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Scolopendromorph centipedes (Chilopoda: Scolopendromorpha) from Colombia: a richness update

Los ciempiés escolopendromorfos (Chilopoda: Scolopendromorpha) de Colombia: actualización de su riqueza

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Abstract

The order Scolopendromorpha includes 700 species of centipedes worldwide. It is the most diverse group of myriapods in Colombia with 40 species and six subspecies. In this work, the number of centipede species known in the country was updated from a review of specialized literature, as well as databases and specimen records in online digital collections. New records of 19 species and one subspecies were found. Thus, the richness of the group increased to fifty-four species and seven subspecies within three families, five subfamilies, eight genera, and seven subgenera. In addition, 30 of the 32 departments of the Colombian territory registered a representative identified at least at the gender level. Antioquia, Boyacá and Cundinamarca are the departments with the highest species richness.

Keywords: Checklist, Myriapoda, review

Resumen

El orden Scolopendromorpha incluye 700 especies de ciempiés a nivel mundial. Es el grupo de miriápodos más diverso en Colombia con alrededor de 40 especies y seis subespecies. En este trabajo se actualizó el número de especies de ciempiés conocidas para el país a partir de la revisión de literatura especializada, así como bases de datos y registros de especímenes en colecciones digitales en línea. Se encontraron nuevos registros de 19 especies y una subespecie. Así, la riqueza del grupo se incrementó a cincuenta y cuatro especies y siete subespecies dentro de tres familias, cinco subfamilias, ocho géneros y siete subgéneros. Además, 30 de los 32 departamentos del territorio colombiano registraron un representante identificado al menos al nivel de género. Antioquia, Boyacá y Cundinamarca son los departamentos con mayor riqueza de especies.

Palabras clave: Lista de especies, Myriapoda, revisión

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INTRODUCTION

The order Scolopendromorpha Pocock, 1895, is a diverse group of centipedes possessing about 700 species (Edgecombe and Bonato, 2011) in 27 genera, 14 subgenera (Schileyko et al., 2020) and 5 families (Cryptopidae Kohlrausch, 1881, Scolopocryptopidae Pocock, 1896, Plutoniumidae Bollman, 1893, Mimopidae Lewis, 2006 and Scolopendridae Leach, 1814). Families, subfamilies and tribes within the order have mostly been considered to be monophyletic, while some genera are not (Vahtera et al., 2013).

Generally, scolopendromorphs are medium to large in size, but some are as small as 9 mm and as large as 30 cm. They usually possess 21 or 23 pairs of legs depending on the family (Edgecombe and Bonato, 2011). However, there is a species with 39 or 43 pairs of legs called *Scolopendropsis duplicata* Chagas-Jr., Edgecombe and Minelli, 2008. The visual organs consist of a cluster of four ocelli on each side of the cephalic plate, a single ocellus on each side, or none (Edgecombe and Bonato, 2011); the clade formed by the blind scolopendromorphs is recognized to be monophyletic (Vahtera et al., 2012, 2013). However, within the family Scolopendridae (which are not blind) there are some species that share this characteristic: *Tonkinodentus lestes* Schileyko, 1992, *Cormocephalus sagmus* Edgecombe and Waldock, 2019, *C. pyropygus* Edgecombe and Waldock, 2019, as well as *C. delta* Edgecombe and Waldock, 2019 (Edgecombe et al., 2019). The tergites of the leg-bearing segments often have sutures, important elements in the taxonomic determination of species, as does the morphology of the last pair of legs (Edgecombre and Bonato, 2011).

Scolopendromorphs are widely distributed worldwide and despite not being the most diverse order of centipedes (occupied by Geophilomorpha with approximately 1250 species (Bonato and Zapparoli, 2011) in seven families (Bonato et al., 2013)), their diversity is known to be high in the Neotropics. However, these positions in terms of species richness of both orders are inverted in Colombia (Chagas-Jr. et al., 2014).

Towards the middle of the 19th century, some studies focused on the myriapods of the New World were published. Among them, the work of Gervais (1847) is one of the first to approach the American fauna, mainly Chilean myriapods. The author reports the species *Scolopendra chilensis* Gervais, 1847, *S. pallida* Gervais, 1847 and *Cryptops monilis* Gervais, 1847. Later, Saussure and Humbert (1872) studied the myriapods of Mexico and Central America, where the scolopendromorphs are classified as a family and divided into three tribes: Heterostomiens (three genera), Scolopendriens (five genera) and Scolopendropsiens (three genera). Likewise, the important study by Kraepelin (1903) records for Colombia the species *Cryptops bivittatus* Pocock, 1893, *Newportia longitarsis* (Newport, 1845), *Otostigmus bürgeri* Attems, 1903, *O. scabricauda* (Humbert and Saussure, 1870), *Cupipes ungulatus* (Meinert, 1886), *Hemiscolopendra laevigata* Kraepelin, 1903, *Scolopendra gigantea* Linnaeus, 1758 and *S. robusta* Kraepelin, 1903. The same author synonymized the names *Heterostoma* Newport, 1844 and *Dacetum* Koch, 1847 under *Ethmostigmus* Pocock, 1898, *Branchiostoma* Newport, 1845 under *Rhysida* Wood, 1862, as well as *S. chilensis* and *S. pallida* under *Hemiscolopendra chilensis* Kraepelin, 1903.

The contribution of German naturalists to the knowledge of scolopendromorphs continued with Kraepelin (1904a), when he studied them (except *Scolopendra*) from the collection of the Natural History Museum of Paris, and recorded *Otostigmus inermis* Porat, 1876 for Colombia. Also, Kraepelin (1904b) studied the genus *Scolopendra* and recorded *S. gigantea* Linnaeus, 1758 and *S. subspinipes* Leach, 1816 for Colombia.

Ribaut (1912) made a study of the country's chylopods with specimens collected by Dr. Otto Fuhrmann, and recorded 17 species of centipedes, of which 12 belong to the order Scolopendromorpha, and two were newly described: *Newportia fuhrmanni* Ribaut, 1912 and *Scolopendra arthrorhabdoides* Ribaut, 1913. Several years later, Chamberlin (1921) recorded seven species of Scolopendromorpha.

The renowned German-Brazilian zoologist Wolfgang Bucherl (1942) ventured into the study of the Neotropical chylopods, recording the presence in

the country of *S. arthrorhabdoides* Ribaut, 1913, *S. gigantea* Linnaeus, 1758, *S. robusta* Kraepelin, 1903, *C.* (*Hemiscolopendra*) *laevigatus* Porat, 1876, *O.* (*Parotostigmus*) *burgeri* Attems, 1903, *O.* (*P.*) *inermis* Porat, 1876, *R. longipes longipes* (Newport, 1845), *C.* (*Chromatanops*) *bivittatus* Pocock, 1893, *Otocryptops ferrugineus* (Linnaeus, 1767), *O. melanostomus* (Newport, 1845), *N. longitarsis* (Newport, 1845), *N. fuhrmanni* Ribaut, 1914, *N. monticola* Pocock, 1890, and *N. stolli* (Pocock, 1896). Chamberlin (1957) reported six species for the Andes, five of which were new: *C. calinus* Chamberlin, 1957, *N. albana* Chamberlin, 1957, *N. caldes* Chamberlin, 1957, *N. rossi* Chamberlin, 1957 and *N. schlingeri* Chamberlin, 1957. Bucherl (1974), in his study of Scolopendromorpha in the Neotropics recorded *H. laevigata* Kraepelin, 1903, *S. arthrorhabdoides* Ribaut, 1913, *S. gigantea gigantea* Linnaeus, 1758, *S. viridicornis viridicornis viridicornis* Newport, 1844, *O.* (*P.*) *bürgeri bürgeri* Attems, 1903, *O.* (*P.*) *inermis* Porat, 1876, *O.* (*P.*) *scabricauda* (Humbert and Saussure, 1870), *C.* (*Chromatanops*) *bivittatus* Pocock, 1893, *C. calinus* Chamberlin, 1957, *C. melanifer* Chamberlin, 1955, *C. rossi* Chamberlin, 1955, *N.* (*Newportia*) *caldes* Chamberlin, 1957, *N.* (*N.*) *fuhrmanni fuhrmanni* Ribaut, 1914, *N.* (*N.*) *monticola* Pocock, 1890, *N.* (*N.*) *pusilla* Pocock, 1893, *N. rossi* Chamberlin, 1957 and *N.* (*Scolopendrides*) *albana* Chamberlin, 1957.

