

Commented checklist of the Odonata from Colombia

Cornelio A. Bota-Sierra ^a, Karen Álvarez-Álvarez ^b, Vanessa Amaya ^c,
Beatriz Carrillo Camargo ^d, Laura L. Garzón-Salamanca ^e, Alejandro Hoyos^f,
Cristian C. Mendoza-Penagos  ^g, Jenilee Montes-Fontalvo  ^h,
Freddy Palacino-Rodríguez  ^{i,j}, León A. Pérez-Gutiérrez  ^{d,k},
Emilio Realpe ^c, Melissa Sánchez Herrera         ^m, Juliana Sandoval-H   ⁿ,
Miguel Stand-Pérez  ^{d,o}, Mónica Torres-Pachón      ^{p,q},
Maria Isabel Velásquez   & Yiselle Cano-Cobos      ^{r,*}

^a Grupo de Entomología Universidad de Antioquia (GEUA), Medellín-Colombia. AA 1226

^b Grupo de Investigación Evaluación, Manejo y Conservación de Recursos Hidrobiológicos y Pesqueros (GIREHPES), Semillero de Investigación JIACACU, Universidad de los Llanos, Meta, Colombia

^c Laboratorio de Zoología y Ecología Acuática (LAZOEA), Departamento de Ciencias Biológicas, Universidad de los Andes, Bogotá, Colombia

^d Grupo de Investigación Biodiversidad del Caribe Colombiano, Facultad de Ciencias Básicas, Universidad del Atlántico, Barranquilla, Colombia

^e Laboratorio de entomología, Departamento de Biología, Facultad de Ciencias, Pontificia Universidad Javeriana, Bogotá, Colombia

^f Semillero de entomología Universidad CES, Medellín, Colombia

^g Laboratório de Ecologia e Conservação (LAEBCO), Instituto de Ciências Biológicas, Universidade Federal do Pará, Belém, PA, Brazil

^h Museo del Instituto de Zoología Agrícola Francisco Fernandez Yepes, Facultad de Agronomía, Universidad Central de Venezuela, Maracay, Venezuela

ⁱ Sección Etología, Facultad de Ciencias, Universidad de la República, Montevideo, Uruguay

^j Grupo de Investigación en Odonatos y otros Artrópodos de Colombia y el Neotrópico, Bogotá, Colombia

^k Laboratory of Systematics on Aquatic Insects (LABSIA), Departamento de Zoología, Universidade Federal do Paraná, P. O. Box 19020, 81531-980, Curitiba, PR, Brazil

^l Department of Museum Research & Collections. University of Alabama Museums. Tuscaloosa, AL 35487, USA

^m Division of Invertebrate Zoology. American Museum of Natural History, New York, NY 10024, USA

ⁿ Independent researcher

^o Red de Biología Evolutiva, Instituto de Ecología A.C., Xalapa, México

^p Grupo de Investigación Interculturalidad, ciencia y tecnología (INTERCITEC-UPN), Departamento de Biología, Universidad Pedagógica Nacional, Bogotá, Colombia

^q Programa de Investigación Corporación Sentido Natural, Bogotá, Colombia

^r Laboratorio de Biodiversidad y Genética Ambiental (BioGeA), Universidad Nacional de Avellaneda, Piñeyro 1870, Avellaneda, Buenos Aires, Argentina

*Corresponding author: Email: yisellecanoc@gmail.com

Research Article



This article is distributed under the terms of the [Creative Commons Attribution License](#),

which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

Published: 18 June 2024

Received: 1 March 2024

Accepted: 5 June 2024

Citation:

Bota-Sierra, Álvarez-Álvarez, Amaya, Carrillo Camargo, Garzón-Salamanca, Hoyos, Mendoza-Penagos, Montes-Fontalvo, Palacino-Rodríguez, Pérez-Gutiérrez, Realpe, Sánchez Herrera, Sandoval-H, Stand-Pérez, Torres-Pachón, Velásquez & Cano-Cobos (2024): Commented checklist of the Odonata from Colombia. *International Journal of Odonatology*, 27, 103–150

doi:10.48156/1388.2024.1917280

Data Availability Statement:

All relevant data are within the paper.

Abstract. Colombian odonatological history was scarce until two decades ago. Here, we present an updated, thoroughly vetted, and refined checklist of taxonomic and geographical records of Colombian odonates, built upon the previous publication in 2011. To achieve this, we conducted an extensive literature review, and curated the most representative biological collections of odonates in the country. Our goal was to integrate new records

and recently described species, while excluding misidentifications or doubtful identifications due to a lack of support from taxonomic revisions and specimens in collections. We report a total of 536 species, reflecting a 38% increase in odonate richness since the last published checklist in 2011. This number positions Colombia among the top ten countries with the highest number of odonates worldwide. We include important taxonomic details for each species in the checklist, the availability of female and/or larva description(s), and the IUCN species assessment. We also highlight rare or puzzling species, which records for the country are controversial. It is noteworthy that the majority of these contributions stem from local Colombian research efforts that have enriched our national reference collections, including ANDES-E, CEUA, and UARC. Geographically, the department with the highest diversity is Meta with 205 species followed by Antioquia with 170 species. The latter holds the highest number of endemics across the country. We anticipate that this effort will be the basis and inspiration to future research on Colombian odonatofauna, especially in underexplored areas, and will encourage conservation initiatives for freshwater ecosystems across the country.

Key words. Amazon, Andes, Biogeographic Chocó, Caribbean, damselfly, distribution, diversity, dragonfly, Neotropics, Orinoco Basin

Resumen. La historia de la odonatología colombiana fue escasa hasta hace un par de décadas. El presente es el listado actualizado de las especies colombianas de odonatos con base en una exhaustiva revisión de los registros taxonómicos y geográficos, construido a partir de la lista publicada en el 2011. Para alcanzar este objetivo, se realizó una revisión de literatura y se curaron las colecciones biológicas de libélulas más representativas de Colombia. Nuestro propósito fue integrar los nuevos registros y especies recientemente descritas, al mismo tiempo que excluir especies con identificaciones erróneas o dudosas por carecer de respaldo en revisiones taxonómicas y especímenes en colecciones. En total, se reportan 536 especies, reflejando un crecimiento del 38% en la riqueza de especies previamente obtenida en el listado del 2011. Este número posiciona a Colombia entre los diez países con mayor diversidad de odonatos a nivel mundial. Se incluyeron importantes detalles taxonómicos para cada especie tales como la disponibilidad de las descripciones de hembra y/o larvas y las evaluaciones de UICN. Además, se resaltaron las especies raras o misteriosas cuyos registros en el país son controversiales. Es importante resaltar que el aumento de los aportes es en gran parte por el esfuerzo de investigadores colombianos, los cuales han enriquecido la imponente representación de odonatos en colecciones de referencia nacional, tal como ANDES-E, CEUA y UARC. A nivel geográfico el departamento del Meta presenta la mayor riqueza de odonatos con 205 especies, seguido por el departamento de Antioquía con 170 especies. Este último alberga el mayor número de especies endémicas del país. Se espera que este esfuerzo sea la base e inspiración de futuros estudios de la odonatofauna colombiana, especialmente en áreas poco exploradas, además de informar iniciativas de conservación de ecosistemas acuáticos para el país.

Palabras clave. Amazonía, Andes, Chocó Biogeográfico, Caribe, libélula, caballitos del diablo, diversidad, distribución, Neotrópico, Orinoquía

Introduction

Colombia is known to be among the megadiverse countries in the world. Nevertheless, two decades ago it was considered “terra incognita” for odonatology (Paulson, 2004). The exploration of Colombian odonates is marked by two early expeditions, one led by the German Antone Fassl (1876–1922), who collected between 1907 and 1912 across the country from the Pacific coast to the Orinoco basin and sent all his specimens to Europe (Ris, 1918). And, a second led by the North American cousins Edward (1878–1933) and Jesse (1884–1964) Williamson, who explored the Caribbean and Andean regions between December 1916 and February 1917, using the Magdalena River as their main transport way and later deposited all their specimens to the University of Michigan Museum of Zoology (Williamson, 1918c).

Colombian residents carried out some scattered collections or expeditions in the 20th century. The French priest Apolinario María (1877–1949) created the first national collection and published the first catalog of Colombian odonates in 1938 (María, 1938). Unfortunately, this collection was destroyed during the political riot of 1948 and Apolinario died soon after (Daniel, 1951; González, 1980). Published studies on Colombian odonates are scarce after this incident. In the 1980s, a significant development occurred when an illustrated publication, authored by Arango and Roldán in 1983 focused on bioindication with aquatic insect larvae. This publication not only depicted the larvae but also illustrated their elevational distribution to the generic level for the odonates in the Antioquia department. In addition, in 1986, the first odonate species described by a Colombian, *Mesamphiagrion demarmelsi* (Cruz, 1986) endemic from the Cundinamarca department, was named.

In the 2000s the interest and research in Colombian odonates grew, leading to numerous publications. The knowledge of odonate richness rapidly changed from 258 species listed by Paulson (2004) to 335 documented by Pérez-Gutiérrez & Palacino-Rodríguez (2011). The latter comprehensive list includes detailed information on the museums hosting species, literature references where the species were published and departments where species are recorded. Since 2011, a total of 82 papers with new odonate records for the country have been published (Table 1), making it a challenging task to track the recorded species in Colombia. Here, we present an updated list that comments on taxonomic history (description of females or larvae, museum and/or publications information), distribution (to the Department level), and conservation status of the species in Colombia according to IUCN.

Methods

Literature review

A comprehensive literature review of publications on Colombian Odonata was conducted through consulta-

Table 1. References with New Locality Records for Odonates in Colombia (Published Since 2011). This table includes the main topic in the publication, the region where records were made, the nationality of the authors, and the authors. Am: Amazon; An: Andean; Ca: Caribbean; Or: Orinoco; and Pa: Pacific. Ar: Argentinian; Br: Brazilian; Col: Colombian; CR: Costarican; Du: Dutch; De: Deutsch; It: Italian; Jp: Japan; Mx: Mexican; Am: North American; Spa: Spaniards.

Year	Main Topic	Region	Author nationality	Authors
2011	Larval description	Pa	Col & Mx	Amaya-Vallejo & Novelo-Gutiérrez
2011a	Larval description	An	Col	Pérez-Gutiérrez & Montes-Fontalvo
2011b	Female and larval description	An	Col	Pérez-Gutiérrez & Montes-Fontalvo
2011	Larval description	An	CR, Am & Col	Ramírez et al.
2011	New records	An	Col	Rojas-Riaño
2012	Species description	Pa	Col & Mx	Amaya-Vallejo & Novelo-Gutiérrez
2012	New records	Am	Col	Bota-Sierra
2012	Life cycle	An	Col	Casallas-Mancipe et al.
2012	Species description	An	Br	Machado
2012	Ecology	An	Col	Moreno-Pallares & Guillot-Monroy
2012	Species description	Pa	Col	Pérez-Gutiérrez
2012	Museum revision	Ca & An	Col	Velásquez
2012	Taxonomic revision	Or, Ca & An	Ar	von Ellenrieder
2012	Ecology	An	Col	Altamiranda & Ortega
2013	Taxonomic revision	An	Col	Bota-Sierra & Wolff
2013	New records	An	Col	Palacino-Rodríguez
2013	New records	Or	Col	Rache et al.
2013	Taxonomic revision	Ca, Am & An	Ar	von Ellenrieder
2013	Species description	Ca & An	Du	Wasscher & Van't Bosch
2014	Taxonomic revision	Ca & An	Ar	von Ellenrieder
2014a	Ecology	An	Col	Bota-Sierra
2014b	New records	Or	Col	Bota-Sierra
2015	Checklist	Am	Col & Du	Bota-Sierra et al.
2015	Taxonomic revision	Ca, Pa, An, Or, & Am	Am & Ar	Garrison & von Ellenrieder
2015	Ecology	An	Jp & Col	Kondo et al.
2015	Museum revision	Ca, Pa, An, Or, & Am	Col & Mx	Palacino-Rodríguez et al.
2015	New records	Or	Col	Rache
2015	Ecology	An	Col	Salazar et al.
2015	Taxonomic revision	Am	Am	Tennessee
2015	Ecology	An	Col	Torres-Pachón & Realpe
2016	Ecology	An	Col	Casallas-Mancipe & Rache-Rodríguez
2016	Ecology	An	Col	Cuellar-Cardozo et al.
2016	New records	An	Col	Lara-Contreras
2016	Ecology	An	Col & Mx	Palacino-Rodríguez et al.
2017	Species description	Pa	Col & Mx	Amaya-Vallejo et al.
2017	Species description	An	Col	Bota-Sierra
2017	Female description	An	Col	Bota-Sierra & Sandoval-H
2017	Taxonomic revisión	Pa & An	Col & Mx	Bota-Sierra & Novelo-Gutiérrez
2017	Female description	An	Col & Mx	Bota-Sierra et al.
2017	Taxonomic revision	Ca, Pa, An, & Or	Am & Ar	Garrison & von Ellenrieder
2017	New records	An	Col	Lara-Contreras
2017	Field Guide	Or	Col	Palacino-Rodríguez et al.
2017	Taxonomic revision	Ca, Or, & An	Ar & Am	von Ellenrieder & Garrison
2018	Larval description	Pa & An	Col & Mx	Amaya-Vallejo et al.
2018a	New records	Pa, Am, & An	Col & It	Bota-Sierra et al.
2018b	Checklist	Ca, Pa, An, Or, & Am	Col	Bota-Sierra, Sánchez-Herrera, et al.
2018	Taxonomic revision	Am & An	Am & Ar	Garrison & von Ellenrieder
2018	Larval description	An	Col & Spa	Palacino-Rodríguez et al.

Year	Main Topic	Region	Author nationality	Authors
2019	Species description	An	Col	Bota-Sierra et al.
2019	Field Guide	Pa & An	Col & Mx	Bota-Sierra, Sandoval-H. et al.
2019	Taxonomic revision	Ca, Pa, An, Or, & Am	Col	Bota-Sierra, Velásquez-Vélez et al.
2019	New records	An	Col & Spa	Galindo-Ruiz et al.
2019	Species description	An	Am	Garrison
2019	Larval description	An	Col	Palacino-Rodríguez et al.
2019	Species description	Pa	Col	Pérez-Gutiérrez
2019	Taxonomic revision	Ca, Pa, An, Or, & Am	Col	Stand-Pérez et al.
2019	Checklist	Ca	Col	Tobias-Loaiza & Tamaris-Turizo
2020	Ecology	An	Col	Cuellar-Cardozo et al.
2020a	Ecology	An	Col	Palacino-Rodríguez, Altamiranda-Saavedra, et al.
2020b	Checklist	Pa	Col	Palacino-Rodríguez, Palacino-Penagos, et al.
2020c	Field Guide	An	Col	Palacino-Rodríguez et al.
2020d	Larval development	An	Col & Spa	Palacino-Rodríguez et al.
2020	Species description	Am	Col	Stand-Pérez & Pérez-Gutiérrez
2020	Species description	An	Col & Mx	Bota-Sierra & Novelo-Gutiérrez
2021	New records	Am	Col	Stand-Pérez et al.
2021a	New records	An	Mx & Col	Novelo-Gutiérrez & Bota-Sierra
2021b	New records	An	Mx & Col	Novelo-Gutiérrez & Bota-Sierra
2021	New records	Or	Col	Álvarez-Álvarez et al.
2021	Species description	Pa	Col	Amaya-Vallejo et al.
2021	Ecology	An	Col & Spa	García-Monsalve et al.
2022	New records	Or	Col	Álvarez-Álvarez et al.
2022	New records	Am	Col	Aristizabal-Botero et al.
2022	Species description	Pa	Col	Bota-Sierra et al.
2022	Taxonomic revision	Pa & An	De	Feindt & Hadrys
2022	Taxonomic revision	Pa & An	Am & Ar	Garrison & von Ellenrieder
2022	New records	An	Col	Mendoza-Penagos & Bota-Sierra
2023	Museum revision	Or	Col	Álvarez-Álvarez et al.
2023	Species description	Am	Col & It	Florez et al.
2023a	New records	Am, An & Or	Col	Cano-Cobos et al.
2023	Species description	An	Col	Bota-Sierra & Sánchez
2023b	Species description	An	Col	Cano-Cobos et al.
2023	Ecology	An	Col	Palacino-Rodríguez et al.

tions with experts and the use of the Google Academic search engine. The search utilized keywords such as Odonata, Damselfly, Dragonfly, “Libélula”, “Caballito del Diablo”, Zygoptera, and Anisoptera combined with Colombia. All publications specifying the odonate locality, at least to the municipality level, were digitized. Data on larvae and female descriptions were collected, and IUCN Red List assessments were incorporated.

Museum sampling

The primary Odonata collections in the country were reviewed, including ANDES-E (Colección de Entomología, Universidad de los Andes), CEUA (Colección de Entomología, Universidad de Antioquia), MEFLG (Museo Entomológico Francisco Luis Gallego, Universidad Nacional – Medellín), MPUJ-ENT (Museo Entomológico de la Pontificia Universidad Javeriana), and UARC (Colección de Odonata, Universidad del Atlántico).

We digitized both samples in datasheets, and then we used the RStudio (RStudio Team, 2020) to graph and manipulate the data. For reading and manipulating the datasheets we used the `readxl` R package (Wickham & Bryan, 2023) and to plot graphs we used the R `ggplot` package (Wickham, 2016). All the figures were organized using Adobe Illustrator 2024. Maps were done using the software Q-Gis 3.26.3-Buenos Aires (2024) and the political department layer by GADM, version 0.8 (2003).

Results

Literature review

A total of 12,490 specimens of 483 species were reported in 735 localities from 31 of the 32 departments in Colombia. La Guajira is the only department lacking records at the municipality level in the literature. Since the last Colombian checklist in 2011, 82 references with

records for odonates in Colombia at the municipality level have been published (Table 1). On average, 6.2 references were published per year (Figure 1a). Most of the references' focus was taxonomy (new records, new species, or taxonomic revisions, see Figure 1b). The majority of these references (69 out of 82) were authored by Colombian researchers with 48 being solely Colombian and 21 involving collaborations with international researchers (Figure 1c). The Andean region emerged as the most studied, with 57 publications (Table 1, Figure 1d).

Museum sampling

A total of 12,816 specimens representing 449 species were documented across 1,112 localities spanning all the departments in Colombia. The museums ANDES-E and CEUA had specimens from 27 out of the 32 departments in the country. ANDES-E emerged as the museum with the highest number of specimens and species, reporting 6,076 and 342 respectively. Following closely, CEUA documented 4,993 specimens and 331 species. Additionally, CEUA boasted the largest representation of type material, holding 17 holotypes (see Figure 2).

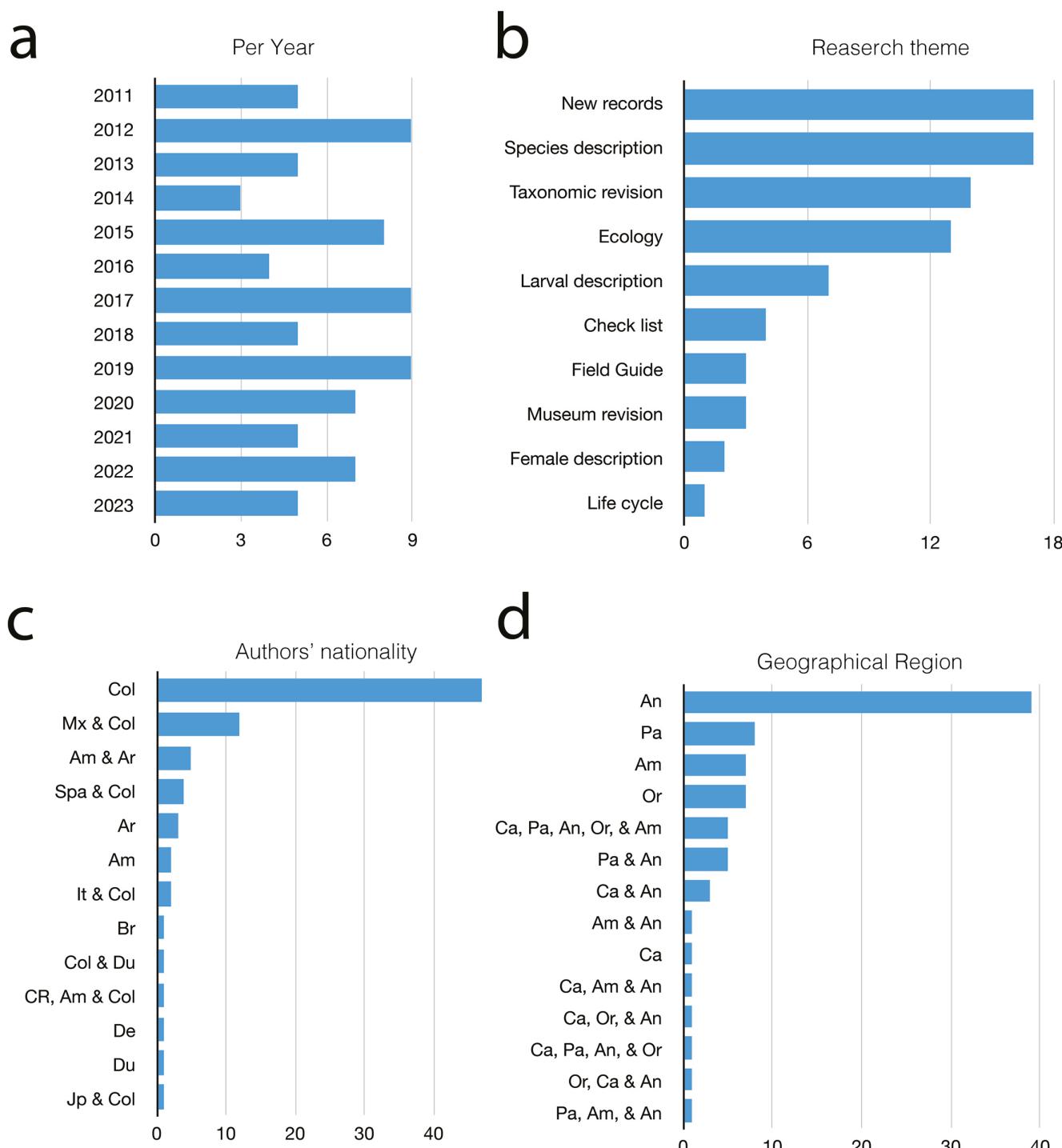


Figure 1. (a) Number of published references with records of Colombian odonates since 2011; (b) main research topics covered in the publications; (c) nationalities of the authors; (d) geographical regions with the primary focus.

Updated checklist of Colombian odonates**Species excluded**

Out of the 335 species reported in Colombia in 2011 (Pérez-Gutiérrez & Palacino-Rodríguez, 2011), 32 species are excluded from the Colombian national odonate list. Among these, nine of them have been identified as junior synonyms, while the remaining 23 are likely to be incorrect identifications. The known distribution range of these species is far beyond Colombia, and several of them lack vouchers in the museums (Table 2).

Current list

The list comprises 536 species, including six subspecies, distributed across 15 families (Table 3, to access the Excel data sheet follow this link <https://doi.org/10.6084/m9.figshare.25979584.v1>). The departments with the highest species diversity are in mountainous regions, particularly Meta and Antioquia. These two departments, encompassing the Andean and other regions, stand out as the richest in the country. Conversely, the less species-rich departments are found in the Carib-

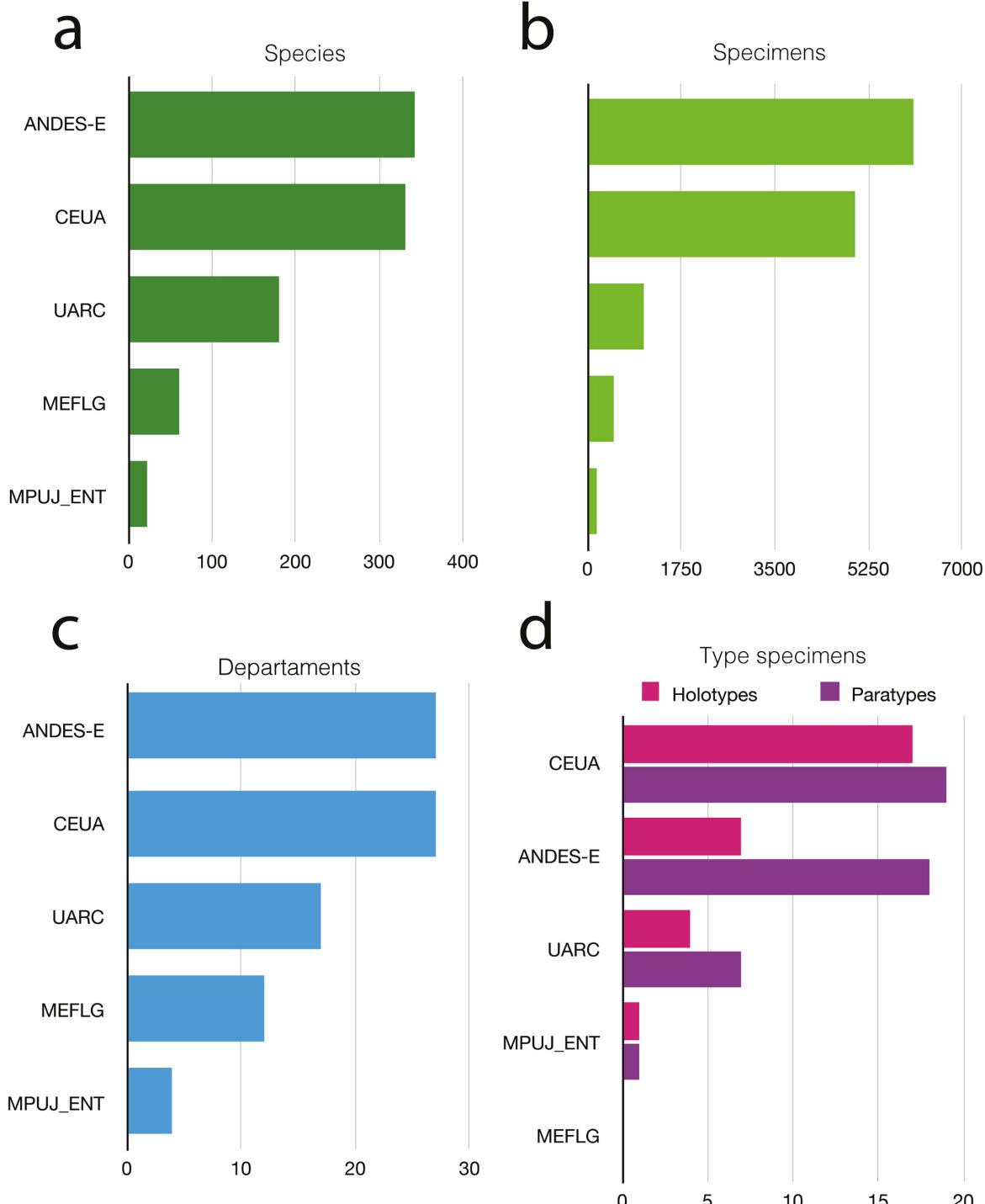


Figure 2. (a) Number of departments represented with specimens in the museum; (b) number of specimens deposited and identified to species level in each museum; (c) number of species deposited in each museum; (d) number of type specimens (holotypes and paratypes) deposited in each museum.

Table 2. Species excluded from Colombian Odonata checklist.

Species excluded	Reason	First record reference
<i>Acanthagrion peruvianum</i>	Junior synonym	Rojas-Riaño & Sánchez-Herrera, 2009
<i>Acanthallagma strohmi</i>	Misidentification	Pérez-Gutiérrez & Palacino-Rodríguez, 2011
<i>Agriogomphus sylvicola</i>	Misidentification	Pérez-Gutiérrez & Palacino-Rodríguez, 2011
<i>Argia cuprea</i>	Misidentification	Ris 1918 & Urrutia, 2005
<i>Argia variabilis</i>	Misidentification	Ris, 1918
<i>Cora confusa</i>	Misidentification	Pérez-Gutiérrez & Palacino-Rodríguez, 2011
<i>Cora terminalis bogotensis</i>	Junior synonym	Förster, 1914
<i>Dythemis multipunctata</i>	Junior synonym	Palacino-Rodríguez, 2009
<i>Enallagma praeverum</i>	Misidentification	Urrutia, 2005
<i>Erythemis sp.</i>	Misidentification	Pérez-Gutiérrez & Palacino-Rodríguez, 2011
<i>Erythrodiplax connata</i>	Taxonomic change	Borror, 1942
<i>Erythrodiplax minuscula</i>	Misidentification	Pérez-Gutiérrez & Palacino-Rodríguez, 2011
<i>Hetaerina proxima</i>	Misidentification	Förster, 1914
<i>Hetaerina simplex</i>	Misidentification	Dunkle, 1981
<i>Hetaerina vulnerata</i>	Misidentification	Pérez-Gutiérrez & Palacino-Rodríguez, 2011
<i>Ischnura denticollis</i>	Misidentification	Urrutia, 2005
<i>Lestes henshawi</i>	Misidentification	Urrutia, 2005
<i>Macrothemis tesellata</i>	Taxonomic change	Ris, 1918
<i>Metaleptobasis bicornis</i>	Misidentification	Ris, 1918
<i>Metaleptobasis gabrielae</i>	Misidentification	Bota-Sierra et al., 2018
<i>Metaleptobasis westfalli</i>	Junior synonym	Pérez-Gutiérrez & Palacino-Rodríguez, 2011
<i>Orthemis ferruginea</i>	Dubious identification	Altamiranda, 2009
<i>Perithemis mooma</i>	Junior synonym	Ris, 1930
<i>Phlogenia cassandra</i>	Misidentification	Pérez-Gutiérrez & Palacino-Rodríguez, 2011
<i>Psaironeura remissa</i>	Misidentification	Garzón & Realpe, 2009
<i>Rhionaeschna intricata</i>	Misidentification	Pérez-Gutiérrez & Palacino-Rodríguez, 2011
<i>Teinopodagrion venale</i>	Misidentification	Hagen, 1862
<i>Telebasis digitocollis</i>	Misidentification	Pérez-Gutiérrez & Palacino-Rodríguez, 2011
<i>Tramea calverti</i>	Junior synonym	De Marmels & Rácenis, 1982
<i>Triacanthagyna trifida</i>	Misidentification	Calvert, 1908
<i>Diaphlebia richteri</i>	Junior synonym	Bota-Sierra et al., 2015
<i>Hetaerina aurora</i>	Junior synonym	Ris, 1918

bean and Orinoco regions (Figure 3a). Among the 536 species, 29 have been described since 2011, and 65 are considered endemic, with the majority concentrated in the Andean region. The Antioquia department particularly highlights a notable number of endemic species (Figure 3b).

Two key indicators reflecting the state of knowledge on the odonate species include the description of their aquatic immature stages and females. In the case of Colombian odonate species, we found that females of 48 species remain undescribed, and the aquatic immature phase is unknown for 327 of them, representing more than half of the total species recorded in the country (Table 3, Figure 4). Most of the lesser-known species, in terms of immatures and females are within the Coenagrionidae and Libellulidae, however, there are quite a few gaps across all families within the country (Figure 4). There is a significant knowledge gap for these two parameters in the country, except for the Caribbean region (Figures 4b–c).

According to the extinction risk assessed by IUCN (2023), 33 species are currently facing some level of extinction risk. Among them, four species are critically endangered (CR), 13 endangered (EN), 12 vulnerable (VU), and four near threatened (NT) (Table 3, Figure 5a). The concentration of these endangered species is primarily in the Andean region. Equally concerning is the fact that 49 species are poorly known, preventing a reliable assessment of their extinction risk (DD). Likely, most of these poorly known species are also at some risk of extinction (Table 3, Figure 5b). These poorly understood species are distributed throughout all the regions in the country, notably with the Amazon and Pacific regions. Finally, five species have not undergone assessment yet since they were recently described. All of them are found from restricted distributions and their habitats are threatened by mining and agriculture expansion. Therefore, these species are also at some level of extinction risk (Table 3). The good news is that the remaining 449 species occurring in Colombia are currently without identified extinction risk (Table 3).

Table 3. Current List of Colombian odonates, with the departments where the species has been reported, its IUCN status, information on endemicity, female and larval description, the museums where the specimens are stored, and the references that mention the species. Bold caption means the species is a Colombian endemic, * means the female of the species is not described. Am: Amazonas; An: Antioquia; At: Atlántico; Ar: Arauca; AS: Archipiélago de San Andrés; Bo: Bolívar; By: Boyacá; Cau: Cauca; Ce: Cesar; Ch: Chocó; Cl: Caldas; Co: Córdoba; Cq: Caquetá; Cs: Casanare; Cu: Cundinamarca; Gu: Guainía; Gv: Guaviare; Gj: La Guajira; Hu: Huila; Ma: Magdalena; Me: Meta; Na: Nariño; Ns: Norte de Santander; Pu: Putumayo; Qu: Quindío; Ri: Risaralda; St: Santander; To: Tolima; Va: Vaupés; Vi: Valle del Cauca; Vi: Vichada.

