

Checklist of myriapods (Arthropoda: Myriapoda) from the colombian Caribbean region Lista de miriápodos (Arthropoda: Myriapoda) de la región Caribe colombiana

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Abstract

Based on the available literature and a review of collections of organisms, a checklist of 69 myriapod species was made for the Colombian Caribbean region; two symphyla, 15 Chilopods, and 52 Diplopods. In total, 20 families (one from Symphyla, five from Chilopoda, and 14 from Diplopoda), from 11 orders (one from Symphyla, three from Chilopoda, and seven from Diplopoda). Each species's geographical range by department, altitude, reference collection, and bibliographic source were included. The presence in Colombian collections of diplopod specimens that are new records of their taxonomic group for the region, such as *Chondrodesmus* cf. *riparius* (Chelodesmidae), two species of Fuhrmannodesmidae, three of Paradoxosomatidae and one of Lophoproctidae. Likewise, two species of Scolopendrellidae of the class Symphyla. This demonstrates the urgent need to complete the essential diversity inventories of the main groups of organisms in the face of the alarming environmental deterioration to which the Colombian Caribbean region is subjected.

Key words: Chilopoda; Diplopoda; symphyla; taxonomy; Colombia

Resumen

Con base en la literatura disponible, y revisión de colecciones de organismos, se realizó una lista de chequeo de 69 especies de miriápodos para la región Caribe colombiana; dos sinfilos, 15 quilópodos y 52 diplópodos. En total 20 familias (una de Symphyla, cinco de Chilopoda y 14 de Diplopoda), pertenecientes a 11 órdenes (uno de Symphyla, tres de Chilopoda y siete de Diplopoda). Para cada especie se incluyó su ámbito geográfico por departamentos, ámbito altitudinal, colección de referencia y fuente bibliográfica. Se confirmó la presencia en colecciones colombianas de especímenes de diplópodos que son nuevos registros de su grupo taxonómico para la región, como *Chondrodesmus* cf. *riparius* (Chelodesmidae), dos especies de Fuhrmannodesmidae, tres de Paradoxosomatidae y una de Lophoproctidae. Asimismo, dos especies de Scolopendrellidae de la clase Symphyla. Esto demuestra la imperiosa necesidad de completar los inventarios básicos de diversidad de los principales grupos de organismos ante el alarmante deterioro ambiental al que está sometida la región Caribe colombiana.

Palabras clave: Chilopoda; Diplopoda; symphyla; taxonomía; Colombia

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Introducción

Recent studies on the Colombian Caribbean region indicate species inventories are far from complete (e.g., Ahumada-C *et al.*, 2020; Botero *et al.*, 2021; López-Orozco *et al.*, 2022). There is not even basic information on species, which allows comparing or estimating changes due to already identified anthropogenic activities that threaten biodiversity (e.g., urbanization, deforestation, contamination for agrochemicals, biological invasions). This is the case of areas recently sampled by the authors of this study, finding species new to science that were completely wiped out in two or three years (extensions of dry forests transformed into oil palm crops, or hills with remnant dry forests in Montes de María, completely burned for unsustainable agriculture).

One of the problems with the available species checklists on the Internet is the accuracy of the species identification and data (Reyserhove *et al.*, 2020). For this reason, this work aims to produce a reliable checklist of Myriapods of the Colombian Caribbean region, including species that the authors consider relevant to study, first taxonomically.

The myriapods (*Subphylum* Myriapoda Latreille, 1802) are edaphic arthropods characterized in a general way by a body with marked metamerism where two tagmata are distinguished, head and trunk, with a high number of segments which, for the most part, have one or two pairs of legs. They are widely distributed in ecosystems from sea level to more than three thousand meters of altitude. The greater richness occurs in the tropical and subtropical areas, inhabiting a great variety of terrestrial microhabitats (soil, litter, decomposing trunks, stems, trees, and canopy) (Minelli, 2011; Bueno-Villegas, 2012).