Paz (1978) was the first Colombian researcher to study the myriapods in the country. In his work on arachnids and myriapods from the department of Antioquia, he documented the presence of 12 species of scolopendromorphs, with the genera *Newportia* and *Otostigmus* as the most diverse. Towards the end of the 20th century, Schileyko and Minelli (1999) carried out a revision of the genus *Newportia* in which they described two species and synonymized some others. They reported the presence of *N. albana* Chamberlin, 1957, *N. fuhrmanni* Ribaut, 1912, *N. longitarsis longitarsis* (Newport, 1845), *N. longitarsis stechowi* Verhoeff, 1938, *N. monticola* Pocock, 1890, *N. pusilla* Pocock, 1893 and *N. stolli* (Pocock, 1896).

During the first two decades of the 21st century, the publication of records for Colombia continued. Thus, Shelley's (2006) work on New World species of the genus *Scolopendra* mentioned the occurrence of *S. gigantea* Linnaeus, 1758, *S. morsitans* Linnaeus, 1758 and *S. viridicornis* Newport, 1844 for the country. Likewise, Chagas-Jr. et al. (2014) presented the list of species of scolopendromorphs and escutigeromorphs found in the Colombian territory up to that year. These authors obtained a total of 36 species in three families, five subfamilies and eight genera, as well as several novel reports of these chylopods in the country; this was the most complete review of the last 20 years and was considered the main source of data and information presented here.

On the other hand, Chagas-Jr. and Galvis (2018) carried out the redescription of *S. arthrorhabdoides*, a typical species of the Colombian Andes. In addition, by examining material deposited in collections, they recorded *S. armata* Kraepelin, 1903. Also, a new monotypic subgenus within the genus *Newportia* was recently described. This comprises *N.* (*Andeocryptops*) *shelleyi* Tulande-M., Prado, Galvis and Chagas-Jr. 2020 (Tulande-M. et al., 2020). In this same work the authors included a key for the identification of the different subgenera of *Newportia* and another for the species of the subgenera *N.* (*Ectonocryptops*), *N.* (*Ectonocryptoides*) and *N.* (*Andeocryptops*).

Although these studies have been developed mainly in the Andean region of Colombia, there are information gaps in the Caribbean, Pacific, Amazon and Orinoco regions. Thus, in order to know the species richness of scolopendromorphs that have been described in Colombia from the first to the most recent works, the results of a review are presented for updating. In this way, basic information will be provided for future studies on this group in the country.

MATERIALS AND METHODS

Information was searched between January 2019 and March 2022 in the most popular databases available on the Internet: Google Scholar, PubMed, Scielo, Research Gate, NCBI and Scopus. Different keywords were used in Spanish and English: "ciempiés", "ciempiés Colombia", "Myriapoda Colombia", "taxonomía ciempiés", "centipedes", "centipedes Colom-

bia", "taxonomy centipedes", "checklist centipedes", "scolopendromorph centipedes", "Scolopendromorpha species", "Scolopendromorpha" and "Chilopoda Colombia". The classic works of Saussure and Humbert (1872), Kraepelin (1903, 1904a, 1904b), Ribaut (1912) and Bucherl (1974) were also included.

Considering that the most important work on scolopendromorphs in Colombia is that of Chagas-Jr. et al. (2014), this was used as the fundamental guide for the elaboration of the updated list of scolopendromorphs. Taxonomic categories are written in bold, while synonymies are written below these in round letters or italics if they are species. Reports that were not presented in Chagas-Jr. et al. (2014) are marked with an exclamation mark (!), while doubtful or incorrect reports are marked with an asterisk (*) and were not taken into account for the final species list.

The ChiloBase 2.0 (Bonato et al., 2016), which corresponds to a database of chylopods, primarily nomenclatural, was consulted for the correct spelling of scientific names and authorship of names, also relying on the Myriatrix database (The Fellegship of the Rings, 2020), which corrects some information errors that ChiloBase 2.0 has. An analysis was also made of the content downloaded through the SIB Colombia biodiversity catalog, belonging to GBIF (2022), which corresponds to the information on the records of Scolopendromorpha for the country in biological collections. The download date of the file in .csv format was on March 29, 2022. The database called "Scolopendromorpha-Colombia" (S-C) was generated in Excel in order to comply with the replicability of the methods. It was not possible to carry out a physical review of the specimens in the collections due to the emergency situation caused by the COVID-19 pandemic. Records that did not meet the aforementioned criteria were not taken into account.

Although the downloaded file contains a large amount of information in different columns, only the following data were taken into account: family, genus, species, infraspecificEpithet (if available), countryCode, locality (if available), stateProvince (if available), institutionCode (if available), collectionCode, catalogNumber and finally, identifiedBy (if available).

From a total of 986 records, 23 data sets from the iNaturalist website (rows 3, 5-8, 48, 61, 61, 92, 93, 96-99, 101-107, 121-123 of S-C) were excluded because the records there are mere observations and do not have taxonomic criteria. Three records (rows 952-954 of S-C) from the Museo de Historia Natural de la Universidad del Cauca were excluded because they are in the process of cataloging, so they do not have a catalog number (catalogNumber). Additionally, two records (rows 94 and 95) were also excluded because they do not have catalog numbers. One record (row 4) with institution code "LACM" was excluded because it was not possible to identify to which institution this report belongs; and one last record (row 948) was excluded because it is presented as a literature citation.

Some records (rows 9-60 of S-C) had no institution code (institutionCode), so they were also excluded. However, eight of these records (rows 13, 14, 27, 31, 38, 43, 46 and 47) had catalog numbers (catalogNumber) and were therefore taken into account.

The abbreviations of the collections included in this work are listed below:

ICN-MHN-Chi: Myriapodology Collection of the Institute of Natural Sciences of the National University of Colombia. Colombia.

MCZ-IZ: Museum of Comparative Zoology, Department of Invertebrate Zoology. United States.

MNHN-MY: Collection of Myriapods and Onychophorans of the Muséum national d'Histoire naturelle. France.

NHMUK-ZOO: Zoology Collection of the Natural History Museum. United Kingdom.

MPUJ-ENT: Entomology Collection of the Museo Javeriano de Historia Natural, Pontificia Universidad Javeriana. Colombia.

SMF: Senckenberg Naturmuseum Frankfurt. Germany.

NMNH: National Museum of Natural History Smithsonian. United States.