Species	IUCN	Larva description	Depart- ments	Collections	References
ZYGOPTERA					
Perilestidae					
<i>Perilestes bispinus</i> Kimmings, 1958*	DD	No	Gu	ANDES-E	Aristizabal-Botero et al., 2022
<i>Perilestes kahli</i> Williamson & Williamson, 1924	LC	No	Cq, Me	ANDES-E	Amaya-Perilla & Palacino-Rodríguez, 2012
<i>Perilestes solutus</i> Williamson & Williamson, 1924	LC	No	Me	CEUA, MHNU-E	Álvarez-Álvarez et al., 2022, 2023
<i>Perissolestes cornutus</i> (Selys, 1886)	LC	No	Am, Pu	ANDES-E, CEUA, ICN	Bota-Sierra et al., 2015
<i>Perissolestes magdalenae</i> (Williamson & Williamson, 1924)	LC	Novelo-Gutiérrez & González-Soriano, 1986	An	UMMZ	Williamson & Williamson, 1924
<i>Perissolestes remotus</i> (Williamson & Williamson, 1924)	LC	Román-Heracleo et al., 2018	An, At, Ch, Na, St	ANDES-E, CEUA, UMMZ	Bota-Sierra et al., 2018a, 2019a; Garzón & Realpe, 2009; Palacino-Rodríguez et al., 2020a; Stand-Pérez et al., 2021; Williamson & Williamson, 1924
<i>Perissolestes romulus</i> Kennedy, 1941	LC	No	Cq	UARC	Stand-Pérez et al., 2022
<i>Perissolestes rupestris</i> Florez, Bota-Sierra, Cano-Cobos, 2023	Na	No	Cs, Gv, Me	ANDES-E, CEUA, UARC	Florez et al., 2023
Lestidae					
<i>Archilestes chocoanus</i> Pérez-Gutiérrez, 2012	DD	No	Ch, Ri, Vi	ANDES-E, CEUA, UARC	Bota-Sierra et al., 2019a; Pérez-Gutiérrez, 2012
<i>Archilestes grandis</i> (Rambur, 1842)	LC	Needham, 1904	An, Cs, Ch, Cu, Ma, St	ANDES-E, CEUA, CMNH, MEFLG, UARC	Calvert, 1909; Ris, 1918
<i>Lestes apollinaris</i> Navás, 1934	LC	De Marmels, 2004	By, Cu, Hu, St	ANDES-E, CEUA, MCZ, UARC	Donnelly, 1996; Navás, 1934; Ris, 1918; Torres-Pachón & Realpe, 2015
<i>Lestes curvatus</i> Belle, 1997	LC	No	Gv	ANDES-E	Florez et al., 2023
<i>Lestes dichrostigma</i> Calvert, 1909	LC	Muzón & Weigel, 2007	Vi	ANDES-E	NA
<i>Lestes forficula</i> Rambur, 1842	LC	Calvert, 1928	An, Cu, Hu, Gj, Ma, Me, Qu, Ri, St, Su, Vi	ANDES-E, CEUA, MHNU-E, MIZA, UARC	Álvarez-Álvarez et al., 2023; Bota-Sierra et al., 2019a; De Marmels, 2006; Lara, 2016
<i>Lestes helix</i> Ris, 1918	LC	No	Gu, Gv, Me, Va	ANDES-E, ICN	Aristizabal-Botero et al., 2022; Bota-Sierra, 2014b; Bota-Sierra et al., 2015
<i>Lestes jerrelli</i> Tennesen, 1997	LC	No	Me	CEUA	Bota-Sierra, 2014b
<i>Lestes minutus</i> Selys, 1862	LC	No	Gu, Me	ANDES-E, CEUA	Aristizabal-Botero et al., 2022; Bota-Sierra, 2014b
<i>Lestes sternalis</i> Navás, 1930*	DD	No	Cu	NA	Navás, 1924
<i>Lestes tenuatus</i> Rambur, 1842	LC	Calvert, 1928	An, At, Ch, Cu, Gj, Ma, St, Su	ANDES-E, CEUA, CMNH, UARC	Calvert, 1909; Stand-Pérez et al., 2021

Species	IUCN	Larva description	Departments	Collections	References
Platystictidae					
<i>Palaemnema apicalis</i> Navás, 1924*	DD	No	By, Cs, Cu, Me	ANDES-E, CEUA, UARC	Calvert, 1931
<i>Palaemnema brucei</i> Calvert, 1931	DD	No	An	CEUA, UARC	Calvert, 1931
<i>Palaemnema brucelli</i> Kennedy, 1938	LC	No	Ri	CEUA	Bota-Sierra et al., 2019a
<i>Palaemnema carmelita</i> Ris, 1918	DD	No	Ch, VI	ANDES-E, UMMZ	Calvert, 1931; Ris, 1918
<i>Palaemnema clementia</i> Selys, 1886	LC	De Marmels, 2007	An, By, Ch, Cl, Cs, Cu, Ma, Me, Ri	ANDES-E, CEUA, CMNH, MPUJ-ENT, UARC	Bota-Sierra et al., 2019a; Calvert, 1909
<i>Palaemnema croceicauda</i> Calvert, 1931	CR	No	An	CEUA, UMMZ	Calvert, 1931
<i>Palaemnema cyclohamulata</i> Donnelly, 1992	DD	No	An, Ch, Ri	ANDES-E, CEUA, UARC	Bota-Sierra et al., 2018b
<i>Palaemnema dentata</i> Donnelly, 1992	LC	No	An, At, Ch, VI	ANDES-E, CEUA, MEFLG, UARC	Bota-Sierra et al., 2019a; Stand-Pérez et al., 2021
<i>Palaemnema edmondi</i> Calvert, 1931*	CR	No	An	NA	Calvert, 1931
<i>Palaemnema joanetta</i> Kennedy, 1940	LC	No	Cau, Ch	ANDES-E	NA
<i>Palaemnema melanocauda</i> Kennedy, 1942*	DD	No	Ri	CEUA	Bota-Sierra et al., 2019a
<i>Palaemnema mutans</i> Calvert, 1931	LC	Amaya-Vallejo & Novelo-Gutiérrez, 2011	Ch, Pu, VI	ANDES-E, CEUA, IEXA, UARC	Amaya-Vallejo & Novelo-Gutiérrez, 2011
<i>Palaemnema nathalia</i> Selys, 1886	LC	No	An, Ch	ANDES-E, CEUA	NA
<i>Palaemnema peruviana</i> Ris, 1918*	DD	No	Am	ICN	Bota-Sierra et al., 2015
<i>Palaemnema picicaudata</i> Kennedy, 1938	LC	No	Gv, Pu	ANDES-E, CEUA	Bota-Sierra et al., 2018a
Calopterygidae					
<i>Hetaerina amazonica</i> Sjöstedt, 1918	LC	No	Am, Gu, Va	ANDES-E, CEUA	NA
<i>Hetaerina caja caja</i> (Drury, 1773)	LC	Geijskes, 1943	An, Ch, Cl, Cs, Gv, Gj, Hu, Ma, Me, Na, St, To, Va, VI	ANDES-E, CEUA, CMNH, MHNU-E, MLS-I, MPUJ-ENT, UARC, UMMZ	Álvarez-Álvarez et al., 2023; Bota-Sierra et al., 2018a, 2019a; Calvert, 1909; Cuellar-Cardozo et al., 2020; Florez et al., 2023; Palacino-Rodríguez et al., 2017, 2020a; Ris, 1918; Williamson, 1923c
<i>Hetaerina caja dominula</i> Hagen, 1853	LC	Geijskes, 1943	An, By, Cl, Ch, Cu, Ma, Me, Ns, Pu, Ri, St, To, VI	ANDES-E, CEUA	Bota-Sierra et al., 2019a; Novelo-Gutiérrez & Bota-Sierra, 2021b; Palacino-Rodríguez et al., 2017; Ris, 1918
<i>Hetaerina capitalis</i> Selys, 1873	LC	De Marmels, 1985	Cq, Gv	ANDES-E, UARC	Florez et al., 2023; Stand-Pérez et al., 2022
<i>Hetaerina charca</i> Calvert, 1909	LC	No	An, By, Cau, Ch, Cl, Cu, Gj, Hu, Ma, Na, Ns, Qu, Ri, St, To, VI	ANDES-E, CEUA, UARC, MEFLG, MIZA	Bota-Sierra et al., 2019a; De Marmels, 2006; Ris, 1918; Velásquez, 2012
<i>Hetaerina cruentata</i> (Rambur, 1842)	LC	Zloty et al., 1993	An, By, Cu, Cl, Hu, Me, Na, Qu, Ri, VI	ANDES-E, CEUA, UARC	Bota-Sierra et al., 2018a, 2019a; Garrison & von Ellenrieder, 2024; Novelo-Gutiérrez & Bota-Sierra, 2021b; Palacino-Rodríguez et al., 2017; Ris, 1918
<i>Hetaerina duplex</i> Selys, 1869	LC	No			

Species	IUCN	Larva description	Departments	Collections	References
<i>Hetaerina fuscoguttata</i> Selys, 1878	LC	Zloty et al., 1993	Ch, VI	ANDES-E, CEUA, MCUB, MEFLG	Bota-Sierra et al., 2019a; Palacino-Rodríguez et al., 2020a
<i>Hetaerina laesa</i> Hagen, 1853	LC	No	Am	ANDES-E	NA
<i>Hetaerina miniata</i> Selys, 1879	LC	Zloty et al., 1993	An, Ch, Cl, St, To	ANDES-E, CEUA, UARC, UMMZ	Garzón & Realpe, 2009; Williamson, 1923c
<i>Hetaerina occisa</i> Hagen, 1853	LC	Zloty et al., 1993	An, At, By, Cl, Cau, Ch, Cs, Cu, Gj, Hu, Ma, Me, Ns, Pu, Ri, To, VI	ANDES-E, CEUA, CMNH, UARC, MEFLG, MLS-I, MPUJ_ENT, UMMZ	Altamiranda, 2009; Bota-Sierra et al., 2018a, 2019a; Calvert, 1909; Cuellar-Cardozo et al., 2020; Hagen, 1869; Navás, 1935; Palacino-Rodríguez, 2009; Palacino-Rodríguez et al., 2017; Ris, 1918; Salazar et al., 2015; Stand-Pérez et al., 2021; Williamson, 1923c
<i>Hetaerina sanguinea</i> Selys, 1853	LC	No	Am, Cq, Gu, Gv, Me, Pu	ANDES-E, CEUA, MHNU-E, UARC	Álvarez-Álvarez et al., 2023; Bota-Sierra, 2012; Bota-Sierra et al., 2015, 2018b; Florez et al., 2023; Palacino-Rodríguez et al., 2017; Ris, 1918
<i>Hetaerina sempronia</i> Hagen, 1853	LC	Zloty et al., 1993	NA	NA	Garrison, 1990
<i>Hetaerina westfalli</i> Rácenis, 1968	LC	No	Cs, Gu, Gv, Me, Va	ANDES-E, CEUA, MHNU-E	Álvarez-Álvarez et al., 2023; Aristizabal-Botero et al., 2022; Bota-Sierra et al., 2015; Florez et al., 2023
<i>Mnesarete astrape</i> De Marmels, 1989	LC	No	Am	ANDES-E	NA
<i>Mnesarete drepame</i> Garrison, 2006	LC	No	Am	ANDES-E	NA
<i>Mnesarete fulgida</i> (Selys, 1879)*	LC	No	Am, Cq, Pu, Va	ANDES-E, CEUA, UARC, RWG	Bota-Sierra et al., 2015; Garrison, 2006; Stand-Pérez et al., 2022
<i>Mnesarete hauxwelli</i> (Selys, 1869)	LC	No	Pu	ANDES-E, CEUA, UARC, LES	Bota-Sierra et al., 2018a; Fraser, 1946a
<i>Mnesarete metallica</i> (Selys, 1869)	LC	No	Am, Cq, Gv, Pu, Va	ANDES-E, CEUA, LES, RWG	Bota-Sierra et al., 2015; Florez et al., 2023; Fraser, 1946a; Garrison, 2006
<i>Ormenophlebia imperatrix</i> (McLachlan, 1878)	LC	Garrison, 2006	Cu	FNS	Ris, 1918
Dicteriadidae					
<i>Heliocharis amazona</i> Selys, 1853	LC	Geijskes, 1986	Cau, Me, Pu, Va	ANDES-E, CEUA, LES	Bota-Sierra et al., 2015, 2018a; Palacino-Rodríguez et al., 2017; Ris, 1918
Heteragrionidae					
<i>Heteragrion aequatoriale</i> Selys, 1886	LC	No	An, Na, Ri, VI	CEUA, UARC	Bota-Sierra & Novelo-Gutiérrez, 2017; Bota-Sierra et al., 2018a; Novelo-Gutiérrez & Bota-Sierra, 2021b
<i>Heteragrion angustipenne</i> Selys, 1886	LC	No	Pu	CEUA, UARC	Stand-Pérez et al., 2019
<i>Heteragrion bariai</i> De Marmels, 1989	LC	De Marmels, 2004	Am, Cq, Gu, Me, Va	ANDES-E, CEUA, ICN, UARC	Bota-Sierra, 2014b; Florez et al., 2023; Stand-Pérez et al., 2019
<i>Heteragrion bickorum</i> Daigle, 2005	LC	No	Cq, Pu	ANDES-E, CEUA, UARC	Stand-Pérez et al., 2019
<i>Heteragrion breweri</i> De Marmels, 1989	LC	De Marmels, 2004	Cq, Gu, Gv, Me, Va, Vi	ANDES-E, CEUA	Aristizabal-Botero et al., 2022; Florez et al., 2023; Stand-Pérez et al., 2019
<i>Heteragrion calendulum</i> Williamson, 1919	EN	No	An, Ri	CEUA	Bota-Sierra & Novelo-Gutiérrez, 2017
<i>Heteragrion demarmelsi</i> Stand-Pérez, Bota-Sierra & Pérez-Gutiérrez, 2019	EN	No	Am, Gu	ANDES-E, CEUA, MPUJ_ENT, UARC	Stand-Pérez et al., 2019

Species	IUCN	Larva description	Departments	Collections	References
<i>Heteragrion erythrogasterum</i> Selys, 1886	LC	Ramírez, 1992	An, By, Cl, Ch	ANDES-E, CEUA, MCUB, MEFLG, MPUJ_ENT, UARC	Bota-Sierra & Novelo-Gutiérrez, 2017; Palacino-Rodríguez et al., 2020a; Williamson, 1919
<i>Heteragrion flavidorum</i> Calvert, 1909	DD	No	Cau, Me, Pu	ANDES-E, CEUA, UARC	Stand-Pérez et al., 2019
<i>Heteragrion inca</i> Calvert, 1909	LC	No	Am, Gv, Pu	ANDES-E, CEUA, ICN	Florez et al., 2023; Stand-Pérez et al., 2019
<i>Heteragrion mitratum atroterminatum</i> Donnelly, 1992	LC	De Marmels, 2004	An, Cl, Ch, Hu	ANDES-E, CEUA, UARC	Bota-Sierra & Novelo-Gutiérrez, 2017; Salazar et al., 2015; Williamson, 1919
<i>Heteragrion mitratum mitratum</i> Williamson, 1919	LC	De Marmels, 2004	Ri, To, Vi	ANDES-E, CEUA, UARC	Bota-Sierra et al., 2019a; Stand-Pérez et al., 2019; Williamson, 1919
<i>Heteragrion peregrinum</i> Williamson, 1919	VU	No	An, Ch, Ri	ANDES-E, CEUA, UARC	Bota-Sierra & Novelo-Gutiérrez, 2017
<i>Heteragrion tatama</i> Bota-Sierra & Novelo-Gutiérrez, 2017	LC	No	Ri	ANDES-E, CEUA, UARC	Stand-Pérez et al., 2019
<i>Heteragrion valgum</i> Donnelly, 1992	DD	No	Ch	ANDES-E, ME-FLG, UARC	Bota-Sierra, 2014b; Stand-Pérez et al., 2022
<i>Oxystigma cyanofrons</i> Williamson, 1919	LC	Geijskes, 1943	Me	ICN	Bota-Sierra et al., 2015
<i>Oxystigma petiolatum</i> (Selys, 1862)	LC	No	Cq	UARC	Stand-Pérez et al., 2022
Megapodagrionidae					
<i>Megapodagrion megalopus</i> (Selys, 1869)	LC	No	Cq, Gu, Gv, Pu	ANDES-E, ICN	De Marmels, 2001; Pérez-Gutiérrez, 2007
<i>Teinopodagrion caquetanum</i> De Marmels, 2001*	LC	Pérez-Gutiérrez, 2007	Cq, Cu, Me	ANDES-E, CEUA, UARC, USNM	Amaya-Perilla & Palacino-Rodríguez, 2012; De Marmels, 2001; Pérez-Gutiérrez, 2007
<i>Teinopodagrion croizati</i> De Marmels, 2002*	LC	No	Ri	CEUA	Bota-Sierra et al., 2018b
<i>Teinopodagrion curtum</i> (Selys, 1886)	LC	No	Am, Pu	CEUA, ICN, UMMZ	Bota-Sierra et al., 2015, 2018a; De Marmels, 2001
<i>Teinopodagrion epidrium</i> De Marmels, 2001	LC	No	Cs, Me	CEUA	Pérez-Gutiérrez & Palacino-Rodríguez, 2011
<i>Teinopodagrion macropus</i> (Selys, 1862)	LC	No	Cu, Me, Ns, St	ANDES-E, UARC, UMMZ	De Marmels, 2001
<i>Teinopodagrion mercenarium</i> (Hagen, 1869)	LC	No	An, Cu, Hu, To	ANDES-E, CEUA, MEFLG, UMMZ	De Marmels, 2001; Novelo-Gutiérrez & Bota-Sierra, 2021b
<i>Teinopodagrion muzatum</i> (Navás, 1934)	DD	No	By	MNHN	De Marmels, 2001; Navás, 1934
<i>Teinopodagrion oscillans</i> (Selys, 1862)	LC	De Marmels, 2001	By, Cu	CEUA, UARC, UMMZ	Hagen, 1869; De Marmels, 2001
<i>Teinopodagrion temporale</i> (Selys, 1862)	VU	No	An, Cu, Qu	CEUA, UMMZ	Navás, 1935
<i>Teinopodagrion vallenatum</i> De Marmels, 2001	NT	Pérez-Gutiérrez, 2007	Ma	ANDES-E, CEUA, UARC, UMMZ	De Marmels, 2001; Pérez-Gutiérrez, 2007
Mesagrionidae					
<i>Mesagrion leucorrhinum</i> Selys, 1885	LC	Pérez-Gutiérrez & Montes-Fontalvo, 2011	An, By, Cl, Cs, Cu, Me, Pu, St	ANDES-E, CEUA, MIZA, UARC, UMMZ	Amaya-Perilla & Palacino-Rodríguez, 2012; Garrison & von Ellenrieder, 2005; Navás, 1935; Novelo-Gutiérrez & Bota-Sierra, 2021b; Pérez-Gutiérrez & Montes-Fontalvo, 2011b; Ris, 1918

Species	IUCN	Larva description	Departments	Collections	References
Philogenidae					
<i>Archaeopodagrion fernandoi</i> Bota-Sierra, 2017	LC	Novelo-Gutiérrez et al., 2020	An, Ri	ANDES-E, CEUA	Bota-Sierra, 2017
<i>Archaeopodagrion recurvatum</i> Amaya-Vallejo, Bota-Sierra, Novelo-Gutiérrez & Sánchez-Herrera, 2021	LC	Amaya-Vallejo et al., 2021	Ri, VI	ANDES-E, CEUA	Amaya-Vallejo et al., 2021
<i>Philogenia berenice</i> Higgins, 1901*	DD	No	Am	ANDES-E, CEUA	Bota-Sierra et al., 2015
<i>Philogenia cristalina</i> Calvert, 1924	Vu	No	An, Cl	CEUA, CMNH	Calvert, 1924; Novelo-Gutiérrez & Bota-Sierra, 2021b
<i>Philogenia ebona</i> Dunkle, 1986*	DD	No	Ch	CEUA, FSCA	Bota-Sierra et al., 2019a; Dunkle, 1986
<i>Philogenia helena</i> Hagen, 1869	NT	No	By, Cu, St	CEUA, NHRS	Ris, 1918
<i>Philogenia martae</i> Bota-Sierra, 2017	LC	No	Ri, VI	ANDES-E, CEUA	Bota-Sierra, 2017
<i>Philogenia minteri</i> Dunkle, 1986	LC	No	Pu	CEUA	Bota-Sierra et al., 2018a
<i>Philogenia monotis</i> (Kennedy, 1941)	EN	No	Na, VI	CEUA	Bota-Sierra et al., 2018a
<i>Philogenia raphaela</i> Selys, 1886*	DD	No	Pu	CEUA, UARC	Bota-Sierra et al., 2018a
<i>Philogenia realpei</i> Cano-Cobos & Bota-Sierra, 2023	NA	No	Cau, Pu	ANDES-E, UARC	Cano-Cobos et al., 2023b
<i>Philogenia sucra</i> Dunkle, 1986*	DD	No	Cau, Cq, Pu	CEUA, USNM	Bota-Sierra et al., 2018a; Dunkle, 1986
<i>Philogenia zeteki</i> Westfall and Cumming, 1956*	LC	No	Ch	ANDES-E, CEUA, UARC	Bota-Sierra, 2017
Polythoridae					
<i>Chalcopteryx scintillans</i> McLachlan, 1870	LC	No	Cq, Va	ANDES-E, ICN	Bota-Sierra et al., 2015
<i>Cora inca</i> Selys, 1873	LC	Novelo-Gutiérrez & Bota-Sierra, 2023	An, Hu, Ri, To	ANDES-E, CEUA, UARC	Bota-Sierra et al., 2019a
<i>Cora klenei</i> Karsch, 1891	LC	No	Ch, Ri, VI	CEUA	Bick & Bick, 1990; Bota-Sierra et al., 2019a
<i>Cora marina</i> Selys, 1868	LC	Novelo-Gutiérrez & González-Soriano, 1985	An	CEUA	NA
<i>Cora modesta</i> Selys, 1869	DD	No	VI	ANDES-E	Bick & Bick, 1990; Ris, 1918
<i>Cora verapax</i> Bota-Sierra, Sánchez-Herrera, Palacino-Rodríguez, 2018*	LC	No	Ri	CEUA	Bota-Sierra et al., 2018b
<i>Cora xanthostoma</i> Ris, 1918	LC	De Marmels, 2007	By, Cs, Cu, Me	ANDES-E, CEUA, UARC	Amaya-Perilla & Palacino-Rodríguez, 2012; Ris, 1918
<i>Euthore fasciata fasciata</i> (Hagen, 1853)	LC	De Marmels, 2007			
<i>Euthore fasciata fastigata</i> (Selys, 1859)	LC	De Marmels, 2007	An, By, Cl, Cs, Cu, Hu, Me, Ns	ANDES-E, CEUA, MEFLG, RWG	Bick & Bick, 1992; Ris, 1918; Sanchez et al., 2010
<i>Euthore fasciata plagiata</i> Selys, 1873	LC	De Marmels, 2007			

Species	IUCN	Larva description	Departments	Collections	References
<i>Euthore fassli</i> Ris, 1914	LC	No	An, Ri, Vi	ANDES-E, CEUA, MEFLG, UARC	Bota-Sierra et al., 2019a; Ris, 1918
<i>Euthore hyalina</i> (Selys, 1853)	DD	No	By, Cu	ANDES-E	Ris, 1918
<i>Euthore inlactea</i> Calvert, 1909	DD	No	St	CEUA	NA
<i>Euthore leroii</i> Ris, 1918	DD	No	Cl, To	MEFLG	Ris, 1918
<i>Miocora aurea</i> (Ris, 1918)	LC	Novelo-Gutiérrez & Bota-Sierra, 2022	Ri, Vi	CEUA, RWG	Bota-Sierra et al., 2019a; Garrison, 2007; Ris, 1918
<i>Miocora lugubris</i> (Navás, 1934)*	VU	Ramírez & Alta-miranda, 2011	An, Cl, Ri	ANDES-E, CEUA, MEFLG	Bota-Sierra et al., 2019a; Navás, 1934; Ramírez et al., 2011
<i>Miocora peraltica</i> Calvert, 1917	LC	No	An, Ch, Vi	ANDES-E, CEUA, FSCA	Bota-Sierra et al., 2019a; Kennedy, 1940
<i>Miocora semiopaca</i> (Selys, 1878)	LC	Ramírez et al., 2011	Ch	ANDES-E, MEFLG, UARC	NA
<i>Polythore albistriata</i> Bota-Sierra & Sánchez, 2023	NA	No	Cq, Hu, Pu	ANDES-E, CEUA, UARC	Bota-Sierra & Sánchez, 2023
<i>Polythore beata</i> (McLachlan, 1869)	LC	No	Am, Cq, Pu	ANDES-E, UARC	Bota-Sierra et al., 2015; Stand-Pérez et al., 2022
<i>Polythore chiribiquete</i> Zloty & Pritchard, 2001	DD	No	Cq	USNM	Zloty & Pritchard, 2001
<i>Polythore concinna</i> (McLachlan, 1881)	LC	No	Cau, Cq, Pu	ANDES-E, CEUA, LES, UARC, USNM	Bick & Bick, 1986; Bota-Sierra et al., 2018a; Fraser, 1946a
<i>Polythore derivata</i> (McLachlan, 1881)	LC	No	Cau, Cq, Pu	ANDES-E, CEUA, LES, UARC, USNM	Bick & Bick, 1985; Fraser, 1946a
<i>Polythore gigantea</i> (Selys, 1853)	LC	Novelo-Gutiérrez & Bota-Sierra, 2023	An, Ch, Cl, Ri, To	ANDES-E, CEUA, MEFLG, UARC, USNM	Altamiranda & Ortega, 2012; Bick & Bick, 1985; Bota-Sierra et al., 2019a; Novelo-Gutiérrez & Bota-Sierra, 2021b; Ris, 1918; Sanchez et al., 2010
<i>Polythore mutata</i> (McLachlan, 1881)	LC	No	Hu, Pu	ANDES-E, CEUA, LES, UARC	Fraser, 1946a
<i>Polythore procera</i> (Selys, 1869)	LC	No	By, Cu, Me	ANDES-E, CEUA, MEFLG	Ris, 1918; Sanchez & Realpe, 2010; Sanchez et al., 2010
<i>Stenocora percornuta</i> Kennedy, 1940	NT	No	Pu	CEUA	Bota-Sierra et al., 2018a
Incpta Sedis					
<i>Heteropodagrion croizati</i> Pérez-Gutiérrez & Montes, 2011	LC	No	Pu	UARC, MIZA	Pérez-Gutiérrez & Montes-Fontalvo, 2011c
<i>Heteropodagrion sanguinipes</i> Selys, 1885	LC	Tennessee, 2010	Pu	UARC	NA
<i>Heteropodagrion superbum</i> Ris, 1918	LC	Tennessee, 2010	An, Cl, Ri, Qu, Vi	ANDES-E, CEUA, DRP, RWG, UARC	Bota-Sierra et al., 2019a; Garrison & von Ellenrieder, 2005; Ris, 1918
Coenagrionidae					
<i>Acanthagrion abunae</i> Leonard, 1977	LC	No	Me, Va	ANDES-E, UARC	Rojas-Riaño & Sánchez-Herrera, 2009
<i>Acanthagrion adustum</i> Williamson, 1916	LC	Geijskes, 1943	Gu, Me, Vi	ANDES-E, UARC	Aristizabal-Botero et al., 2022, 2023; Rojas-Riaño & Sánchez-Herrera, 2009
<i>Acanthagrion amazonicum</i> Sjöstedt, 1918	LC	No	Va	ANDES-E	Cano-Cobos et al., 2023a

Species	IUCN	Larva description	Departments	Collections	References
<i>Acanthagrion apicale</i> Selys, 1876	LC	De Marmels, 1992	Am, Cq, Cu, Gu, Gv, Me, Va	ANDES-E, CEUA, UARC, MHNU-E	Álvarez-Álvarez et al., 2023; Amaya-Perilla & Palacino-Rodríguez, 2012; Aristizabal-Botero et al., 2022; Bota-Sierra, 2012; Bota-Sierra et al., 2015; Florez et al., 2023; Gloger, 1967; Palacino-Rodríguez et al., 2017
<i>Acanthagrion ascendens</i> Calvert, 1909	LC	Geijskes, 1941	Am, Ch, Gu, Gv, Me	ANDES-E, CEUA, UARC, UMMZ	Amaya-Perilla & Palacino-Rodríguez, 2012; Aristizabal-Botero et al., 2022; Florez et al., 2023; Leonard, 1977
<i>Acanthagrion chacoense</i> Calvert, 1909	LC	No	Me	CEUA	NA
<i>Acanthagrion cuyabae</i> Calvert, 1909	LC	No	Gv	ANDES-E	Florez et al., 2023
<i>Acanthagrion floridense</i> Fraser, 1946	LC	Lozano et al., 2017	Cau, Cq, Cu, Me, Pu	ANDES-E, BMNH, CEUA, ICN, UARC	Álvarez-Álvarez et al., 2023; Bota-Sierra et al., 2018a; Fraser, 1946a; Rojas-Riaño & Sánchez-Herrera, 2009
<i>Acanthagrion fluviatile</i> (De Marmels, 1984)	DD	De Marmels, 1990	Ch, Ma, Me	CEUA	De Marmels, 1984
<i>Acanthagrion inexpectum</i> Leonard, 1977*	LC	No	Cu, Hu, St	ANDES-E, ICN	Garzón & Realpe, 2009; Rojas-Riaño & Sánchez-Herrera, 2009; Lara, 2016
<i>Acanthagrion jessei</i> Leonard, 1977	LC	No	Me	CEUA, MHNU-E	Álvarez-Álvarez et al., 2022, 2023
<i>Acanthagrion kennedii</i> Williamson, 1916	LC	No	Hu	MLS-I	Cuellar-Cardozo et al., 2020
<i>Acanthagrion lancea</i> Selys, 1876	LC	Anjos-Santos et al., 2011	Am	CEUA	Bota-Sierra, 2012; Bota-Sierra et al., 2015
<i>Acanthagrion minutum</i> Leonard, 1977	LC	No	Gv, Me	ANDES-E, CEUA, LES, MHNU-E	Álvarez-Álvarez et al., 2023; Florez et al., 2023; Rojas-Riaño & Sánchez-Herrera, 2009
<i>Acanthagrion obsoletum</i> (Förster, 1914)	LC	No	Am, Cau, Cu, Me, Pu	ANDES-E, CEUA, LES, UARC	Amaya-Perilla & Palacino-Rodríguez, 2012; Bota-Sierra et al., 2018a; Fraser, 1946a; Ris, 1918
<i>Acanthagrion phallicorne</i> Leonard, 1977	LC	No	Cq	ANDES-E	Cano-Cobos et al., 2023a
<i>Acanthagrion trilobatum</i> Leonard, 1977	LC	Román-Heracleo et al., 2019	An, At, Bo, By, Ce, Ch, Cl, Cq, Cu, Hu, Ma, Me, Na, Qu, Ri, St, Su, To, Vi	ANDES-E, CEUA, SMF, UARC, UMMZ	Amaya-Perilla & Palacino-Rodríguez, 2012; Bota-Sierra et al., 2018a, 2019a; Leonard, 1977; Garzón & Realpe, 2009; Ris, 1918
<i>Acanthagrion truncatum</i> Selys, 1876	LC	Silva-Vilela et al., 2020	Me, Pu	ANDES-E, UARC	Cano-Cobos et al., 2023a
<i>Acanthagrion vidua</i> Selys, 1876	LC	De Marmels, 2007	By, Cq, Cs, Cu, Me, Ns, Qu	ANDES-E, CEUA, ICN, MIZA, UARC	Amaya-Perilla & Palacino-Rodríguez, 2012; De Marmels, 2006; Ris, 1918; Rojas-Riaño & Sánchez-Herrera, 2009
<i>Acanthagrion viridescens</i> Leonard, 1977	LC	Gutierrez et al., 2015	Me, Pu	ANDES-E, ICN, MHNU-E	Álvarez-Álvarez et al., 2023; Rojas-Riaño & Sánchez-Herrera, 2009
<i>Acanthagrion williamsoni</i> Leonard, 1977*	EN	No	An, Cl, Cu, Hu, Me, Qu, To	ANDES-E, CEUA, UMMZ	Amaya-Perilla & Palacino-Rodríguez, 2012; Lara-Contreras et al., 2017; Leonard, 1977; Salazar et al., 2015
<i>Acanthagrion yungarum</i> Ris, 1918	LC	No	Pu	ANDES-E, UARC	Cano-Cobos et al., 2023a
<i>Acanthallagma caeruleum</i> Williamson & Williamson, 1924	LC	No	Cau, Me, Pu	ANDES-E, CEUA, MHNU-E	Álvarez-Álvarez et al., 2023; Bota-Sierra et al., 2018a
<i>Aeolagrion dorsale</i> (Burmeister, 1839)	LC	No	Am	CEUA	Bota-Sierra et al., 2015

Species	IUCN	Larva description	Departments	Collections	References
<i>Aeolagrion inca</i> (Selys, 1876)	LC	No	Am	CEUA	Bota-Sierra, 2012
<i>Amazoneura westfalli</i> Machado, 2001	LC	No	Pu	ANDES-E, CEUA, UARC	Bota-Sierra et al., 2018a
<i>Anisagrion inornatum</i> (Selys, 1876)	LC	No	By, Cl, Qu	ANDES-E, CEUA, ICN	Rojas-Riaño, 2011
<i>Anomisma abnorme</i> McLachlan, 1877	LC	No	Pu	LES	Fraser, 1946b
<i>Argia adamsi</i> Calvert, 1902	LC	De Marmels, 2007	An, Cl, Ch, Hu, Pu, St, To, Vi	ANDES-E, CEUA, MCUB, MEFLG, UARC, UMMZ	Bota-Sierra et al., 2019a; Garrison & von Ellenrieder, 2022; Garzón & Realpe, 2009; Palacino-Rodríguez et al., 2020a; Salazar et al., 2015
<i>Argia appendiculata</i> Garrison & von Ellenrieder, 2015	LC	No	Cq, Va	CSCA, RWG	Garrison & von Ellenrieder, 2015
<i>Argia collata</i> Selys, 1865	LC	No	Gy, Me	ANDES-E, MHNU-E, RWG	Álvarez-Álvarez et al., 2023; Florez et al., 2023; Garrison & von Ellenrieder, 2015
<i>Argia cuneifera</i> Garrison & von Ellenrieder, 2015	LC	No	Gu	RWG	Garrison & von Ellenrieder, 2015
<i>Argia cupraurea</i> Calvert, 1902	LC	No	An, At, Bo, Cl, Cau, Ch, Cu, Hu, Ma, Me, Ns, Ri, To, Vi	ANDES-E, CEUA, CMNH, FSCA, MLS-I, RWG, TWD, UARC, UMMZ, USNM	Bota-Sierra et al., 2019a; Cuellar-Cardozo et al., 2020; Garrison & von Ellenrieder, 2017; Stand-Pérez et al., 2021
<i>Argia difficilis</i> Selys, 1865	LC	Geijskes, 1946	Am, An, Me, Pu	ANDES-E, CEUA, MHNU-E	Álvarez-Álvarez et al., 2023; Bota-Sierra et al., 2018a; Garrison & von Ellenrieder, 2015
<i>Argia dives</i> Förster, 1914	LC	No	Me, Pu, Va	ANDES-E, CEUA, UARC	Bota-Sierra et al., 2018a; Palacino-Rodríguez et al., 2017
<i>Argia euphorbia</i> Fraser, 1946	LC	No	Am, Cq, Va	ANDES-E, UARC, RWG	Garrison & von Ellenrieder, 2015; Stand-Pérez et al., 2022
<i>Argia fissa</i> Selys, 1865	LC	No	An, By, Cu, Hu, Qu, St, VI	ANDES-E, CEUA, MEFLG, MIZA, MLS-I	Altamiranda, 2009; Cuellar-Cardozo et al., 2020; De Marmels, 2006; Ris, 1918
<i>Argia fulgida</i> Navás, 1934	LC	No	An, By, Ch, Ri, VI	CEUA, MCUB, MNHN	Garrison & von Ellenrieder, 2018; Palacino-Rodríguez et al., 2020a
<i>Argia gerhardi</i> Calvert, 1909	LC	No	Cu, Me	NA	Palacino-Rodríguez et al., 2017; Ris, 1918
<i>Argia indicatrix</i> Calvert, 1902	LC	No	An, By, Cau, Ch, Cu, Me, Pu, Ri, St, To, Vi, Va	ANDES-E, BMNH, CEUA, FSCA, ICN, LES, RWG, UARC, UMMZ	Bota-Sierra et al., 2015, 2018b; Fraser, 1946b; Garrison & von Ellenrieder, 2015; Garzón & Realpe, 2009; Palacino-Rodríguez et al., 2020a; Ris, 1918
<i>Argia infrequentula</i> Fraser, 1946	LC	No	Am, Cq, Pu	ANDES-E, UARC	Fraser, 1946b; Stand-Pérez et al., 2022
<i>Argia infumata</i> Selys, 1865	LC	No	Cq, Va	RWG, UARC	Garrison & von Ellenrieder, 2015; Stand-Pérez et al., 2022
<i>Argia insipida</i> Hagen, 1865	LC	No	Ma, Me	CEUA, MHNU-E, UMMZ	Álvarez-Álvarez et al., 2023; Garrison & von Ellenrieder, 2015
<i>Argia joallyne</i> Garrison & von Ellenrieder, 2015	LC	No	Gu	ANDES-E	NA
<i>Argia jocosa</i> Hagen, 1865	LC	De Marmels, 2012	An, Ch, Cu, Ma, Ri	ANDES-E, CEUA, CMNH	Bota-Sierra et al., 2019a; Calvert, 1909
<i>Argia kokama</i> Calvert, 1909	LC	No	Cau, Cu	ANDES-E, UMMZ	Garrison & von Ellenrieder, 2018