They can transform the soil's physical and chemical structure due to their ability to excavate, which increases the porosity and, therefore, the soil's water retention capacity, thus improving the flow of nutrients. Their feces release nitrogenous components that allow humus formation, accelerating the processes of decomposition and mineralization of organic matter (Scheller, 2011; Bueno-Villegas, 2012). Others, like centipedes (Chilopoda) are predators of other arthropods; the large specimens of up to 30 cm prey on amphibians, reptiles, birds and mammals (Cupul-Magaña, 2013).

Myriapoda includes four classes: Chilopoda Latreille, 1817 (commonly known as centipedes), with five orders, 18 families, 39 genera, and approximately 3.110 species worldwide (Minelli,

2011; Bonato *et al.*, 2016). Diplopoda de Blainville in Gervais, 1844 (commonly known as millipedes) with 16 orders, 140 families, and approximately 13.000 recorded species (Adis, 2002; Enghoff, 2015; Sierwald and Spelda, 2020). Pauropoda Lubbock, 1868 (commonly known as pauropods), is comprised of two orders, twelve families, 46 genera, and approximately 800 species (Scheller, 2008, 2011); and finally, Symphyla Ryder, 1880 (commonly known as garden centipedes), with only two families, 15 genera, and around 200 species (Scheller and Adis, 2002b; Scheller, 2011).

Chilopods have a sclerotized body of variable size (between 2 and 300 mm in length), they have a pair of legs for each of their segments, and their first pair of legs (known as forcípules) is modified for the injection of venom (Minelli, 2011). Most of these organisms are predators that feed on both other invertebrates and small vertebrates. This class comprises five orders: Craterostigmomorpha, Geophilomorpha, Lithobiomorpha, Scolopendromorpha and Scutigleromorpha. The first four are registered for Colombia (Lewis, 1981; Minelli, 2011; Prado-Sepúlveda *et al.*, 2016; Prado *et al.*, 2018).

Individuals of Diplopoda class also have a sclerotized body of variable size (between 1.5 and 350 mm in length). They have two pairs of legs in most of their segments (diplosegments). Are detritivores with mandibular structures adapted to fragment decomposing plant material (Hopkin and Read, 1992; Bueno-Villegas, 2012). Of the 16 orders of this class, seven have been reported for Colombia: Iomeridesmida, Polydesmida, Siphonophorida, Spirobolida, Spirostreptida and Polyxenida (Ruiz-Cobo *et al.*, 2010; Martínez-Torres and Flórez, 2015).

A poorly sclerotized body characterizes pauropods, with a length between 0.4 and 2 mm, and a pair of branched antennae. Their feeding habits are little understood; it is believed that they feed on fluids from fungal hyphae and root hairs (Hüther, 1959). Although they are challenging to observe and collect due to their small size, there are 780 described species distributed in the Hexamerocerata and Tetramerocerata orders, the latter having distribution in Colombia with the genus *Hemipauropus* Silvestri, 1902 (Scheller and Adis, 2002a; Scheller, 2008; Minelli, 2011).

Symphyla includes blind individuals with a small body (0.5-8.0 mm in length) and a poorly sclerotized cuticle. They have long and filiform antennae and a pair of spiracles on the head; their feeding habits vary since they can be herbivorous or fungivorous (Szucsich and Scheller, 2011). In the Neotropic, its

fauna has received little attention, probably due to the few specialists in the group and the difficulty in observing the characters that allow them to be assigned at the genus and species level (Scheller and Adis, 2002b; Minelli, 2011). Only 29 species have been reported for Central America (Scheller, 1986; 1992). Although its distribution is known in other Neotropical countries, for Colombia, only one species is reported *Scutigera immaculata* Newport, 1845, which is considered a pest for pineapple and flower crops (Agredo *et al.*, 1988; Navarro and Gaviria, 2001).

