.
Table 4. Records previous to Ellenrieder and Muzón (2008) but omitted in it.

| Species                     | Prov | Record          | Named as                              |
|-----------------------------|------|-----------------|---------------------------------------|
| Argentagrion ambiguum       | CAT  | Ris (1918)      | Acanthagrion ambiguum                 |
| Homeoura lindneri           | FOR  | Ris (1928)      | Acanthagrion lindneri                 |
| Ischnura capreolus          | SGO  | Navás (1922)    | Ceratoptera capreola                  |
| Telebasis inalata           | SAL  | von Ellenrieder and Garrison (2007) | Telebasis inalata |
| Lestes undulatus            | SFE  | Navás (1920)    | Lestes undulatus                      |
| Diastatops intensa          | FOR  | Ris (1928)      | Diastatops pullata                    |
| Erythemis vesiculosa        | CAT  | Ris (1928)      | Lepthemis vesiculosa                  |
| Erythrodiplax atroterminata | ENT  | Rodrigues Capítulo and Muzón (1985) | Erythrodiplax atroterminata |
| Erythrodiplax corallina     | SFE  | Förster (1914)  | Erythrodiplax nutrina. Borror (1942) synonymized this with E. corallina |
| Erythrodiplax fusca         | SAL  | Ris (1918)      | Erythrodiplax connata fusca           |
| Erythrodiplax fusca         | TUC  | Ris (1918)      | Erythrodiplax connata fusca           |
| Erythrodiplax ochracea      | MEN  | Navás (1924)    | Erythrodiplax ochracea                |
| Erythrodiplax ochracea      | SGO  | Navás (1922)    | Erythrodiplax ochracea                |
| Erythrodiplax umbrata       | SGO  | Navás (1922)    | Erythrodiplax umbrata                 |
| Miuathyria marcella         | CBA  | Navás (1922)    | Miuathyria marcella                   |
| Microathyria hypodiydyma    | SFE  | Navás (1917)    | Microathyria difformis var. hypodiydyma |
| Orthemis discolor           | CBA  | Navás (1922)    | Orthemis ferruginea                   |
| Pantala flavescens          | CBA  | Navás (1922)    | Pantala flavescens                    |
| Tauriphila argo             | BUE  | Navás (1930)    | Tauriphila argo                       |
| Tramea binotata             | SFE  | Navás (1930)    | Tramea binotata                       |
| Tramea binotata             | SGO  | Navás (1922)    | Tramea binotata                       |

There are 80 provincial records belonging to 62 species that could not be georeferenced (Figure 5). The reason for this is that either the localities mentioned in the publication were not found or only provincial records were provided.

Seven species cited for Argentina are known only by provincial records: Telebasis carminita for Santa Fe, Archaeogomphus densus, Erythrodiplax anomala, Erythrodiplax famula, Erythrodiplax lativittata, and Allopodagrion erinys for Misiones and Macrothemis tessellata for Buenos Aires and Misiones. Further research is needed in order to confirm the presence of these species within the provinces in which they were recorded.

Provincial records removed

Aphylla dentata: Removed from BUE, ENT and SFE.

von Ellenrieder and Muzón (2008) list this species for Buenos Aires, Entre Ríos, and Santa Fe. The records from Buenos Aires and Santa Fe belong to Ris (1904) and Navás (1927a, 1928, 1930); the record from Entre Ríos could not be found, but there is a mention of Aphylla dentata from Delta del Paraná (Rodrigues Capítulo, Mola, & Agopian, 1991). Belle (1992) stated that all specimens cited by Navás as A. dentata probably belong to Aphylla distinguenda. Therefore, taking into account that A. dentata has not been found again in these provinces we remove it from Buenos Aires, Entre Ríos and Santa Fe and transfer these records to A. distinguenda.

Erythrodiplax anomala: Removed from BUE.

This species is distributed in eastern Brazil south to northeastern Argentina (Misiones). Navás (1922) mentioned this species for BUE. Santos (1953) says that its general appearance is similar to E. media and E. paraguayensis. Therefore, this species is likely to be a misidentification.
Knowledge of larvae

The knowledge of the larvae of the Odonata recorded in Argentina is still far from complete. Of the 282 species recorded, the larva of only 184 (65%) have been described (Figure 6). The situation at the generic level is much better, as of the 85 genera recorded, 70 (82%) have at least one Argentinian species with its larva described, and of the 15 remaining genera the larva of seven of them is known based on species not recorded in Argentina.