ZMH: Zoologisches Museum Hamburg. Germany.

RESULTS

Three families, five subfamilies, eight genera (*Akymnopellis*, *Cryptops*, *Cormocephalus*, *Newportia*, *Rhysida*, *Scolopendra*, *Scolopocryptops* and *Otostigmus*), seven subgenera, 54 species, as well as seven subspecies have been recorded for Colombia in 30 of the 32 departments that make up its territory. Arauca and Córdoba have no records, not even for higher taxonomic levels such as order or family. In Huila, although the review of S-C presents only one species record, Chagas-Jr. et al. (2014) report two species for this department.

The genera found with the highest number of species were *Newportia* (19 spp.), *Otostigmus* (11 spp.) and *Scolopendra* (9 spp.). The departments of Amazonas, Cundinamarca, Meta and Tolima presented all genera except *Akymnopellis*. Departments such as Nariño, Santander and Vaupés only recorded six genera, as well as five in Boyacá, Cauca, Quindío and Risaralda.

The species *Otostigmus* (*Parotostigmus*) *inermis* Porat, 1876, *O.* (*P.*) *scabricauda* (Humbert and Saussure, 1870) and *Cryptops* (*Trigonocryptops*) *iheringi* (Brolemann, 1902) were excluded from the list, for different reasons: for the first species, its presence in Colombia was not recorded (Chagas-Jr., 2012), for the second, no morphology matching this species was found in the country, and for the third, its morphology was reported to differ from that normally found in the species (Chagas-Jr. et al., 2014).

The following is a list of the species of scolopendromorphs present in Colombia:

Order **Scolopendromorpha** Pocock, 1895

Family **Scolopendridae** Newport, 1844

Subfamily **Scolopendrinae** Newport, 1844

Genus ***Scolopendra*** Linnaeus, 1758

Scolopendra angulata Newport, 1844

Scolopendra angulata angulata Newport, 1844

Type locality: Trinidad (Shelley, 2006)
Distribution in Colombia: Amazonas (MPUJ_ENT0001059), Meta (ICN-MHN-Chi 278, ICN-MHN-Chi 547, MPUJ_ENT0001060, MPUJ_ENT0001061, MPUJ_ENT0001063), Santander (MPUJ_ENT0001066), Vaupés (ICN-MHN-Chi 130, ICN-MHN Prov 508) and Vichada (ICN-MHN-Chi 91; Chagas-Jr. et al., 2014).

Scolopendra angulata explorans Chamberlin, 1914

Type locality: Rio Madeira, Rondônia, Brazil (Bonato et al., 2016).
Distribution in Colombia: Via Tarapacá, Leticia, Amazonas (Chagas-Jr. et al., 2014) (ICN-MHN-Chi 9).

Scolopendra alternans Leach, 1816 **!**

Scolopendra complanata Newport, 1844

Scolopendra cubensis Saussure, 1860

Scolopendra grayi Newport, 1844

Scolopendra hirsutipes Bollman, 1893

Scolopendra incerta Newport, 1845

Scolopendra longipes Wood, 1862

Scolopendra multispinata Newport, 1844

Scolopendra sagraea Gervais, 1837

Scolopendra testacea Wood, 1861

Scolopendra torquata Wood, 1861

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Table 1. Distribution of the eight genera reported in the departments of Colombia

Departament	Genera							
	Scolopendra	*Cornocephalus*	*Akymnopellis*	*Rhysida*	*Otostigmus*	*Cryptops*	*Scolopcryptops*	*Newportia*
Amazonas	X	X		X	X	X	X	X
Antioquia	X				X		X	X
Atlántico	X							
Bogotá					X			X
Bolívar	X	X						X
Boyacá	X				X	X	X	X
Caldas					X			X
Caquetá	X				X		X	X
Casanare				X		X		
Cauca			X		X	X	X	X
Cesar	X			X	X	X		
Chocó	X				X		X	X
Cundinamarca	X	X		X	X	X	X	X
Guainía					X			
Guaviare						X		X
La Guajira	X							
Magdalena	X				X		X	X
Meta	X	X		X	X	X	X	X
Nariño	X	X			X	X	X	X
Norte de Santander	X				X			X
Putumayo								X
Quindío		X		X	X		X	X
Risaralda				X	X	X	X	X
Santander	X	X			X	X	X	X
Sucre	X			X				
Tolima	X	X		X	X	X	X	X
Valle del Cauca		X			X		X	X
Vaupés	X			X	X	X	X	X
Vichada	X			X				
Archipiélago de San Andrés, Providencia y Santa Catalina	X							

Neotype locality: Fat Hog Bay, Tortola, British Virgin Islands (Shelley, 2006).
Distribution in Colombia: there is one record in collections of this species from the department of Atlántico in the Caribbean region (ICN-MHN-Chi 266).

Scolopendra arthrorhabdoides Ribaut, 1913

Type locality: Guaduas, near Bogotá, Cundinamarca, Colombia (Shelley, 2006).

Distribution in Colombia: Boyacá (ICN-MHN-Chi 145, ICN-MHN-Chi 883, ICN-MHN-Chi 886, ICN-MHN-Chi 887), Chocó (ICN-MHN-Chi 120), Cundinamarca (ICN-MHN-Chi 407, ICN-MHN-Chi 408, ICN-MHN-Chi 409, ICN-MHN-Chi 412, ICN-MHN-Chi 508, ICN-MHN-Chi 1005, MPUJ_ENT 0001065), Meta (MPUJ_ENT 0001064, ICN-MHN-Chi 36, ICN-MHN-Chi 239, ICN-MHN-Chi 315, ICN-MHN-Chi 340, ICN-MHN-Chi 411, ICN-MHN-Chi 766, ICN-MHN-Chi 825; Chagas-Jr. et

al., 2014), Nariño (ICN-MHN-Chi 959), Santander (ICN-MHN-Chi 410), Tolima (ICN-MHN-Chi 414). There is also a record in a place called "Juadua" (NHMUK ZOO BM 1928.5.1.166), which possibly corresponds to a typo.

Scolopendra gigantea Linnaeus, 1758

Scolopendra gigantea insignis Gervais, 1844. MNHN-MY 4317, 4321.

Scolopendra annulipes Lucas, 1758

Scolopendra epileptica Wood, 1861

Scolopendra gigas Leach, 1815

Scolopendra prasinipes Wood, 1861

Neotype locality: Valencia, Carabobo, Venezuela (Shelley, 2006).
Distribution in Colombia: known only from the Caribbean region, in Atlántico (ICN-MHN-Chi 4, ICN-MHN-Chi 55, ICN-MHN-Chi 95), Bolívar (ICN-MHN-Chi 94), Magdalena (ICN-MHN-Chi 123, ICN-MHN-Chi 124, MCZ-IZ 33144), Sucre (ICN-MHN-Chi 54, ICN-MHN-Chi 896; Chagas-Jr. et al., 2014) and Valle del Cauca (MCZ-IZ26467).

Scolopendra morsitans Linnaeus, 1758

Scolopendra angulipes Newport, 1844

Scolopendra attenuata Porat, 1871

Scolopendra elegans Brandt, 1841

Scolopendra impressa Porat, 1876

Type locality: India (Shelley, 2006).
Distribution in Colombia: occurs in Amazonas (MPUJ_ENT 0001069) and Meta (Chagas-Jr. et al., 2014), as well as Casanare and Córdoba (Shelley, 2006). There is one record in the archipelago of San Andrés, Providencia and Santa Catalina (ICN-MHN-Chi 549) and another in Antioquia (MCZ-IZ CHIL-1323).