The first records of the species of myriapods distributed in Colombia were published in the mid-19th century (Gervais and Goudot, 1844; Gervais, 1844, 1859; Humbert and De Saussure, 1870; Karsch, 1884; Pocock, 1896), thanks to European expeditions that reported, cataloged, and preserved specimens in different museums and foreign biological collections. At the beginning of the 20th century, expeditions such as those of Otto Fuhrmann and Eugene Mayor in 1910 and the one carried out by the University of Michigan to Central America (1913) (Fuhrmann, 1914) made it possible to consolidate the knowledge of the species of the group. The reports were made by Ribaut (1912), Carl (1914), and Chamberlin (1921). Since the 20th century, as a consequence of the recognition of biological diversity and the accelerated loss of species richness, there has been a growing interest in the study of myriapods in the country, which is reflected in biological, taxonomic, ecological, and geographic studies, such as those of Ruiz-Cobo *et al.* (2010), Martínez-Torres *et al.* (2011), Hoffman and Martínez-Torres (2012), Chagas-Jr *et al.* (2014), Castillo-Ávila *et al.* (2015),

Martínez-Torres and Flórez (2015), Prado-Sepúlveda *et al.* (2016), and Prado *et al.* (2018).

Materials and Methods

The Colombian Caribbean region has approximately 132.288 km², corresponding to 11.6 % of the country's total area, spread over a continental area of 132.218 km² and another insular area of 70 km². The continental area is located between 12° 60' and 7° 80' latitude north and 75° and 71° longitude west, and is compound of seven departments (La Guajira, Atlántico, Bolívar, Cesar, Córdoba, Magdalena and Sucre; figure 1) (Quintero *et al.*, 2009). Given its geography, the Caribbean region is considered relatively homogeneous in most of its territory (Galvis, 2009). It presents low and flatlands that do not exceed 500 m of altitude, mainly in the Córdoba, Bolívar, and Cesar departments. The mountainous area includes the Sierra Nevada de Santa Marta in Magdalena, which presents heights of 5.775 masl (Mesa *et al.*, 2016). Colombian Caribbean ecosystems are subject to a marked climatic seasonality (Pizano and García, 2014). Rainfall ranges from 20 mm in dry months to 200 mm in months of higher rainfall, and temperatures vary between 26 and 30 °C. In the Sierra Nevada de Santa Marta and its surroundings, the average monthly precipitation is 209.9 mm in the upper part, and the temperature drops to 0 °C (Jaramillo-Robledo and Chaves-Córdoba, 2000; Pabón-Caicedo *et al.*, 2001; Maass and Burgos, 2011; Arango *et al.*, 2015).

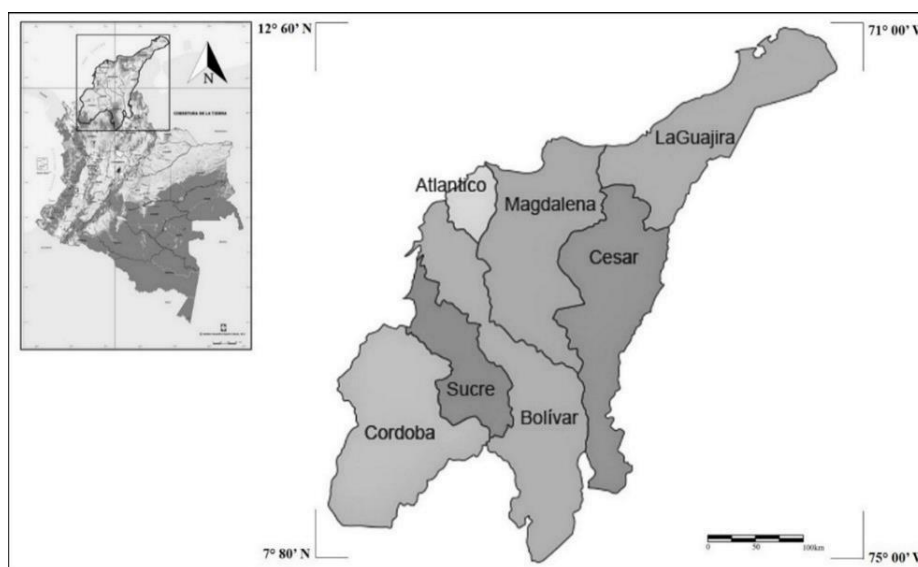


Figure 1. Departments of the Caribbean region, Colombia. In the upper left margin, general map of Colombia.