Species	IUCN	Larva description	Departments	Collections	References
<i>Argia limitata</i> Navás, 1924	LC	No	Me	CEUA	NA
<i>Argia loutoni</i> Garrison & von Ellenrieder, 2015	LC	No	Me	ANDES-E	Garrison & von Ellenrieder, 2015
<i>Argia mauffrayi</i> Garrison & Ramón-Cabrera, 2019*	LC	No	Ri, VI	ANDES-E, CEUA	Bota-Sierra et al., 2019a
<i>Argia medullaris</i> Hagen, 1865	LC	Pérez-Gutiérrez & Montes-Fontalvo, 2011	An, Cl, Cu, Hu, Na, Pu, Ri	ANDES-E, CEUA, MNHN, UARC, UMMZ	Bota-Sierra et al., 2019a; Garrison & von Ellenrieder, 2018
<i>Argia nataliae</i> Garrison, 2019	DD	No	An	CSCA, RWG, UMMZ	Garrison, 2019
<i>Argia oculata</i> Hagen, 1865	LC	Limongi, 1983	An, At, By, Cl, Ch, Cs, Cu, Gv, Hu, Ma, Me, Ns, Pu, Ri, To, VI	ANDES-E, CEUA, CMNH, FSCA, ICN, MEFLG, MHNN, MLS-I, RWG, UMMZ	Bota-Sierra et al., 2018a, 2019a; Calvert, 1909; Cuellar-Cardozo et al., 2020; Florez et al., 2023; Garrison & von Ellenrieder, 2015; Lara, 2016; Salazar et al., 2015; Stand-Pérez et al., 2021
<i>Argia orichalcea</i> Hagen, 1865	LC	Geijskes, 1946	At, Ce, Ma	ANDES-E, CEUA, CMNH, UARC	Calvert, 1909; Stand-Pérez et al., 2021
<i>Argia philippi</i> Garrison & von Ellenrieder, 2018	LC	No	Cq	RWG	Garrison & von Ellenrieder, 2018
<i>Argia popoluca</i> Calvert, 1902	LC	No	An, By, Me	RWG, UMMZ	Garrison & von Ellenrieder, 2017
<i>Argia pulla</i> Hagen, 1865	LC	Novelo-Gutiérrez, 1992	An, At, Cau, Ch, Cl, Cs, Cu, Gu, Hu, Ma, Me, Pu, Qu, Ri, St, To, VI	ANDES-E, CEUA, MCUB, MHNU-E, MIZA, MPUJ_ENT, RWG, UARC	Álvarez-Álvarez et al., 2023; Aristizabal-Botero et al., 2022; Bota-Sierra et al., 2018a, 2019a; De Marmels, 2006; Garrison & von Ellenrieder, 2015; Garzón & Realpe, 2009; Palacino-Rodríguez et al., 2017, 2020a; Salazar et al., 2015; Stand-Pérez et al., 2021
<i>Argia schneideri</i> Garrison & von Ellenrieder, 2017	LC	No	Pu	CEUA	Bota-Sierra et al., 2018a
<i>Argia talamanca</i> Calvert, 1907	LC	No	Ch, Cu, Hu, Ma, Me, Pu, Ri, St, VI	ANDES-E, CEUA, UARC	Bota-Sierra et al., 2019a; Garzón & Realpe, 2009; Ris, 1918; Salazar et al., 2015
<i>Argia translata</i> Hagen, 1865	LC	Geijskes, 1946	An, At, Bo, Ch, Cl, Cu, Hu, Ma, Me, Ri, St, To, VI	ANDES-E, CEUA, CMNH, FSCA, MCUB, MHNN, MPUJ_ENT, RWG, UARC, UMMZ, USNM	Bota-Sierra et al., 2019a; Calvert, 1909; Garrison & von Ellenrieder, 2015; Navás, 1935; Palacino-Rodríguez et al., 2017, 2020a; Salazar et al., 2015; Stand-Pérez et al., 2021
<i>Argia ulmeca</i> Calvert, 1902	LC	Novelo-Gutiérrez, 1992	Ch, To	ANDES-E	Garrison & von Ellenrieder, 2018
<i>Argia variegata</i> Förster, 1914	LC	No	An, Cau, Ri, Pu	CEUA, LES	Bota-Sierra et al., 2019a; Fraser, 1946b
<i>Bromeliagrion rehni</i> Garrison, 2005	LC	Torreias et al., 2008	Am	ANDES-E	NA
<i>Calvertagrion charis</i> Tennessen, 2015	LC	No	Am	CEUA	Tennessen, 2015
<i>Calvertagrion declivatum</i> Tennessen, 2015	LC	No	Cq	ANDES-E	NA
<i>Calvertagrion mauffrayi</i> Tennessen, 2015	LC	No	Cq, Pu	ANDES-E, CEUA	Bota-Sierra et al., 2018a
<i>Calvertagrion minutissimum</i> (Selys, 1876)	LC	No	Cq	ANDES-E	NA

Species	IUCN	Larva description	Departments	Collections	References
<i>Dactylobasis demarmelsi</i> Pérez-Gutiérrez, 2019	LC	No	Ch	CEUA, MCUB, UARC	Palacino-Rodríguez et al., 2020a; Pérez-Gutiérrez, 2019
<i>Denticulobasis garrisoni</i> Machado, 2009	DD	No	Am, Cq	ANDES-E, CEUA	Bota-Sierra et al., 2015
<i>Dolonagrion fulvellum</i> (Selys, 1876)	DD	No	Cq, Gu	ANDES-E	Cano-Cobos et al., 2023a
<i>Drepanoneura donnellyi</i> von Ellenrieder & Garrison, 2008	EN	No	An, Cl, St, To	CEUA, ANDES-E, RWG, UMMZ	Garzón & Realpe, 2009; von Ellenrieder & Garrison, 2008a
<i>Drepanoneura flinti</i> von Ellenrieder & Garrison, 2008	LC	No	Cq	ANDES-E, RWG, USNM	von Ellenrieder & Garrison, 2008a
<i>Drepanoneura letitia</i> (Donnelly, 1992)	DD	No	Ch, Na	CEUA	Bota-Sierra et al., 2018a, 2018b
<i>Drepanoneura muzoni</i> von Ellenrieder & Garrison, 2008	LC	No	Am	CEUA, ICN	Bota-Sierra et al., 2015
<i>Enallagma civile</i> (Hagen, 1861)	LC	Needham, 1903	An, By, Cu, St	ANDES-E, CEUA, MEFLG, UMNG, UARC	Altamiranda, 2009; Altamiranda-S et al., 2010; Bota-Sierra et al., 2019a; Cruz, 1988; Cuellar-Cardozo et al., 2016; Moreno Pallares & Guillot Monroy, 2012; Palacino-Rodríguez et al., 2020b
<i>Enallagma novaehispanie</i> Calvert, 1907	LC	Novelo-Gutiérrez, 2005	An, Cau, Cl, Hu, Ma, Qu, St, To	ANDES-E, CEUA, CMNH, MLS-I, MPUJ_ENT	Bota-Sierra et al., 2018a; Calvert, 1909; Cuellar-Cardozo et al., 2020
<i>Epipleoneura fuscaenea</i> Williamson, 1915*	LC	No	Me	MCUB	Bota-Sierra et al., 2018b
<i>Epipleoneura haroldoi</i> Santos, 1964	LC	No	Am, Va	ANDES-E, CEUA	NA
<i>Epipleoneura lencionii</i> Pessacq & Anjos-Santos, 2022	NA	No	By	ANDES-E	NA
<i>Epipleoneura metallica</i> Rácenis, 1955	LC	De Marmels, 2007	Cs, Gv, Me	ANDES-E, CEUA, MPUJ_ENT, UARC	Amaya-Perilla & Palacino-Rodríguez, 2012; Florez et al., 2023
<i>Epipleoneura solitaria</i> De Marmels, 1989*	LC	No	Gu	ANDES-E	NA
<i>Epipleoneura spatulata</i> Rácenis, 1960*	LC	No	Cq, Gu	ANDES-E	Stand-Pérez et al., 2022
<i>Epipleoneura tariana</i> Machado, 1985*	LC	No	Gu	ANDES-E	NA
<i>Epipleoneura venezuelensis</i> Rácenis, 1955	LC	No	Am, Cau, Cq, Gv, Me, Pu	ANDES-E, CEUA, MCUB	Bota-Sierra et al., 2018a, 2018b; Florez et al., 2023
<i>Homeoura chelifera</i> (Selys, 1876)	LC	Needham, 1904	An, By, Cu, Hu, Me	ANDES-E, CEUA, MEFLG, MHNU-E, UARC	Álvarez-Álvarez et al., 2023; Palacino-Rodríguez et al., 2017; von Ellenrieder, 2008
<i>Homeoura obrieni</i> von Ellenrieder, 2008	LC	No	Bo, Gv, Ma	ANDES-E, FSCA, MLP, RGW, UMMZ	Florez et al., 2023; von Ellenrieder, 2008
<i>Hylaeonympha magoi</i> Rácenis, 1968	DD	No	Gu	ANDES-E	NA
<i>Inpabasis nigridorsum</i> Bota-Sierra & Faasen, 2015	LC	No	Am, Cq	CEUA, UARC	Bota-Sierra et al., 2015; Stand-Pérez et al., 2022

Species	IUCN	Larva description	Departments	Collections	References
<i>Ischnura capreolus</i> (Hagen, 1861)	LC	Geijskes, 1941	Am, An, At, Ch, Cl, Cu, Gj, Gu, Hu, Me, Ma, Pu, St, Su, To, Va, Vi	ANDES-E, CEUA, CMNH, MCUB, MEFLG, MHNU-E, MPUJ_ENT	Álvarez-Álvarez et al., 2023; Amaya-Perilla & Palacino-Rodríguez, 2012; Aristizabal-Botero et al., 2022; Bota-Sierra, 2012; Bota-Sierra et al., 2015, 2019a; Calvert, 1902–08; Galindo-Ruiz et al., 2019; Garzón & Realpe, 2009; Lara, 2016; Palacino-Rodríguez et al., 2020a; Salazar et al., 2015; Stand-Pérez et al., 2021
<i>Ischnura chingaza</i> Realpe, 2010	LC	Casallas-Mancipe et al., 2012	By, Cu	ANDES-E, CEUA, MIZA	Casallas-Mancipe et al., 2012; Palacino-Rodríguez et al., 2020b, 2020c; Realpe, 2010; Torres-Pachón & Realpe, 2015
<i>Ischnura cruzi</i> De Marmels, 1987	LC	Velasquez et al., 2009	Cu	ANDES-E, CEUA, MIZA, UARC, UMNG	Cuellar-Cardozo et al., 2016; De Marmels, 1987; Moreno Pallares & Guillot Monroy, 2012; Palacino-Rodríguez et al., 2020b, 2020c; Velásquez et al., 2009
<i>Ischnura cyane</i> Realpe, 2010	LC	No	By, Cu, St	ANDES-E, CEUA	Galindo-Ruiz et al., 2019; Realpe, 2010
<i>Ischnura fluviatilis</i> Selys, 1876	LC	Rodrigues da Fonseca & Pujol-Luz, 1999	NA	NA	Bota-Sierra et al., 2019c
<i>Ischnura hastata</i> (Say, 1840)	LC	Needham, 1903	An, Ch, St	ANDES-E, CEUA, MCUB, UARC	Bota-Sierra et al., 2019a; Palacino-Rodríguez et al., 2020a
<i>Ischnura indivisa</i> (Ris, 1918)*	DD	No	VI, Qu	ANDES-E, FNS, MIZA	Bota-Sierra et al., 2019c; De Marmels, 2006; Rácenis, 1958; Ris, 1918
<i>Ischnura mahechiae</i> Machado, 2012*	DD	No	Cu	UFMG	Machado, 2012
<i>Ischnura ramburii</i> (Selys in Sagra, 1857)	LC	Needham, 1904	An, At, AS, By, Cl, Cu, Hu, Ma, Me, Qu, Ri, St, Su, To	ANDES-E, CEUA, CMNH, FNS, MIZA, MEFLG, UARC	Altamiranda-S et al., 2010; Amaya-Perilla & Palacino-Rodríguez, 2012; Bota-Sierra, 2014a; Bota-Sierra et al., 2019a; Calvert, 1902–08; De Marmels, 2006; Garzón & Realpe, 2009; Ris, 1918; Stand-Pérez et al., 2021
<i>Ischnura solitaria</i> Bota-Sierra, Velásquez-Vélez & Realpe, 2019	CR	No	An	CEUA	Bota-Sierra et al., 2019c
<i>Leptobasis buchholzi</i> (Rácenis, 1959)	EN	No	At	RWG	Donnelly, 1967; Garrison & von Ellenrieder, 2010
<i>Leptobasis vacillans</i> Hagen, 1877	LC	Geijskes, 1941	An, Cu, Ch, Qu, Su, VI	ANDES-E, CEUA, MCUB, RWG, TWD	Bota-Sierra et al., 2019a; Garrison & von Ellenrieder, 2010; Palacino-Rodríguez et al., 2020a
<i>Leucobasis candidans</i> Rácenis, 1959	LC	No	Gu	ANDES-E	Aristizabal-Botero et al., 2022
<i>Mecistogaster linearis infumata</i> Fraser, 1946	LC	Salhén & Hedstrom, 2005	Am, An, By, Ch, Cl, Cq, Cu, Gj, Me, Pu, St	ANDES-E, CEUA, LES, MEFLG, UARC	Fraser, 1946b; Palacino-Rodríguez et al., 2020a; Ris, 1918
<i>Mecistogaster linearis linearis</i> (Fabricius, 1776)	LC	Salhén & Hedstrom, 2005	Am, An, By, Ch, Cl, Cq, Cu, Gj, Me, Pu, St	ANDES-E, CEUA, LES, MEFLG, UARC	Fraser, 1946b; Palacino-Rodríguez et al., 2020a; Ris, 1918
<i>Mecistogaster lucretia</i> (Drury, 1773)	LC	No	Am	CEUA	Bota-Sierra et al., 2015
<i>Mecistogaster modesta iphigenia</i> Selys, 1886	LC	Calvert, 1911	An, By, Ch, Me, VI	ANDES-E, CEUA, MEFLG, UARC	Ris, 1918
<i>Mecistogaster ornata ornata</i> Rambur, 1842	LC	Ramírez, 1995	An, At, By, Ch, Gu, Gj, Hu, Ma, Me, VI	ANDES-E, CEUA, MEFLG, UARC	Palacino-Rodríguez et al., 2017; Ris, 1918; Salazar et al., 2015; Stand-Pérez et al., 2021

Species	IUCN	Larva description	Departments	Collections	References
<i>Megaloprepus brevistigma</i> Selys, 1860	NA	No	By, Cu, Me, To	ANDES-E	Feindt & Hadrys, 2022; Ris, 1918
<i>Megaloprepus caerulatus</i> (Drury, 1782)	LC	Ramírez, 1997	An, By, Ch, Cq, Ri, Vi	ANDES-E, CEUA, MCUB, MEFLG, UARC	Hagen, 1869; Palacino-Rodríguez, 2009; Palacino-Rodríguez et al., 2020a; Ris, 1918
<i>Mesamphiagrion demarmelsi</i> (Cruz, 1986)	En	No	Cu	ANDES-E, CEUA, ICN, RWG, UARC	Bota-Sierra & Wolff, 2013; Cruz, 1986; von Ellenrieder & Garrison, 2008b
<i>Mesamphiagrion gaudiimontanum</i> Bota-Sierra, 2013	En	No	An	ANDES-E, CEUA	Bota-Sierra & Wolff, 2013
<i>Mesamphiagrion laterale</i> (Selys, 1876)	LC	De Marmels, 2007	By, Cu, St	ANDES-E, CEUA, ICN, NHMP, RWG, TWD, UARC, UMNG	Bota-Sierra & Wolff, 2013; Cuellar-Cardozo et al., 2016; Moreno Pallares & Guillot Monroy, 2012; Ris, 1918; von Ellenrieder & Garrison, 2008b
<i>Mesamphiagrion nataliae</i> Bota-Sierra, 2013	EN	No	Cu	ANDES-E, CEUA	Bota-Sierra & Wolff, 2013
<i>Mesamphiagrion occultum</i> (Ris, 1918)	LC	No	By, Cu	ANDES-E, CEUA, ICN, RWG	Bota-Sierra & Wolff, 2013; Ris, 1918; von Ellenrieder & Garrison, 2008b
<i>Mesamphiagrion ovigerum</i> (Calvert, 1909)	VU	No	By, Cu	ANDES-E, CEUA, DRP, ICN, MCZ	Bota-Sierra & Wolff, 2013; Calvert, 1909; Ris, 1918; von Ellenrieder & Garrison, 2008b
<i>Mesamphiagrion risi</i> (De Marmels, 1997)	LC	No	An, By, Cu, Hu, St	ANDES-E, CEUA, UARC	Bota-Sierra & Wolff, 2013; Novelo-Gutiérrez & Bota-Sierra, 2021b
<i>Mesamphiagrion rosseri</i> Bota-Sierra, 2013	VU	No	An, Cau, Qu, Ri	ANDES-E, CEUA	Bota-Sierra & Wolff, 2013
<i>Mesamphiagrion santainense</i> Bota-Sierra, 2013	En	No	An	ANDES-E, CEUA	Bota-Sierra & Wolff, 2013
<i>Mesamphiagrion tamaense</i> (De Marmels, 1988)	VU	De Marmels, 2007	By, St	CEUA, RWG	Bota-Sierra & Wolff, 2013; von Ellenrieder & Garrison, 2008b
<i>Mesoleptobasis acuminata</i> Santos, 1961	LC	No	Cq, Vi	ANDES-E	NA
<i>Mesoleptobasis cantralli</i> Santos, 1961	LC	No	Cq, Vi	ANDES-E	Cano-Cobos et al., 2023a
<i>Mesoleptobasis elongata</i> Garrison & von Ellenrieder, 2009	DD	No	Gu	ANDES-E, ICN	Bota-Sierra et al., 2015
<i>Mesoleptobasis incus</i> Sjöstedt, 1918	LC	No	Am, Gu	ANDES-E, CEUA	Aristizabal-Botero et al., 2022; Bota-Sierra, 2012
<i>Metaleptobasis foreli</i> Ris, 1918	LC	No	An, At, Ma, St	CEUA, FNS, UMMZ, RWG	Ris, 1918; Stand-Pérez et al., 2021; von Ellenrieder, 2013
<i>Metaleptobasis gibbosa</i> Tennessee, 2012	CR	No	Cq	UARC	Stand-Pérez et al., 2022
<i>Metaleptobasis lillianae</i> Daigle, 2004	DD	No	Me	CEUA	Cano-Cobos et al., 2023a
<i>Metaleptobasis mauffrayi</i> Daigle, 2000	LC	No	Am, Pu	ANDES-E, CEUA, BMNH	Bota-Sierra et al., 2015, 2018a; von Ellenrieder, 2013
<i>Metaleptobasis minteri</i> Daigle, 2003	DD	No	Cq, Pu	CEUA, USNM	Bota-Sierra et al., 2018a; von Ellenrieder, 2013
<i>Metaleptobasis peltata</i> von Ellenrieder, 2013	DD	No	Cau, Pu	CEUA	Bota-Sierra et al., 2018a
<i>Metaleptobasis tridentigera</i> von Ellenrieder, 2013	LC	No	Va	ANDES-E	NA
<i>Microstigma anomalum</i> Rambur, 1842	LC	No	Am, Pu	CEUA	Bota-Sierra et al., 2018a

Species	IUCN	Larva description	Departments	Collections	References
<i>Microstigma rotundatum</i> Selys, 1860	LC	De Marmels, 2007	Am, Cq, Gu, Me, Pu	ANDES-E, CEUA, FNS, ICN	Aristizabal-Botero et al., 2022; Bota-Sierra et al., 2015, 2018a; Ris, 1918
<i>Nehalennia minuta</i> (Selys, 1857)	LC	García-Díaz, 1938	An, Me, Vi	ANDES-E, CEUA, MHNU-E	Álvarez-Álvarez et al., 2022, 2023
<i>Neoerythromma cultellatum</i> (Hagen, 1876)	LC	García-Díaz, 1938	At, Co, Gj, Su	CEUA, UARC	Stand-Pérez et al., 2021
<i>Neoneura amelia</i> Calvert, 1903	LC	No	VI	MEUV	Urrutia, 2005
<i>Neoneura bilinearis</i> Selys, 1860	LC	No	Am, Gu	ANDES-E, CEUA	Bota-Sierra, 2012
<i>Neoneura confundens</i> Wasscher & van't Bosch, 2013	LC	Rodriguez & Molineri, 2019	Am, An, At, Cl, Gu, Ma, Me, Qu, St, To, VI	ANDES-E, CEUA, UARC, MPUJ-ENT, MIZA, UMMZ	Wasscher & van't Bosch, 2013; Williamson, 1917
<i>Neoneura cristina</i> Rácenis, 1955	LC	No	Va, Vi	ANDES-E	NA
<i>Neoneura denticulata</i> Williamson, 1917	LC	No	Gu, Va	ANDES-E	Cano-Cobos et al., 2023a
<i>Neoneura desana</i> Machado, 1989	LC	No	Cq, Me, Va	ANDES-E	Stand-Pérez et al., 2022
<i>Neoneura esthera</i> Williamson, 1917	LC	No	An, Gj, Ma, To	ANDES-E, CEUA, UARC, UMMZ	Williamson, 1917, 1918c; Garrison, 1999
<i>Neoneura fulvicollis</i> Selys, 1886	LC	De Marmels, 2007	Cq	UARC	Stand-Pérez et al., 2022
<i>Neoneura joana</i> Williamson, 1917	LC	Geijskes, 1954	Cq, Vi	ANDES-E, UARC	Stand-Pérez et al., 2022
<i>Neoneura luzmarina</i> De Marmels, 1989	LC	No	Cq, Va	ANDES-E, UARC	Stand-Pérez et al., 2022
<i>Neoneura myrthea</i> Williamson, 1917	LC	No	NA	NA	Garrison, 2009
<i>Neoneura rubriventris</i> Selys, 1860	LC	No	Gu	ANDES-E	NA
<i>Neoneura rufithorax</i> Selys, 1886	LC	No	Am, Gu, Gv, Vi	ANDES-E, CEUA	Aristizabal-Botero et al., 2022; Bota-Sierra, 2012; Florez et al., 2023
<i>Neoneura sylvatica</i> Hagen, 1886	LC	No	Me	ANDES-E, CEUA	Amaya-Perilla & Palacino-Rodríguez, 2012
<i>Oreiallagma oreas</i> (Ris, 1918)	LC	No	An, Ri, VI	CEUA	Bota-Sierra & Sandoval-H, 2017; Ris, 1918
<i>Oxyagrion miniopsis</i> Selys, 1876	LC	No	By, Cu	ANDES-E, UARC	Torres-Pachón & Realpe, 2015
<i>Oxyagrion tennesseeni</i> Mauffray, 1999	LC	No	Hu	CEUA	NA
<i>Oxyallagma colombianum</i> Bota-Sierra, 2014	LC	No	An, St	ANDES-E, CEUA	Bota-Sierra, 2014a
<i>Oxyallagma dissidens</i> (Selys, 1876)	LC	Hartung, 2023	Cau, Na, Pu	ANDES-E, CEUA	Bota-Sierra, 2014a
<i>Phoenicagrion flammeum</i> (Selys, 1876)	LC	No	Am, Cq, Gu, Me, Vi	ANDES-E, CEUA, RWG, UARC	Aristizabal-Botero et al., 2022; Bota-Sierra et al., 2015; von Ellenrieder, 2008
<i>Phoenicagrion paulsoni</i> von Ellenrieder, 2008	LC	No	Cq, Pu	ANDES-E, UARC	Stand-Pérez et al., 2022
<i>Platystigma jocaste</i> jocaste Hagen, 1869	LC	No	By, Cu, Me, Pu	CEUA, LES, UARC	Bota-Sierra et al., 2015, 2018a; Fraser, 1946b; Palacino-Rodríguez et al., 2017; Ris, 1918
<i>Platystigma jocaste</i> vicentius Ris, 1918	LC	No	By, Cu, Me, Pu	CEUA, LES, UARC	Bota-Sierra et al., 2015, 2018a; Fraser, 1946b; Palacino-Rodríguez et al., 2017; Ris, 1918
<i>Proneura prolongata</i> Selys, 1889*	DD	No	Am	CEUA	Bota-Sierra, 2012

Species	IUCN	Larva description	Departments	Collections	References
<i>Protoneura amatoria</i> Calvert, 1907	LC	No	An, Bo, Ch, Cs, Ma, Me, St, To	ANDES-E, CEUA, UARC, UMMZ	Bota-Sierra et al., 2019a; Garzón & Realpe, 2009; Palacino-Rodríguez et al., 2020a; von Ellenrieder & Garrison, 2017
<i>Protoneura cara</i> Calvert, 1903	LC	No	VI	MEUV	Urrutia, 2005
<i>Protoneura klugi</i> Cowley, 1941	DD	No	Am	ANDES-E	Cano-Cobos et al., 2023a
<i>Protoneura macintyrei</i> Kennedy, 1939	NT	No	Ch, VI	CEUA	Bota-Sierra et al., 2018a, b
<i>Protoneura paucinervis</i> Selys, 1886	LC	No	Am, Me	CEUA, FSCA	Bota-Sierra et al., 2015; von Ellenrieder & Garrison, 2017
<i>Protoneura scintilla</i> Gloyd, 1939	LC	No	Am, Me	ANDES-E, CEUA	Bota-Sierra et al., 2015
<i>Protoneura tenuis</i> Selys, 1860	LC	No	Cq, Gv, Me	ANDES-E, UARC	Florez et al., 2023; Stand-Pérez et al., 2022
<i>Protoneura woytkowskii</i> Gloyd, 1939	LC	No	Pu	CEUA, UARC	Bota-Sierra et al., 2018a
<i>Psaironeura angeloi</i> Tennesen, 2016	LC	Román-Heracleo et al., 2020	An, Cs, Ch, Ma, Na, Ri, St, VI	ANDES-E, CEUA, MCUB, MEFLG, UARC	Bota-Sierra et al., 2018a, b, 2019a; Garzón & Realpe, 2009; Palacino-Rodríguez et al., 2020a
<i>Psaironeura bifurcata</i> (Sjöstedt, 1918)	LC	No	Gu, Me, Pu	ANDES-E, CEUA, UARC	Bota-Sierra et al., 2018a
<i>Psaironeura tenuissima</i> (Selys, 1886)	LC	No	Am, Me, Pu	CEUA, UARC	Bota-Sierra et al., 2015, 2018a
<i>Pseudostigma accedens</i> Selys, 1860	LC	No	An	MEFLG	NA
<i>Telebasis blasii</i> Bota-Sierra & Sandoval-H, 2022	NA	No	Ri	CEUA	Bota-Sierra et al., 2022
<i>Telebasis brevis</i> Bick & Bick, 1995	LC	No	An	CEUA	NA
<i>Telebasis carminita</i> Calvert, 1909	LC	No	Gu	ANDES-E	NA
<i>Telebasis carota</i> Kennedy, 1936	LC	No	Cau, Pu	ANDES-E, CEUA	Bota-Sierra et al., 2018a
<i>Telebasis corallina</i> (Selys, 1876)	LC	Westfall & May, 2006	Me	ANDES-E, CEUA	Palacino-Rodríguez et al., 2017
<i>Telebasis corbetti</i> Garrison, 2009	LC	No	Pu	ICN	Bota-Sierra et al., 2015
<i>Telebasis dunklei</i> Bick & Bick, 1995	LC	No	Am	CEUA	Bota-Sierra et al., 2015
<i>Telebasis farcimentum</i> Garrison, 2009	VU	No	Cau, Qu, VI	ANDES-E, CEUA, FSCA, MIZA, TWD	Bota-Sierra et al., 2019a; Garrison, 2009
<i>Telebasis filiola</i> (Perty, 1834)	LC	Westfall & May, 2006	At, Cl, Cu, Ma, Me, St	ANDES-E, CEUA, UARC, RWG	Altamiranda-S et al., 2010; Calvert, 1902–08; Garrison, 2009; Stand-Pérez et al., 2021
<i>Telebasis flameola</i> Kennedy, 1936	En	No	Pu	ANDES-E, CEUA	Bota-Sierra et al., 2018a
<i>Telebasis garleppi</i> Ris, 1918	LC	No	Ri, VI	CEUA, TWD	Bota-Sierra et al., 2019a; Garrison, 2009
<i>Telebasis garrisoni</i> Bick & Bick, 1995	VU	No	Ma, Su, St	CEUA, UMMZ	Bick & Bick, 1995; Garrison, 2009
<i>Telebasis griffinii</i> (Martin, 1896)	LC	No	An, At, Cau, Cl, Co, Cu, Gu, Gv, Hu, Me, Pu, St, Su	ANDES-E, CEUA, FSCA, SWD, UARC	Aristizabal-Botero et al., 2022; Bota-Sierra et al., 2018a, b; Florez et al., 2023; Garrison, 2009

Species	IUCN	Larva description	Departments	Collections	References
<i>Telebasis inalata</i> (Calvert, 1961)	LC	No	Am, Gu	ANDES-E, CEUA	Bota-Sierra et al., 2015
<i>Telebasis isthmica</i> Calvert, 1902	LC	No	Cu	ANDES-E, CEUA	Mendoza-Penagos & Bota-Sierra, 2022
<i>Telebasis noveloi</i> Bota-Sierra & Pérez-Gutiérrez, 2022	NA	No	Ch	ANDES-E, CEUA, UARC	Bota-Sierra et al., 2022
<i>Telebasis obsoleta</i> (Selys, 1876)	LC	No	Am	ANDES-E, CEUA	Bota-Sierra et al., 2015
<i>Telebasis rubricauda</i> Bick & Bick, 1995	LC	No	Cs, Me, Va	ANDES-E, CEUA, ICN, CBUCES	Bota-Sierra, 2014b; Bota-Sierra et al., 2018b
<i>Telebasis salva</i> (Hagen, 1861)	LC	Needham, 1904	An, At, Bo, Cu, Hu, Ma, Me, Qu, St, To	ANDES-E, CEUA, ICN, MEFLG, MIZA, MPUJ_ENT, RWG, UARC	Altamiranda-S et al., 2010; Bota-Sierra, 2014b; De Marmels, 2006; Garrison, 2009; Ris, 1918; Stand-Pérez et al., 2021
<i>Telebasis simulata</i> Tennessen, 2002	LC	Geijskes, 1943	Vi	ANDES-E	Aristizábal-Botero et al., 2023
<i>Telebasis versicolor</i> Fraser, 1946*	LC	No	Cau, Pu	CEUA	Bota-Sierra et al., 2015; Calvert, 1909; Fraser, 1946a
<i>Telebasis williamsoni</i> Garrison, 2009	LC	No	An, At, Bo, Cl, Gu, Ma, Me, St, Su	ABMM, ANDES-E, CEUA, FSCA, RWG, UARC, UMMZ	Garrison, 2009; Palacino-Rodríguez et al., 2017; Stand-Pérez et al., 2021
<i>Tepuibasis garrisoni</i> (Stand-Pérez & Pérez-Gutiérrez, 2020)	NA	No	Cq	UARC	Garrison & von Ellenrieder, 2024; Stand-Pérez & Pérez-Gutiérrez, 2020
<i>Tuberculobasis macuxi</i> Machado, 2009*	DD	No	Vi	ANDES-E	NA
<i>Tuberculobasis williamsoni</i> Machado, 2009	LC	No	Ma, Su, St	UMMZ	Machado, 2009
ANISOPTERA					
Aeshnidae					
<i>Allopetalia pustulosa</i> Selys, 1873	LC	De Marmels, 2000	An, Hu, Na, To	CEUA	NA
<i>Anax amazili</i> (Burmeister, 1839)	LC	Calvert, 1934	An, At, Cs, Cu, Me, Qu, Ri, Su, VI, Vi	ANDES-E, CEUA, MIZA, MEUV, MPUJ_ENT	Amaya-Perilla & Palacino-Rodríguez, 2012; Aristizábal-Botero et al., 2023; Bermúdez & López-Victoria, 2009; Casallas-Mancipe & Rache-Rodríguez, 2016; De Marmels, 2006; Palacino-Rodríguez et al., 2017; Stand-Pérez et al., 2021
<i>Anax concolor</i> Brauer, 1865	LC	Geijskes, 1968	An, At, Gu, Me, Ri, Vu	ANDES-E, CEUA	Amaya-Perilla & Palacino-Rodríguez, 2012; Bota-Sierra et al., 2019a; Stand-Pérez et al., 2021
<i>Andaeschna occidentalis</i> Bota-Sierra, 2019	LC	No	Ri	CEUA	Bota-Sierra et al., 2019b
<i>Andaeschna rufipes</i> (Ris, 1918)	LC	De Marmels, 1982	Cu	NA	Ris, 1918
<i>Coryphaeschna adnexa</i> (Hagen, 1861)	LC	Calvert, 1956	Am, An, At, Gu, Ma, Me, Qu, Ri, St, Su	ANDES-E, CEUA, CMNH, MEFLG, MIZA	Altamiranda-S et al., 2010; Bota-Sierra et al., 2019a; Calvert, 1902–08; De Marmels, 2006; Florez et al., 2023; Palacino-Rodríguez et al., 2017; Stand-Pérez et al., 2021
<i>Coryphaeschna viriditas</i> Calvert, 1952	LC	Geijskes, 1943	An, At, Hu, Me, Su	CEUA, MLS-I	Cuellar-Cardozo et al., 2020; Palacino-Rodríguez et al., 2017; Stand-Pérez et al., 2021