Scolopendra subspinipes Leach, 1816

Scolopendra audax Gervais, 1837

Scolopendra gracilipes Wood, 1861

Scolopendra sexspinosa Newport, 1844

Type locality: unknown (Shelley, 2006).
Distribution in Colombia: Chocó (MCZ-IZ CHIL-1380) and no specific locality (MNHN-3953).

Scolopendra dehaani Brandt, 1840 **!**

Scolopendra subspinipes dehaani Brandt, 1840.

Type locality: unknown.
Distribution in Colombia: Santa Marta, Magdalena (SMF 7402).

Scolopendra viridicornis Newport, 1844 **!**

Scolopendra viridicornis viridicornis Newport, 1844

Scolopendra cristata Porat, 1876

Scolopendra herculeana Koch, 1847

Scolopendra punctides Newport, 1844

Scolopendra variegate Newport, 1844

Type locality: Brazil (Shelley, 2006).
Distribution in Colombia: Medellín, Antioquia (Shelley, 2006)

Scolopendra robusta Kraepelin, 1903*

Type locality: Monterrey, Nuevo León, Mexico (Bonato et al., 2016).
Distribution in Colombia: Bogotá (Thofern et al., 2021). A later revision of the paratype by Shelley (2006) indicated that it is a juvenile of *S. gigantea* Linnaeus, 1758.

Scolopendra armata Kraepelin, 1903**!**

Actual. Biol. 45(119): 1-19, 2023 | DOI:10.17533/udea.acbi.v45n119a02

Type locality: Maracaibo, Zulia, Venezuela (Chagas-Jr. and Galvis, 2018).
Distribution in Colombia: Chocó (Chagas-Jr. and Galvis, 2018).

Genus ***Cormocephalus*** Newport, 1844

Cupipes Kohlrausch, 1878

Cormocephalus monilicornis Wood, 1862

Type locality: Chocó, New Granada, present-day Colombia (Wood, 1862).
Distribution in Colombia: Province of Chocó (Chagas-Jr. et al., 2014).

Cormocephalus guildingii Newport, 1845

Cormocephalus ungulatus (Meinert, 1886).

Cormocephalus impressus Porat, 1876

Cupipes microstoma Kohlrausch, 1878

Cupipes neglectus Chamberlin, 1914

Cupipes propulsus Chamberlin, 1920

Type locality: St. Vincent Islands, West Indies (Martínez-Muñoz and Pérez-Gelabert, 2018).
Distribution in Colombia: Quindío and Magdalena (MCZ IZ 33653; Chagas-Jr. et al., 2014).

Cormocephalus brasiliensis Humbert and Saussure, 1870.

Cupipes ungulatus mitis Brolemann, 1904

Type locality: Manaus, Amazonas, Brazil (Bonato et al., 2016).

Distribution in Colombia: Guaduas, Cundinamarca, Cordillera Oriental (Ribaut, 1912).

Cormocephalus lineatus Newport, 1845

Cupipes lineatus Newport, 1845.

Type locality: St. Vincent, West Indies (Bonato et al., 2016).
Distribution in Colombia: Camelia coffee plantation, Antioquia (Ribaut, 1912).

Genus ***Akymnopellis*** Shelley, 2008

Hemiscolopendra Kraepelin, 1903

Cormocephalus (Hemiscolopendra) Attems, 1930

Akymnopellis laevigata (Porat, 1876)

Hemiscolopendra laevigata Kraepelin, 1903

Cormocephalus (Hemiscolopendra) laevigata Bucherl, 1942

Scolopendra cormocephalina Kohlraush, 1878

Scolopendra longispina Meinert, 1886

Otostigma michaelseni Attems, 1903

Cormocephalus (Hemiscolopendra) laevigatus Attems, 1930

Cormocephalus (Hemiscolopendra) michaelseni Attems, 1930

Type locality: Montevideo, Uruguay (Shelley, 2008).
Distribution in Colombia: Cauca (Chagas-Jr. et al., 2014). Shelley (2008) reports its presence in "Colombia in genera" and the city of Popayán, Cauca.

Subfamily **Otostigminae** Kraepelin, 1903

Genus ***Rhysida*** Wood, 1862

Branchiostoma Newport, 1845

Ethmophorus Pocock, 1891

Ptychotrema Peters, 1855

Trematoptychus Peters, 1862

Rhysida celeris (Humbert and Saussure, 1870)

Rhysida monaguensis González-Sponga, 2002

Rhysida neoespartana González-Sponga, 2002

Rhysida sucupanensis González-Sponga, 2002

Type locality: Venezuela (Chagas-Jr., 2013).
Distribution in Colombia: Amazonas (ICN-MHN-Chi 5), Casanare (ICN-MHN-Chi 97, ICN-MHN-Chi 285), Cundinamarca (ICN-MHN-Chi 287), Magdalena (MCZ IZ 34115, MCZ IZ 34116, MCZ IZ 34117), Meta (ICN-MHN-Chi 39, ICN-MHN-Chi 136), Sucre (ICN-MHN-Chi 37), Tolima (ICN-MHN-Chi 100) and Vaupes (ICN-MHN-Chi 138). Chagas-Jr. (2013) also found specimens of this species in Caquetá, Casanare and Vichada.

Rhysida longipes (Newport, 1845)

Rhysida longipes longipes (Newport, 1845)

Branchiostoma affine Kohlrausch, 1878

Branchiostoma gracile Kohlrausch, 1878

Branchiostoma longipes

Otostigmus simplex Chamberlin, 1913

Type locality: unknown.
Distribution in Colombia: Sucre (ICN-MHN-Chi 35).

Genus ***Otostigmus*** Porat, 1876

Branchiotrema Kohlrausch, 1878

Congobius Dobroruka, 1968

Coxopleurotostigmus Bucherl, 1939

Dactylotergitius Verhoeff, 1937

Malaccopleurus Verhoeff, 1937

Otostigma Meinert, 1887

Parotostigmus Pocock, 1896

Subgenus ***Otostigmus (Parotostigmus)*** Pocock, 1896

Otostigmus (Parotostigmus) amazonae Chamberlin, 1914

Type locality: Manaus, Amazonas state, Brazil (Chagas-Jr., 2012).
Distribution in Colombia: Putumayo (Chagas-Jr. et al., 2014) and Vaupés (ICN-MHN-Chi 140).

Otostigmus (Parotostigmus) burgeri Attems, 1903

Otostigmus (Parotostigmus) buergeri Attems, 1903

Type locality: Villavicencio, Meta, Colombia (Chagas-Jr. et al., 2014).
Distribution in Colombia: Amazonas (MPUJ_ENT 0001071), Meta (MPUJ_ENT 0001074, MPUJ_ENT 0001085) and Quindío (Chagas-Jr. et al., 2014).

Otostigmus (Parotostigmus) casus Chamberlin, 1914 **!**

Type locality: Madeira-Mamoré R. R. R. camp 39, Mato Grosso State, Brazil (Chagas-Jr., 2012).
Distribution in Colombia: Antioquia (Paz, 1978).

Otostigmus (Parotostigmus) clavifer Chamberlin, 1921

Type locality: Dunoon, Guyana (Bonato et al., 2016).
Distribution in Colombia: Magdalena (Chagas-Jr. et al., 2014; MCZ IZ 32928).