Since the last published checklist (von Ellenrieder & Muzón, 2008), the larvae of 35 species have been described, mostly Libellulidae and Coenagrionidae with 15 and 13, respectively (Table 5).

_Erythrodiplax juliana_: Removed from ENT

This species has been removed from ENT since the specimens belong to _E. chromoptera_.

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**Figure 5.** Number of species per province only known by provincial records.
Figure 6. Larvae described and unknown for each family.

Ecoregional knowledge

At the ecoregional level, the Selva Paranaense and Yungas are the richest (Figures 7, 8A). This is not surprising, taking into account that many of the neotropical species have their southernmost distribution limits within these ecoregions. When plotting the richness of the ecoregions (Figure 8A, B), it becomes evident that the knowledge of CHH is still far from complete; fewer species are recorded than in neighboring ecoregions (Figure 8B). Little is known about the odonates of the Puna, where only three species have been recorded, and it is likely that this number is higher. These regions need to be better surveyed in order to improve their state of knowledge.

Conservation status

The Odonata is the first insect order to be assessed on a representative global scale for the IUCN Red List of Threatened Species (Clausnitzer et al., 2009). From the 282 species recorded in Argentina, only 113 species (40.07%) have been assessed globally using the IUCN categories and criteria (Figure 9). However, most of these assessments (73.45%) were done before 2010 and need to be updated (Figure 10).

Efforts are being made to complete the global assessment of all neotropical species and publish them in the Red List. Therefore, it is estimated that all the Latin American species are going to
Table 5. Larvae described since von Ellenrieder and Muzón (2008).

| Family          | Species                          | Larval description                          |
|-----------------|----------------------------------|---------------------------------------------|
| Aeshnidae       | Limnetron antarcticum           | del Palacio and Muzón (2014)                |
| Aeshnidae       | Rhionaeschna vigintipunctata     | Rodríguez and Molineri (2014)               |
| Coenagrionidae  | Acanthagrion floridense          | Lozano et al. (2017)                        |
| Coenagrionidae  | Acanthagrion gracile             | Anjos Santos et al. (2011)                  |
| Coenagrionidae  | Acanthagrion lancea              | Anjos Santos et al. (2011)                  |
| Coenagrionidae  | Argia croceipennis              | Costa et al. (2008)                         |
| Coenagrionidae  | Argia jujuya                     | Molineri and Rodríguez (2013)               |
| Coenagrionidae  | Argia serva                      | del Palacio et al. (2018)                   |
| Gomphidae       | Progomphus joergensis            | Muzón and Lozano (2011)                     |
| Lestidae        | Archilestes exoletus             | Dalzochio and Rodrigues (2011)              |
| Libellulidae    | Diastatops intensa               | Costa et al. (1999)                         |
| Libellulidae    | Erythodiplax atroterminata       | Garré et al. (2008)                         |
| Libellulidae    | Erythodiplax connata             | Lozano et al. (2011)                        |
| Libellulidae    | Erythodiplax corallina           | Garré et al. (2008)                         |
| Libellulidae    | Erythodiplax media               | Dalzochio et al. (2018)                     |
| Libellulidae    | Idiataphe longipes               | Oldrini et al. (2005)                       |
| Libellulidae    | Macrothemis declivata            | Salgado et al. (2013)                       |
| Libellulidae    | Macrothemis henchilora           | Salgado et al. (2013)                       |
| Libellulidae    | Macrothemis heteromycha          | Costa et al. (2010)                         |
| Libellulidae    | Macrothemis imitans              | Salgado et al. (2013)                       |
| Libellulidae    | Macrothemis tenuis               | Salgado et al. (2013)                       |
| Libellulidae    | Micrathyria pseudeximia          | Dalzochio (2009a)                           |
| Libellulidae    | Nephepeltia berlai               | Dalzochio (2009b)                           |
| Libellulidae    | Orthemis cultriformis            | Carvalho and Werneck-de-Carvalho (2005)     |
| Libellulidae    | Perithemis lais                  | Costa and Régis (2005)                      |
| Megapodagrionida| Allopodagrion brachyurum         | Neiss et al. (2011)                         |
| Polythoridae    | Chalcopteryx rutians             | Santos and Costa (1987)                     |

be assessed by 2021. At present, progress is being made in completing the National Red List of Odonata, the first national red list of an insect order within Argentina.

**Species yet to be described or in manuscript**

*Limnetron* n. sp.: According to von Ellenrieder & Garrison (2007) *Limnetron* n. sp. was mentioned as *L. debile* by von Ellenrieder (2001c).