Species	IUCN	Larva description	Departments	Collections	References
<i>Gynacantha bifida</i> Rambur, 1842	LC	Carvalho, 1987	Am, Gu	ANDES-E	NA
<i>Gynacantha jessei</i> Williamson, 1923*	DD	No	An	UMMZ	Williamson, 1923a
<i>Gynacantha klagesi</i> Williamson, 1923	LC	No	Cq, Gu	ICN	Bota-Sierra et al., 2015, 2018b; von Ellenrieder & Garrison, 2003
<i>Gynacantha litoralis</i> Williamson, 1923	LC	No	Am, Gu, Pu	CEUA, ANDES-E	Bota-Sierra et al., 2015, 2018b
<i>Gynacantha membranalis</i> Karsch, 1891	LC	Santos et al., 1987	Am, An, Cq, Ch, Cu, Gv, Me, Pu, Ri, VI	ANDES-E, CEUA, UARC, MCUB	Bota-Sierra et al., 2015, 2018a, 2019a; Florez et al., 2023; Hincks, 1934; Palacino-Rodríguez et al., 2017, 2020a; Ris, 1918; Stand-Pérez et al., 2021, 2022; Williamson, 1923a
<i>Gynacantha mexicana</i> Selys, 1868	LC	Carvalho & Ferreira, 1989	An, Cq, Cu, Ch, Gu, Gv, Ma	ANDES-E, CEUA, MCUB, MEFLG, UMMZ	Bota-Sierra et al., 2015; Florez et al., 2023; Palacino-Rodríguez et al., 2020a; Williamson, 1923a
<i>Gynacantha nervosa</i> Rambur, 1842	LC	Williams, 1937	An, At, Ch, Cs, Gu, Ma, Me, Na, Ri, St, Su, To, VI	ANDES-E, CEUA, MCUB, MEFLG, MPUJ_ENT, UARC, UMMZ	Álvarez-Álvarez et al., 2023; Bota-Sierra et al., 2019a; Garzón & Realpe, 2009; Palacino-Rodríguez et al., 2017; Williamson, 1923a
<i>Gynacantha remartinia</i> Navás, 1934*	DD	No	Me, To	NA	Navás, 1934
<i>Gynacantha tenuis</i> Martin, 1909	LC	No	An	NA	Williamson, 1923a
<i>Neuraeschna maya</i> Belle, 1989	LC	No	An	MEFLG	Cano-Cobos et al., 2023a
<i>Remartinia luteipennis</i> <i>luteipennis</i> (Burmeister, 1839)	LC	Calvert, 1956	An, Me, Qu, Ri, St, VI	CEUA, MIZA, UARC	Bota-Sierra et al., 2019a; Calvert, 1956; De Marmels, 2006; Ris, 1918
<i>Rhionaeschna brevicercia</i> (Muzón & von Ellenrieder, 2001)	LC	De Marmels, 2001	An, Cu, To	CEUA, RNHL	Calvert, 1956
<i>Rhionaeschna caligo</i> Bota-Sierra, 2014*	EN	No	An	ANDES-E, CEUA	Bota-Sierra, 2014a
<i>Rhionaeschna cornigera</i> (Brauer, 1865)	LC	De Marmels, 1982	An, By, Cu, Hu, Ma, Me, Qu, Ri, St, To, Va	AMNH, ANDES-E, ANSP, CEUA, UARC	Amaya-Perilla & Palacino-Rodríguez, 2012; Bota-Sierra et al., 2019a; Calvert, 1956; Palacino-Rodríguez, 2009; Ris, 1918
<i>Rhionaeschna joannisi</i> (Martin, 1897)	LC	Calvert, 1956	An, Cau, Ri	CEUA, CUIC	Bota-Sierra, 2014a; Bota-Sierra et al., 2019a; Calvert, 1956
<i>Rhionaeschna marchali</i> (Rambur, 1842)	LC	Limongi, 1983	Am, An, By, Cau, Cl, Cu, Gj, Ma, Me, Na, Ri, St, To	ANDES-E, CEUA, UMNG, UPN, UMMZ, IAVH	Bota-Sierra, 2014a; Bota-Sierra et al., 2019a; Calvert, 1956; Cuellar-Cardozo et al., 2016; Moreno Pallares & Guillot Monroy, 2012; Navás, 1935; Palacino-Rodríguez, 2009; Palacino-Rodríguez et al., 2017, 2020b; Ris, 1918; Torres-Pachón & Realpe, 2015
<i>Rhionaeschna peralta</i> (Ris, 1918)	LC	No	Ri	CEUA	Bota-Sierra, 2014a
<i>Rhionaeschna planaltica</i> (Calvert, 1952)	LC	De Marmels, 1992	An, Me, Qu	CEUA	Amaya-Perilla & Palacino-Rodríguez, 2012
<i>Rhionaeschna psilus</i> (Calvert, 1947)	LC	Needham & Westfall, 1955	An, Hu, Pu	CEUA, UARC	Bota-Sierra & Wolff, 2013
<i>Staurophlebia reticulata</i> (Burmeister, 1839)	LC	Needham, 1904	An, Gu, Me, Pu	ANDES-E, CEUA	Amaya-Perilla & Palacino-Rodríguez, 2012; Hincks, 1934
<i>Staurophlebia wayana</i> Geijskes, 1959	LC	No	Gu	ANDES-E	NA

Species	IUCN	Larva description	Departments	Collections	References
<i>Triacanthagyna caribbea</i> Williamson, 1923	LC	Santos, 1973	An, Bo, Ma, Su	CEUA, MEFLG, UMMZ	Altamiranda, 2009; Bota-Sierra et al., 2019a; Williamson, 1923a
<i>Triacanthagyna dentata</i> (Geijskes, 1943)	LC	De Marmels, 1992	Ri	CEUA	Bota-Sierra et al. 2019a
<i>Triacanthagyna ditzleri</i> Williamson, 1923	LC	No	An, Gu, Gv	ANDES-E, UMMZ	Florez et al., 2023; Williamson, 1923a
<i>Triacanthagyna satyrus</i> (Martin, 1909)	LC	No	Pu	CEUA	Bota-Sierra et al., 2018a
<i>Triacanthagyna septima</i> (Selys in Sagra, 1857)	LC	Calil & Carvalho, 1999	Am, An, At, Bo, Ch, Co, Gu, Ma, Ri, Su	ANDES-E, CEUA, CMNH, ICN, MEFLG, UARC, UMMZ	Altamiranda-S et al., 2010; Bota-Sierra et al., 2015, 2019a; Calvert, 1902–08; Dunkle, 1981; Stand-Pérez et al., 2021; Williamson, 1923a
Gomphidae					
<i>Agriogomphus jessei</i> (Williamson, 1918)*	EN	No	An, Me, St	ANDES-E, CEUA, UMMZ	Williamson, 1918a
<i>Aphylla boliviiana</i> Belle, 1972	LC	No	Gu, Pu	ANDES-E, CEUA	Bota-Sierra et al., 2015
<i>Aphylla molossus</i> Selys, 1869	LC	No	Am, Cq, Cu, Gu, Me, To	ANDES-E, MHNU-E, UARC	Álvarez-Álvarez et al., 2023; Stand-Pérez et al., 2022
<i>Aphylla tenuis</i> Selys, 1859	LC	No	An, At, Bo, Ch, Co, Ma, Ri, Su	CEUA, UMMZ	Belle, 1992a; Bota-Sierra et al., 2019a; Dunkle, 1981; Stand-Pérez et al., 2021
<i>Aphylla theodorina</i> (Navás, 1933)*	LC	Belle, 1992b	Me	MHNU-E	Álvarez-Álvarez et al., 2021, 2023
<i>Archaeogomphus furcatus</i> Williamson, 1923	LC	Belle, 1992b	An, Ma	CEBUMAG, UMMZ	Belle, 1982b; Tobias-Loaiza & Tamaris-Turizo, 2019
<i>Archaeogomphus hamatus</i> (Williamson, 1918)	LC	No	Ma	UMMZ	Belle, 1982b; Williamson, 1918a
<i>Desmogomphus anchicayensis</i> Amaya-Vallejo & Novelo-Gutiérrez, 2012*	LC	Amaya-Vallejo & Novelo-Gutiérrez, 2012	VI	IEXA	Amaya-Vallejo & Novelo-Gutiérrez, 2012
<i>Desmogomphus paucinervis</i> (Selys, 1873)	LC	Westfall, 1989	Gu	ICN	Bota-Sierra et al., 2015
<i>Diaphlebia angustipennis</i> Selys, 1854*	LC	No	Me	ANDES-E	Rache et al., 2013
<i>Ebogomphus conchinus</i> (Williamson, 1916)*	LC	Belle, 1966	Me	FSCA	Palacino-Rodríguez et al., 2017
<i>Epigomphus brillantina</i> Bota-Sierra & Novelo-Gutiérrez, 2020*	NA	No	An	CEUA	Bota-Sierra & Novelo-Gutiérrez, 2020
<i>Epigomphus obtusus</i> Selys, 1869*	LC	No	NA	NA	Ris, 1918
<i>Epigomphus paludosus</i> Hagen, 1854	LC	Costa, 1968	Cq	UARC	Stand-Pérez et al., 2020
<i>Epigomphus pechumani</i> Belle, 1970	DD	No	Ch, Ri, VI	ANDES-E, CEUA	Bota-Sierra et al., 2017
<i>Epigomphus rufus</i> Bota-Sierra & Novelo-Gutiérrez, 2020	NA	No	An	CEUA	Bota-Sierra & Novelo-Gutiérrez, 2020
<i>Erpetogomphus sabatetius</i> Williamson, 1918	LC	Belle, 1992b	An, Ch, Hu, To	CEUA, MLS-I, UMMZ	Bota-Sierra et al., 2019a; Cuellar-Car-dozo et al., 2020; Williamson, 1918b
<i>Perigomphus basicornis</i> Amaya-Vallejo, Novelo-Gutiérrez & Realpe, 2017	DD	Amaya-Vallejo et al., 2018	VI	ANDES-E, IEXA	Amaya-Vallejo et al., 2017; Bota-Sierra et al., 2019a

Species	IUCN	Larva description	Departments	Collections	References
<i>Perigomphus pallidistylus</i> (Belle, 1972)	VU	Westfall, 1989	Cl	IEXA	Amaya-Vallejo et al., 2018
<i>Phyllocycla anduzei</i> (Needham, 1943)	LC	No	Ma, Me	ANDES-E, UMMZ	Belle, 1970, 1988
<i>Phyllocycla hespera</i> (Calvert, 1909)	LC	No	VI	CEUA	Bota-Sierra et al., 2019a
<i>Phyllocycla volSELLA</i> (Calvert, 1905)	LC	Needham, 1940	Qu	MIZA	De Marmels, 2006
<i>Phyllogomphoides brunneus</i> Belle, 1981	LC	No	Pu, To	ANDES-E, CEUA	Bota-Sierra et al., 2018a
<i>Phyllogomphoides cornutifrons</i> (Needham, 1944)	LC	No	Cl	ANDES-E	NA
<i>Phyllogomphoides imperator</i> Belle, 1976	DD	No	Gu	ANDES-E	Aristizabal-Botero et al., 2022
<i>Phyllogomphoides insignatus</i> Donnelly, 1979	LC	No	An	MEFLG	NA
<i>Phyllogomphoides pedunculus</i> Belle, 1984*	LC	No	Va	ANDES-E	NA
<i>Phyllogomphoides semi-circularis</i> (Selys, 1854)	VU	No	An	CEUA, RNHL	Belle, 1982a
<i>Progomphus abbreviatus</i> Belle, 1973	LC	De Marmels, 1981	An, Hu, St	ANDES-E, CEUA	NA
<i>Progomphus dorsopallidus</i> Byers, 1934	LC	Knopf, 1977	At, Cl, Ma	ANDES-E, CEUA, UARC	NA
<i>Progomphus incurvatus bivittatus</i> De Marmels, 1991	LC	De Marmels, 1991	Ma	ANDES-E, UARC	NA
<i>Progomphus phyllochromus</i> Ris, 1918	LC	Limongi, 1983	An, Ri, Ma, VI	ANDES-E, CEUA, UARC, UMMZ	Belle, 1973; Bota-Sierra et al., 2019a; Novelo-Gutiérrez & Bota-Sierra, 2021b
<i>Progomphus pygmaeus</i> Selys, 1873	LC	Limongi, 1983	Cq, Ch, Me, Qu, VI	ANDES-E, CEUA, CMNH, MIZA, UARC	Calvert, 1902–08; De Marmels, 2006; Ris, 1918; Stand-Pérez et al., 2022
<i>Zonophora nobilis</i> Belle, 1983	DD	No	Gu	ANDES-E, ICN	Bota-Sierra et al., 2015
<i>Zonophora regalis</i> Belle, 1976*	DD	No	Cq	UARC	Stand-Pérez et al., 2022
<i>Zonophora wucherpfennigi</i> Schmidt, 1941	LC	No	Va	CEUA	Bota-Sierra et al., 2015
Synthemistidae					
<i>Gomphomacromia fallax</i> (McLachlan, 1881)	LC	No	An, Cau, Ri, VI	CEUA, MUSENUV	Bota-Sierra et al., 2019a, 2010
Corduliidae					
<i>Aeschnosoma forcipula</i> Selys, 1871	LC	Geijskes, 1970	Me	LIA-UNAL	Rache, 2015
<i>Neocordulia batesi longipollex</i> Calvert, 1909	LC	Novelo-Gutiérrez & Ramírez, 1995	Cau, Ch, Ri, VI	ANDES-E, CEUA, MCUB, UARC	Bermúdez & López-Victoria, 2009; Bota-Sierra et al., 2019a; Palacino-Rodríguez et al., 2020a
Libellulidae					
<i>Anatya guttata</i> (Erichson, 1848)	LC	No	An, At, Ch, Cl, Gu, Gv, Ma, Me, St, To, VI, Vi	ANDES-E, CEUA, CMNH, MCUB, MEFLG, MHNU-E, UARC	Álvarez-Álvarez et al., 2023; Aristizábal-Botero et al., 2023; Bota-Sierra et al., 2019a; Calvert, 1902–08, 1909; Florez et al., 2023; Garzón & Realpe, 2009; Palacino-Rodríguez et al., 2017, 2020a; Stand-Pérez et al., 2021

Species	IUCN	Larva description	Departments	Collections	References
<i>Antidythemis nigra</i> Buchholz, 1952*	LC	No	Gu	ANDES-E	Aristizabal-Botero et al., 2022
<i>Argyrothemis argentea</i> Ris, 1909*	LC	Fleck, 2003	Me	NA	Rache et al., 2013
<i>Brachymesia furcata</i> (Hagen, 1861)	LC	Geijskes, 1934	Am, An, At, Me, St, Su, To	ANDES-E, CEUA, MEFLG, MHNU-E	Álvarez-Álvarez et al., 2023; Bota- Sierra, 2012; Bota-Sierra et al., 2015; Palacino-Rodríguez et al., 2017; Stand-Pérez et al., 2021
<i>Brachymesia herbida</i> (Gundlach, 1889)	LC	Needham et al., 2000	Am, An, AS, At, Cs, Gu, Me, Su, St, To, Vi	ANDES-E, CEUA, MEFLG, MHNU- E, UARC	Álvarez-Álvarez et al., 2023; Aristizabal-Botero et al., 2022; Bota-Sierra, 2012; Calvert, 1902–08; Palacino-Rodríguez et al., 2017; Stand-Pérez et al., 2021
<i>Brechmorhoga</i> <i>flavopunctata</i> (Martin, 1897)	DD	No	NA	NA	Ris, 1918
<i>Brechmorhoga nubecula</i> (Rambur, 1842)	LC	Santos, 1969	Ch, Cs, Cu, Ma, Me	ANDES-E, CEUA, CMNH, UARC	Calvert, 1902–08; Palacino-Rodríguez et al., 2017; Ris, 1918, 1919
<i>Brechmorhoga pertinax</i> (Hagen, 1861)	LC	Novelo- Gutiérrez, 1995	NA	NA	Ris, 1918
<i>Brechmorhoga praecox</i> (Hagen, 1861)	LC	Novelo- Gutiérrez, 1995	Ma, Me, Ns, Ri	ANDES-E, CEUA, CMNH	Bota-Sierra et al., 2019a; Calvert, 1902–08, 1909; Palacino-Rodríguez et al., 2017; Ris, 1918, 1919
<i>Brechmorhoga</i> <i>praedatrix</i> Calvert, 1909	LC	Fleck, 2004	An, Me	IEXA, MHNU-E	Álvarez-Álvarez et al., 2023; Novelo- Gutiérrez & Bota-Sierra, 2021a
<i>Brechmorhoga rapax</i> Calvert, 1898	LC	De Marmels, 1982	An, Cu, Me, Ri, VI	CEUA, MEFLG	Bota-Sierra et al., 2019a; Navás, 1935; Novelo-Gutiérrez & Bota-Sierra, 2021b; Palacino-Rodríguez et al., 2017; Ris, 1918, 1919
<i>Brechmorhoga vivax</i> Calvert, 1906	LC	De Marmels, 1982	An, By, Cu, Na, Me, Qu, Ri, St, VI	ANDES-E, CEUA	Bota-Sierra et al., 2018a, 2019a; De Marmels, 2006
<i>Cannaphila insularis</i> <i>funerea</i> (Carpenter, 1897)	LC	Klots, 1932	An, Ch	CEUA	Garrison, 1986
<i>Cannaphila mortoni</i> Donnelly, 1992	DD	No	An, Ch, Ri, VI	ANDES-E, CEUA, MCUB, UARC	Bota-Sierra et al., 2019a; Palacino- Rodríguez et al., 2020a
<i>Cannaphila vibex</i> (Hagen, 1861)	LC	Limongi, 1991	An, By, Ch, Cu, Hu, Ma, Me, Pu, Qu, Ri, St, VI	ANDES-E, CEUA, CMNH, MEFLG, MIZA, UARC	Bota-Sierra et al., 2019a; Calvert, 1902–08, 1909; De Marmels, 2006; Palacino-Rodríguez, 2009; Palacino- Rodríguez et al., 2017; Ris, 1918
<i>Dasythemis esmeralda</i> Ris, 1910	LC	No	Me, Pu	ANDES-E, CEUA, LES	Bota-Sierra et al., 2015; Fraser, 1946b; Palacino-Rodríguez et al., 2017; Schmidt, 1942
<i>Diastatops estherae</i> Montgomery, 1940	LC	No	Gu	ANDES-E	NA
<i>Diastatops intensa</i> Montgomery, 1940	LC	Costa et al., 1999	Cs, Gv, Me	ANDES-E, CEUA, MHNU-E	Álvarez-Álvarez et al., 2023; Florez et al., 2023; Palacino-Rodríguez et al., 2017
<i>Diastatops obscura</i> (Fabricius, 1775)	LC	Santos et al., 1993	An, Cs, Cq, Gu, Ma, Me, St, Pu	ANDES-E, CEUA, ICN, UMMZ, MHNU-E	Álvarez-Álvarez et al., 2023; Amaya- Perilla & Palacino-Rodríguez, 2012; Aristizabal-Botero et al., 2022; Bota- Sierra et al., 2015; Garzón & Realpe, 2009; Montgomery, 1940
<i>Diastatops pullata</i> (Burmeister, 1839)	LC	Fleck, 2003	Am, Va	ANDES-E, CEUA	Bota-Sierra et al., 2015

Species	IUCN	Larva description	Departments	Collections	References
<i>Dythemis nigra</i> Martin, 1897	LC	De Marmels, 1982	An, Cq, Ch, Cs, Hu, Me, Ma, Ri, St, VI	ANDES-E, CEUA, MEFLG, MHNU-E, MLS-I, UARC	Altamiranda, 2009; Álvarez-Álvarez et al., 2023; Bota-Sierra et al., 2015, 2019a; Cuellar-Cardozo et al., 2020; Garzón & Realpe, 2009; Palacino-Rodríguez et al., 2017, 2020a; Stand-Pérez et al., 2022
<i>Dythemis sterilis</i> Hagen, 1861	LC	Geijskes, 1946	An, At, By, Ch, Cu, Hu, Ma, Me, Ri, St, To	ANDES-E, CEUA, MEFLG, MHNU-E, MCUB, UARC	Altamiranda, 2009; Altamiranda-S et al., 2010; Álvarez-Álvarez et al., 2023; Bota-Sierra et al., 2019a; Palacino-Rodríguez, 2009; Palacino-Rodríguez et al., 2017; Velásquez, 2012; Palacino-Rodríguez et al., 2020a; Ris, 1918; Ris, 1919; Stand-Pérez et al., 2021
<i>Elasmothemis cannaciroides</i> (Calvert, 1906)	LC	Westfall, 1988	An, Ch, Hu, Me, Ri, St, To, Va, VI	ANDES-E, CEUA, MCUB, MLS-I, UARC	Amaya-Perilla & Palacino-Rodríguez, 2012; Bota-Sierra et al., 2019a; Cuellar-Cardozo et al., 2020; Palacino-Rodríguez et al., 2020a; Ris, 1918
<i>Elga leptostyla</i> Ris, 1909	LC	De Marmels, 1990	Am, Hu, Va	ANDES-E, ICN, MLS-I	Bota-Sierra et al., 2015; Cuellar-Cardozo et al., 2020
<i>Erythemis attala</i> (Selys in Sagra, 1857)	LC	Rodrigues-Capitulo, 1983	Am, An, At, Bo, Gu, Hu, Ma, Me, VI	ANDES-E, CEUA, CMNH, MEFLG, MUSENUV, UARC, UMMZ	Altamiranda, 2009; Altamiranda-S et al., 2010; Aristizabal-Botero et al., 2022; Bota-Sierra et al., 2015; Calvert, 1902–08; Palacino-Rodríguez et al., 2015; Ris, 1918; Stand-Pérez et al., 2021; Williamson, 1923b
<i>Erythemis carmelita</i> Williamson, 1923	LC	No	An, At, Bo, Ma	CEUA, UARC, UMMZ	Palacino-Rodríguez et al., 2015; Stand-Pérez et al., 2021
<i>Erythemis credula</i> (Hagen, 1861)	LC	Calvert, 1928	Am, Ch, Gu, Me	ANDES-E	Palacino-Rodríguez et al., 2015, 2020a; Ris, 1918
<i>Erythemis haematoxysta</i> (Burmeister, 1839)	LC	No	An, At, Cs, Ce, Ch, Co, Gu, Gv, Hu, Ma, Me, Su	ANDES-E, CEUA, ICN, MEFLG, MHNU-E, UMMZ	Altamiranda, 2009; Álvarez-Álvarez et al., 2023; Aristizabal-Botero et al., 2022; Florez et al., 2023; Palacino-Rodríguez et al., 2015, 2020a; Salazar et al., 2015; Stand-Pérez et al., 2021; Williamson, 1923b
<i>Erythemis mithroides</i> (Brauer, 1900)	LC	Costa & Pujol-Luz, 1993	An, At, Bo, By, Ch, Co, Ma	CMNH, ICN, UARC, UMMZ	Calvert, 1902–08; Ris, 1918; Palacino-Rodríguez et al., 2015, 2020a; Schmidt, 1942; Stand-Pérez et al., 2021; Williamson, 1923b
<i>Erythemis peruviana</i> (Rambur, 1842)	LC	Calvert, 1928	Am, An, At, Bo, By, Ce, Ch, Cl, Co, Cu, Gu, Gj, Gv, Hu, Ma, Me, St, Su, To, Vi, VI	ANDES-E, CEUA, CMNH, ICN, MEFLG, MUSENUV, UARC, UMMZ	Aristizabal-Botero et al., 2022; Bota-Sierra et al., 2015; Calvert, 1902–08, 1909; Florez et al., 2023; Garzón & Realpe, 2009; Navás, 1935; Palacino-Rodríguez et al., 2015, 2017, 2020a; Salazar et al., 2015; Stand-Pérez et al., 2021; Williamson, 1923b
<i>Erythemis plebeja</i> (Burmeister, 1839)	LC	Calvert, 1928	An, At, Bo, Co, Ma, Me, Qu, Ri, St, Su	ANDES-E, CEUA, CMNH, ICN, MEFLG, UARC, UMMZ	Altamiranda-S et al., 2010; Bota-Sierra et al., 2019a; Calvert, 1902–08; De Marmels, 2006; Palacino-Rodríguez, 2011; Palacino-Rodríguez et al., 2015; Ris, 1918; Stand-Pérez et al., 2021; Williamson, 1923b

Species	IUCN	Larva description	Departments	Collections	References
<i>Erythemis vesiculosa</i> (Fabricius, 1775)	LC	Klots, 1932	Am, An, AS, At, Bo, Cl, Cs, Ce, Ch, Co, Cu, Gu, Hu, Ma, Me, Pu, Qu, Ri, St, Su, To, Vi, VI	ANDES-E, CEUA, CMNH, ICN, MCUB, MEFLG, MIZA, MUSENUV, MPUJ_ENT, UARC, UMMZ	Álvarez-Álvarez et al., 2023; Aristizabal-Botero et al., 2022, 2023; Bota-Sierra et al., 2015, 2018a, 2019a; Calvert, 1902–08, 1909; De Marmels, 2006; Lara, 2016; Palacino- Rodríguez, 2013; Palacino-Rodríguez et al., 2015, 2017, 2020a, b; Salazar et al., 2015; Stand-Pérez et al., 2021; Ris, 1918; Velásquez, 2012
<i>Erythrodiplax abjecta</i> (Rambur, 1842)	LC	Palacino- Rodríguez et al., 2020	An, By, Cl, Cau, Cu, Hu, Ma, Me, Na, Qu, Ri, St, To, VI	ANDES-E, CEUA, MCUB, UARC	Borror, 1942; Bota-Sierra et al., 2018a, 2019a; Palacino-Rodríguez et al., 2017, 2019, 2020b; Ris, 1918, 1919
<i>Erythrodiplax andagoya</i> Borror, 1942	LC	No	An, Ch, Ri, St, VI	ANDES-E, CEUA, MCUB, UARC, UMMZ	Borror, 1942; Bota-Sierra et al., 2019a; Garrison et al., 2003; Garzón & Realpe, 2009; Palacino-Rodríguez et al., 2020a; Ris, 1919
<i>Erythrodiplax attenuata</i> (Kirby, 1889)	LC	No	Am, Gu, Gv, Pu	ANDES-E, CEUA	Bota-Sierra, 2012; Bota-Sierra et al., 2015; Florez et al., 2023
<i>Erythrodiplax basalis</i> (Kirby, 1897)	LC	Costa et al., 2001	Am, An, By, Cl, Cq, Ch, Cu, Gu, Gv, Ma, Me, Pu, St, To	ANDES-E, CEUA, MHNU-E	Álvarez-Álvarez et al., 2023; Aristizabal-Botero et al., 2022; Borror, 1942; Bota-Sierra et al., 2015; Florez et al., 2023; Garzón & Realpe, 2009; Palacino-Rodríguez, 2013; Palacino- Rodríguez et al., 2020a
<i>Erythrodiplax berenice naeva</i> (Hagen, 1861)	LC	Klots, 1932	An, Ch, Su	ANDES-E, CEUA	NA
<i>Erythrodiplax castanea</i> (Burmeister, 1839)	LC	No	Am, An, Ch, Hu, Me, Pu, Ri, VI	ANDES-E, CEUA, LES, MLS-I, UARC	Borror, 1942; Cuellar-Cardozo et al., 2020; Fraser, 1946b; Ris, 1918, 1919
<i>Erythrodiplax cauca</i> Borror, 1942*	DD	No	Qu	MIZA	De Marmels, 2006
<i>Erythrodiplax famula</i> (Erichson, 1848)	LC	No	Am, Cq, Gu, Me, VI	ANDES-E, CEUA, UARC	Palacino-Rodríguez et al., 2017; Ris, 1919; Stand-Pérez et al., 2022
<i>Erythrodiplax fervida</i> (Erichson, 1848)	LC	Trapero- Quintana & Reyes-Tur, 2008	An, At, Bo, Ce, Cl, Ch, Gu, Hu, Ma, Me, St, Su	ANDES-E, CEUA, MEFLG, MHNU- E, UARC	Altamiranda, 2009; Altamiranda-S et al., 2010; Álvarez-Álvarez et al., 2023; Borror, 1942; Bota-Sierra et al., 2019a; Garzón & Realpe, 2009; Palacino-Rodríguez et al., 2017, 2020a; Stand-Pérez et al., 2021
<i>Erythrodiplax fulva</i> Borror, 1957	LC	No	Gu	ANDES-E	NA
<i>Erythrodiplax funerea</i> (Hagen, 1861)	LC	Needham & Westfall, 1955	An, Ch, VI	CEUA, MCUB, MEFLG	Borror, 1942; Bota-Sierra et al., 2019a; Palacino-Rodríguez et al., 2020a; Ris, 1918, 1919
<i>Erythrodiplax fusca</i> (Rambur, 1842)	LC	Santos, 1967	Am, An, By, Cau, Ch, Cl, Cq, Cs, Cu, Gu, Gv, Hu, Ma, Me, Na, Ns, Pu, Qu, Ri, St, To, Va, VI	ANDES-E, CEUA, CMNH, MCUB, MHNU-E, MIZA, MPUJ_ENT, UARC	Álvarez-Álvarez et al., 2023; Aristizabal-Botero et al., 2022; Bota- Sierra et al., 2015, 2018a, 2019a; Calvert, 1902–08; Ris, 1919; De Marmels, 2006; Florez et al., 2023; Garzón & Realpe, 2009; Palacino- Rodríguez et al., 2017, 2020a
<i>Erythrodiplax ines</i> Ris, 1911	LC	No	An, Ri, St	ANDES-E, CEUA	Borror, 1942; Bota-Sierra et al., 2019a; Garzón & Realpe, 2009
<i>Erythrodiplax juliana</i> Ris, 1911	LC	Carvalho et al., 1991	An, St	ANDES-E, CEUA	Borror, 1942

Species	IUCN	Larva description	Departments	Collections	References
<i>Erythrodiplax kimminsi</i> Borror, 1942	LC	No	An, Ch, Ma, Me, Pu	ANDES-E, CEUA	Borror, 1942; Palacino-Rodríguez et al., 2017, 2020a
<i>Erythrodiplax latimaculata</i> Ris, 1911	LC	Costa et al., 2001	Me, Pu	ANDES-E, CEUA	Álvarez-Álvarez et al., 2023
<i>Erythrodiplax lativittata</i> Borror, 1942	LC	No	Am, An, Cq, Ch, Gu, Me, St	ANDES-E, CEUA	Aristizabal-Botero et al., 2022; Borror, 1942; Bota-Sierra et al., 2015; Garzón & Realpe, 2009
<i>Erythrodiplax longitudinalis</i> (Ris, 1919)	LC	No	Gu, Vi	ANDES-E	NA
<i>Erythrodiplax melanorubra</i> Borror, 1942	LC	Limongi, 1991	Pu	ANDES-E, UARC	NA
<i>Erythrodiplax ochracea</i> (Burmeister, 1839)	LC	Carvalho et al., 1991	Me, Pu	CBUCES, LES	Bota-Sierra et al., 2015; Fraser, 1946b; Ris, 1918
<i>Erythrodiplax paraguayensis</i> (Förster, 1905)	LC	Muzón & Garré, 2005	Gu, Me, St, To, Vi	ANDES-E	Garzón & Realpe, 2009
<i>Erythrodiplax parvamaculata</i> Borror, 1942*	LC	No	Va	CBUCES	Bota-Sierra et al., 2015
<i>Erythrodiplax tenuis</i> Borror, 1942	LC	No	Gu, Me, Va	ANDES-E	Florez et al., 2023
<i>Erythrodiplax umbrata</i> (Linnaeus, 1758)	LC	Calvert, 1928	Am, An, AS, At, Bo, Cau, Ch, Cs, Cu, Gj, Gu, Hu, Ma, Me, Pu, Qu, Ri, St, Su, To, Vi, VI	ANDES-E, CEUA, CMNH, MEFLG, MIZA, MPUJ_ENT, MHNU-E, UARC	Altamiranda, 2009; Altamiranda-S et al., 2010; Álvarez-Álvarez et al., 2023; Aristizabal-Botero et al., 2022; Borror, 1942; Bota-Sierra et al., 2018a, 2019a; Calvert, 1902–08; De Marmels, 2006; Garzón & Realpe, 2009; Lara, 2016; Palacino-Rodríguez, 2013; Palacino-Rodríguez et al., 2017, 2020a; Ris, 1918; Salazar et al., 2015; Stand-Pérez et al., 2021; Ris, 1919; Velásquez, 2012
<i>Erythrodiplax unimaculata</i> (De Geer, 1773)	LC	No	Am, Cq, Gu, Gv, Me, Pu, To	ANDES-E, CEUA, MHNU-E	Álvarez-Álvarez et al., 2023; Aristizabal-Botero et al., 2022; Florez et al., 2023; Palacino-Rodríguez, 2013
<i>Erythrodiplax venusta</i> (Kirby, 1897)	LC	No	Me, Vi	ANDES-E	Ris, 1919
<i>Fylgia amazonica lynchii</i> De Marmels, 1989	LC	De Marmels, 1992	Gv, Me, Va	ANDES-E, CEUA	Florez et al., 2023; Rache et al., 2013
<i>Gynothemis pumila</i> (Karsch, 1890)	LC	Fleck, 2004	Cau, Me, Pu, Va	ANDES-E, CEUA, LES	Bota-Sierra et al., 2015, 2018a; Fraser, 1946b; Palacino-Rodríguez et al., 2017
<i>Idiataphe amazonica</i> (Kirby, 1889)	LC	No	An, At, Me, Su	ANDES-E, CEUA, MHNU-E	Álvarez-Álvarez et al., 2023; Stand-Pérez et al., 2021
<i>Idiataphe cubensis</i> (Scudder, 1866)	LC	Needham & Fisher, 1936	Ch, Su	CEUA	Bota-Sierra et al., 2019a
<i>Idiataphe longipes</i> (Hagen, 1861)	LC	No	Ch	ANDES-E, UARC	Palacino-Rodríguez et al., 2020a
<i>Libellula herculea</i> Karsch, 1889	LC	De Marmels, 1982	An, By, Ch, Hu, Ma, Me, Qu, Ri, St, VI, VI	ANDES-E, CEUA, CMNH, MEFLG, MIZA, MLS-I	Aristizábal-Botero et al., 2023; Bota-Sierra et al., 2019a; Calvert, 1902–08; Cuellar-Cardozo et al., 2020; De Marmels, 2006; Palacino-Rodríguez, 2009; Palacino-Rodríguez et al., 2020a; Ris, 1918, 1919; Velásquez, 2012
<i>Macrothemis extensa</i> Ris, 1913	LC	No	Gu	ANDES-E	NA
<i>Macrothemis fallax</i> May, 1998*	DD	No	Ma, Na, Ri	ANDES-E, CEUA, UARC	Bota-Sierra et al., 2019a