Otostigmus (Parotostigmus) demelloi Verhoeff, 1937 **!**

Type locality: Minas Gerais, Brazil (Chagas-Jr., 2012).
Distribution in Colombia: Vaupés (ICN-MHN-Chi 125).

Revista Actualidades Biológicas
Actual. Biol. 45(119): 1-19, 2023 | DOI:10.17533/udea.acbi.v45n119a02

Otostigmus (Parotostigmus) diringshofeni Bucherl, 1969 **!**

Type locality: São Paulo de Olivença, Amazonas State, Brazil (Chagas-Jr., 2012).
Distribution in Colombia: Cundinamarca (ICN-MHN-Chi 276).

***Otostigmus ferruginosus* ***

Type locality: unknown
Distribution in Colombia: unknown
Note: this identification, made by Paz (1978), is doubtful and probably erroneous, since there is no species of *Otostigmus* as mentioned by the author.

Otostigmus (Parotostigmus) goeldii Brolemann, 1898

Lectotype locality: Pará, Brazil (Chagas-Jr., 2012).
Distribution in Colombia: found in the departments of Cauca, Quindío and Valle del Cauca (Chagas-Jr. et al., 2014; ICN-MHN-Chi 83).

Otostigmus (Parotostigmus) limbatus Meinert, 1886 **!**

Type locality: Buenos Aires, Argentina (Chagas-Jr., 2012).
Distribution in Colombia: Antioquia (Paz, 1978).

Otostigmus (Parotostigmus) pococki Kraepelin, 1903

Type locality: Haut Carsevenne, French Guiana (Bonato et al., 2016).
Distribution in Colombia: Amazonas (MPUJ_ENT 0001081, MPUJ_ENT 0001087, MPUJ_ENT 0001092), Boyacá (ICN-MHN-Chi 112, ICN-MHN-Chi 143, ICN-MHN-Chi 148, ICN-MHN-Chi 369), Cauca (ICN-MHN-Chi 96), Cundinamarca (ICN-MHN-Chi 135), Meta (ICN-MHN-Chi 78), Nariño (ICN-MHN-Chi 38), Risaralda (ICN-MHN-Chi 86), Tolima (ICN-MHN-Chi 8,ICN-MHN-Chi 88), Valle del Cauca (ICN-MHN-Chi 79) and Vaupés (ICN-MHN-Chi 128); Chagas-Jr. et al, 2014).

Otostigmus (Parotostigmus) sulcatus Meinert, 1886 **!**

Type locality: Montevideo, Uruguay (Bonato et al., 2016).
Distribution in Colombia: La Unión, Chingaza (Meta and Cundinamarca) (MCZ IZ 30383).

Otostigmus (Parotostigmus) tibialis Brolemann, 1902 **!**

Otostigmus (Parotostigmus) longipes Bucherl, 1939

Type locality: Piquete, São Paulo State, Brazil (Chagas-Jr., 2012).
Distribution in Colombia: Cundinamarca (MPUJ_ENT 0001089).

Genus ***Ethmostigmus*** Pocock, 1898*

Ethmostigmus rubripes Brandt, 1840*

Ethmostigmus rubripes spinosus Newport, 1845*

Type locality: Sri Lanka (Bonato et al., 2016).
Note: Bonato et al. (2016) recorded this species as part of the Colombian scolopendromorph fauna. However, there is no record in literature or collections to confirm the above. This record is questioned.

Family **Cryptopidae** Kohlrausch, 1881

Subfamily **Cryptopinae** Kohlrausch, 1881

Genus ***Cryptops*** Leach, 1814

Subgenus ***Cryptops (Cryptops)*** Leach, 1814

Cryptops (Chromatanops) Verhoeff, 1906

Cryptops (Cryptops) bivittatus Pocock, 1893

Cryptops (Chromatanops) bivittatus Pocock, 1893

Type locality: St. Vincent, West Indies (Bonato et al., 2016).
Distribution in Colombia: No details of its location are known.

Cryptops (Cryptops) calinus Chamberlin, 1957

Type locality: Western Cali, Valle, Colombia (Bonato et al., 2016).
Distribution in Colombia: Cali, Valle del Cauca (Chagas-Jr. et al., 2014).

Cryptops (Cryptops) galatheae Meinert, 1886 **!**

Cryptops brasiliensis Attems, 1901

Cryptops capivarae Pocock, 1891

Type locality: Montevideo, Uruguay (Bonato et al., 2016).
Distribution in Colombia: Antioquia (Paz, 1978).

Cryptops (Cryptops) melanifer Chamberlin, 1955

Type locality: Colombia (Bonato et al., 2016).
Distribution in Colombia: unknown.

Cryptops (Cryptops) rossi Chamberlin, 1955

Type locality: Buenaventura, Colombia (Bonato et al., 2016).
Distribution in Colombia: Buenaventura (Chagas-Jr. et al., 2014).

Family **Scolopocryptopidae** Pocock, 1896

Subfamily **Scolopocryptopinae** Pocock, 1896

Genus ***Scolopocryptops*** Newport, 1844

Otocryptops Haase, 1887

Dinocryptops Crabill, 1953

Scolopocryptops ferrugineus (Linnaeus, 1767)

Otocryptops ferrugineus (Linnaeus, 1767)

Scolopendra ferruginea Linnaeus, 1767

Scolopocryptops mexicana Humbert and Saussure, 1869

Scolopocryptops miersii peruanus Verhoeff, 1941

Scolopocryptops antillarum Marshall, 1878

Scolopocryptops bisulca Karsch, 1884

Scolopocryptops meinerti Pocock, 1888

Scolopocryptops rufa Gervais, 1847

Scolopocryptops strigilis Karsch, 1884

Type locality: West Africa (Bonato et al., 2016).
Distribution in Colombia: Boyacá (ICN-MHN-Chi 399, ICN-MHN-Chi 400), Caquetá (ICN-MHN-Chi 977), Caldas (Chagas-Jr. et al., 2014), Huila (Chagas-Jr. et al., 2014), Magdalena (ICN-MHN-Chi 43), Nariño (ICN-MHN-Chi 42, ICN-MHN-Chi 59, ICN-MHN-Chi 298, ICN-MHN-Chi 306, ICN-MHN-Chi 322, ICN-MHN-Chi 323, ICN-MHN-Chi 417, ICN-MHN-Chi 556, MCZ IZ 32770, MCZ IZ 32772, MCZ IZ 32774, MCZ IZ 130809, MCZ IZ 130810, MCZ IZ 130811), Risaralda (ICN-MHN-Chi 27, ICN-MHN-Chi 31, ICN-MHN-Chi 114, ICN-MHN-Chi 115), Santander (ICN-MHN-Chi 282, ICN-MHN-Chi 352), Tolima (ICN-MHN-Chi 513) and Valle del Cauca (ICN-MHN-Chi 679).

Scolopocryptops ferrugineus ferrugineus Linnaeus, 1767 **!**

Type locality: West Africa (Bonato et al., 2016).

Distribution in Colombia: Antioquia (NHMUK ZOO BM 1890.4.18.5) and an undetermined locality (NHMUK ZOO BM 1928.5.1.134).

Scoloporcyptops melanostoma Newport, 1845

Actual. Biol. 45(119): 1-19, 2023 | DOI:10.17533/udea.acbi.v45n119a02

Scolopocryptops megacephalus Kohlrausch, 1879. ZMH-A0000678.