Results

There are 69 confirmed species of Myriapods known for the Colombian Caribbean region; two belong Symphyla class , 15 belong to the Chilopoda class and 52 to the

Diplopoda class. In total, 20 families (one from Symphyla, five from Chilopoda, and 15 from Diplopoda) of 11 orders (one of symphyla, three of Chilopoda and seven of Diplopoda). Table 1 shows each species's geographical distribution in the Caribbean region (by departments), its altitudinal range, and its published bibliography.

Table 1. List of myriapods known for the Colombian Caribbean region, based on available literature and material preserved in collections. For each species, its geographical range, altitude, reference collection, source of the record, and the reference are provided. The new records are presented in bold; the list is organized based on Miyazawa et al. (2014) and the alphabetical order for the species. Cor: Córdoba; Mag: Magdalena; Suc: Sucre; Atl: Atlántico; Bol: Bolívar. Colección de referencia. ICN: Instituto de Ciencias Naturales (UN); MCZ: Museum of Comparative Zoology; CUDC: Colección de la Universidad de Cartagena NMNH: National Museum of Natural History; FMNH: Field Museum of Natural History.

Class/ Clase	Order /Orden	Family / Familia	Taxon/ Taxón	Distribution in Colombian Caribbean/ Distribución en el Caribe colombiano	Altitude (masl)/Altitud (msnm)	Reference Collection /Colección de Referencia	Reference / Referencias
Chilopoda	Lithobiomorpha	Lithobiidae	<i>Lithobius forficatus</i>	Cor	87	ICN	Linnaeus, 1758; Prado <i>et al.</i> , 2018
			<i>Linnaeus, 1758</i>				
	Scolopendromorpha	Scolopendridae	<i>Otostigmus clavifer</i>	Mag	13-16	MCZ	Chamberlin, 1921; Chagas-Jr <i>et al.</i> , 2014
			<i>Rhysida celeris</i>	Suc, Bol	1210	ICN	Humbert and De Saussure, 1870
			<i>Rhysida longipes</i>	Suc, Bol	44-100	CUDC, ICN	Newport, 1845; Chagas-Jr <i>et al.</i> , 2014
			<i>Scolopendra alternans</i>	Atl	-	ICN	Leach, 1815
			<i>Scolopendra arthrorhabdoides</i>	Atl, Bol	0-100	ICN, CUDC	Ribaut, 1912
			<i>Scolopendra gigantea</i>	Suc, Atl, Bol, Mag, Cor	9-102	CUDC, ICN	Linnaeus, 1758; Chagas-Jr <i>et al.</i> , 2014
			<i>Linnaeus, 1758</i>				
			<i>Newportia longitarsis stechowi</i>	Mag	1300-3245	ICN	Verhoeff, 1938; Chagas-Jr <i>et al.</i> , 2014
Scolopocryptopidae	<i>Newportia longitarsis longitarsis</i>	Mag	10-50	NMNH	Gervais, 1847; Chagas-Jr <i>et al.</i> , 2014		
	<i>Gervais, 1847</i>						

Table 1 continued.