Species	IUCN	Larva description	Departments	Collections	References
<i>Macrothemis flavesiensis</i> (Kirby, 1897)*	LC	No	Vi	ANDES-E	NA
<i>Macrothemis hahneli</i> Ris, 1913*	LC	von Ellenrieder, 2007	An, Ri, St	ANDES-E, CEUA	Bota-Sierra et al., 2019a
<i>Macrothemis hemichlora</i> (Burmeister, 1839)	LC	Vargas et al., 2013	At, Ch, Cl, Gu, Hu, Ma, Me, St, To	ANDES-E, CEUA, CMNH, MLS-I, MHNU-E, MPUJ-ENT	Álvarez-Álvarez et al., 2023; Calvert, 1902–08; Cuellar-Cardozo et al., 2020; Palacino-Rodríguez et al., 2017; Ris, 1918, 1919; Stand-Pérez et al., 2021
<i>Macrothemis imitans leucozona</i> Ris, 1913	LC	Vargas et al., 2013	Cl, Me, Qu, St	ANDES-E, MIZA	Amaya-Perilla & Palacino-Rodríguez, 2012; De Marmels, 2006
<i>Macrothemis inacuta</i> Calvert, 1898	LC	Novelo-Gutiérrez & Ramírez, 1998	An, Ch, Me, St, To	ANDES-E, CEUA	Palacino-Rodríguez et al., 2017
<i>Macrothemis inequiunguis</i> Calvert, 1895	LC	Ramírez & Novelo-Gutiérrez, 1999	Ch, Ma, Ri, VI	ANDES-E, CEUA, CMNH	Bota-Sierra et al., 2019a; Calvert, 1902–08
<i>Macrothemis musiva</i> Calvert, 1898	LC	Santos, 1970	An, Cu, Ma, Me, Ri, St, VI	ANDES-E, CEUA, CMNH, FNS	Bota-Sierra et al., 2019a; Calvert, 1902–08; Ris, 1918, 1919
<i>Macrothemis pseudimitans</i> Calvert, 1898	LC	Limongi, 1991	An, Cu, Ma, Ri, St	ANDES-E, CEUA, UARC	Bota-Sierra et al., 2019a; Ris, 1918, 1919
<i>Miathyria marcella</i> (Selys in Sagra, 1857)	LC	Klots, 1932	An, At, Bo, Ch, Cl, Hu, Gj, Ma, Me, Pu, Su, To, Vi, VI	ANDES-E, CEUA, CMNH, MCZ, MEFLG, UARC	Aristizábal-Botero et al., 2023; Bota-Sierra et al., 2018a, 2019a; Calvert, 1902–08; Lara, 2016; Palacino-Rodríguez et al., 2017, 2020a; Stand-Pérez et al., 2021; Velásquez, 2012
<i>Miathyria simplex</i> (Rambur, 1842)	LC	Limongi, 1991	Am, At, Cl, Gu, Gv, Me, Ri, To	ANDES-E, CEUA, MHNU-E	Altamiranda-S et al., 2010; Álvarez-Álvarez et al., 2023; Bota-Sierra et al., 2015, 2019a; Florez et al., 2023; Stand-Pérez et al., 2021
<i>Micrathyria aequalis</i> (Hagen, 1861)	LC	Needham & Westfall, 1955	An, At, Ch, Cl, Cu, Hu, Ma, Qu, St, Su, To	ANDES-E, CEUA, UARC, MIZA	Calvert, 1902–08; De Marmels, 2006; Lara, 2016; Stand-Pérez et al., 2021
<i>Micrathyria artemis</i> (Ris, 1911)	LC	Santos, 1972	Me	MHNU-E	Álvarez-Álvarez et al., 2021, 2023
<i>Micrathyria atra</i> (Martin, 1897)	LC	Santos, 1978	Gu	ANDES-E	NA
<i>Micrathyria caerulistyla</i> Donnelly, 1992	LC	No	An, Ri	CEUA	Bota-Sierra et al., 2019a
<i>Micrathyria catenata</i> Calvert, 1909	LC	No	Cu, Me, Va	ANDES-E	Lara-Contreras et al., 2017
<i>Micrathyria dictynna</i> Ris, 1919	LC	No	At, Ch, Ri	ANDES-E, CEUA, UARC	Stand-Pérez et al., 2021
<i>Micrathyria dido</i> (Ris, 1911)	LC	No	Gv, Me	ANDES-E, MHNU-E	Álvarez-Álvarez et al., 2021, 2023; Florez et al., 2023
<i>Micrathyria didyma</i> (Selys in Sagra, 1857)	LC	Needham, 1943	Cl, Cu, Hu, St, Su	ANDES-E, CEUA	Garzón & Realpe, 2009
<i>Micrathyria eximia</i> Kirby, 1897	LC	No	NA	NA	Ris, 1918
<i>Micrathyria hippolyte</i> Ris, 1911	LC	No	Cq	UARC	Stand-Pérez et al., 2022
<i>Micrathyria laevigata</i> Calvert, 1909	LC	No	Ma, St	ANDES-E, CMNH	NA
<i>Micrathyria mengeri watsoni</i> Dunkle, 1995	LC	Assis & Costa, 1994	An	UMMZ, FSCA	Dunkle, 1995

Species	IUCN	Larva description	Departments	Collections	References
<i>Micrathyria ocellata</i> Martin, 1897	LC	Assis & Costa, 1994	An, At, Ch, Cq, Hu, Me, Ri, St	ANDES-E, CEUA	Bota-Sierra et al., 2019a; Garzón & Realpe, 2009; Lara, 2016; Salazar et al., 2015; Stand-Pérez et al., 2021
<i>Micrathyria pseudeximia</i> Westfall, 1992	LC	Dalzochio, 2009	Ch, Me, Pu, St	ANDES-E, CEUA, MHNU-E	Álvarez-Álvarez et al., 2023; Bota-Sierra et al., 2019a; Garzón & Realpe, 2009
<i>Micrathyria spinifera</i> Calvert, 1909	LC	No	Gu, Gv	ANDES-E	Florez et al., 2023
<i>Micrathyria spuria</i> (Selys, 1900)	LC	Souza & Costa, 2002	Cau, Me, To	ANDES-E, CEUA, MHNU-E	Álvarez-Álvarez et al., 2023; Ris, 1918
<i>Micrathyria sympriona</i> Tennesen, 2000	LC	No	Cau, Ri	CEUA	Bota-Sierra et al., 2019a, b
<i>Micrathyria tibialis</i> Kirby, 1897	LC	Souza & Costa, 2002	Ch, Cl, Me, Su	ANDES-E, CEUA, UARC	Ris, 1918
<i>Micrathyria venezuelae</i> De Marmels, 1989	LC	Hartung, 2022	Cu, Hu, Me	ANDES-E	NA
<i>Misagria parana</i> Kirby, 1889	LC	Fleck & Neiss, 2019	Cau	CEUA	Bota-Sierra et al., 2018a
<i>Nephepeltia flavifrons</i> (Karsch, 1889)	LC	No	An, At, Bo, By, Ce, Cl, Co, Gu, Ma, Me, St, Vi	ANDES-E, CEUA, FSCA, MHNU-E, RWG, UMMZ	Álvarez-Álvarez et al., 2023; Aristizabal-Botero et al., 2022, 2023; Stand-Pérez et al., 2021; von Ellenrieder, 2014
<i>Nephepeltia phryne</i> (Perty, 1834)	LC	De Marmels, 1990	An, At, Ch, Cq, Ma, Me, Pu, Ri, St	ANDES-E, CEUA, UMMZ, UARC	Bota-Sierra et al., 2018a, 2019a; von Ellenrieder, 2014
<i>Oligoclada abbreviata</i> <i>limnophila</i> Machado & Machado, 1993	LC	Machado & Machado, 1993	Cq, Gu, Me	ANDES-E, CEUA, UARC	Bota-Sierra et al., 2018b; Palacino-Rodríguez et al., 2017; Stand-Pérez et al., 2022
<i>Oligoclada amphinome</i> Ris, 1919*	LC	No	Va	ANDES-E	NA
<i>Oligoclada garrisoni</i> De Marmels, 2008	DD	No	Gu	ANDES-E	NA
<i>Oligoclada heliophila</i> Borrer, 1931	Vu	No	An, Ch, Cl, Ma, To	ANDES-E, CEUA, UMMZ	Borrer, 1931; Bota-Sierra et al., 2019a; Garrison et al., 2003
<i>Oligoclada monosticha</i> Borrer, 1931	LC	No	Am, Gu, Vi	ANDES-E	Borrer, 1931
<i>Oligoclada pachystigma</i> Karsch, 1890	LC	Fleck, 2003	Am, Cs, Gu, Me	ANDES-E, CEUA, MHNU-E	Álvarez-Álvarez et al., 2023; Borrer, 1931; Bota-Sierra et al., 2015
<i>Oligoclada umbricola</i> Borrer, 1931*	LC	no	An, Ch, St	ANDES-E, CEUA, UARC	Borrer, 1931; Bota-Sierra et al., 2019a; Garzón & Realpe, 2009
<i>Oligoclada walkeri</i> Geijskes, 1931	LC	no	Am, Gu	ANDES-E	Borrer, 1931
<i>Orthemis aequilibris</i> Calvert, 1909	LC	Fleck, 2003	An, Cq, Gu, Me, St	ANDES-E, CEUA, UARC, MHNU-E	Álvarez-Álvarez et al., 2023; Palacino-Rodríguez et al., 2017; Ris, 1918, 1919; Stand-Pérez et al., 2022
<i>Orthemis ambirufa</i> Calvert, 1909	LC	No	Me	DRP	von Ellenrieder, 2012
<i>Orthemis anthracina</i> De Marmels, 1989	LC	No	An, Cq	UARC, NE, UMMZ	Stand-Pérez et al., 2022; von Ellenrieder, 2012
<i>Orthemis attenuata</i> (Erichson, 1848)	LC	No	An, By, Gu, Ma, Su	ANDES-E, CEUA, UMMZ, RWG	Florez et al., 2023; von Ellenrieder, 2012
<i>Orthemis bolleyi</i> Calvert, 1906	LC	Fleck, 2003	Me, Pu	LES	Fraser, 1946b; Palacino-Rodríguez et al., 2017; Ris, 1918, 1919
<i>Orthemis concolor</i> Ris, 1919	LC	No	Gu	ANDES-E	NA
<i>Orthemis coracina</i> von Ellenrieder, 2009	LC	No	An	UMMZ	von Ellenrieder, 2012

Species	IUCN	Larva description	Departments	Collections	References
<i>Orthemis cultriformis</i> Calvert, 1899	LC	Carvalho & Werneck, 2005	Am, An, Ar, At, By, Ch, Cl, Gu, Me, Na, Pu, Ri, St	ANDES-E, CEUA, LES, MHNU-E, UARC, UMMZ	Álvarez-Álvarez et al., 2023; Bota-Sierra et al., 2019a; Fraser, 1946b; Palacino-Rodríguez et al., 2017, 2020a; Ris, 1918, 1919; von Ellenrieder, 2012
<i>Orthemis discolor</i> (Burmeister, 1839)	LC	No	Am, An, AS, At, By, Cau, Ch, Cl, Cq, Cs, Cu, Gu, Hu, Ma, Me, Na, Qu, Pu, Ri, St, Su, To, Va, Vi, VI	ANDES-E, CEUA, MEFLG, MCUB, MHNU-E, MIZA, MPUJ_ENT, UARC	Altamiranda, 2009; Álvarez-Álvarez et al., 2023; Aristizábal-Botero et al., 2023; Bota-Sierra et al., 2019a; De Marmels, 2006; Hagen, 1869; Lara, 2016; Palacino-Rodríguez, 2009; Palacino-Rodríguez et al., 2017, 2020a; Salazar et al., 2015; Stand-Pérez et al., 2021
<i>Orthemis levis</i> Calvert, 1906	LC	De Marmels, 1990	An, At, Cl, Hu, Ma, Me	ANDES-E, CEUA, UMMZ	von Ellenrieder, 2012
<i>Orthemis schmidti</i> Buchholz, 1950	LC	Costa & Santos, 2009	An, Me, Su	CEUA, MHNU-E	Álvarez-Álvarez et al., 2023
<i>Orthemis sulphurata</i> Calvert, 1906	LC	No	Bo, Ch, Ri, VI	CEUA	Bota-Sierra et al., 2019a
<i>Pantala flavescens</i> (Fabricius, 1798)	LC	Cabot, 1890	An, AS, At, By, Ce, Ch, Cs, Cu, Gj, Hu, Ma, Me, Qu, Ri, St, Su, To, Vi, VI	ANDES-E, CEUA, MEFLG, MCUB, MHNU-E, MIZA, MPUJ_ENT, UARC	Altamiranda, 2009; Álvarez-Álvarez et al., 2023; Aristizábal-Botero et al., 2023; Bota-Sierra et al., 2019a; Calvert, 1909; De Marmels, 2006; Lara, 2016; Palacino-Rodríguez et al., 2015; Salazar et al., 2021; Stand-Pérez et al., 2021; Ris, 1918, 1919
<i>Pantala hymenaea</i> (Say, 1840)	LC	Kennedy, 1923	Ch, Ma, VI	CEUA, MCUB, MEFLG	Bota-Sierra et al., 2019a; Calvert, 1909; Palacino-Rodríguez et al., 2020a
<i>Perithemis bella</i> Kirby, 1889	LC	no	Am	CEUA	Bota-Sierra, 2012, 2015
<i>Perithemis cornelia</i> Ris, 1910	LC	no	Gu	ANDES-E	Aristizabal-Botero et al., 2022
<i>Perithemis domitia</i> (Drury, 1773)	LC	Novelo-Gutiérrez, 2002	An, At, Ch, Ma, Me, Ri, To	ANDES-E, CEUA, CMNH, UARC, UMMZ	Bota-Sierra et al., 2019a; Calvert, 1902–08; Palacino-Rodríguez et al., 2017; Ris, 1930
<i>Perithemis electra</i> Ris, 1930	LC	Santos, 1970	An, Ch, Me, ST	ANDES-E, CEUA, UARC	Palacino-Rodríguez et al., 2017
<i>Perithemis lais</i> (Perty, 1834)	LC	Costa & Régis, 2005	Am, Ch, Gu, Gv, Me, St, Va	ANDES-E, CEUA	Aristizabal-Botero et al., 2022; Bota-Sierra et al., 2015; Florez et al., 2023; Garzón & Realpe, 2009; Palacino-Rodríguez et al., 2017, 2020a
<i>Perithemis rubita</i> Dunkle, 1982	LC	Dunkle, 1982	Gv	ANDES-E	Florez et al., 2023
<i>Perithemis tenera</i> (Say, 1840)	LC	Needham, 1901	An, At, By, Ce, Ch, Cl, Co, Cu, Hu, Gj, Ma, Me, Qu, Pu, Ri, St, Su, To	ANDES-E, CEUA, MEFLG, MHNU-E, MIZA, MLS-I, MPUJ_ENT, UARC, UMMZ	Altamiranda, 2009; Altamiranda-S et al., 2010; Álvarez-Álvarez et al., 2023; Bota-Sierra et al., 2019a; Cuellar-Cardozo et al., 2020; De Marmels, 2006; Lara, 2016; Palacino-Rodríguez, 2009; Salazar et al., 2015; Stand-Pérez et al., 2021; Ris, 1930
<i>Perithemis thais</i> Kirby, 1889	LC	Spindola et al., 2001	Am, Ch, Me, St, Va	ANDES-E, CEUA, MHNU-E	Álvarez-Álvarez et al., 2023; Bota-Sierra, 2014b; Bota-Sierra et al., 2015; Garzón & Realpe, 2009
<i>Planiplax phoenicura</i> Ris, 1912	LC	Souza et al., 1999	At, Cs, Me	ANDES-E, CEUA, MHNU-E, UARC	Álvarez-Álvarez et al., 2023; Palacino-Rodríguez et al., 2017; Stand-Pérez et al., 2021

Species	IUCN	Larva description	Departments	Collections	References
<i>Rhodopygia cardinalis</i> (Erichson, 1848)	LC	No	Gu, Me, St, Su	ANDES-E, CEUA, MHNU-E	Álvarez-Álvarez et al., 2023; Garzón & Realpe, 2009; Palacino-Rodríguez et al., 2017
<i>Rhodopygia hinei</i> Calvert, 1907	LC	No	Ch, Ri	CEUA	Bota-Sierra et al., 2019a
<i>Sympetrum gilvum</i> (Selys, 1884)	LC	Limongi, 1991	An, By, Cu, Ma, Na, Ri, St, To, Vi	ANDES-E, CEUA, MCZ, UARC	Calvert, 1902–08; Ris, 1918, 1919
<i>Sympetrum paramo</i> De Marmels, 2001	DD	No	An, St	CEUA	Bota-Sierra, 2014a
<i>Tauriphila australis</i> (Hagen, 1867)	LC	Westfall, 1998	An, At, Ch, Ma, Su, Vi	ANDES-E, CEUA, CMNH, MCZ, UARC	Calvert, 1902–08, 1909; Stand-Pérez et al., 2021
<i>Tholymis citrina</i> Hagen, 1867	LC	Fleck et al., 2004	Am, An, At, Bo, Ch, Co, Gu, Gj, Ma, Me, Ri, Su, Vi	ANDES-E, CEUA, MEFLG, CMNH	Aristizabal-Botero et al., 2022; Bota-Sierra et al., 2019a; Calvert, 1902–08, 1909; Dunkle, 1981; Palacino-Rodríguez et al., 2017; Stand-Pérez et al., 2021
<i>Tramea abdominalis</i> (Rambur, 1842)	LC	Cabot, 1890	An, At, Ch, Cl, Cu, Gu, Hu, Me, Ri, To	ANDES-E, CEUA, MEFLG, UARC	Aristizabal-Botero et al., 2022; Bota-Sierra et al., 2019a; Ris, 1919; Salazar et al., 2015
<i>Tramea binotata</i> (Rambur, 1842)	LC	Needham et al., 2000	Ch, Cu, Gu, Me, Ri, Va, Vi	ANDES-E, CEUA, MHNU-E, UARC	Álvarez-Álvarez et al., 2023; Aristizabal-Botero et al., 2022; Bota-Sierra et al., 2019a; Palacino-Rodríguez et al., 2020a; Ris, 1918, 1919
<i>Tramea cophysa</i> Hagen, 1867	LC	Santos, 1968	An, Cu, Ma, Me	CMNH	Calvert, 1902–08, 1909; Ris, 1918, 1919
<i>Tramea darwini</i> Kirby, 1889	LC	Souza et al., 1999	An, AS, At, Ce, Ch, Cu, Cs, Gu, Gj, Gv, Ma, Me, Qu, Ri, St, Su, To, Va, Vi, VI	ANDES-E, CEUA, MEFLG, MHNU-E, MIZA, UARC	Álvarez-Álvarez et al., 2023; Aristizabal-Botero et al., 2023; Bota-Sierra et al., 2019a; De Marmels, 2006; De Marmels & Rácenis, 1982; Florez et al., 2023; Palacino-Rodríguez et al., 2020a; Stand-Pérez et al., 2021
<i>Tramea onusta</i> Hagen, 1861	LC	Byers, 1927	An, At	CEUA	Altamiranda-S et al., 2010
<i>Tramea rustica</i> De Marmels & Rácenis, 1982	LC	No	Cs, Gu, Ma, Me, Vi	ANDES-E, MHNU-E, MPUJ_ENT	Álvarez-Álvarez et al., 2023; De Marmels & Rácenis, 1982
<i>Uracis fastigiata</i> (Burmeister, 1839)	LC	No	Am, An, Cq, Ch, Gv, Ma, Me, Pu, Vi	ANDES-E, CEUA, CMNH, MCUB, MEFLG, MHNU-E	Álvarez-Álvarez et al., 2023; Ris, 1918; Ris, 1919; Bota-Sierra et al., 2015, 2018a, b; Calvert, 1902–08; Florez et al., 2023; Palacino-Rodríguez et al., 2020a
<i>Uracis imbuta</i> (Burmeister, 1839)	LC	No	Am, An, By, Ch, Cl, Cq, Cs, Cu, Gu, Gv, Hu, Ma, Me, Pu, Ri, St, Su, Va, Vi, VI	ANDES-E, CEUA, CMNH, MEFLG, MHNU-E, MPUJ_ENT, UARC	Altamiranda, 2009; Álvarez-Álvarez et al., 2023; Aristizabal-Botero et al., 2022; Bota-Sierra et al., 2015, 2018a, 2019a; Calvert, 1902–08; Florez et al., 2023; Garzón & Realpe, 2009; Palacino-Rodríguez, 2009; Palacino-Rodríguez et al., 2017, 2020a; Salazar et al., 2015; Ris, 1918, 1919
<i>Uracis infumata</i> (Rambur, 1842)	LC	No	Am, Cq, Gu, Gv	ANDES-E, CEUA, ICN	Aristizabal-Botero et al., 2022; Florez et al., 2023; Palacino-Rodríguez, 2009
<i>Uracis ovipositorix</i> Calvert, 1909	LC	No	Cq, Gu	ANDES-E, UARC	Aristizabal-Botero et al., 2022; Stand-Pérez et al., 2022

Species	IUCN	Larva description	Departments	Collections	References
<i>Uracis siemensi</i> Kirby, 1897	LC	No	Am, Cq, Gu, Pu	ANDES-E, ICN, LES, UARC	Fraser, 1946b; Palacino-Rodríguez, 2009
<i>Ypirangathemis calverti</i> Santos, 1945	LC	No	Cq, Gu	ANDES-E, UARC	Stand-Pérez et al., 2022
<i>Zenithoptera fasciata</i> (Linnaeus, 1758)	LC	No	Am, An, Ch, Cq, Gu, Hu, Me, Pu, Ri, St, VI	ANDES-E, CEUA, LES, MEFLG, UARC	Aristizabal-Botero et al., 2022; Bota-Sierra et al., 2019a, 2015; Fraser, 1946b; Garzón & Realpe, 2009; Palacino-Rodríguez et al., 2017; Ris, 1919
<i>Zenithoptera lanei</i> Santos, 1941	LC	No	Gu, Me, Pu, Va	ANDES-E, ICN	Aristizabal-Botero et al., 2022; Bota-Sierra, 2014b
<i>Zenithoptera viola</i> Ris, 1910	LC	No	Me	ICN	Bota-Sierra, 2014b

Puzzling or rare species

Out of the 536 species included in the current list, 15 are considered mysterious species (Table 4). No voucher for these species has been found in national collections, and their records come from a single or few bibliographic references after which they have not been found again. For nine species, records were made at the end of the 19th century and the beginning of the 20th

century (between 1873 and 1942), while the remaining ones were made in the last two decades (between 1999 and 2017). For seven species, it was not possible to associate a specific locality. Four species are endemic, one of them being critically endangered (CR) and the remaining three data deficient (DD). Furthermore, four species are closely related to other taxa, so it is likely that they can be considered as junior synonyms.

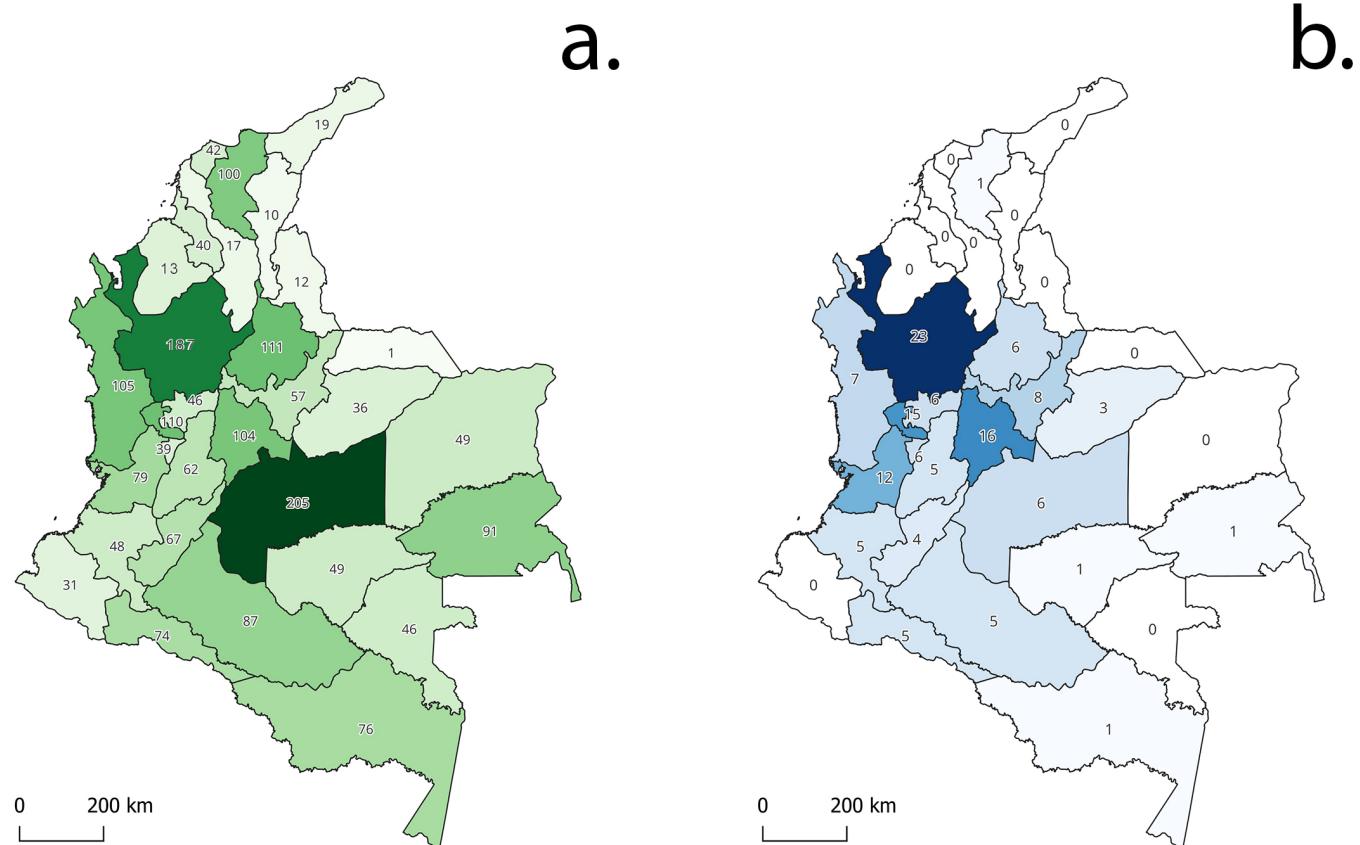


Figure 3. Odonate species by department in Colombia: (a) Total species richness; (b) endemic species richness. Numbers correspond to the total species by department.

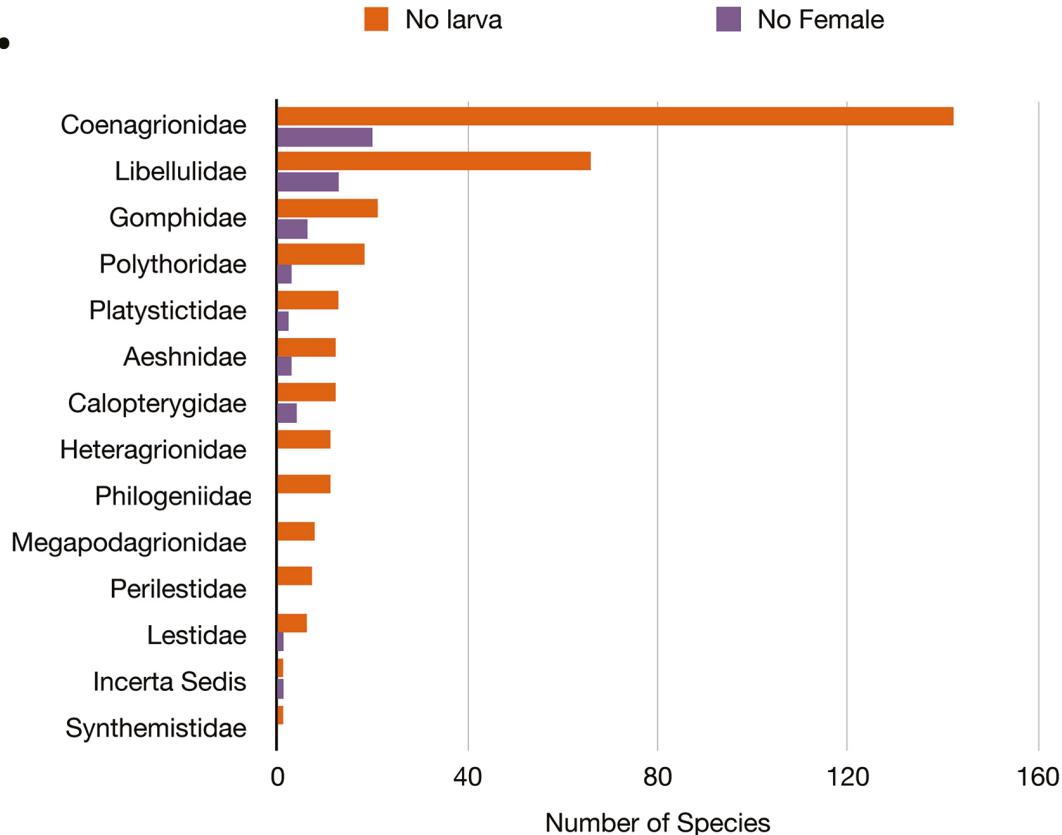
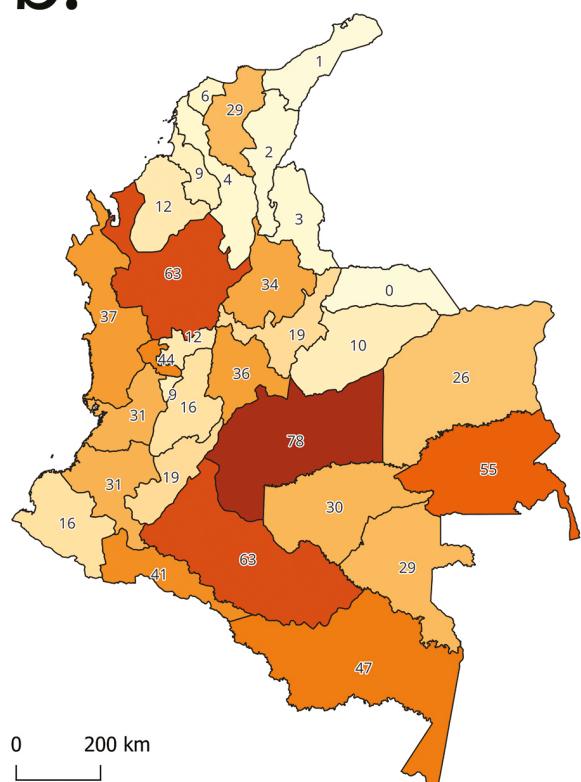
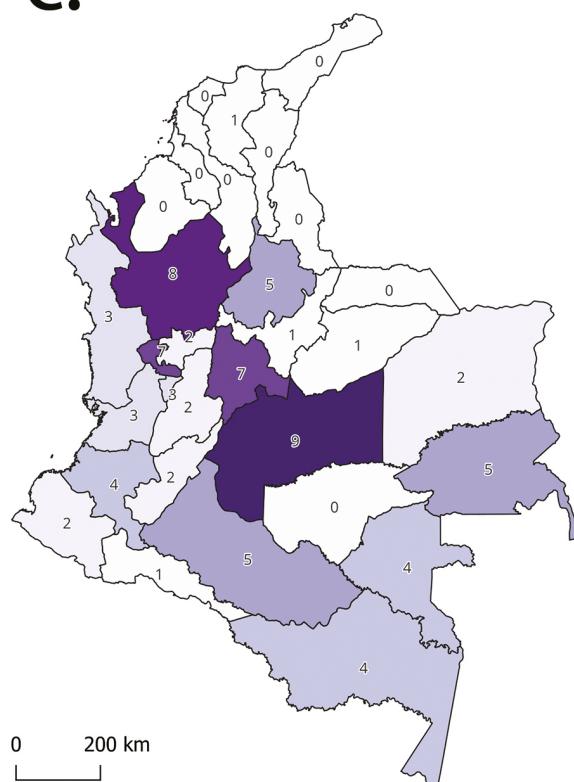
a.**b.****c.**

Figure 4. Knowledge of females and larvae in Colombia: (a) Number of unknown larvae and females by family; (b) number of species without larval description per department; (c) number of species without female description per department. Numbers correspond to the total species by department.