Scolopocryptops melanostomus Crabill, 1953. Newport, 1845

Otocryptops aculeatus Attems, 1897

Scolopocryptops boholiensis Kohlrausch, 1881

Scolopocryptops geophilicornis Tomosvary, 1885

Scolopocryptops longiceps Pocock, 1891

Scolopocryptops luzonicus Kohrlrausch, 1879

Type locality: St. Vincent, West Indies (Bonato et al., 2016).
Distribution in Colombia: Amazonas (ICN-MHN-Chi 17, ICN-MHN-Chi 23, ICN-MHN-Chi 25, ICN-MHN-Chi 26, ICN-MHN-Chi 62, ICN-MHN-Chi 578; Chagas-Jr. et al., 2014), Antioquia (NHMUK ZOO BM 1928.5.1.135-136, NHMUK ZOO BM 1928.5.1.137-142), Boyacá (ICN-MHN-Chi 3, ICN-MHN-Chi 72, ICN-MHN-Chi 109, ICN-MHN-Chi 142, ICN-MHN-Chi 144, ICN-MHN-Chi 279, ICN-MHN-Chi 302, ICN-MHN-Chi 333, ICN-MHN-Chi 403, ICN-MHN-Chi 767), Cauca (ICN-MHN-Chi 90), Cundinamarca (ICN-MHN-Chi 674, ICN-MHN-Chi 829), Meta (ICN-MHN-Chi 316), Nariño (ICN-MHN-Chi 48, ICN-MHN-Chi 532, ICN-MHN-Chi 680), Quindío (ICN-MHN-Chi 45, ICN-MHN-Chi 118), Santander (ICN-MHN-Chi 10, ICN-MHN-Chi 119, ICN-MHN-Chi 280, ICN-MHN-Chi 286, ICN-MHN-Chi 670, ICN-MHN-Chi 744, ICN-MHN-Chi 783; Chagas-Jr. et al., 2014), Tolima (ICN-MHN-Chi 538), Valle del Cauca (ICN-MHN-Chi 970) and Vaupés (ICN-MHN-Chi 19, ICN-MHN-Chi 73, ICN-MHN-Chi 74).

Scolopocryptops miersii Newport, 1845

Dinocryptops miersii (Newport, 1845)

Scolopocryptops miersii guaraniticus Coscarón, 1955

Scolopocryptops miersii puruensis Bucherl, 1942

Type locality: Paranapiacaba, Sao Paulo, Brazil (Bonato et al., 2016).
Distribution in Colombia: Amazonas (ICN-MHN-Chi 24) and Vaupés (ICN-MHN-Chi 13, ICN-MHN-Chi 21, ICN-MHN-Chi 75, ICN-MHN-Chi 76, ICN-MHN-Chi 129, ICN-MHN-Chi 131, ICN-MHN-Chi 151; Chagas-Jr. et al., 2014).

Subfamily **Newportiinae** Pocock, 1896

Genus ***Newportia*** Gervais, 1847

Subgenus ***Newportia (Newportia)*** Gervais, 1847

Newportia (Newportia) adisi Schileyko and Minelli, 1999

Type locality: Padre Cocha, Nanay River, near Iquitos, Peru (Schileyko and Minelli, 1999).
Distribution in Colombia: Boyacá (ICN-MHN-Chi 113, ICN-MHN-Chi 911, ICN-MHN-Chi 914, MPUJ_ENT 0001142), Bogota D.C. (ICN-MHN-Chi 263), Cundinamarca (ICN-MHN-Chi 56), Meta (ICN-MHN-Chi 46, ICN-MHN-Chi 892), Nariño (ICN-MHN-Chi 525), Risaralda (ICN-MHN-Chi 71), Valle del Cauca (ICN-MHN-Chi 12, MPUJ_ENT 0001114), and Vaupés (ICN-MHN-Chi 127, ICN-MHN-Chi 258, ICN-MHN-Chi 264; Chagas-Jr. et al, 2014).

Newportia (Newportia) albana Chamberlin, 1957

Type locality: Albán, Cundinamarca, Colombia (Bonato et al., 2016).
Distribution in Colombia: Albán, Cundinamarca (Chagas-Jr. et al., 2014).

Newportia (Newportia) fuhrmanni Ribaut, 1912

Type locality: Camelia coffee plantation, Angelópolis, Central Cordillera, Colombia (Schileyko and Minelli, 1999).
Distribution in Colombia: Antioquia (NHMUK ZOO BM 1928.5.1.111-113), Nariño (ICN-MHN-Chi 47, ICN-MHN-Chi 292, ICN-MHN-Chi 327,

ICN-MHN-Chi 530), Quindío (Chagas-Jr. et al., 2014), Tolima (ICN-MHN-Chi 429) and Valle del Cauca (ICN-MHN-Chi 93; Chagas-Jr. et al., 2014).

Newportia (Newportia) heteropoda Chamberlin, 1918 **!**

Type locality: Belona Oriente, Cuba (Bonato et al., 2016).
Distribution in Colombia: A single specimen, determined by S. Galvis and H. D. Triana is found in Boyacá (MPUJ_ENT 0001133).

Newportia (Newportia) ignorata Kraus, 1955

Type locality: San Bartolomé River, Zorate, Peru (Schileyko and Minelli, 1999).
Distribution in Colombia: Caquetá, Solano, Chiribiquete National Natural Park (Chagas-Jr. et al., 2014).

Newportia (Newportia) leptotarsis Negrea et al., 1973 **!**

Type locality: Cueva de los Majáes, Oriente, Cuba (Schileyko and Minelli, 1999).
Distribution in Colombia: single specimen, determined by H. D. Triana and found in Magdalena (ICN-MHN-Chi 44).

Newportia (Newportia) longitarsis (Newport, 1845)

Scolopocryptops longitarsis Newport, 1845

Type locality: St. Vincent, West Indies (Bonato et al., 2016).
Distribution in Colombia: Bogotá D.C. (MCZ IZ 32670), Magdalena and Nariño (MCZ IZ 32671, MCZ IZ 32673, MCZ IZ 32674, MCZ IZ 32675).

Newportia (Newportia) longitarsis guadeloupensis Demange, 1982

Type locality: Matouba, Guadeloupe, France (Schileyko and Minelli, 1999).
Distribution in Colombia: Cundinamarca (ICN-MHN-Chi 18, ICN-MHN-Chi 57, ICN-MHN-Chi 69, ICN-MHN-Chi 70, ICN-MHN-Chi 146), Magdalena (ICN-MHN-Chi 262) and Vaupés (ICN-MHN-Chi 22, ICN-MHN-Chi 137; Chagas-Jr. et al., 2014).

Newportia (Newportia) longitarsis longitarsis (Newport, 1845)

Type locality: St. Vincent, West Indies (Schileyko and Minelli, 1999).
Distribution in Colombia: Bogotá D.C. and Magdalena (Chagas-Jr. et al., 2014; NMNH03285).