Gen nov. sp. nov. (Coenagrionidae) Muzón & Lozano (in press): This species has been described based on specimens collected in COR (CYM) and Brazil. Specimens from Argentina were collected in a marshy area around a pine plantation was crossed by a small creek.

*Angelagrion* sp.: Specimens from this genus were collected in ENT (DIP) and are under study.

**Argentina in a South American context**

The knowledge of the Odonata from South America has grown steadily in recent years, with many South American entomologists working on ecology, diversity, taxonomy, and conservation of dragonflies and damselflies. However, there are still gaps that need to be addressed: there are
Figure 7. Number of species recorded for each ecoregion.

| Ecoregion | Species Recorded |
|-----------|-----------------|
| SEL       | 170             |
| YUN       | 110             |
| CYM       | 94              |
| PAM       | 89              |
| CHS       | 85              |
| ESP       | 78              |
| DIP       | 70              |
| EST       | 67              |
| CHH       | 41              |
| MSB       | 33              |
| BPA       | 19              |
| EPA       | 18              |
| MLM       | 16              |
| ALT       | 13              |
| PUN       | 3               |

Figure 8. Map showing diversity per ecoregion. Colors correlate with alpha diversity, the darker the more diverse. (A) Argentina; (B) detail of Chaco Húmedo showing that the number of species recorded is less than neighboring ecoregions.
Figure 9. Proportion of species assessed according to the IUCN categories and criteria.

Figure 10. Number of Red List Assessments done per year.

many countries that do not have updated checklists (Table 6), and the specific richness is probably underestimated (for example in Bolivia and Paraguay); this can be evidenced in the fact that many new species are being described every year. Besides, little is known on the ecology, habitat preferences, and larvae of many species.

When comparing the specific richness between South American countries, Argentina, with 282 known species, is behind Brazil, Venezuela, Peru, Ecuador, and Colombia (Table 6). This
Table 6. Species richness, endemics and information of last checklist available for South American countries.

| Country       | Last checklist available                                                                 | N° of sp. | (N° of sp/country area) × 100,000 | N° of endemic sp. | % of endemic sp. |
|---------------|------------------------------------------------------------------------------------------|-----------|----------------------------------|------------------|-----------------|
| Brazil        | Only regional lists available (e.g. Renner, Périco, Ely, & Sahlén, 2017; Borges, Barbosa, Vilela, & Carneiro, 2019; Koroiva, Neiss, Fleck, & Hamada, 2020) | 818       | 9.6                              | 324              | 39.6            |
| Venezuela     | Vivas-Santeliz & De Marmels, 2017                                                        | 525       | 57.3                             | 88               | 16.8            |
| Peru          | Hoffmann, 2009                                                                           | 455       | 35.4                             | 62               | 13.6            |
| Ecuador       | Mauffray & Tennessen, 2019                                                                | 425       | 153.5                            | 44               | 10.3            |
| Colombia      | Perez Gutierrez & Palacino Rodríguez, 2011                                               | 394       | 34.5                             | 53               | 13.4            |
| Argentina     | This work                                                                                | 282       | 10.1                             | 17               | 6.0             |
| Suriname      | Belle 2002; recent checklist for Kwamalasamutu region (von Ellenrieder, 2011)            | 268       | 163.6                            | 9                | 3.3             |
| French Guiana | No checklist available von Ellenrieder, Billink, and Svensson (2017)                     | 243       | 290.9                            | 6                | 2.5             |
| Guyana        | Only partial lists available (Amaya Vallejo & Ledezma, 2010; Pessacq et al., 2015)        | 203       | 18.5                             | 19               | 9.3             |
| Bolivia       | No checklist available von Ellenrieder et al., 2009                                      | 135       | 33.2                             | 8                | 5.9             |
| Paraguay      | von Ellenrieder et al., 2009                                                              | 70        | 39.7                             | 0                | 0               |
| Uruguay       | Needham & Bullock, 1943; recent checklist for Patagonia region (Muzón et al., 2014)      | 49        | 6.5                              | 14               | 28.6            |

is not surprising taking into account that most of these countries are known for their high specific richness. However, when weighting the species richness with the country area, the situation is very different, with Argentina being one of the countries with the lowest values of species richness (Table 6).

The number of endemic species varies greatly among the South American countries. Brazil, with more than 300 species, is the country with the greatest number of endemic species. It is followed by Venezuela, Peru, Ecuador, and Colombia, as with the number of known species. However, when the percentage of endemic species is considered, Chile with 28.6% of endemic species is second to Brazil (Table 6).

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