Class/ Clase	Order /Orden	Family / Familia	Taxon/ Taxón	Distribution in Colombian Caribbean/ Distribución en el Caribe colombiano	Altitude (masl)/Altitud (msnm)	Reference Collection /Colección de Referencia	Reference / Referencias
	Scolopendromorpha	Scolopocryptopidae	<i>Newportia longitarsis</i> <i>guadeloupensis</i> Demange, 1981	Mag	200-2850	ICN	Demange, 1981; Chagas-Jr <i>et al.</i> , 2014
			<i>Newportia monticola</i> Pocock, 1890	Bol	20	ICN	Pocock, 1890
			<i>Newportia simoni</i> Brölemann, 1898	Suc	640-1920		Brölemann, 1898; Chagas- Jr <i>et al.</i> , 2014
			<i>Scolopocryptops ferrugineus</i> Linnaeus, 1767	Mag	1300	ICN	Linnaeus, 1767; Chagas-Jr <i>et al.</i> , 2014
	Scutigermorpha	Pselliopidae	<i>Sphendononema guildingii</i> Newport, 1845	Mag, Bol	60-2200	ICN, NMNH	Newport, 1845; Stoev and Geoffroy, 2004
Diplopoda	Glomeridesmida	Glomeridesmidae	<i>Glomeridesmidae</i> sp.	Mag	762-1219	CRVC	Gervais y Goudot, 1844; Loomis, 1968
	Polydesmida	Aphelidesmidae	<i>Pycnotropis cylindroides</i> Chamberlin, 1923	Mag	1620	MCZ	Chamberlin, 1923
			<i>Pycnotropis colombiensis</i> Chamberlin, 1923	Mag	915-1370	MCZ	Chamberlin, 1923
		Chelodesmidae	<i>Alassodesmus reductus</i> Chamberlin, 1923	Mag	1890	MCZ	Chamberlin, 1923; Hoffman, 1975
			<i>Alocodesmus longipes</i> Chamberlin, 1923	Mag	10	MCZ	Hoffman, 1969; Chamberlin, 1923
			<i>Chondrodesmus ceracinopus</i> Chamberlin, 1923	Mag	10	MCZ	Chamberlin, 1923
			<i>Chondrodesmus</i> cf. <i>riparius</i> Carl, 1914	Bol	0-100	CUDC, ICN	Carl, 1914
			<i>Chondrodesmus rugosior</i> Chamberlin, 1923	Mag	1370	MCZ	Chamberlin, 1923
			<i>Chondrodesmus tamocalanus</i> Chamberlin, 1923	Mag	200-1370	MCZ	Chamberlin, 1923

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Table 1 continued.

Class/ Clase	Order /Orden	Family / Familia	Taxon/ Taxón	Distribution in Colombian Caribbean/ Distribución en el Caribe colombiano	Altitude (masl)/Altitud (msnm)	Reference Collection /Colección de Referencia	Reference / Referencias
Diplopoda	Polydesmida	Chelodesmidae	<i>Chondrodesmus virgatus</i> Chamberlin, 1923	Mag	10	MCZ	Chamberlin, 1923
			<i>Colombodesmus catharus</i> Chamberlin, 1923	Mag	1370	MCZ	Chamberlin, 1923
			<i>Colombodesmus lygrus</i> Chamberlin, 1923	Mag	610-1370	MCZ	Chamberlin, 1923
			<i>Cormodesmus hirrutellus</i> Chamberlin, 1923	Mag	1220-1620	MCZ	Chamberlin, 1923
			<i>Trachelodesmus ancylophor</i> Chamberlin, 1923	Mag	1890	MCZ	Chamberlin, 1923; Hoffman, 1975
			<i>Trachelodesmus angulatus</i> Chamberlin, 1923	Mag	1220	MCZ	Chamberlin, 1923; Hoffman, 1975
			<i>Trichomorpha angulella</i> Chamberlin, 1923	Mag	762	MCZ	Chamberlin, 1923
			<i>Trichomorpha eusema</i> Chamberlin, 1923	Mag	1370	MCZ	Chamberlin, 1923
			<i>Trichomorpha eutyla</i> Chamberlin, 1923	Mag	1370	MCZ	Chamberlin, 1923
			<i>Trichomorpha manzanaris</i> Chamberlin, 1952	Mag	-	FMNH	Chamberlin, 1952; Sierwald <i>et al.</i> , 2005
			<i>Trichomorpha paurothrix</i> Chamberlin, 1923	Mag	1530	MCZ	Chamberlin, 1923
			<i>Trichomorpha rondonum</i> Chamberlin, 1952	Mag	-	FMNH	Chamberlin, 1952; Sierwald <i>et al.</i> , 2005
			<i>Trichomorpha rugosella</i> Chamberlin, 1923	Mag	1036-1220	MCZ	Chamberlin, 1923
			<i>Trichomorpha setosior</i> Chamberlin, 1923	Mag	1370	MCZ	Chamberlin, 1923
			<i>Trichomorpha tuberculosa</i> Chamberlin, 1923	Mag	1890	MCZ	Chamberlin, 1923

Table 1 continued.