Newportia (Newportia) longitarsis stechowi Verhoeff, 1938

Newportia pusillum Ribaut, 1912

Newportia rossi Chamberlin, 1957

Newportia stechowi Verhoeff, 1938

Type locality: Maracay, Caracas, Venezuela (Schileyko and Minelli, 1999).
Distribution in Colombia: Antioquia (ICN-MHN-Chi 34), Boyacá (ICN-MHN-Chi 906, ICN-MHN-Chi 907), Caldas, Cundinamarca (ICN-MHN-Chi 15, ICN-MHN-Chi 141), Magdalena (ICN-MHN-Chi 50, ICN-MHN-Chi 51, ICN-MHN-Chi 66), Nariño (MCZ IZ 130775, MCZ IZ 130776, MCZ IZ 131451), Norte de Santander, Putumayo, Quindío, Risaralda (MPUJ_ENT 0001127), Santander and Valle del Cauca (MCZ IZ 56037; Chagas-Jr. et al., 2014).

Newportia (Newportia) longitarsis tropicalis Bucherl, 1960

Type locality: Selva Kunana, Zulia, Venezuela (Bonato et al., 2016).

Distribution in Colombia: Cundinamarca (Chagas-Jr. et al., 2014; ICN-MHN-Chi 20, ICN-MHN-Chi 77, ICN-MHN-Chi 261, ICN-MHN-Chi 861).

Newportia (Newportia) monticola Pocock, 1890

Newportia caldes Chamberlin, 1957

Newportia schlingeri Chamberlin, 1957

Newportia atopa Chamberlin, 1957

Newportia cuzcona Chamberlin, 1955

Newportia ecuadorana Chamberlin, 1957

Newportia koepckei Kraus, 1954

Newportia occidentalis Kraus, 1954

Newportia parva Chamberlin, 1921

Newportia perucola Chamberlin, 1955

Newportia peruviana Kraus, 1954

Newportia rogersi Pocock, 1896

Type locality: Chimborazo, Ecuador (Schileyko and Minelli, 1999).
Distribution in Colombia: Antioquia (ICN-MHN-Chi 241, NHMUK ZOO BM 1890.4.18.24, NHMUK ZOO BM 1928.5.1.132-133, NHMUK ZOO BM 1928.5.1.132-128, NHMUK ZOO BM 1928.5.1.132-114-124), Bogotá D.C. (ICN-MHN-Chi 237, ICN-MHN-Chi 247, NHMUK ZOO BM 1928.5.1.129, NHMUK ZOO BM 1928.5.1.130), Bolivar (ICN-MHN-Chi 92), Boyaca (ICN-MHN-Chi 917, ICN-MHN-Chi 918, ICN-MHN-Chi 919, MCZ IZ 130778), Cundinamarca (ICN-MHN-Chi 236, ICN-MHN-Chi 269), Nariño (ICN-MHN-Chi 297, NHMUK ZOO BM 1928.5.1.131), Risaralda (MPUJ_ENT 0001121), Santander (ICN-MHN-Chi 648), Tolima (NHMUK ZOO BM 1928.5.1.125-126, ICN-MHN-Chi 415, ICN-MHN-Chi 422, ICN-MHN-Chi 423, ICN-MHN-Chi 424, ICN-MHN-Chi 425, ICN-MHN-Chi 427, ICN-MHN-Chi 428, ICN-MHN-Chi 430, ICN-MHN-Chi 431, ICN-MHN-Chi 432, ICN-MHN-Chi 433, ICN-MHN-Chi 434, ICN-MHN-Chi 435, ICN-MHN-Chi 437, ICN-MHN-Chi 438, ICN-MHN-Chi 439, ICN-MHN-Chi 440, ICN-MHN-Chi 444) and Vaupés (ICN-MHN-Chi 150, ICN-MHN-Chi 255), in addition to Caldas, Huila, Meta, Quindío and Valle del Cauca (Chagas-Jr. et al, 2014).

Newportia (Newportia) morela Chamberlin, 1943 **!**

Type locality: Tepoztlán, Morelos, Mexico (Schileyko and Minelli, 1999).

Distribution in Colombia: Boyacá (MPUJ_ENT 0001135), Cundinamarca (ICN-MHN-Chi 844) and Valle del Cauca (MPUJ_ENT 0001164).
Note: Schileyko and Minelli (1999) comment that the original description of the species is not complete and images are missing; however, it is taken as a valid species in later works such as those of Schileyko (2013) and Cupul-Magaña (2014). Specimens reported for Colombia were identified by S. Galvis and H. D. Triana.

Newportia (Newportia) phoretha Chamberlin, 1950

Type locality: Rancho Grande, Venezuela (Schileyko and Minelli, 1999).
Distribution in Colombia: Boyacá, Caldas, Cundinamarca (ICN-MHN-Chi 68) and Norte de Santander (Chagas-Jr. et al., 2014).

Newportia (Newportia) pusilla Pocock, 1893

Type locality: St. Vincent, West Indies (Schileyko and Minelli, 1999).
Distribution in Colombia: Cundinamarca, Bogotá D.C. (ICN-MHN-Chi 52) and Norte de Santander (Chagas-Jr. et al., 2014).

Newportia (Newportia) simoni Brolemann, 1898

Type locality: La Guayra, Corozal, Venezuela (Schileyko and Minelli, 1999).

Distribution in Colombia: Antioquia (ICN-MHN-Chi 60), Chocó (MPUJ_ENT 0001122), Nariño (ICN-MHN-Chi 347), Quindío, Risaralda (Chagas-Jr. et al., 2014) and Tolima (ICN-MHN-Chi 426).

Newportia (Newportia) weyrauchi Chamberlin, 1955

Newportia montícola weyrauchi Chamberlin, 1955

Type locality: Peru and Asia (Schileyko and Minelli, 1999).
Distribution in Colombia: it is recorded in the departments of Boyacá and Quindío (Chagas-Jr. et al., 2014), although there are some records for Boyacá that do not have a catalog number, so they are not taken into account.

Newportia (Newportides) Chamberlin, 1921

Newportia (Newportides) amazonica Brolemann, 1905 **!**

Type locality: Manaus, Amazonas, Brazil (Bonato et al., 2016).
Distribution in Colombia: Antioquia (Paz, 1978).

Newportia (Scolopendrides) Saussure, 1858

Newportia (Scolopendrides) brevipes Pocock, 1891 **!**

Scolopendrides brevipes Pocock, 1891

Type locality: Georgetown, Demerara, Guyana (Bonato et al., 2016).
Distribution in Colombia: Boyacá (MPUJ_ENT 0001111) and Meta (MPUJ_ENT 0001115).

Newportia (Scolopendrides) ernsti Pocock, 1891

Newportia (Scolopendrides) ernsti ernsti Pocock, 1891

Type locality: Venezuela, Caracas and Brazil (Martínez-Muñoz and Pérez-Gelabert, 2018).
Distribution in Colombia: Boyacá (ICN-MHN-Chi 28), Guaviare (ICN-MHN-Chi 584), Meta (ICN-MHN-Chi 108, MPUJ_ENT 0001139) and Vaupés (ICN-MHN-Chi 257; Chagas-Jr. et al., 2014).

Newportia (Scolopendrides) ernsti fossulata Bucherl, 1942

Type locality: Aura, Pará, Brazil (Bonato et al., 2016).
Distribution in Colombia: Guaviare (MPUJ_ENT 0001136) and Vaupés (ICN-MHN-Chi 583).