Table 4. Current list of puzzling or rare Colombian odonates, with their IUCN status, information on endemicity, the departments and municipalities where the species has been reported, references mentioning these species, and references suggesting possible synonyms. An: Antioquia; Cau: Cauca; Cu: Cundinamarca; Me: Meta; Qu: Quindío; To: Tolima

Family	Species	IUCN	Endemic	Departments in Colombia	Municipality	Main reference(s)	Possible synonymy
Aeshnidae	<i>Andaeschna rufipes</i> (Ris, 1918)	LC	No	Cu	Guayabetal	Ris, 1918	No
Aeshnidae	<i>Gynacantha remartinia</i> Navás, 1934	DD	Yes	Me, To	Villavicencio, Espinal	Navás, 1934	Yes (close to <i>Gynacantha tibiata</i> Karsch, 1891)—see Williamson & Williamson (1930)
Aeshnidae	<i>Gynacantha tenuis</i> Martin, 1909	LC	No	An	Puerto Berrío	(Williamson, 1923) Ris, 1918; Selys Longchamps, 1873	No
Gomphidae	<i>Epigomphus obtusus</i> Selys, 1869	LC	No	Cu	Unknown		No
Libellulidae	<i>Argyrothemis argentea</i> Ris, 1911	LC	No	Me	San Martín	Rache et al., 2013	No
Libellulidae	<i>Brechmorhogha flavopunctata</i> (Martin, 1897)	DD	No	Unknown	Unknown	Ris, 1913	No
Libellulidae	<i>Brechmorhogha pertinax</i> (Hagen, 1861)	LC	No	Unknown	Unknown	Ris, 1913	No
Libellulidae	<i>Erythrodiplax cauca</i> Borror, 1942	DD	Yes	Cau?, Qu	Tebaida	Borror, 1942; De Marmels, 2006	Yes (close to <i>Erythrodiplax abjecta</i> [Rambur, 1842])—see Bota-Sierra, 2014a
Libellulidae	<i>Micrathyria eximia</i> Kirby, 1897	LC	No	Unknown	Unknown	Ris, 1918	No
Calopterygidae	<i>Hetaerina sempronina</i> Hagen, 1853	LC	No	Unknown	Bogotá (Hagen 1877)	Garrison, 1990; Hagen, 1877	No
Coenagrionidae	<i>Argia gerhardi</i> Calvert, 1909	LC	No	Cu, Me	Susumuco, Rio Negro, Villa-vicencio	Garrison & von Ellenrieder, 2015; Palacino-Rodríguez et al., 2017; Ris, 1918	No (however made part of <i>Argia gerhardi-kokama-nigrior-complex</i>)—Rosser Garrison (pers. comm. 27-ix-2022)
Coenagrionidae	<i>Ischnura fluviatilis</i> Selys, 1876	LC	No	Unknown	Unknown	Bota-Sierra et al., 2019c	No
Coenagrionidae	<i>Neoneura myrthea</i> Williamson, 1917	LC	No	Unknown	Unknown	Garrison, 1999	No
Lestidae	<i>Lestes sternalis</i> (Navás, 1930)	DD	Yes	Cu	Choachí	Navás, 1924	Yes, probably synonym with <i>Lestes apollinaris</i> , the cerci illustrated by Návás (1924) are very similar for both species, and their distributions overlap
Platystictidae	<i>Palaemnema edmondi</i> Calvert, 1931	CR	Yes	An	Puerto Berrío	Calvert, 1931	No

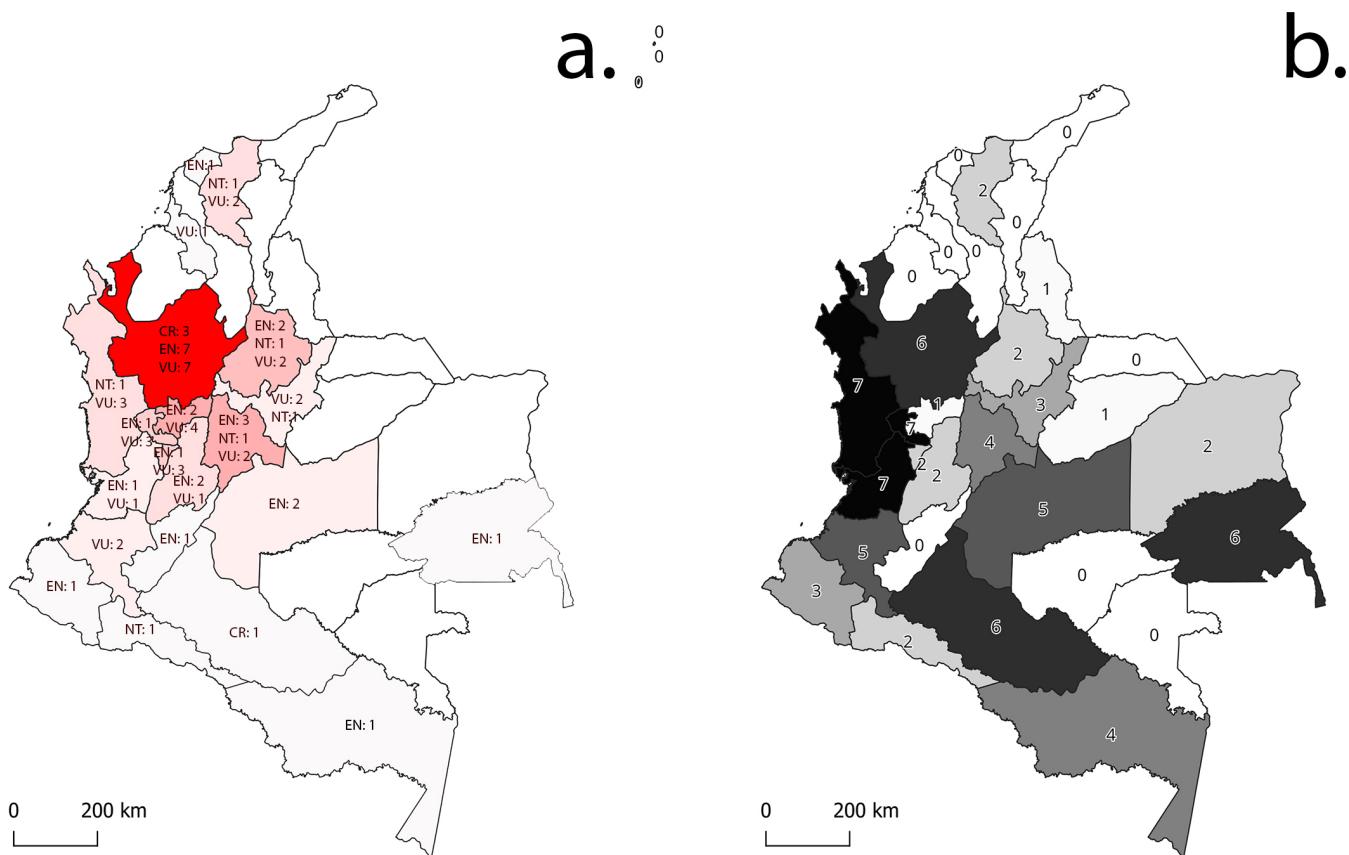


Figure 5. Odonate species by department in Colombia: (a) Number of threatened species according to IUCN; (b) number of data deficient species according to IUCN. CR – Critically endangered; EN – Endangered; NT – Near threatened; VU – Vulnerable. Numbers correspond to the total species by department.

Discussion

This list nearly doubles the number of species recorded in Colombia in 2011 (Pérez-Gutiérrez & Palacino-Rodríguez, 2011). In America, Colombia has recently surpassed the number of species for the Nearctic Region (509 spp.) (Abbott et al., 2022). For the tropical region in South America, Colombia is approaching the expected number of species close to Peru (553 spp.) and Venezuela (522 spp.), its neighboring countries with similar sizes (Hoffmann, 2008; Vivas-Santeliz & De Marmels, 2017). The growth of 38% in species records over a decade underscores the great momentum odonatology is gaining in Colombia, placing the country among the globally ten most diverse nations for odonates (Pinto et al., 2022). Nevertheless, the number of species recorded for the country is expected to grow in the upcoming years, since several new species are being described. Additionally, there are large gaps in large areas that remain poorly explored or completely unexplored where sampling is needed. As indicated by the high number of data-deficient species and the limited knowledge of several registered ones, particularly those with undescribed females or larvae, highlights the significant breach in understanding of Colombian odonatofauna. Checklists serve as fundamental and crucial tools for research, and it is expected that this

work will boost the enthusiasm and further research on Colombian odonates helping to fulfill these knowledge gaps.

The high number of endangered species recorded in the country is concerning, with the majority located in the Andean region, where tropical mountains promote biological endemism (Bota-Sierra et al., 2022; Janzen, 1967). On the other hand, the core of the Colombian human population residing in the Andean region exacerbates the conflict as the habitats of several unique species are disappearing due to urbanization, agriculture and mining activities (Bota-Sierra et al., 2016, 2021; Palacino-Rodríguez et al., 2020; Ríos-Touma et al., 2023). Despite these challenges, there is hope that this compilation will be a crucial step in initiating effective conservation actions to ensure the survival of all Colombian odonates.

Odonate larvae, as sensitive inhabitants of aquatic ecosystems, offer significant value due to their bioindicator properties (Arango & Roldan, 1983; Juen et al., 2007; Miguel et al., 2017; Oertli, 2008). They are commonly collected by environmental consultants working on freshwater quality assessments. However, the level of knowledge regarding the immature stages of the odonates in Colombia requires attention, with close to 60% of the larvae remaining undescribed. Most of the collections done by environmental consultants are

identified only to the family level, leaving out a great amount of valuable information. It is therefore crucial to intensify the work on the knowledge of odonate larvae, creating taxonomic tools that will allow consultants to get deeper into odonate biology and therefore boost the knowledge of Colombian aquatic ecology through odonates.

The number of publications on Colombian odonates has greatly increased in the last decade likely attributed to the increase in the contributions from Colombian researchers. This highlights the great effort by national researchers to build a Colombian odonatology school and national reference collections filled with the type specimens of Colombian odonatofauna. A series of publications in taxonomy are backed up by these collections. Over the last decade, taxonomic topics have been the most frequent, since taxonomy is the first step to develop other areas in biology such as conservation, ecology, evolution, or physiology (Pinto et al., 2022).

Robust national reference collections, serve as part of a solid base for biological sciences development (Abbott & Sandall, 2022). These collections help to overcome an historical impediment that still hinders odonatology development in our country: primary types of species described from Colombia deposited in foreign collections making the access difficult and possibly causing errors or misidentifications. The five museums reviewed here harbor a great base for taxonomic knowledge in Colombia, ANDES-E in Bogotá and CEUA in Medellín, the most populous cities in the country, stand out for their number of specimens, species, and types distributed across the whole country. Despite their significance, there is still a considerable amount of curatorial work needed in these collections and the remaining 75 entomological collections in the country (RNC, 2024), especially in remarkable collections such as the Instituto Nacional de Ciencias (ICN) in Bogotá, or the Museo de Entomología de la Universidad del Valle (MUSENUV) in Cali. We encourage placement of primary types in Colombian collections. In the same way we consider it a priority to digitize old material deposited in foreign institutions relevant for Colombian taxonomic work (Ebach et al., 2011), especially when there is only a holotype (Coleman & Radulovici, 2020; Deng et al., 2019). But despite their great importance, the biological collections, museums, and taxonomy are going through a global crisis due to the shortage of resources and qualified labor (Engel et al., 2021).

There is a geographic bias of published research towards the Andean region likely due to the concentration of the human population in this area and research facilities making it more accessible, cost-effective and practical for researchers to study this region. A similar pattern has been documented in Brazil where there is a relationship between increased sampling effort and more populated regions, that coincide with a greater number of active researchers (De Marco & Vianna, 2005; Vianna & De Marco, 2012). Similarly, recent findings regarding the gap in ecological research across the

Brazilian Amazonia indicate that factors such as accessibility (travel time) and distance to research facilities play significant roles in determining the likelihood of research in aquatic taxa, including Odonata (Carvalho et al., 2023). This observation also emphasizes the importance of directing attention and intensifying research efforts in other equally fascinating and biologically rich regions in Colombia.

According to Pérez-Gutiérrez and Palacino-Rodríguez (2011), only 11 new Colombian species were described between 1981 and 2011. By contrast, in the last 13 years, 29 new species were described for the country, almost three times as many new species compiled in the previous checklist over 30 years. Most of these new species involve national researchers, with 19 of them being described solely by Colombians, and seven in collaboration with international researchers; this is another indicator of the great momentum of current Colombian odonatology. Most of the new species have been described in the much-studied Andean mountains, still the exploration of new localities in the lowlands has also promoted the discovery of new species for science, especially in the Amazon and Pacific regions where a great sampling effort is needed.

One of the impediments for Colombian odonatologists that threatens the dynamics of our work is the armed conflict and the difficulties for safe transit in the areas affected by it. Paradoxically they are the most forested and potentially most diverse regions, added to the current problems of war that already poses a high risk for the field work, there is the destruction of forests and basins due to activity associated with illicit activities such as drug crops and mining, which shows an increase in such areas (Clerici et al., 2020). We hope peace will come soon to our country, allowing researchers to visit every region and conservation plans to be implemented across the whole country. Another paradoxical problem hindering research in Colombia is the excessive bureaucratic paperwork needed to get collecting permits, this process are resource consuming in terms of time and money, becoming an obstacle for the research progress (Fernandez, 2011).

We emphasize the importance of increasing sampling efforts focused on the search for rare or poorly known species. Most of these species were recorded approximately 100 years ago in localities of the Andean region, which are currently part of the most populated areas with the highest levels of anthropogenic pressure. This is particularly important for endemic species that lack any other information beyond the original descriptions. Only the description of *Palaemnema edmondi* allows a clear identification from its congeners and, despite recent studies in the type locality of the species and in similar habitats in the surrounding region, it could not be found (Bota-Sierra pers. comm., 2024). The descriptions of *Erythrodiplax cauca*, and the poor descriptions coupled with poor illustrations for *Gynacantha remartinia* and *Lestes sternalis* apply to closely related species, so taxonomic studies should be conducted to

determine the validity of these species (Bota-Sierra et al., 2014a; Garrison & von Ellenrieder, 2024; Mendoza-Penagos et al., 2024; Williamson & Williamson, 1930). On the other hand, further sampling even within anthropized areas may lead to confirmation of previously unknown localities for species that despite being poorly known have wide distributions, e.g. *Telebasis isthmica* recently confirmed in Colombia (Mendoza-Penagos & Bota-Sierra, 2022).

This contribution encloses the substantial effort invested over the past decade to unveil the rich biodiversity of Colombian odonates. It points to several regions and research topics needing attention. The heightened concern arises from the high number of threatened species in the country. Notably, many traditional, sectoral, and international policies impacting Neotropical Biodiversity lack essential information about insect diversity (Duffus et al., 2023). Our contribution serves as a crucial step toward addressing these gaps, facilitating robust evaluations of extinction risks, implementing species population monitoring programs, and advocating for the appropriate valuation of insect biodiversity (Bungartz et al., 2012; Granjou et al., 2014). This effort is envisioned as a pivotal starting point, emphasizing our responsibility as Colombians to own and preserve our biodiversity. We hope that this work will not only enhance the previously established knowledge but also helps to catalyze dedicated actions towards the preservation of Colombian remarkable odonatofauna.

Acknowledgments

We are grateful to all the odonate collectors. We are grateful to all the researchers who have worked on Colombian odonates. We are grateful to all the curators of odonate specimens, especially Tatiana Florez and Lorenzo Comoglio (ANDES-E), Marta Wolff (CEUA), Dimitri Forero (MPUI_ENT). This work was supported in part by an NSF award #2002489 to John Abbott for the Genealogy of Odonata (GEODE): Dispersal and color as drivers of 300 million years of global dragonfly evolution. Also, it was partly supported by the Universidad de Antioquia's project "Base de datos de las libélulas de Colombia 2023-62411" and by the Universidad de los Andes's project "Libélulas de Colombia".

References

- Abbott, J. C., Bota-Sierra, C. A., Guralnick, R., Kalkman, V., González-Soriano, E., Novelo-Gutiérrez, R., Bybee, S., Ware, J. & Belitz, M. W. (2022). Diversity of Nearctic Dragonflies and Damselflies (Odonata). *Diversity*, 14(7). doi:[10.3390/d14070575](https://doi.org/10.3390/d14070575)
- Abbott, J. & Sandall, E. (2022). Odonata collections and databases. In *Dragonflies and damselflies: Model organisms for ecological and evolutionary research* (2^a ed.). Oxford University Press. doi:[10.1093/oso/9780192898623.003.0023](https://doi.org/10.1093/oso/9780192898623.003.0023)
- Altamiranda, M. (2009). Diversidad de libélulas (Insecta-Odonata) para dos usos de suelo, en un bosque seco tropical. *Revista Facultad Nacional de Agronomía – Medellín*, 62(2), 5071–5079.
- Altamiranda-S., M., Pérez-G., L. A. & Gutiérrez-M., L. C. (2010). Composición y preferencia de micro hábitat de larvas de Odonata (Insecta), en la ciénaga San Juan de Tocagua (Atlántico, Colombia). *Caldasia* 32, 399–410.
- Álvarez-Álvarez, K. L., Bota-Sierra, C. A. & Vásquez-Ramos, J. M. (2021). New records of genera *Aphylla* and *Micrathyria* for Colombia (Odonata: Gomphidae, Libellulidae). *Notulae odonatologicae*, 9(6), 358–366. doi:[10.60024/zenodo.5702959](https://doi.org/10.60024/zenodo.5702959)
- Álvarez-Álvarez, K. L., Bota-Sierra, C. A. & Vásquez-Ramos, J. M. (2022). New species records in *Acanthagrion*, *Nehalemma*, and *Perilestes* (Odonata: Zygoptera) for Colombia. *Biota Colombiana*, 23(2), 1–7. doi:[10.21068/2539200X.1061](https://doi.org/10.21068/2539200X.1061)
- Álvarez-Álvarez, K. L., Cortés-Hernández, M. Á., Vásquez-Ramos, J. M. & Bota-Sierra, C. A. (2023). Libélulas del campus Barcelona de la Universidad de los Llanos, Villavicencio, Colombia. *Ecosistemas*, 32(1), 2442–2442. doi:[10.7818/ECOS.2442](https://doi.org/10.7818/ECOS.2442)
- Amaya-Vallejo, V., Bota-Sierra, C. A., Novelo-Gutiérrez, R. & Sanchez-Herrera, M. (2021). Two new species of *Archaeopodagrion* (Odonata, Philogeniidae) from the western foothills of the Tropical Andes, with biological observations and distributional records. *ZooKeys*, 1036, 21–38. doi:[10.3897/zookeys.1036.64230](https://doi.org/10.3897/zookeys.1036.64230)
- Amaya-Vallejo, V. & Novelo-Gutiérrez, R. (2011). The larva of *Palaeumnema mutans* Calvert, 1931 (Odonata: Platystictidae). *Zootaxa*, 63(3049), 59–63. doi:[10.11646/zootaxa.3049.1.3](https://doi.org/10.11646/zootaxa.3049.1.3)
- Amaya-Vallejo, V. & Novelo-Gutiérrez, R. (2012). *Desmogomphus anchicayensis* spec. nov. from Colombia (Anisoptera: Gomphidae). *Odonatologica*, 41(1), 17–21.
- Amaya-Vallejo, V., Novelo-Gutiérrez, R. & Realpe, E. (2017). *Perigomphus basicornis* sp. nov. (Odonata: Gomphidae) from Anchicayá, Colombia. *Zootaxa*, 4294(3), 395–400. doi:[10.11646/zootaxa.4294.3.10](https://doi.org/10.11646/zootaxa.4294.3.10)
- Amaya-Vallejo, V., Novelo-Gutiérrez, R. & Realpe, E. (2018). The larva and female of *Perigomphus basicornis* Amaya-Vallejo, Novelo- Gutiérrez & Realpe, 2017, and the first record of *Perigomphus pallidistylus* (Belle, 1972) for Colombia (Insecta: Odonata: Gomphidae). *PeerJ*, 2018(8). doi:[10.7717/peerj.5279](https://doi.org/10.7717/peerj.5279)
- Anjos-Santos, D., Carrico, C., Costa, J. M. & Santos, T. C. (2011). Description of the final instar larvae of *Acanthagrion gracile* (Rambur) and *Acanthagrion lancea* Selys (Odonata: Coenagrionidae). *Zootaxa*, 2832(1), 44–50. doi:[10.11646/zootaxa.2832.1.2](https://doi.org/10.11646/zootaxa.2832.1.2)
- Arango, M. C. & Roldan, G. (1983). Odonatos inmaduros del departamento de Antioquia en diferentes pisos altitudinales. *Actualidades Biológicas*, 12(46), 91–105. doi:[10.17533/udea.acbi.330308](https://doi.org/10.17533/udea.acbi.330308)
- Aristizabal-Botero, A., Araque-Orjuela, I., Cano-Cobos, Y. & Realpe, E. (2022). Libélulas: Una conexión entre el agua y la tierra. In J. S. Usma Oviedo, F. Trujillo, & L. G. Naranjo (Eds.), *Diversidad biológica y cultural del departamento de Guainía*. pp. 114–123. Gobernación de Guainía, WWF Colombia, Corporación para el Desarrollo Sostenible del Norte y el Oriente Amazónico – CDA & Instituto Amazónico de Investigaciones Científicas SINCHI.
- Aristizábal-Botero, Á., Snoeks, J. M., Realpe, E. & Vanschoenwinkel, B. (2023). Conductivity and water level modulate developmental plasticity and explain distribution patterns in a diverse neotropical Odonata assemblage. *Freshwater Biology*, 68(9), 1558–1571. doi:[10.1111/fwb.14151](https://doi.org/10.1111/fwb.14151)
- Assis, C. V. de & Costa, J. M. (1994). Seis novas larvas do gênero *Micrathyria* Kirby e notas sobre a distribuição no Brasil (Odonata: Libellulidae). *Revista Brasileira de Zoologia*, 11, 195–209. doi:[10.1590/S0101-81751994000200003](https://doi.org/10.1590/S0101-81751994000200003)
- Belle, J. (1966). Surinam dragonflies of the *Agriogomphus* complex of genera. *Studies on the Fauna of Suriname and Other Guyanas*, 8(1), 29–60.
- Belle, J. (1970). Studies on South American Gomphidae (Odonata). *Studies on the Fauna of Surinam and other Guyanas*, 11, 3–154.
- Belle, J. (1973). A revision of the New World genus *Progomphus* (Anisoptera: Gomphidae). *Odonatologica*, 2, 191–308.
- Belle, J. (1982a). Some new and interesting South American species of *Phyllogomphoides* in the Museum of Zoology, University

- of Michigan, Ann Arbor, Michigan (Insecta Odonata Gomphidae). *Occasional papers of the Museum of Zoology University of Michigan*, 701, 1–16.
- Belle, J. (1982b). A review of the genus *Archaeogomphus* Williamson (Odonata: Gomphidae). *Tijdschrift voor Entomologie*, 125, 37–56.
- Belle, J. (1988). A synopsis of the species of *Phyllocycla* Calvert, with descriptions of four new taxa and a key to the genera of Neotropical Gomphidae (Odonata, Gomphidae). *Tijdschrift voor entomologie*, 131, 73–102.
- Belle, J. (1992a). A revision of the South American species of *Aphylla* Selys, 1854 (Odonata: Gomphidae). *Zoologische Mededelingen*, 66, 239–264.
- Belle, J. (1992b). Studies on ultimate instar larvae of neotropical Gomphidae, with the description of *Tibiagomphus* gen. nov. (Anisoptera). *Odonatologica*, 21(1), 1–24.
- Bermúdez, C. & López-Victoria, M. (2009). Primeros registros de libélulas (Odonata: Anisoptera) en la Isla Malpelo, Colombia. *Revista Colombiana de Entomología*, 35, 286–287. doi:10.25100/socolen.v35i2.9231
- Bick, G. H. & Bick, J. C. (1985). A revision of the *picta* group of *Polythore*, with a description of a new species, *P. lamcereda* spec. nov., from Peru (Zygoptera: Polythoridae). *Odonatologica*, 14, 1–28.
- Bick, G. H. & Bick, J. C. (1986). The genus *Polythore* exclusive of the *picta* group (Zygoptera: Polythoridae). *Odonatologica*, 15, 245–273.
- Bick, G. H. & Bick, J. C. (1990). A revision of the Neotropical genus genus *Cora* Selys, 1853 (Zygoptera: Polythoridae). *Odonatologica*, 19, 117–143.
- Bick, G. H. & Bick, J. C. (1992). A study of family Polythoridae, with details on the genus *Euthore* Selys, 1869 (Zygoptera). *Odonatologica*, 21, 275–288.
- Bick, G. H. & Bick, J. C. (1995). A review of the genus *Telebasis* with descriptions of eight new species (Zygoptera: Coenagrionidae). *Odonatologica*, 24, 1–15.
- Borror, D. J. (1931). The genus *Oligoclada* (Odonata). *Miscellaneous Publications of Museum of Zoology, University of Michigan*, 22, 1–58.
- Borror, D. J. (1942). *A revision of the Libelluline genus Erythrodiplax (Odonata)*. Ohio State University.
- Bota-Sierra, C. A. (2012). Rediscovery of *Proneura prolongata* (Zygoptera: Protoneuridae) and other new Odonata records from Colombian Amazon. *Agrion*, 16(2), 34–41.
- Bota-Sierra, C. A. (2014a). A brief look at the Odonata from the páramo ecosystems in Colombia, with the Descriptions of *Oxyallagma colombianum* sp. nov. and *Rhionaeschna caligo* sp. nov. (Odonata: Coenagrionidae, Aeshnidae, Libellulidae). *Zootaxa*, 3856(2), 192–210. doi:10.11646/zootaxa.3856.2.2
- Bota-Sierra, C. A. (2014b). Nine new records of Odonata for Colombia from the Orinoco Basin (Lestidae, Calopterygidae, Heteragrionidae, Coenagrionidae, Libellulidae). *Notulae odontologicae*, 8(2), 97–100.
- Bota-Sierra, C. A. (2017). Two new species of the family Philogeniidae (Odonata: Zygoptera) from the Western Colombian Andes. *International Journal of Odonatology*, 20(3–4), 137–150. doi:10.1080/13887890.2017.1344733
- Bota-Sierra, C. A., Baena-Bejarano, N. & Bermúdez, C. (2010). First records of *Gomphomacromia fallax* (Odonata, Corduliidae) from Colombia. *Revista Colombiana de Entomología*, 36, 333–334. doi:10.25100/socolen.v36i2.9168
- Bota-Sierra, C. A., Corso, A., Janni, O., Sandoval-H, J. & Viganò, M. (2018a). Seventeen new dragonfly records from Colombia and the confirmation of the synonymy of *Philogenia monotis* and *P. tinalandia* (Insecta: Odonata). *International Journal of Odonatology*, 21(2), 115–127. doi:10.1080/13887890.2018.1462262
- Bota-Sierra, C. A., Flórez-V, C., Escobar, F., Sandoval-H, J., Novelo-Gutiérrez, R., Londoño, G. A. & Cordero-Rivera, A. (2021). The importance of tropical mountain forests for the conservation of dragonfly biodiversity: A case from the Colombian Western Andes. *International Journal of Odonatology*, 24, 233–247. doi:10.23797/2159-6719_24_18
- Bota-Sierra, C. A., García-Robledo, C., Escobar, F., Novelo-Gutiérrez, R. & Londoño, G. A. (2022). Environment, taxonomy and morphology constrain insect thermal physiology along tropical mountains. *Functional Ecology*, 36(10), 1924–1935. doi:10.1111/1365-2435.14083
- Bota-Sierra, C. A. & Herrera, M. S. (2023). A new species of bannerwing damselfly, *Polythore albistriata* sp. nov. (Odonata: Polythoridae). *International Journal of Odonatology*, 26, 82–92. doi:10.48156/1388.2023.1917037
- Bota-Sierra, C. A., Mauffray, B., Palacino-Rodríguez, F., Hofmann, J., Tennessen, K., Rache, L. & Tognelli, M. F. (2016). Capítulo 5. Estado de conservación de las libélulas de los Andes Tropicales. In M. F. Tognelli, C. A. Lasso, C. A. Bota-Sierra, L. F. Jiménez-Segura, & N. A. Cox (Eds.), *Estado de conservación y distribución de la biodiversidad de agua dulce en los Andes Tropicales*. pp. 67–86. IUCN, Gland, Switzerland. <http://dx.doi.org/10.2305/IUCN.CH.2016.02.es>
- Bota-Sierra, C. A., Moreno-Arias, C. & Faasen, T. (2015). Preliminary list of Odonata from the Colombian Amazon, with descriptions of *Inpabasis nigridorsum* sp. nov. & *Diaphlebia richteri* sp. nov. (Coenagrionidae & Gomphidae). *International Journal of Odonatology*, 18(3), 249–268. doi:10.1080/13887890.2015.1081637
- Bota-Sierra, C. A. & Novelo-Gutiérrez, R. (2017). The genus *Heteragrion* (Odonata: Zygoptera) in Northwestern Colombia, with the description of *Heteragrion tatama* sp. nov. *Zootaxa*, 4347(3), 553–571. doi:10.11646/zootaxa.4347.3.8
- Bota-Sierra, C. A. & Novelo-Gutiérrez, R. (2020). Two new species of Colombian *Epigomphus* (Odonata: Gomphidae). *Zootaxa*, 4896(2), 265–276. doi:10.11646/zootaxa.4896.2.7
- Bota-Sierra, C. A., Novelo-Gutiérrez, R. & Amaya-Vallejo, V. (2017). The rediscovery and redescription of *Epigomphus pechumani* Belle, 1970 (Odonata: Gomphidae), with a description of its female from the Western Colombian Andes. *Zootaxa*, 4306(3), 419–427. doi:10.11646/zootaxa.4306.3.8
- Bota-Sierra, C. A., Sánchez-Herrera, M. & Palacino-Rodríguez, F. (2018b). Odonata from protected areas in Colombia with new records and description of *Cora verapax* sp. nov. (Zygoptera: Polythoridae). *Zootaxa*, 4462(1), 115–131. doi:10.11646/zootaxa.4462.1.5
- Bota-Sierra, C. A. & Sandoval-H, J. (2017). The female of *Oreiallagma oreas* (Odonata: Coenagrionidae), with notes on the species natural history. *International Journal of Odonatology*, 20(3–4), 165–172. doi:10.1080/13887890.2017.1362363
- Bota-Sierra, C. A., Sandoval-H, J., Ayala-Sánchez, D. & Novelo-Gutiérrez, R. (2019). *Libélulas de la Cordillera Occidental colombiana, una mirada desde el Tatamá / Dragonflies of the Colombian Cordillera Occidental, a look from Tatamá*. Bogotá: Panamericana S.A.
- Bota-Sierra, C. A., Sandoval-H, J. & Palacino-Rodríguez, F. (2019). Description of a new species of *Andaeschna* (Odonata: Aeshnidae) from the western Colombian Andes. *Zootaxa*, 4615(3), 594–600. doi:10.11646/zootaxa.4615.3.12
- Bota-Sierra, C. A., Sandoval-H, J. & Pérez-Gutiérrez, L. (2022). Two new *Telebasis* Selys, 1865 species (Odonata: Zygoptera: Coenagrionidae) from Western Colombia. *Zootaxa*, 5138(1), 54–66. doi:10.11646/zootaxa.5138.1.5