Class/ Clase	Order /Orden	Family / Familia	Taxon/ Taxón	Distribution in Colombian Caribbean/ Distribución en el Caribe colombiano	Altitude (masl)/Altitud (msnm)	Reference Collection /Colección de Referencia	Reference / Referencias
Diplopoda	Polydesmida	Cyrtodesmidae	<i>Agnurodesmus thrixophor</i>	Mag	1370	MCZ	Chamberlin, 1923
			Chamberlin, 1923				
		Fuhrmannodesmidae	Fuhrmannodesmidae sp. 1	Bol	100	CUDC	Brolemann, 1916
			Fuhrmannodesmidae sp. 2	Bol	100	CUDC	Brolemann, 1916
		Paradoxosomatidae	Paradoxosomatidae sp. 1	Bol	0-100	CUDC, ICN	Daday, 1889
				Bol	56-67	ICN	Daday, 1889
				Bol	100	ICN	Daday, 1889
		Aphelidesmidae	<i>Colomborus martanus</i>	Mag	0-700	FMNH	Chamberlin, 1952; Sierwald <i>et al.</i> , 2005
			Chamberlin, 1952				
		Pyrgodesmidae	<i>Colomborus colombiensis</i>	Mag	1370	MCZ	Chamberlin, 1923
			Chamberlin, 1923				
		Pyrgodesmidae	<i>Arionus ulophilus</i>	Mag	1220	MCZ	Chamberlin, 1923
			Chamberlin, 1923				
		Polyxenida	Lophoproctidae	Lophoproctidae sp.1	Bol	9-120	CUDC, ICN
Siphonophorida	Siphonophoridae	<i>Columbiozonium pearsei</i>	Mag	10	MCZ	Chamberlin, 1923	
		Chamberlin, 1923					
		<i>Siphonophora graciliceps</i>	Mag	10	MCZ	Chamberlin, 1923	
Spirobolida	Rhinocricidae	<i>Lissocticus howlandi</i>	Mag	-	FMNH	Chamberlin, 1953; Sierwald <i>et al.</i> , 2005	
		Chamberlin, 1953					
		<i>Rhinocricus amblus</i>	Mag	1370	MCZ	Chamberlin, 1923	
		Chamberlin, 1923					
		<i>Rhinocricus colombianus</i>	Mag	610	-	Schubart, 1951	
		Schubart, 1951					
<i>Rhinocricus hylophilus</i>	Mag	610-1370	MCZ	Chamberlin, 1923; Marek <i>et al.</i> , 2003			
Chamberlin, 1923							
<i>Rhinocricus pycnus</i>	Mag	610-1280	MCZ	Chamberlin, 1923; Marek <i>et al.</i> , 2003			
Chamberlin, 1923							

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Table 1 continued.

Class/ Clase	Order /Orden	Family / Familia	Taxon/ Taxón	Distribution in Colombian Caribbean/ Distribución en el Caribe colombiano	Altitude (masl)/Altitud (msnm)	Reference Collection /Colección de Referencia	Reference / Referencias
	Spirobolida	Spirobolellidae	<i>Microspirobolus tridens</i> Chamberlin, 1923	Mag	1370	MCZ	Chamberlin, 1923
	Spirostreptida	Pseudonannolenidae	<i>Epinannolene arius</i> Chamberlin, 1923	Mag	260	MCZ	Chamberlin, 1923
<i>Epinannolene lorenzonus</i> Chamberlin, 1923			Mag	915	MCZ	Chamberlin, 1923	
<i>Epinannolene xestus</i> Chamberlin, 1923			Mag	1370-1520	MCZ	Chamberlin, 1923	
<i>Phallorthus colombianus</i> Chamberlin, 1952			Mag	-	FMNH	Chamberlin, 1952; Hoffman and Florez, 1995; Sierwald <i>et al.</i> , 2005	
<i>Phallorthus lorenzanus</i> Chamberlin, 1923		Mag	-	MCZ	Chamberlin, 1923		
Spirostreptidae		<i>Spirostreptus atoporus</i> Chamberlin, 1923	Mag	610-1370	MCZ	Chamberlin, 1923	
		<i>Spirostreptus eustriatus</i> Chamberlin, 1923	Mag	10	MCZ	Chamberlin, 1923	
	<i>Orthoporus gaigei</i> Chamberlin, 1923	Mag	610 -1370	MCZ	Chamberlin, 1923		
Stemmiulida	Stemmiulidae	<i>Stemmiulus craurus</i> Chamberlin, 1923	Mag	790	MCZ	Chamberlin, 1923	
		<i>Stemmiulus major</i> Carl, 1914	Mag	610	-	Carl, 1914	
		<i>Stemmiulus ruthveni</i> Chamberlin, 1929	Mag	1370-1520	-	Chamberlin, 1923; Sierwald and Spelda, 2020	
		Symphyla	Symphyla	Scolopendrellidae	Scolopendrellidae sp. 1	Bol	100
			Scolopendrellidae sp. 2	Bol	100	CUDC	Bagnall, 1913