Newportia (Scolopendrides) stolli (Pocock, 1896)

Newportia mimetica Chamberlin, 1922

Newportia sulana Chamberlin, 1922

Scolopendrides stolli Pocock, 1896

Type locality: Quezaltenango, Guatemala (Schileyko and Minelli, 1999).
Distribution in Colombia: Amazonas (MCZ IZ 10789), Bogotá D.C. (ICN-MHN-Chi 41, ICN-MHN-Chi 61, ICN-MHN-Chi 116, ICN-MHN-Chi 117, ICN-MHN-Chi 246, NHMUK ZOO BM 1928.5.1.101), Boyacá (ICN-MHN-Chi 902, ICN-MHN-Chi 903, ICN-MHN-Chi 904, ICN-MHN-Chi 905, ICN-MHN-Chi 920, MCZ IZ 130785), Cundinamarca (ICN-MHN-Chi 29, ICN-MHN-Chi 342), Nariño (NHMUK ZOO BM 1928.5.1.100), Santander (ICN-MHN-Chi 523, ICN-MHN-Chi 773), Tolima (ICN-MHN-Chi 518) and Vaupés (ICN-MHN-Chi 152). It is also reported in Meta and Norte de Santander (Chagas-Jr. et al., 2014).

Newportia (Andeocryptops) Tulande-M. et al., 2020

Newportia (Andeocryptops) shelleyi Tulande-M. et al., 2020 **!**

Type locality: Parque Forestal Embalse del Neusa,

Tausa, Cundinamarca, Colombia (Tulande-M. et al., 2020).
Distribution in Colombia: recorded in the department of Cundinamarca (Tulande-M. et al., 2020).

Newportia (Tidops) Chamberlin, 1915

Tidops Chamberlin, 1915

Newportia (Tidops) collaris Kraepelin, 1903 **!**

Kartops guianae Archey, 1923

Newportia (Scolopendrides) bicegoi Brolemann, 1905

Tidops collaris (Kraepelin, 1903)

Tidops echinopus Chamberlin, 1921

Type locality: Guyana (Bonato et al., 2016).
Distribution in Colombia: Antioquia (Paz, 1978).

DISCUSSION

Within the literature on scolopendromorphs from Colombia the most complete and updated work is that of Chagas-Jr. et al. (2014), who found a total of 36 species in three families, five subfamilies and eight genera. The diversity reported by Chagas-Jr. et al. (2014) is similar to that reported here, since the families, subfamilies and genera are the same. It is possible to note a considerable increase in scolopendromorph records for the country with a total of 19 of these novel ones among which four species of *Scolopendra*, six species of *Otostigmus* (*Parotostigmus*), one species of *Cryptops* (*Cryptops*), one subspecies of *Scolopocryptops* and seven species of various subgenera of *Newportia* stand out, thus increasing the known richness of the group in question. The large number of taxa found in this study are reflected in the projects and research that have emerged in the years following Chagas-Jr. et al., (2014). The effort to know the diversity of Colombia has allowed novel reports to be found for taxa that are not as widely studied.

According to Prado-Sepúlveda et al. (2016), Boyacá and Cundinamarca are the departments with the highest species richness in general. Considering only the scolopendromorphs, like the aforementioned authors, a large number of species were found in the two departments. However, in this review, it was possible to observe that Antioquia is at the level of Boyacá, since in both departments there are 14 species and two subspecies. Cundinamarca has 16 species and three subspecies, while other departments such as Meta, Nariño, Quindío, Valle del Cauca and Vaupés have between 10 and 12 species (figure 1). In the department of Huila, the number of taxa of this order of centipedes is not clear, so a more exhaustive review of the diversity of this fauna in this territory is needed. Arauca and Córdoba are the only departments that do not have records of scolopendromorphs, possibly because no expeditions have been carried out to collect biological samples of this fauna and, therefore, they are not deposited in collections of universities or biological institutions. However, it is advisable to carry out a review of these samples, since they may exist, but are not curated. In addition, it is important to propose new studies in these parts of the country to increase the knowledge of the group.

In a previous review (July 2021) of the content hosted in the GBIF it was possible to note a discrepancy between some data presented in all the information content. Six records from the departments of Amazonas (MPUJ_ENT 0001129), Cauca (MPUJ_ENT 0001159), Casanare (MPUJ_ENT 0001160), Guaviare (MPUJ_ENT 0001161), Meta (MPUJ_ENT 0001112) and Risaralda (MPUJ_ENT 0001162) indicated that they belonged to the genus *Cryptops*. However, taxonomic information showed that they were classified in the family Scolopendridae. It is possible that this was a capture error at the time of data submission. However, in this revision those records were already found with the correct taxonomy.

Although it was not possible to physically review some specimens, with the objective of clarifying doubts in potentially incorrect determinations, this work represented an excellent exercise in approaching the knowledge of the diversity of scolopendromorphs in the country.

However, there is some doubt about some of the

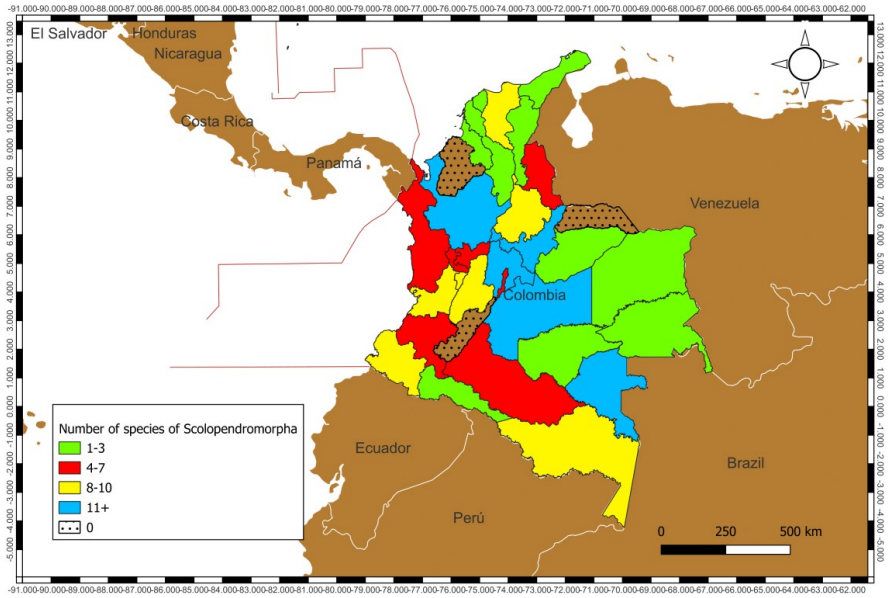

Figure 1. Number of Scolopendromorpha species in each of the departments of the Colombian territory.

records submitted, such as *Scolopendra alternans*, *S. dehaani*, *S. viridicornis*, *Otostigmus* (*Parotostigmus*) *casus*, *O.* (*P.*) *demelloi*, *O.* (*P.*) *diringshofeni*, *O.* (*P.*) *limbatus*, *O.* (*P.*) *tibialis*, *Cryptops* (*Cryptops*) *galatheae*, *Scolopocryptops ferrugineus ferrugineus*, *Newportia* (*Newportia*) *heteropoda*, *N.* (*N.*) *leptotarsis*, *N.* (*N.*) *morela*, *N.* (*Newportides*) *amazonica*, *N.* (*Scolopendrides*) *brevipes* and *N.* (*Tidops*) *collaris*, because the authors and/or determiners of the published information may have made errors in the identification of the specimens.

It is recommended to continue and increase the studies of neotropical centipedes, especially in areas such as the Amazon, where it is estimated that there is a high diversity threatened by the phenomenon of deforestation and climate change.

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CONFLICT OF INTEREST

The authors have no conflicts of interest of any kind.

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