- Bota-Sierra, C. A., Velásquez-Vélez, M. I. & Realpe, E. (2019). A new species of *Ischnura* from the Colombian Central Andes (Odonata: Coenagrionidae). *Odonatologica*, 48(1/2), 115–132. doi:[10.5281/zenodo.2677697](https://doi.org/10.5281/zenodo.2677697)
- Bota-Sierra, C. A. & Wolff, M. I. (2013). Taxonomic revision of *Mesamphiagrion* Kennedy, 1920 from Colombia (Odonata: Coenagrionidae), with the description of four new species. *Zootaxa*, 3718(5), 401–440. doi:[10.11646/zootaxa.3718.5.1](https://doi.org/10.11646/zootaxa.3718.5.1)
- Bungartz, F., Ziemmeck, F., Tirado, N., Jaramillo, P., Herrera, H. & Jiménez-Uzcátegui, G. (2012). The neglected majority: Biodiversity inventories as an integral part of conservation biology. In *The role of science for conservation*. pp. 119–142. Routledge.
- Byers, C. F. (1927). Notes on some American dragonfly nymphs (Odonata: Anisoptera). *Journal of the New York Entomological Society*, 35(1), 65–75.
- Cabot, L. (1890). Immature State of the Odonata. *Memoirs of the Museum of Comparative Zoology*, 17(1), 1–52.
- Calil, E. R. & Carvalho, A. L. (1999). Descrições da larva de ultimo estádio e do adulto de *Triacanthagyna septima* (Selys, 1857) (Odonata: Aeshnidae), com notas sobre a biologia da espécie. *Revista Brasileira de Entomologia*, 43(1/2), 73–83.
- Calvert, P. P. (1908). Odonata. In R. H. Porter & Dulau Co. (Eds.), *Biology Centrali Americana: Insecta Neuroptera*. pp. 405–420. UK, London: Porter and Dulau.
- Calvert, P. P. (1909). Contributions to a knowledge of the Odonata of the Neotropical region, exclusive of Mexico and Central America. *Annals of the Carnegie Museum*, 6, 73–280. doi:[10.5962/p.202300](https://doi.org/10.5962/p.202300)
- Calvert, P. P. (1911). Studies on Costa Rican Odonata. III. Structure and transformation of the larva of *Mecistogaster modestus*. *Entomological News*, 22(10), 449–460.
- Calvert, P. P. (1924). The generic characters and the species of *Phlogenia* Selys (Odonata: Agrionidae). *Transactions of the American Entomological Society* (1890–), 50, 1–56.
- Calvert, P. P. (1928). Report on Odonata, including notes on some internal organs of the larvae collected by the Barbados-Antigua Expedition from the University of Iowa in 1918. *University of Iowa Studies in Natural History*, 12(2), 1–44.
- Calvert, P. P. (1931). The generic characters and the species of *Palaemnema* (Odonata: Agrionidae). *Transactions of the American Entomological Society* (1890–), 57(1), 1–111.
- Calvert, P. P. (1934). The rates of growth, larval development and seasonal distribution of dragonflies of the genus *Anax* (Odonata: Aeshnidae). *Proceedings of the American Philosophical Society*, 1–70.
- Calvert, P. P. (1956). The neotropical species of the “subgenus *Aeschna*” sensu Selysii 1883 (Odonata). *Memoirs of the American Entomological Society*, 15, 1–251.
- Casallas-Mancipe, A. C. & Rache-Rodríguez, L. (2016). Migrating Odonata in the Colombian Andes. *Notulae odonatologicae*, 8, 247–318.
- Casallas-Mancipe, A., Rache-Rodríguez, L. & Rincón-Hernandez, M. (2012). Postembryonic development of *Ischnura chingaza* Realpe under captivity conditions (Zygoptera: Coenagrionidae). *Odonatologica*, 41, 327–335.
- Cano-Cobos, Y., Bota-Sierra, C. A. & Mendoza-Penagos, C. (2023a). Ten new records of Odonata for Colombia (Coenagrionidae, Aeshnidae). *Biota colombiana*, 24(2), e1112. doi:[10.21068/2539200X.1112](https://doi.org/10.21068/2539200X.1112)
- Cano-Cobos, Y., Montes-Fontalvo, J. & Bota-Sierra, C. A. (2023b). *Philogenia realpei* sp. nov. (Zygoptera: Philogeniidae), a new damselfly species from Colombia. *International Journal of Odonatology*, 26, 74–81. doi:[10.48156/1388.2023.1917034](https://doi.org/10.48156/1388.2023.1917034)
- Carvalho, A. do L. & Werneck-de-Carvalho, P. C. (2005). Descrição da larva de *Orthemis cultriformis* Calvert, 1899 (Insecta: Odonata: Libellulidae). *Arquivos Do Museu Nacional (Rio de Janeiro)*, 63(2), 267–273.
- Carvalho, A. L., Ferreira, N. & Nessimian, J. L. (1991). Descrição das larvas de três espécies do gênero *Erythrodiplax* Brauer (Odonata: Libellulidae). *Revista Brasileira de Entomologia*, 35(1), 165–171.
- Carvalho, R. L., Resende, A. F., Barlow, J., França, F. M., Moura, M. R., Maciel, R., ... & Daly, D. (2023). Pervasive gaps in Amazonian ecological research. *Current Biology*, 33(16), 3495–3504. doi:[10.1016/j.cub.2023.06.077](https://doi.org/10.1016/j.cub.2023.06.077)
- Casallas-Mancipe, A. C. & Rache-Rodríguez, L. (2016). Migrating Odonata in the Colombian Andes. *Notulae odonatologicae*, 8(8), 247–318.
- Casallas-Mancipe, A., Rache-Rodríguez, L. & Rincón-Hernandez, M. (2012). Postembryonic development of *Ischnura chingaza* Realpe under captivity conditions (Zygoptera: Coenagrionidae). *Odonatologica*, 41(4), 327–335.
- Clerici, N., Armenteras, D., Kareiva, P., Botero, R., Ramírez-Delgado, J. P., Forero-Medina, G., Ochoa, ... & Biggs, D. (2020). Deforestation in Colombian protected areas increased during post-conflict periods. *Scientific reports*, 10(1), 1–10. doi:[10.1038/s41598-020-61861-y](https://doi.org/10.1038/s41598-020-61861-y)
- Coleman, C. & Radulovici, A. (2020). Challenges for the future of taxonomy: talents, databases and knowledge growth. *Megataxa* (1), 028–034. doi:[10.11646/megataxa.1.1.5](https://doi.org/10.11646/megataxa.1.1.5)
- Costa, J. M. (1968). Contribuição ao conhecimento da fauna da Guanabara. 59 – Notas sobre a ninfa de *Epigomphus paludosus* Hagen in Selys, 1854 (Odonata: Gomphidae). *Atas Da Sociedade de Biologia de Rio de Janeiro*, 11(4), 157–158.
- Costa, J. M. & Pujol-Luz, J. R. (1993). Descrição da larva de *Erythemis mithroides* (Brauer) e notas sobre outras larvas conhecidas do gênero (Odonata: Libellulidae). *Revista Brasileira de Zoologia*, 10, 443–448. doi:[10.1590/S0101-81751993000300011](https://doi.org/10.1590/S0101-81751993000300011)
- Costa, J. M. & Régis, L. (2005). Description of the last instar larva of *Perithemis lais* (Perty) and comparison with other species of the genus (Anisoptera: Libellulidae). *Odonatologica*, 34(1), 51–57.
- Costa, J. M. & Santos, T. C. (2009). Description of the larva of *Orthemis schmidti* (Odonata: Libellulidae). *Iheringia. Série Zoologia*, 99, 129–131. doi:[10.1590/S0073-47212009000200002](https://doi.org/10.1590/S0073-47212009000200002)
- Costa, J. M., Souza-Franco, G. M. & Takeda, A. M. (1999). Descrição da larva de *Diastatops intensa* Montgomery, 1940 e morfologia dos diferentes estádios de desenvolvimento (Odonata: Libellulidae). *Boletim Do Museu Nacional, Nova Série Zoologia, Rio de Janeiro*, 410, 1–14.
- Costa, J. M., Vieira, L. P. & Lourenço, A. D. (2001). Descrição de três larvas de *Erythrodiplax* Brauer, 1868, e redescricão das larvas de *E. pallida* (Needham, 1904) e *E. umbrata* (Linnaeus, 1758), com chave para identificação das larvas conhecidas das espécies brasileiras (Odonata: Libellulidae). *Boletim Do Museu Nacional, Nova Série Zoologia, Rio de Janeiro*, 4665, 1–16.
- Cruz, F. (1986). Contribución a los estudios taxonómicos de Odonata-Zygoptera de Colombia: Descripción de una nueva especie de *Cianallagma* (Odonata: Coenagrionidae). *Caldasia*, 14(68–70), 743–747.
- Cruz, F. (1988). Contribución al conocimiento de los Odonata-Zygoptera de Colombia: los adultos de *Enallagma civile* (Hagen) y *Cyanallagma lateralle* (Selys) (Odonata: Coenagrionidae). *Universitas Scientiarum*, 1, 27–34.
- Cuellar-Cardozo, J. A., Arteaga-Guzmán, E., Bernal-Arriero, L., Campo-Garnica, A., Capera, D., Ocampo, C., Ortiz-Ruiz, M., Rincón-Aceldas, S. & Sánchez, F. (2016). Composición y riqueza de odonatos en tres humedales artificiales suburbanos en Cajicá, Cundinamarca, Colombia. *Revista Biodiversidad Neotropical*, 6(2 Jul–Dic). doi:[10.18636/bioneotropical.v6i2.271](https://doi.org/10.18636/bioneotropical.v6i2.271)

- Cuellar-Cardozo, J. A., Castro-Rebolledo, M. I. & Jaramillo, M. A. (2020). Diversidad y composición de Odonata asociadas con diferentes condiciones de la vegetación riparia a lo largo de un arroyo en Paicol-Huila, Colombia. *Actualidades Biológicas*, 42, 1–11. doi:[10.17533/udea.acbi.v42n113a04](https://doi.org/10.17533/udea.acbi.v42n113a04)
- Dalzochio, M. S. (2009). Descrição da larva de último estádio de *Micrathyria pseudeximia* Westfall (Odonata: Libellulidae). *Entomo-Brasilis*, 2(2), 54–57. doi:[10.12741/ebrazilis.v2i2.56](https://doi.org/10.12741/ebrazilis.v2i2.56)
- Daniel, H. (1951). El Hermano Apolinar María y los Pájaros. *Revista Institucional UPB*, 16(60), 80–92.
- De Marco Jr, P. & Vianna, D. M. (2005). Distribuição do esforço de coleta de Odonata no Brasil—subsídios para escolha de áreas prioritárias para levantamentos faunísticos. *Lundiana: International Journal of Biodiversity*, 6(1), 13–26. doi:[10.35699/2675-5327.2005.22111](https://doi.org/10.35699/2675-5327.2005.22111)
- De Marmels, J. (1981). The larva of *Progomphus abbreviatus* Belle, 1973 from Venezuela (Anisoptera: Gomphidae). *Odonatologica*, 10(2), 147–149.
- De Marmels, J. (1982a). Cuatro náyades nuevas de la familia Libellulidae (Odonata: Anisoptera). *Boletín de Entomología Venezolana*, 2(11).
- De Marmels, J. (1982b). Dos náyades nuevas de la familia Aeshnidae (Odonata: Anisoptera). *Boletín de Entomología Venezolana*, 2(12), 102–106.
- De Marmels, J. (1984). *Oxyagrion fluviatile* sp. n. from Venezuela, with notes on *Oxyagrion cardinale* Fraser (Odonata: Coenagrionidae). *Boletín de Entomología Venezolana* 3: 21–28.
- De Marmels, J. (1985). On the true *Hetaerina capitalis* Selys, 1873 and its sibling species *Hetaerina smaragdalis* spec. nov. (Zygoptera: Calopterygidae). *Odonatologica*, 14(3), 177–190.
- De Marmels, J. (1987). *Ischnura (Anomalagrion) cruzi* sp. n., eine neue Kleinlibelle aus Kolumbien (Odonata: Coenagrionidae). *Entomologischen Gesellschaft Basel*, 6, 1–5.
- De Marmels, J. (1990a). Nine new Anisoptera larvae from Venezuela (Gomphidae, Aeshnidae, Corduliidae, Libellulidae). *Odonatologica*, 19(1), 1–15.
- De Marmels, J. (1990b). Notas sobre dos “formas” en *Acanthagrion fluviatile* (De Marmels, 1984) y una descripción de la náyade (Odonata: Coenagrionidae). *Boletín de Entomología Venezolana*, 5(15), 116–122.
- De Marmels, J. (1991). *Progomphus incurvatus bivittatus* subsp. nov. from Venezuela (Odonata: Gomphidae). *Opuscula zoologica fluminensis*, 71.
- De Marmels, J. (1992). Caballitos del Diablo (Odonata) de las Sierras de Tapirapecó y Unturán, en el extremo sur de Venezuela. *Acta Biológica Venezolana*, 14(1), 57–78.
- De Marmels, J. (2000). The larva of *Allopetalia pustulosa* Selys, 1873 (Anisoptera: Aeshnidae), with notes on aeshnid evolution and biogeography. *Odonatologica*, 29(2), 113–128.
- De Marmels, J. (2001a). *Aeshna (Hesperaeschna) condor* sp. nov. from the Venezuelan Andes, with a redescription of *A. (H.) joannisii*, comments on other species, and descriptions of larvae (Odonata: Aeshnidae). *International Journal of Odonatology*, 4(2), 119–134. doi:[10.1080/13887890.2001.9748166](https://doi.org/10.1080/13887890.2001.9748166)
- De Marmels, J. (2001b). Revision of *Megapodagrion* Selys, 1886 (Insecta: Odonata: Megapodagrionidae). Tesis doctoral. Mathematisch-Naturwissenschaftliche Fakultät. Zürich, Switzerland: Universität Zürich.
- De Marmels, J. (2004a). *Heteragrion makiritare* sp. nov with descriptions of hitherto unknown females and larvae of other species from Venezuela (Odonata: Megapodagrionidae: Lestidae). *International Journal of Odonatology*, 7(3), 439–458. doi:[10.1080/13887890.2004.9748230](https://doi.org/10.1080/13887890.2004.9748230)
- De Marmels, J. (2004b). *Heteragrion makiritare* sp. nov with descriptions of hitherto unknown females and larvae of other species from Venezuela (Odonata: Megapodagrionidae: Lestidae). *International Journal of Odonatology*, 7(3), 439–458. doi:[10.1080/13887890.2004.9748230](https://doi.org/10.1080/13887890.2004.9748230)
- De Marmels, J. (2006). Una pequeña colección de libélulas (Odonata) de Colombia. *Entomotropica*, 21(1), 69–71.
- De Marmels, J. (2007). Thirteen new Zygoptera larvae from Venezuela (Calopterygidae, Polythoridae, Pseudostigmatidae, Platystictidae, Protoneuridae, Coenagrionidae). *Odonatologica*, 36(1), 27–51.
- De Marmels, J. (2012). Review of the “metallic group” of species of *Argia* Rambur known from Venezuela, with description of the larva of *Argia jocosa* Hagen in Selys, 1865 (Odonata: Coenagrionidae). *International Journal of Odonatology*, 15(3), 249–262. doi:[10.1080/13887890.2012.717906](https://doi.org/10.1080/13887890.2012.717906)
- De Marmels, J. & Rácenis, J. (1982). An analysis of the *cophysa*-group of *Tramea* Hagen, with descriptions of two new species (Anisoptera: Libellulidae). *Odonatologica*, 11(2), 109–128.
- Deng, J., Guo, Y., Cheng, Z., Lu, C. & Huang, X. (2019b). The prevalence of single-specimen/locality species in insect taxonomy: An empirical analysis. *Diversity*, 11(7), 106. doi:[10.3390/d11070106](https://doi.org/10.3390/d11070106)
- Donnelly, T. W. (1967). The discovery of *Chrysobasis* in Central America, with the description of a new species (Odonata: Coenagrionidae). *The Florida Entomologist*, 50, 47–52. doi:[10.2307/3493207](https://doi.org/10.2307/3493207)
- Donnelly, T. W. (1996). The status of *Lestes apollinaris* Navás and *L. henshawi* Calvert. *Bulletin of American Odonatology*, 4, 69–74.
- Duffus, N. E., Echeverri, A., Dempewolf, L., Noriega, J. A., Furumo, P. R. & Morimoto, J. (2023). The present and future of insect biodiversity conservation in the Neotropics: Policy gaps and recommendations. *Neotropical Entomology*, 52(3), 407–421. doi:[10.1007/s13744-023-01031-7](https://doi.org/10.1007/s13744-023-01031-7)
- Dunkle, S. W. (1981). Dunkle and Knopf blitz Ecuador and Colombia. *Selysia*, 10(1), 5–6.
- Dunkle, S. W. (1982). *Perithemis rubita* spec. nov., a new dragonfly from Ecuador (Anisoptera: Libellulidae). *Odonatologica*, 11(1), 33–39.
- Dunkle, S. W. (1986). Four new species of *Philogenia* damselflies from Ecuador and Colombia (Zygoptera: Megapodagrionidae). *Odonatologica*, 15, 43–50.
- Dunkle, S. W. (1995). Geographical variation in *Micrathyria mengeri* Ris, with a description of *M. mengeri watsoni* ssp. nov. (Anisoptera: Libellulidae). *Odonatologica*, 24, 45–51.
- Ebach, M. C., Valdecasas, A. G. & Wheeler, Q. D. (2011). Impediments to taxonomy and users of taxonomy: accessibility and impact evaluation. *Cladistics*, 27, 550–557. doi:[10.1111/j.1096-0031.2011.00348.x](https://doi.org/10.1111/j.1096-0031.2011.00348.x)
- Engel, M. S., Ceríaco, L. M., Daniel, G. M., Dellapé, P. M., Löbl, I., Marinov, M., Reis, R. E., Young, M. T., Dubois, A. & Agarwal, I. (2021). The taxonomic impediment: A shortage of taxonomists, not the lack of technical approaches. *Zoological Journal of the Linnean Society*, 193(2), 381–387. doi:[10.1093/zoolinnean/zlab072](https://doi.org/10.1093/zoolinnean/zlab072)
- Feindt, W. & Hadrys, H. (2022). The damselfly genus *Megaloprepus* (Odonata: Pseudostigmatidae): Revalidation and delimitation of species-level taxa including the description of one new species. *Zootaxa*, 5115(4), 487–510. doi:[10.11646/zootaxa.5115.4.2](https://doi.org/10.11646/zootaxa.5115.4.2)
- Fernandez, F. (2011). The greatest impediment to the study of biodiversity in Colombia. *Caldasia*, 33(2), 3–5.
- Fleck, G. (2003a). Contribution à la connaissance des Odonates de Guyane française. Les larves des genres *Argyrothemis* Ris, 1911 et *Oligoclada* Karsch, 1889 (Insecta: Odonata: Anisoptera: Libellulidae). *Die Annalen des Naturhistorischen Museums in Wien*, 104, 341–352.

- Fleck, G. (2003b). Contribution à la connaissance des Odonates de Guyane française: Notes sur des larves des genres *Orthemis*, *Diastatops* et *Elga* (Anisoptera: Libellulidae). *Odonatologica*, 32(4), 335–344.
- Fleck, G. (2004). Contribution à la connaissance des Odonates de Guyane française. Les larves de *Macrothemis pumila* Karsch, 1889 et de *Brechmorhoga praedatrix* Calvert, 1909. Notes biologiques et conséquences taxonomiques (Anisoptera: Libellulidae). *Annales de La Société Entomologique de France*, 40(2), 177–184. doi:10.1080/00379271.2004.10697414
- Fleck, G., de Marmels, J. & Grand, D. (2004). La larve de *Tholymis citrina* Hagen, 1867 (Odonata: Anisoptera: Libellulidae). *Bulletin de La Société Entomologique de France*, 109(5), 455–457. doi:10.3406/bsef.2004.16154
- Fleck, G. & Neiss, U. G. (2019). The larva of the genus *Misagria* Kirby, 1889 (Odonata: Libellulidae). *Zootaxa*, 4706(3). doi:10.11646/zootaxa.4706.3.6
- Florez, T., Comoglio, L., Pinzón, T., Bota-Sierra, C. A. & Cano-Cobos, Y. (2023). A collecting trip to San José del Guaviare, Colombia, with the description of a new species of *Perissolestes* (Zygoptera: Perilestidae). *International Journal of Odonatology*, 26, 7–17. doi:10.48156/1388.2023.1917193
- Förster, F. (1914). Beiträge zu den Gattungen und Arten der Libellen (N. III). *Archiv Naturgeschichte Abteilung A*, 80(2), 59–83. doi:10.5962/bhl.part.26477
- Fraser, F. C. (1946a). Notes on Amazonian Odonata in the Leeds Museum. Part I. *Transactions of the Entomological Society of London*, 96, 11–46. doi:10.1111/j.1365-2311.1946.tb00441.x
- Fraser, F. C. (1946b). Notes on Amazonian Odonata in the Leeds Museum. Part II. *Transactions of the Entomological Society of London*, 97, 443–472. doi:10.1111/j.1365-2311.1946.tb00272.x
- GADM. Colombian political division map. Retrieved December, 2023, from: gadm.org/maps.html
- Galindo-Ruiz, N., Velasquez-Velez, M. I., Cano-Cobos, Y., Sánchez-Guillén, R. A. & Realpe, E. (2019). Description of a putative hybrid between *Ischnura cyane* and *I. capreolus* from Colombia (Odonata: Coenagrionidae). *Notulae odonatologicae*, 9(4), 144–151.
- Garcia-Diaz, J. (1938). An ecological survey of the fresh water insects of Puerto Rico. *Journal of Agriculture of the University of Puerto Rico*, 22(1), 43–97. doi:10.46429/jaupr.v22i1.12904
- García-Monsalve, M. V., Altamiranda-Saavedra, M. & Palacino, F. (2021). Demographic traits and behavior of *Hetaerina cruentata* (Odonata: Calopterygidae) in ecosystems of the Andean Region of Colombia. *International Journal of Odonatology*, 24, 261–273. doi:10.23797/2159-6719_24_20
- Garrison, R. W. (1986). *Diceratobasis melanogaster* spec. nov., a new damselfly from the Dominican Republic (Zygoptera: Coenagrionidae), with taxonomic and distributional notes on the Odonata of Hispaniola and Puerto Rico. *Odonatologica*, 15, 61–76.
- Garrison, R. W. (1990). A synopsis of the genus *Hetaerina* with descriptions of four new species (Odonata: Calopterygidae). *Transactions of American Entomological Society*, 116(1), 175–259.
- Garrison, R. W. (1999). The genus *Neoneura*, with keys and description of a new species, *Neoneura jurzitzai* spec. nov. (Zygoptera: Protoneuridae). *Odonatologica*, 28(4), 343–375.
- Garrison, R. W. (2006). A synopsis of the genera *Mnesarete* Cowley, *Bryoplatthanon* gen. nov., and *Ormenoplebia* gen. nov. (Odonata: Calopterygidae). *Contributions in Science*, 506, 1–84. doi:10.5962/p.210560
- Garrison, R. W. (2007). *Kalocora*, a junior synonym of *Cora* (Odonata: Polythoridae). *International Journal of Odonatology*, 10, 185–188. doi:10.1080/13887890.2007.9748298
- Garrison, R. W. (2009). A synopsis of the genus *Telebasis* (Odonata: Coenagrionidae). *International Journal of Odonatology*, 12, 1–121. doi:10.1080/13887890.2009.9748331
- Garrison, R. W. (2019). *Argia nataliae* n. sp. from Colombia (Odonata: Coenagrionidae). *Zootaxa*, 4590(4), 477–486. doi:10.11646/zootaxa.4590.4.4
- Garrison, R. W. & von Ellenrieder, N. (2005). *Neuragrion mysticum* (Odonata: Megapodagrionidae) demystified. *Canadian Entomologist*, 137, 169–173. doi:10.4039/n04-097
- Garrison, R. W. & von Ellenrieder, N. (2010). Redefinition of *Leptobasis* Selys with the synonymy of *Chrysobasis* Ráenis and description of *L. mauffrayi* sp. nov. from Peru (Odonata: Coenagrionidae). *Zootaxa*, 2438, 1–36. doi:10.11646/zootaxa.2438.1.1
- Garrison, R. W. & von Ellenrieder, N. (2015). Damselflies of the genus *Argia* of the Guiana Shield (Odonata: Coenagrionidae). *Zootaxa*, 4042(1), 1–134. doi:10.11646/zootaxa.4042.1.1
- Garrison, R. W. & von Ellenrieder, N. (2017). New species of the damselfly genus *Argia* from Mexico, Central America and Ecuador with an emphasis on Costa Rica (Insecta: Odonata: Coenagrionidae). *Zootaxa*, 4235(1), 1–93. doi:10.11646/zootaxa.4235.1.1
- Garrison, R. W. & von Ellenrieder, N. (2018). Damselflies of the genus *Argia* (Odonata: Coenagrionidae) from Ecuador with descriptions of five new species. *Zootaxa*, 4470(1), 1–69. doi:10.11646/zootaxa.4470.1.1
- Garrison, R. W. & von Ellenrieder, N. (2022). Damselflies of the genus, *Argia* Rambur, 1842 (Odonata: Coenagrionidae) from Mexico, Central America and the Lesser Antilles with descriptions of five new species. *Zootaxa*, 5201(1), 1–439. doi:10.11646/zootaxa.5201.1.1
- Garrison, R. W. & von Ellenrieder, N. (2024). Taxonomic revisions of some Neotropical Zygoptera (Odonata). *Zootaxa*, 5405(1), 1–42. doi:10.11646/zootaxa.5405.1.1
- Garrison, R. W., von Ellenrieder, N. & O'Brien, M. F. (2003). An annotated list of the name-bearing types of species-group names in Odonata preserved in the University of Michigan Museum of Zoology. *Occasional Papers of the Museum of Zoology*, 1–76.
- Garzón, C. & Realpe, E. (2009). Diversidad de Odonata (Insecta) en la reserva natural Cabildo Verde (Sabana de Torres, Santander, Colombia), una aproximación hacia la conservación. *Caldasia*, 31(2), 459–470.
- Geijskes, D. C. (1934). No. 1 Notes on the Odonate-fauna of the Dutch West Indian Islands Aruba, Curaçao and Bonaire, with an account on their nymphs. *Internationale Revue der gesamten Hydrobiologie und Hydrographie*, 31(1), 287–311. doi:10.1002/iroh.19340310116
- Geijskes, D. C. (1941). Notes on Odonata of Surinam II. Six mostly new zygopterous nymphs from the coastland waters. *Annals of the Entomological Society of America*, 34(4), 719–734. doi:10.1093/aesa/34.4.719
- Geijskes, D. C. (1943a). Notes on Odonata of Surinam. III. The genus *Coryphaeschna*, with descriptions of a new species and the nymph of *C. virens*. *Entomological News*, 54(3), 61–72.
- Geijskes, D. C. (1943b). Notes on Odonata of Surinam IV. Nine new or little known zygopterous nymphs from the inland waters. *Annals of the Entomological Society of America*, 36(2), 165–184. doi:10.1093/aesa/36.2.165
- Geijskes, D. C. (1946). Observations on the Odonata of Tobago, B.W.I. *Transactions of the Royal Entomological Society of London*, 97(9), 213–235. doi:10.1111/j.1365-2311.1946.tb00281.x
- Geijskes, D. C. (1954). Notes on Odonata of Surinam VI. The nymph of *Neoneura joana* Will. *Entomological News*, 65, 141–144.
- Geijskes, D. C. (1968). *Anax longipes* versus *Anax concolor* Notes on Odonata of Suriname X. *Studies on the Fauna of Suriname and Other Guyanas*, 10(1), 67–100.

- Geijskes, D. C. (1970). Generic characters of the South American Corduliidae, with descriptions of the species found in the Guyanas. *Studies on the Fauna of Suriname and Other Guyanas*, 12(1), 1–42.
- Geijskes, D. C. (1986). The larva of *Dicterias cothurnata* (Förster, 1906) (Zygoptera: Dicteriastidae). *Odonatologica*, 15(1), 77–80.
- Gloger, H. (1967). Sobre *Acanthagrion* (Odonata, Coenagrionidae) y géneros próximos. *Acta Zoologica Lilloana*, 21, 45–58.
- González, H. D. (1980). Hno. Apolinar María el hombre que entendió el lenguaje de las mariposas. *Revista de la Universidad de la Salle*, 2(7), 33–41.
- Granjou, C., Mauz, I., Barbier, M. & Breucker, P. (2014). Making taxonomy environmentally relevant. Insights from an all taxa biodiversity inventory. *Environmental Science & Policy*, 38, 254–262. doi:10.1016/j.envsci.2014.01.004
- Gutierrez, Y., Freitas, H. L. & Oliveira, E. E. (2015). *Acanthagrion viridescens* (Odonata: Coenagrionidae): description of the final larval stadium and biological notes. *Zootaxa*, 4057(1), 125–134. doi:10.11646/zootaxa.4057.1.8
- Hagen, H. A. (1862). Synopsis of the described Neuroptera of North America, with a list of the South American species. *Smithsonian Miscellaneous Collections*, 4, 55–187, 305–321.
- Hagen, H. A. (1869). Zur Odonaten-Fauna von Neu-Granada nach Lindig's Sammlungen. *Entomologische Zeitung*, 30, 256–263.
- Hagen, H. A. (1877). Synopsis of the Odonata of America. *Proceedings of the Boston Society of Natural History*, 18, 20–96. doi:10.1056/NEJM187701040960103
- Hartung, M. (2023). Description of the larva of *Oxyallagma dis-sidens* (Selys, 1876) (Odonata: Coenagrionidae: Ischnurinae). *American Journal of Entomology*, 7(1), 9–12. doi:10.11648/aje.20230701.12
- Hincks, W. D. (1934). Odonata from Peru and Colombia. *The Entomologist's Record and Journal of Variation*, 46, 77–81.
- Hoffmann, J. (2008). Summary catalogue of the Odonata of Peru. *IDF-Report*, 16, 1–112.
- IUCN (2023). *The IUCN Red List of Threatened Species. Version 2023-1*. IUCN, Gland, Switzerland. <https://www.iucnredlist.org>.
- Janzen, D. H. (1967). Why mountain passes are higher in the Tropics. *The American Naturalist*, 101(919), 233–249. doi:10.1086/282487
- Juen, L., Cabette, H. S. R. & De Marco, P. (2007). Odonate assemblage structure in relation to basin and aquatic habitat structure in Pantanal wetlands. *Hydrobiologia*, 579, 125–134. doi:10.1007/s10750-006-0395-6
- Kennedy, C. H. (1923). The naiad of *Pantala hymenea* (Odonata). *The Canadian Entomologist*, 55(2), 36–38. doi:10.4039/Ent5536-2
- Kennedy, C. H. (1940). The *Miocora*-like dragonflies from Ecuador with notes on *Cora*, *Miocora*, *Kalocora*, *Josocora* and *Stenocora* (Odonata: Polythoridae). *Annals of the Entomological Society of America*, 33, 406–436. doi:10.1093/aesa/33.2.406
- Klots, E. B. (1932). Insects of Porto Rico and the Virgin Islands, Odonata or dragonflies. Scientific Survey of Porto Rico and the Virgin Islands. *New York Academy of Sciences*, 14, 1–107.
- Knopf, K. W. (1977). Dragonfly collecting in Trinidad. *Selsysia*, 7(2), 6–7.
- Kondo, T., Palacino-Rodríguez, F. & Peña-Cuellar, R. D. (2015). Report of *Erpetogomphus sabaeleticus* Williamson, 1918 (Odonata: Gomphidae) feeding on *Diaphorina citri* Kuwayama (Hemiptera: Liviidae). *Boletín del Museo de Entomología de la Universidad del Valle*, 16(1), 17–26.
- Lara-Contreras, J. C. (2016). New records of Odonata from a tropical dry forest in the department of Huila, Colombia. *Boletín Del Museo de Entomología de La Universidad Del Valle*, 17, 21–25.
- Lara-Contreras, J. C. (2017). First records of *Erythrodiplax melanura* Borror, 1942 and *Microthryia catenata* Calvert, 1909 in Colombia and comments on the distribution of *Acanthagrion williamsoni* Leonard, 1977 (Odonata: Libellulidae, Coenagrionidae). *Entomotropica*, 32, 87–95.
- Leonard, J. (1977). A revisionary study of the genus *Acanthagrion* (Odonata: Zygoptera). *Miscellaneous Publications Museum of Zoology, University of Michigan*, 153, 1–188.
- Limongi, J. (1983). Estudio morfo-taxonómico de náyades en algunas especies de Odonata (Insecta) en Venezuela. *Memorias de La Sociedad de Ciencias Naturales "La Salle,"* 43(119), 95–117.
- Limongi, J. (1991). Estudio morfo-taxonómico de náyades de algunas especies de Odonata (Insecta) en Venezuela (II). *Memorias de La Sociedad de Ciencias Naturales "La Salle,"* 49(131–132), 405–420.
- Lozano, F., Rodríguez, J. S. & Molineri, C. (2017). *Acanthagrion peruvianum* Leonard, 1977 (Odonata Coenagrionidae) a junior subjective synonym of *A. floridense* Fraser, 1946 and description of its final stadium larva. *Zoologischer Anzeiger*, 270, 71–80. doi:10.1016/j.jcz.2017.10.002
- Machado, A. B. M. (2009). *Denticulobasis* and *Tuberculobasis*, new genera close to *Leptobasis*, with description of ten new species (Odonata: Coenagrionidae). *Zootaxa*, 2108, 1–36. doi:10.11646/zootaxa.2108.1.1
- Machado, A. B. M. (2012). A new species of *Ischnura* (Odonata: Coenagrionidae) from high altitude eastern Andes, of Colombia. *Zoología (Curitiba)*, 29(6), 598–600. doi:10.1590/S1984-46702012000600011
- Machado, A. B. M. & Machado, P. A. R. (1993). *Oligoclada abbreviata limnophila* ssp. nov., with notes on its ecology and distribution (Anisoptera: Libellulidae). *Odonatologica*, 22(4), 479–486.
- Maria, A. (1938). Catálogo de los Odonatos Colombianos. *Revista Chilena de Historia Natural*, 62, 206–211.
- Mariano, A. S. & Oscar, O. M. (2012). Population structure of *Polythore gigantea* (Odonata: Polythoridae) in lotic systems with different conservation states in Antioquia-Colombia. *Revista de Biología Tropical*, 60(3), 1205–1216. doi:10.15517/rbt.v60i3.1772
- Mendoza-Penagos, C. C. & Bota-Sierra, C. A. (2022). Primera localidad confirmada para *Telebasis isthmica* Calvert, 1902 en Colombia y algunos datos sobre su historia natural. *Hetaerina*, 4(2), 6–11.
- Mendoza-Penagos, C. C., Pérez-Gutiérrez, L. A. & Muzón, J. (2024). A revision of *Lestidae* Calvert, 1901 (Odonata: Zygoptera) from Colombia, with the first record of *Lestes dichrostigma* Calvert, 1909. *Zootaxa*, 5415(2), 201–240. doi:10.11646/zootaxa.5415.2.1
- Miguel, T. B., Oliveira-junior, J. M. B., Ligeiro, R. & Juen, L. (2017). Odonata (Insecta) as a tool for the biomonitoring of environmental quality. *Ecological Indicators*, 81(June), 555–566. doi:10.1016/j.ecolind.2017.06.010
- Montgomery, B. E. (1940). A revision of the genus *Diastatops* (Libellulidae, Odonata) and a study of the leg characters of related genera. *Lloydia*, 3(4), 213–280.
- Moreno Pallares, M. I. & Guillot Monroy, G. H. (2012). Distribución espacial y temporal de náyades de odonatos en los humedales La Vaca y Santa María del Lago, Bogotá, Colombia. *Acta Biológica Colombiana*, 17(2), 281–294.
- Muzón, J. & Garré, A. (2005). Description of the last larval stage of *Erythrodiplax paraguayensis* (Anisoptera: Libellulidae). *Revista de La Sociedad Entomológica Argentina*, 64(1–2), 85–91.
- Navás, L. (1924). Odonatos nuevos o interesantes. *Memorias de la Real Academia de Ciencias y Artes de Barcelona*, 18(13), 315–332.
- Navás, L. (1934). Décadas de insectos nuevos. Década 26. *Broteria*, 3, 133–144.