For the Chilopoda class, the families with the highest richness were Scolopendridae, with six species and Scolopocryptopidae with four, both belonging to the Scolopendromorpha order. In comparison, the Lithobiidae families of the Lithobiomorpha order and Psellioididae of the Scutigleromorpha order presented one species. *Scolopendra gigantea* Linnaeus, 1758 was the species with the largest geographic range in the Caribbean region, with records in five departments (table 1).

For the Diplopoda class, the family with the highest richness was Chelodesmidae (Polydesmida) with 20 species, followed by Pseudonannolenidae (Spirostreptida) and Rhinocricidae (Spirobolida), each one with five species. Glomeridesmidae (Glomeridesmida), Cyrtodesmidae and Pyrgodesmidae (Polydesmida), and Spirobolellidae (Spirobolida), shown the lower richness with one species each one (table 1).

The unidentified examined specimens stored in the Universidad de Cartagena research laboratories and in the ICN collections, were assigned to the diplopods *Chondrodesmus* cf. *riparius* (Chelodesmidae), two species of Fuhrmannodesmidae, three of Paradoxosomatidae, and one of Lophoproctidae.

Regarding the Symphyla class, no publications were found with records of species for the Colombian Caribbean. Still, in the collections of both institutions specimens of two unidentified species of Scolopendrellidae were found.

Discussion

In general, the species documented in the literature for the Caribbean region are found in the Magdalena Department, reporting a total of 51 species; these records are related to the expeditions made by Otto Fuhrmann and Eugene Mayor (1910), Carl (1914), and University of Michigan to Central America (1913) and Chamberlin (1921) in the 20th century, which focused mainly on determining the biological diversity of the Sierra Nevada de Santa Marta and its surroundings.

Regarding *Scolopendra gigantea* Linnaeus, 1758, it was the species with the largest geographic range in the Caribbean region, with records in five departments. According Chagas-Jr *et al.* (2014), in Colombia, this species is only distributed in this region. In this work, the species *Scolopendra arthrorhabdoides* Ribaut, 1912, is recorded for the department of Bolívar, expanding its distribution which is considered restricted by Chagas-Jr *et al.* (2014) and Prado *et al.* (2018); records between 0 and 1300 masl (Prado-Sepúlveda *et al.*, 2016) were found. The list includes the species *Trachelodesmus angulatus* (Chamberlin, 1923) and *T. ancylaphor* (Chamberlin, 1923) recorded for the

Colombian Caribbean by Chamberlin (1923). However, Hoffman and Flórez (1995) consider that these species' taxonomic identity is not sure, and they possibly do not belong to the *Trachelodesmus* genus. Therefore, it is recommended to do a review of the type material. Of the Pauropoda class, no species records were found for the Colombian Caribbean. However, their presence in the region is possible, so it is recommended to increase the search for these tiny individuals.

The results obtained here show a high richness of myriapods in the Colombian Caribbean region, which should be reviewed in a more detailed way, for example, by examining the type material of the species, in addition to taxonomically determining the morphospecies mentioned here. For this, it is recommended to continue carrying out projects that allow a more detailed contribution to the myriapod fauna knowledge in this region of the country.

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