- Navás, L. (1935). Odonatos de Colombia. *Boletín de la Sociedad entomológica de España*, 17, 33–38.
- Needham, J. C., Westfall, M. J. & May, M. L. (2000). *Dragonflies of North America: Vol. XV*. Scientific Publishers (Ed.), Revised edition.
- Needham, J. G. (1903). Aquatic insects in New York State. Part 3. Life histories of Odonata, suborder Zygoptera. *New York State Museum Bulletin*, 68, 218–279. doi:10.5962/bhl.title.48467
- Needham, J. G. (1904). New dragon-fly nymphs in the United States National Museum. *Proceedings of the United States National Museum*, 27, 685–720. doi:10.5479/si.00963801.27-1371.685
- Needham, J. G. (1940). Studies on neotropical Gomphine dragonflies (Odonata). *Transactions of the American Entomological Society* (1890–), 65(4), 363–394.
- Needham, J. G. (1943). Life history notes on *Micrathyria* (Odonata). *Annals of the Entomological Society of America*, 36(2), 185–189. doi:10.1093/aesa/36.2.185
- Needham, J. G. & Betten, C. (1901). Aquatic insects in the Adirondacks. *New York State Museum Bulletin*, 47, 383–612.
- Needham, J. G. & Cockerell, T. D. A. (1903). Some hitherto unknown nymphs of Odonata from New Mexico. *Psyche*, 10(324), 134–139. doi:10.1155/1903/37045
- Needham, J. G. & Fisher, E. (1936). The nymphs of North American Libelluline dragonflies (Odonata). *Transactions of the American Entomological Society* (1890–), 62(2), 107–116.
- Needham, J. G. & Westfall, M. J. (1955). *A manual of the dragonflies of North America (Anisoptera)*. Berkeley, USA: University of California Press.
- Novelo-Gutiérrez, R. (1995a). La náyade de *Brechmorhoga praecox* (Hagen, 1861), y notas sobre las náyades de *B. rapax* Calvert, 1898, *B. vivax* Calvert, 1906 y *B. mendax* (Hagen, 1861) (Odonata: Libellulidae). *Folia Entomológica Mexicana*, 94, 33–40.
- Novelo-Gutiérrez, R. (1995b). Náyade de *Brechmorhoga pertinax* (Odonata: Libellulidae). *Anales Del Instituto de Biología de La Universidad Nacional Autónoma de México, Serie Zoología*, 66(2), 181–187.
- Novelo-Gutiérrez, R. (2002). Descripción de las larvas de *Perithemis intensa* Kirby, 1889 y *P. domitia* (Drury, 1773), con notas sobre otras larvas del género en México (Odonata: Anisoptera: Libellulidae). *Folia Entomológica Mexicana*, 41(3), 321–327.
- Novelo-Gutiérrez, R. (2005). La larva de *Enallagma novaehispaniae* Calvert, 1902 (Odonata: Coenagrionidae). *Folia Entomologica Mexicana*, 44(2), 219–224.
- Novelo-Gutiérrez, R. & Bota-Sierra, C. A. (2021a). First record of *Brechmorhoga praedatrix* from Colombia (Odonata: Libellulidae). *Argia*, 33(1), 16–17.
- Novelo-Gutiérrez, R. & Bota-Sierra, C. A. (2021b). Primer registro del género *Racinaeschna* para Colombia (Anisoptera: Aeshnidae) y otras especies en la Reserva La Forzosa. *Hetaerina*, 3(2), 7–11.
- Novelo-Gutiérrez, R. & Bota-Sierra, C. A. (2022). Description of the larva of *Miocora aurea* (Ris, 1918) (Odonata: Polythoridae). *Zootaxa*, 5228(3), 599–599. doi:10.11646/zootaxa.5228.5.5
- Novelo-Gutiérrez, R. & Bota-Sierra, C. A. (2023). The larvae of *Cora inca* Selys, 1873 and *Polythore gigantea* (Selys, 1853) from Colombia (Odonata: Polythoridae), with a larval diagnoses of some genera in the family. *Zootaxa*, 5254(4), 517–533. doi:10.11646/zootaxa.5254.4.4
- Novelo-Gutiérrez, R., Bota-Sierra, C. A. & Amaya-Vallejo, V. (2020). Description of the larva of the genus *Archaeopodagrion* Kennedy, 1939 (Zygoptera: Philogeniidae). *Zootaxa*, 4816(3), 325–332. doi:10.11646/zootaxa.4816.3.3
- Novelo-Gutiérrez, R. & González-Soriano, E. (1985). Descripción de la náyade de *Cora marina* Selys, 1868 (Odonata: Polythoridae). *Folia Entomologica Mexicana*, 63, 5–12.
- Novelo Gutiérrez, R. & Gonzalez Soriano, E. (1986). Description of the larva of *Perissolestes magdalena* (Williamson & Williamson, 1924) (Zygoptera: Perilestidae). *Odonatologica*, 15(1), 129–133.
- Novelo-Gutiérrez, R. & Ramírez, A. (1995). The larva of *Neocordulia batesi longipollex* Calvert, 1909 (Odonata: Corduliidae). *Journal of the New York Entomological Society*, 180–184.
- Novelo-Gutiérrez, R. & Ramírez-Ulate, A. (1998). The larva of *Macromiella inacuta* (Odonata: Libellulidae). *Entomological News*, 109(5), 301–306.
- Oertli, B. (2008). The use of dragonflies in the assessment and monitoring of aquatic habitats. In *Dragonflies and damselflies: Model organisms for ecological and evolutionary research*. doi:10.1093/acprof:oso/9780199230693.003.0007
- Palacino, F., Sarmiento, C. E. & González-Soriano, E. (2015). Morphological variability and evaluation of taxonomic characters in the genus *Erythemis* Hagen, 1861 (Odonata: Libellulidae: Symptetrinae). *Insecta mundi*, 428, 1–68.
- Palacino-Rodríguez, F. (2009). Dragonflies (Odonata: Anisoptera) of the collection of the Instituto de Ciencias Naturales, Universidad Nacional de Colombia. *Boletín del Museo de Entomología de la Universidad del Valle*, 10(1), 37–41.
- Palacino-Rodríguez, F. (2013). Five new records of dragonflies (Odonata: Anisoptera) from Putumayo department (Colombia). *Boletín del Museo de Entomología de la Universidad del Valle*, 14(2), 16–22.
- Palacino-Rodríguez, F., Altamiranda-Saavedra, M., Palacino, D. & Penagos, A. C. (2020a). Ecology of *Mesamphiagrion laterale* (Odonata: Coenagrionidae): Abundance, reproduction and interactions with co-occurring species. *International Journal of Odonatology*, 23(2), 165–182. doi:10.1080/13887890.2020.1739567
- Palacino-Rodríguez, F., Altamiranda-Saavedra, M. A., Palacino-Penagos, D. A., Penagos-Arévalo, A. C. & Ríos-Olaya, K. J. (2023). Factors influencing predation on Odonata by *Argiope trifasciata* (Forskål, 1775). *International Journal of Odonatology*, 26, 36–43. doi:10.48156/1388.2023.1917202
- Palacino-Rodríguez, F., Bota-Sierra, C. A., Amaya, C. & Contreras, N. (2017). *Libélulas y caballitos del diablo del departamento del Meta, Colombia*. Universidad El Bosque. doi:10.2307/jj.5329356
- Palacino-Rodríguez, F., Munguía-Steyer, R., Mesa-Blanco, L. V., Contreras-Sánchez, N. & Córdoba-Aguilar, A. (2016). Survival is predicted by territorial status but not wing pigmentation in males of a polythorid damselfly, *Euthore fasciata* (Odonata: Zygoptera: Polythoridae). *International Journal of Odonatology*, 19(4), 183–190. doi:10.1080/13887890.2016.1209137
- Palacino-Rodríguez, F., Palacino, D. A., Rache-Rodríguez, L., Cordero-Rivera, A., Penagos, A. C. & Lamelas-López, L. (2018). Larval development and behavior of *Rhionaeschna marchali* Rambur (Anisoptera: Aeshnidae) under captivity conditions. *International Journal of Odonatology*, 21(1), 55–70. doi:10.1080/13887890.2018.1437478
- Palacino-Rodríguez, F., Palacino-Penagos, D. A. & González-Neitha, A. A. (2020b). Odonata from Bahía Solano, Colombian Pacific region. *Check List*, 16(6). doi:10.15560/16.6.1561
- Palacino-Rodríguez, F., Rache-Rodríguez, L., Caicedo, J. C. & Suárez-Tovar, C. M. (2020c). *Danzantes del aire: Guía para la identificación de libélulas y caballitos del diablo asociados a humedales de Bogotá*. Air Dancers / Identification guide of the dragonflies and damselflies of the Bogotá wetlands. Serie guías de campo del Instituto de Ciencias Naturales N.º 26. Universidad Nacional de Colombia.
- Palacino-Rodríguez, F., Rache-Rodríguez, L. & Castillo, D. R. (2019). Description of the last stadium larva of *Erythrodiplax abjecta* (Anisoptera: Libellulidae) from the eastern Colombian Andes. *Zootaxa*, 4545(1), 139–145. doi:10.11646/zootaxa.4545.1.9

- Palacino-Rodríguez, F., Rache-Rodríguez, L., Palacino, D. A. & Cordeiro-Rivera, A. (2020d). Larval development and foraging behavior of *Erythrodiplax abjecta* (Rambur) (Anisoptera: Libellulidae) in captivity. *Journal of Asia-Pacific Entomology*, 23(4), 1030–1040. doi:10.1016/j.aspen.2020.08.014
- Paulson, D. R. (2004). Critical species of Odonata in the Neotropics. *International Journal of Odonatology*, 7(2), 163–188. doi:10.1080/13887890.2004.9748208
- Pérez-Gutiérrez, L. A. (2007). The larvae of *Teinopodagrion caquetanum* De Marmels and *T. vallenatum* De Marmels (Zygoptera: Megapodagrionidae). *Odonatologica*, 36(3), 307–313.
- Pérez-Gutiérrez, L. A. (2012). *Archilestes chocoanus*, a new damselfly from Colombia (Odonata: Lestidae). *Odonatologica*, 41(4), 347–352. https://doi.org/10.5281/zenodo.3236059 doi:10.5281/zenodo.3236059
- Pérez-Gutiérrez, L. A. (2019). *Dactylobasis* gen. nov. from Colombia, a new genus of Zygoptera with Teinobasini affinities (Odonata: Coenagrionidae). *Zootaxa*, 4656(2), 232–242. doi:10.11646/zootaxa.4656.2.2
- Pérez-Gutiérrez, L. A. & Montes-Fontalvo, J. M. (2011a). Description of the last stadium larvae of *Argia medullaris* Hagen in Selys and *A. variegata* Förster (Odonata: Coenagrionidae). *International Journal of Odonatology*, 14(3), 217–222. doi:10.1080/13887890.2011.608189
- Pérez-Gutiérrez, L. A. & Montes-Fontalvo, J. M. (2011b). Rediscovery of *Mesagrion leucorrhinum* (Zygoptera: Megapodagrionidae): A “formal” description of female and ultimate stadium of larva with notes on habits. *International Journal of Odonatology*, 14(1), 91–100. doi:10.1080/13887890.2011.570162
- Pérez-Gutiérrez, L. A. & Montes-Fontalvo, J. M. (2011c). *Heteropodagrion croizati* sp. nov. (Odonata: Megapodagrionidae) with a key to the known species of the genus. *Zootaxa*, 2810, 63–68. doi:10.11646/zootaxa.2810.1.7
- Pérez-Gutiérrez, L. A. & Palacino-Rodríguez, F. (2011). Updated checklist of the Odonata known from Colombia. *Odonatologica*, 40(3), 203–225.
- Pinto, A. P., Bota-Sierra, C. A. & Marinov, M. (2022). Species identification and description. In A. Córdoba-Aguilar, C. Beatty & J. Bried (Eds.), *Dragonflies and damselflies: Model organisms for ecological and evolutionary research*. pp. 263–278. Oxford University Press. doi:10.1093/oso/9780192898623.003.0019
- QGIS.org (2024). *QGIS Geographic Information System*. QGIS Association. <http://www.qgis.org>
- Rácenis, J. (1958). Los odonatos neotropicales en la colección de la Facultad de Agronomía de la Universidad Central de Venezuela. *Acta Biológica Venezolana*, 2, 179–226.
- Rache, L. (2015). Primer registro del género *Aeschnosoma* Selys, 1871 (Odonata: Corduliidae) para Colombia. *Entomotropica*, 30(23), 224–226.
- Rache, L., Acero, A., Alfonso, S. & Rincón, J. D. (2013). Primer registro de los géneros *Diaphlebia* Selys, 1854, *Argyrothemis* Ris 1909 y *Fylgia* Kirby 1889 para Colombia (Odonata: Gomphidae, Libellulidae). *Entomotropica*, 28(2), 95–97.
- Ramírez, A. (1992). Description and natural history of Costa Rican dragonfly larvae. 1. *Heteragrion erythrogaster* Selys, 1886 (Zygoptera: Megapodagrionidae). *Odonatologica*, 21(3), 361–365.
- Ramírez, A. (1995). Descripción e historia natural de las larvas de odonatos de Costa Rica. IV: *Mecistogaster ornata* (Rambur, 1842) (Zygoptera: Pseudostigmatidae). *Bulletin of American Odonatology*, 3(2), 43–47.
- Ramírez, A. (1997). Description and natural history of the Costa Rican Odonata larvae. 5. *Megaloprepus caerulatus* (Drury, 1782) (Zygoptera, Pseudostigmatidae). *Odonatologica*, 26(1), 75–81.
- Ramírez, A., Altamiranda-Saavedra, M., Gutiérrez-Fonseca, P. & Springer, M. (2011). The neotropical damselfly genus *Cora*: New larval descriptions and a comparative analysis of larvae of known species (Odonata: Polythoridae). *International Journal of Odonatology*, 14(3), 249–256. doi:10.1080/13887890.2011.616992
- Ramírez, A. & Novelo-Gutiérrez, R. (1999). The Neotropical dragonfly genus *Macrothemis*: new larval descriptions and an evaluation of its generic status based on larval stages (Odonata: Libellulidae). *Journal of the North American Benthological Society*, 18(1), 67–73. doi:10.2307/1468009
- Realpe, E. (2010). Two new Andean species of the genus *Ischnura* Charpentier from Colombia, with a key to the regional species (Zygoptera: Coenagrionidae). *Odonatologica*, 39, 121–131.
- Ríos-Touma, B., Rosero, P., Morabowen, A., Guayasamin, J. M., Carson, C., Villamarín-Cortez, S., Solano-Ugalde, A., Tobes, I. & Cuesta, F. (2023). Biodiversity responses to land-use change in the equatorial Andes. *Ecological Indicators*, 156, 111100. doi:10.1016/j.ecolind.2023.111100
- Ris, F. (1913). Libellulinen. Collections zoologiques du Baron Edm. de Selys Longchamps, catalogue systématique et descriptif, Fasc. XV, *Libellulinen*, 7, 837–964.
- Ris, F. (1918). Libellen (Odonaten) aus der Region der amerikanischen Kordilleren von Costa Rica bis Catamarca. *Archiv für Naturgeschichte*, 82, 1–197.
- Ris, F. (1919). Libellulinen. Collections zoologiques du Baron Edm. de Selys Longchamps, catalogue systématique et descriptif, Fasc. XVI (2), *Libellulinen*, 9, 1043–1278.
- Ris, F. (1930). A revision of the Libelluline genus *Perithemis* (Odonata). *Miscellaneous Publications University of Michigan Museum of Zoology*, 21, 1–50.
- RNC. *Lista de colecciones registradas, Registro Nacional de Colecciones Biológicas*. Retrieved February, 2, 2024, from rnc.humboldt.org.co/admin/index.php/registros/colecciones
- Rodrigues da Fonseca, R. & Pujol-Luz, J. R. (1999). Notas sobre a larva de *Ischnura fluviatilis* Selys, 1876 (Odonata: Coenagrionidae). *Contribuições Avulsas Sobre a História Natural Do Brasil, Série Zoologia*, 1, 1–4.
- Rodrigues-Capitulo, A. (1983). Descripción de los estadios preimagoinales de *Erythemis attala* Selys (Odonata, Libellulidae). *Limnobiós*, 2(7), 533–548.
- Rodriguez, J. S. & Molineri, C. (2019). The larva of *Neoneura confundens* Wasscher and van't Bosch, 2013 (Odonata, Coenagrionidae) and key to the larvae of genus. *Anais Da Academia Brasileira de Ciências*, 91. doi:10.1590/0001-3765201920190302
- Rojas-Riaño, N. C. (2011). First record of the damselfly genus *Anisagrion* (Odonata: Coenagrionidae) from Colombia. *Revista Colombiana de Entomología*, 37(1), 164–165. doi:10.25100/socolen.v37i1.9068
- Rojas-Riaño, N. C. & Sánchez Herrera, M. (2009). New records of *Acanthagrion* (Odonata: Coenagrionidae) from Colombia. *Bulletin of American Odonatology*, 11(1), 17–19.
- Román-Heracleo, J., Novelo-Gutiérrez, R. & Springer, M. (2020). First description of the larva of *Psaironeura*, based on specimens of *P. angeloi* from Costa Rica (Odonata: Coenagrionidae: Protoneuriinae), with a key to the genera of Central American Protoneuriinae. *International Journal of Odonatology*, 23(2), 183–190. doi:10.1080/13887890.2020.1752829
- Román-Heracleo, J., Springer, M. & Ramírez, A. (2018). The larva of *Perissolestes remotus* (Williamson & Williamson, 1924) (Zygoptera: Perilestidae). *International Journal of Odonatology*, 21(3–4), 173–179. doi:10.1080/13887890.2018.1511481
- Román-Heracleo, J., Soringer, M. & Novelo-Gutiérrez, R. (2019). Descriptions of the larvae of *Acanthagrion speculum* and *A. trilobatum* from Costa Rica (Odonata: Coenagrionidae). *Zootaxa*, 4624(2), 219–229. doi:10.11646/zootaxa.4624.2.5

- Sahlén, G. & Hedström, I. (2005). The larva of *Mecistogaster linearis*, with notes on its abundance in lowland rainforest of Costa Rica (Odonata: Pseudostigmatidae). *International Journal of Odonatology*, 8(1), 59–66. doi:10.1080/13887890.2005.9748243
- Salazar, S. A., Castrillón, G., Valenzuela-Rojas., J. C. & Amórtegui, E. F. (2015). Diversidad de odonatos (Insecta: Odonata) en el centro de investigación y educación ambiental la tribuna, vereda Tamarindo (Neiva-Huila). *Entomología Mexicana*, 2(February), 619–627.
- Santos, N. D. (1967). Notas sobre a ninfa de *Erythrodiplax connata fusca* (Rambur, 1842) Brauer, 1868 (Odonata, Libellulidae). *Atas da Sociedade de Biologia do Rio de Janeiro*, 10(6), 145–147.
- Santos, N. D. (1968). Contribuição ao conhecimento da fauna do estado da Guanabara. 66 – Descrição da ninfa de *Trapezostigma cophysa* (Selys, 1857) Cowley, 1934 e notas sobre a emergencia (Odonata, Libellulidae). *Atas da Sociedade de Biologia do Rio de Janeiro*, 12(3), 169–171.
- Santos, N. D. (1969). Contribuição ao conhecimento da fauna do estado da Guanabara. 67 – Descrição da ninfa e emergencia de *Brechmorhoga nubecula* (Rambur, 1842) Calvert, 1898 (Odonata – Libellulidae). *Atas da Sociedade de Biologia do Rio de Janeiro*, 12(4), 221–223.
- Santos, N. D. (1970a). Contribuição ao conhecimento da fauna do Estado da Guanabara. 76 – Descrição da ninfa de *Perithemis electra* Ris, 1930 e notas sobre o macho (Odonata: Libellulidae). *Atas da Sociedade de Biologia do Rio de Janeiro*, 14(3/4), 49–50.
- Santos, N. D. (1970b). Descrição da ninfa de *Macrothemis musiva* (Hagen, 1861) Calvert, 1898 (Odonata: Libellulidae). *Atas da Sociedade de Biologia do Rio de Janeiro*, 13(4), 157–158.
- Santos, N. D. (1972). Contribuição ao conhecimento da fauna do Estado da Guanabara e Arredores. 80 – Descrição da ninfa de *Micrathyria artemis* (Selys ms.) Ris, 1911 (Odonata: Libellulidae). *Atas da Sociedade de Biologia do Rio de Janeiro*, 15(3), 141–143.
- Santos, N. D. (1973). Contribuição ao conhecimento da fauna da Guanabara e arredores. 81 – Descrição da ninfa de *Triacantha-gyna caribbea* Williamson, 1923 (Odonata: Aeshnidae). *Atas da Sociedade de Biologia do Rio de Janeiro*, 16(2,3), 53–54.
- Santos, N. D. (1978). Contribuição ao conhecimento da fauna do Município do Rio de Janeiro, RJ e arredores. 85 – Descrição da ninfa de *Micrathyria atra* (Martin, 1897) Calvert, 1906 (Odonata: Libellulidae). *Atas da Sociedade de Biologia do Rio de Janeiro*, 19, 17–18.
- Santos, N. D. & Costa, J. M. (1988). The larva of *Heliocharis amazona* Selys, 1853 (Zygoptera: Heliocharitidae). *Odonatologica*, 17(2), 135–139.
- Santos, N. D., Costa, J. M. & Pujol-Luz, J. R. (1987). Descrição da ninfa de *Gynacantha membranalis* Karsch, 1891 (Odonata: Gynacanthini) e notas sobre o imago. *Anais da Sociedade Entomológica do Brasil*, 16(2), 437–443. doi:10.37486/0301-8059.v16i2.494
- Santos, N. D., Costa, J. M. & Pujol-Luz, J. R. (1993). Descrição da larva de *Diastatops obscura* (Fabricius) (Odonata, Libellulidae). *Revista Brasileira de Zoologia*, 10, 467–472. doi:10.1590/S0101-81751993000300014
- Schmidt, E. (1942). Odonata nebst Bemerkungen über die *Anomisma* und *Chalcopteryx* des Amazonas-Gebiets. In E. Titschack (Ed.), Beiträge zur Fauna Perus nach der Ausbeute der Hamburger Südperu-Expedition 1936. pp. 225–276. Jena, Germany: Wissenschaftliche Bearbeitungen.
- Selys Longchamps, E. de. (1873). Troisièmes additions au synopsis des gomphines. *Bulletins de l'Academie Royale des Sciences, des Lettres et des Beaux Arts de Belgique*, 2(35), 732–774.
- Silva-Vilela, D., Venancio, H. & Santos, J. C. (2020). Final instar larva of *Acanthagrion truncatum* Selys, 1876 (Zygoptera: Coenagrionidae). *Zootaxa*, 4881(2), 393–400. doi:10.11646/zootaxa.4881.2.12
- Souza, L. O., Costa, J. M. & Santos, T. C. (1999). Description of the larva of *Planiplax phoenicura* Ris, from Pantanal sul-Matogrossense, Brazil (Anisoptera: Libellulidae). *Odonatologica*, 28(2), 159–163.
- Souza, L. O. I. & Costa, J. M. (2002). Descrição de três larvas de *Micrathyria* Kirby, 1889, com chave para identificação das larvas conhecidas das espécies Brasileiras (Odonata: Libellulidae). *Arquivos do Museu Nacional, Rio de Janeiro*, 60(4), 321–331.
- Souza, L. O. I. Costa, J. M., & Santos, T. C. (1999). Redescription da larva de *Tramea calverti* Muttkowsky, 1910, com chave para identificação das larvas conhecidas do gênero (Odonata, Libellulidae). *Boletim do Museu Nacional, Rio de Janeiro*, 409, 1–7.
- Spindola, L. A., Souza, L. O. I. & Costa, J. M. (2001). Descricao da larva de *Perithemis thais* Kirby, 1889, com chave para identificação das larvas das especies conhecidas do genero citadas para o Brasil (Odonata: Libellulidae). *Boletim do Museu Nacional, Rio de Janeiro*, 442, 1–8.
- Stand-Pérez, M. Á., Bota-Sierra, C. A. & Pérez-Gutiérrez, L. A. (2019). *Heteragrion demarmelsi* sp. nov., with taxonomic notes on Colombian *Heteragrion* species (Odonata: Heteragrionidae). *Zootaxa*, 4623(1), 90–112. doi:10.11646/zootaxa.4623.1.6
- Stand-Pérez, M. Á., Montes-Fontalvo, J. & Pérez-Gutiérrez, L. A. (2021). Sixteen new records of Odonata for Colombia from the Aracuara Region (Perilestidae, Calopterygidae, Heteragrionidae, Megapodagrionidae, Polythoridae, Coenagrionidae, Aeshnidae, Gomphidae, Libellulidae). *Notulae odonatologicae*, 9(8), 378–388. doi:10.60024/zenodo.5702965
- Stand-Pérez, M. Á. & Pérez-Gutiérrez, L. A. (2020). *Pseudotepuibasis* gen. nov., a new monotypic genus of Coenagrionidae from Colombian Amazon (Odonata: Zygoptera). *Zootaxa*, 4845(4), 576–584. doi:10.11646/zootaxa.4845.4.7
- Tennessen, K. (2010). The madicolous nymph of *Heteropodagrion sanguinipes* Selys (Odonata: Megapodagrionidae). *Zootaxa*, 2531(1), 29–38. doi:10.11646/zootaxa.2531.1.3
- Tennessen, K. J. (2015). Four new species of *Calvertagrion* St. Quentin from South America (Odonata: Coenagrionidae). *Odonatologica*, 44(3), 397–430.
- Tobias-Loaiza, M. & Tamaris-Turizo, C. (2019). Odonatos de la Sierra Nevada de Santa Marta, Colombia: Una lista preliminar. *Revista de la Academia Colombiana de Ciencias Exactas, Físicas y Naturales*, 43(167), 212–218. doi:10.18257/raccefyn.832
- Torres-Pachón, M. & Realpe, E. (2015). Listado preliminar de los odonatos (Insecta: Odonata) del bosque alto andino del Santuario de Fauna y Flora Iguaque, Boyaca, Colombia. *Dugesiana*, 22(2), 133–136.
- Trápero-Quintana, A. D. & Reyes-Tur, B. (2008). Description of the last instar larva of *Erythrodiplax fervida* (Erichson, 1848) (Anisoptera: Libellulidae), with notes on the biology of the species. *Zootaxa*, 1688(1), 66–68. doi:10.11646/zootaxa.1688.1.6
- Urrutia, M. X. (2005). Riqueza de especies de Odonata Zygoptera por unidades fisiográficas en el Departamento del Valle del Cauca. *Boletín del Museo de Entomología de la Universidad del Valle*, 6(2), 30–36.
- Vargas-Salgado, L. G., Carvhalo, A. do L. & Parise-Pinto, A. (2013). Larval taxonomy of *Macrothemis* Hagen, 1868 (Odonata: Libellulidae), with descriptions of four larvae and a key to the fourteen known species. *Zootaxa*, 3599(3), 229–245. doi:10.11646/zootaxa.3599.3.2
- Velásquez, M. (2012). Actualización de registros del orden Odonata del Museo Entomológico Francisco Luís Gallego. *Boletín del Museo Entomológico Francisco Luis Gallego*, 4(4), 25–73.
- Velásquez, N., Bautista, K., Guevara, M., Ramirez, D., Realpe, E. & Perez-Gutierrez, L. A. (2009). Larval development and growth ratio in *Ischnura cruzi* De Marmels, with description of last lar-

- val instar (Zygoptera: Coenagrionidae). *Odonatologica*, 38(1), 29–38.
- Vianna, D. M. & De Marco Jr, P. (2012). Higher-taxon and cross-taxon surrogates for odonate biodiversity in Brazil. *Natureza & Conservação*, 10(1), 34–39. doi:10.4322/natcon.2012.006
- Vivas-Santeliz, J. & De Marmels, J. (2017). Current knowledge of Odonata in Venezuela: Diversity and distribution of endemic taxa. *Odonatologica*, 46(1/2), 35–54. doi:10.5281/zenodo.572355
- von Ellenrieder, N. (2003). A synopsis of the Neotropical species of "Aeshna" Fabricius: the genus *Rhionaeschna* Förster (Odonata: Aeshnidae). *Tijdschrift voor Entomologie*, 146, 67–207. doi:10.1163/22119434-900000120
- von Ellenrieder, N. (2007). Some Libellulidae larvae from the Yungas Forest, Argentina: *Macrothemis hahneli* Ris, *Brechmorhoga nubecula* (Rambur) and *Dasythemis mincki clara* Ris (Anisoptera). *Odonatologica*, 36(3), 263–273.
- von Ellenrieder, N. (2008a). *Phoenicagrion* gen. nov. for *Leptagrion flammeum*, with description of a new species, *P. paulsoni*, from Peru (Odonata: Coenagrionidae). *International Journal of Odonatology*, 11, 81–93. doi:10.1080/13887890.2008.9748314
- von Ellenrieder, N. (2008b). Revalidation of *Argentagrion* and redefinition of *Homeoura*, with the description of *H. obrieni* n. sp. (Odonata: Coenagrionidae). *Revista de la Sociedad Entomológica Argentina*, 67, 81–106.
- von Ellenrieder, N. (2012). The *levis* group of *Orthemis* revisited: A synopsis including a synonymy and description of six new species of *Orthemis* from South America (Odonata: Libellulidae). *International Journal of Odonatology*, 15(3), 115–207. doi:10.1080/13887890.2012.688186
- von Ellenrieder, N. (2013). A revision of *Metaleptobasis* Calvert (Odonata: Coenagrionidae) with seven synonymies and the description of eighteen new species from South America. *Zootaxa*, 3738(1), 1–155. doi:10.11646/zootaxa.3738.1.1
- von Ellenrieder, N. (2014). A synopsis of the Neotropical genus *Nephepeltia* (Odonata: Libellulidae), including description of a new species, synonymies, and a key to males. *Zootaxa*, 3796(1), 121–146. doi:10.11646/zootaxa.3796.1.6
- von Ellenrieder, N. & Garrison, R. W. (2003). A synopsis of the genus *Triacanthagyna* (Odonata: Aeshnidae). *International Journal of Odonatology*, 6, 147–184. doi:10.1080/13887890.2003.974835
- von Ellenrieder, N. & Garrison, R. W. (2008a). *Drepanoneura* gen. nov. for *Epileoneura letitia* and *Protoneura peruviensis*, with descriptions of eight new Protoneuridae from South America (Odonata: Protoneuridae). *Zootaxa*, 1842, 1–34. doi:10.11646/zootaxa.1842.1.1
- von Ellenrieder, N. & Garrison, R. W. (2008b). *Oreiallagma* gen. nov. with a redefinition of *Cyanallagma* Kennedy 1920 and *Mesamphiagrion* Kennedy 1920, and the description of *M. dunklei* sp. nov. and *M. ecuatoriale* sp. nov. from Ecuador (Odonata: Coenagrionidae). *Zootaxa*, 1805, 1–51. doi:10.11646/zootaxa.1805.1.1
- von Ellenrieder, N. & Garrison, R. W. (2017). A synopsis of the Neotropical genus *Protoneura* (Odonata: Coenagrionidae). *Zootaxa*, 4361, 1–76. doi:10.11646/zootaxa.4361.1.1
- Wasscher, M. T. & Van't Bosch, J. G. (2013). The true identity of *Neoneura bilinearis* Selys, 1860, with the synonymy of *N. gaida* Rácenis, 1953, and the description of *N. confundens* sp. nov. (Odonata: Protoneuridae). *Zootaxa*, 3599(1), 19–36. doi:10.11646/zootaxa.3599.1.2
- Westfall, J. M. & May M.L. (2006). *Damselflies of North America*. (Revised edition). Gainesville, FL: Scientific Publishers.
- Westfall Jr, M. J. (1988). *Elasmothemis* gen. nov., a new genus related to *Dythemis* (Anisoptera: Libellulidae). *Odonatologica*, 17(4), 419–428.
- Westfall Jr, M. J. (1989). The larvae of *Desmogomphus paucinervis* (Selys, 1873) and *Perigomphus pallidistylus* (Belle, 1972) (Anisoptera: Gomphidae). *Odonatologica*, 18(1), 99–106.
- Westfall Jr, M. J. (1998). Description of the true larva of *Tauriphila australis* (Hagen, 1867) from Limoncocha, Ecuador (Anisoptera: Libellulidae). *Odonatologica*, 27(4), 491–494.
- Williams, F. X. (1937). Notes on the biology of *Gynacantha nervosa* Rambur (Aeschnidae), a crespuscular dragonfly in Guatemala. *The Pan-Pacific Entomologist*, 13(1/2), 1–8.
- Williamson, E. B. (1917). The genus *Neoneura* (Odonata). *Transactions of the American Entomological Society*, 43, 211–246.
- Williamson, E. B. (1918a). Results of the University of Michigan Williamson expedition to Colombia 1916–1917. II. A new species of *Agriogomphus* (Odonata). *Occasional Papers of the Museum of Zoology, University of Michigan*, 59, 1–18.
- Williamson, E. B. (1918b). Results of the University of Michigan-Wilson Expedition to Colombia. 1916–1917. 1. Two interesting new Colombian gomphines (Odonata). *Occasional Papers of the Museum of Zoology, University of Michigan*, 52, 1–14.
- Williamson, E. B. (1918c). A collecting trip to Colombia, South America. *University of Michigan Museum of Zoology Miscellaneous Publications*, 3(3), 1–24.
- Williamson, E. B. (1923). Notes on American species of *Triacanthagyna* and *Gynacantha*. *University of Michigan, Museum of Zoology, Miscellaneous Publications*, 9, 3–80.
- Williamson, E. B. (1919). Results of the University of Michigan-Wilson expedition to Colombia. 1916–1917. IV. Notes on the species of the genus *Heteragrion* Selys with descriptions of new species (Odonata). *Occasional Papers of the Museum of Zoology University of Michigan*, 1, 1–89.
- Williamson, E. B. (1923a). Notes on American species of *Triacanthagyna* and *Gynacantha*. *University of Michigan, Museum of Zoology, Miscellaneous Publications*, 9, 3–80.
- Williamson, E. B. (1923b). Notes on the genus *Erythemis* with a description of a new species (Odonata). *University of Michigan, Museum of Zoology, Miscellaneous Publications*, 11, 3–18.
- Williamson, E. B. (1923c). Notes on the habitats of some tropical species of *Hetaerina* (Odonata). *Occasional Papers of the Museum of Zoology, University of Michigan*, 130, 1–46.
- Williamson, E. B. & Williamson, J. H. (1924). The genus *Perilestes* (Odonata). *University of Michigan, Museum of Zoology, Miscellaneous Publications*, 14, 3–39.
- Williamson, E. B. & Williamson, J. H. (1930). Two new neotropical Aeshnines (Odonata). *Occasional Papers of the Museum of Zoology, University of Michigan*, 218, 1–17.
- Zloty, J., Pritchard, G. & Esquivel, C. (1993). Larvae of the Costa Rican *Hetaerina* (Odonata: Calopterygidae) with comments on distribution. *Systematic Entomology*, 18(3), 253–265. doi:10.1111/j.1365-3113.1993.tb00665.x
- Zloty, J. & Pritchard, G. (2001). *Cora chiribiquete* spec. nov., a new damselfly species from Colombia (Zygoptera: Polythoridae). *Odonatologica*, 30(2), 227–232.