

## Check list of the Venezuelan millipedes species

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## Abstract

Here we provide a checklist of millipedes described or recorded in the literature from Venezuela. The diplopod fauna is comprised of eight orders, 18 families, 54 genera, and 157 species. The millipede orders Glomerida, Chordeumatida, Julida, Siphoniulida, and Platydesmida (known elsewhere in the Western Hemisphere) are not, as of yet, reported from the Venezuelan fauna. Two widely distributed invasive species, *Asiomorpha coarctata* and *Oxidus gracilis*, were recorded from Venezuela. All species records listed here contain comprehensive citation and synonymy lists. Numerous locality data are questionable and are discussed. For most species, the supposed deposition of the type specimens is given. However, the

museum and gender information is taken mostly from the literature as the type specimen themselves were not examined. An analysis of records extracted from GBIF in 2016 and in 2018 was conducted and compared to the data captured from the published taxonomic literature. The data in this checklist are summarized online at the MilliBase website.

**Key words:** Myriapoda, Diplopoda, Venezuela, South America, Neotropic

## Introduction

To date, a total of 157 species in eight orders have been reported from Venezuela: Polyxenida (3 species), Glomeridesmida (3 species), Polydesmida (87 species), Polyzoniida (1 species), Siphonophorida (2 species), Spirobolida (35 species), Spirostreptida (15 species), and Stemmiulida (11 species). No members of the orders Glomerida, Chordeumatida, Julida, Siphoniulida, and Platynodesmida have yet been recorded, and these taxa have also not been reported from neighboring countries of Colombia, Guyana (Jeekel 1963), and Brazil. As for the majority of the Neotropical millipede fauna, Polydesmida are represented with the most species with about 55% of the Venezuelan millipedes species recorded to date. Of the total number of species, 36 (27.4%) are listed only with the primary description. Two introduced species, *Asiomorpha coarctata* (DeSaussure, 1860) and *Oxidus gracilis* (C.L. Koch, 1847) (Polydesmida, Paradoxosomatidae), have been recorded in the country.

The Venezuelan myriapod fauna is extremely poorly known for all classes, partly due to limited collecting and research efforts, and the lack of resident taxonomists and systematists. The only Venezuelan myriapodologist, Dr. González-Sponga, died in 2010. Between 2000 and 2009, he described 28 species of millipedes and 15 species of centipedes from Venezuela. All the other species of myriapods from this country have been described or recorded by foreign specialists. Venezuelan species lists of the Chilopoda were recently provided by Cazorla (2012), and Schileyko (2014). Only a few field surveys and specimen collecting activities targeting myriapods have been conducted, and vast areas of Venezuela have never been surveyed. Thus, the current species checklist and distributional information may be an artifact of limited collecting effort. A major impediment to our knowledge of the Venezuelan millipede fauna (and those of many other regions) is caused by the profound lack of digitized and catalogued specimen records from arthropod collections around the world.

This checklist is largely based on data from the primary taxonomic literature. The species and literature citations were assembled from a global millipede species database that formed the nucleus for the online database MilliBase (Sierwald & Spelda 2018). Museum collection web sites were queried to determine type specimen data. Aggregated datasets compiled by the Global Biodiversity Information Facility (GBIF; <http://www.gbif.org/>) were searched for millipede species occurrence data for Venezuela to locate additional species and specimens contributed by digitized museum collection records.

When more natural history collections are digitized and catalogued at the specimen/lot level, and the data made accessible online (e.g., GBIF, SCAN, InvertEbase, iDigBio as well as numerous individual museum databases published on institutional web sites), the development of regional checklists will be greatly advanced. We therefore hypothesize that the current number of known Venezuelan millipedes vastly underestimates the actual diplopod diversity of the country.

## Material and methods

For this checklist, the taxonomic data and the literature citations were extracted through a series of queries from a global diplopod species catalog, now available online: MilliBase Sierwald & Spelda; <http://www.millibase.org/index.php>. The database records were validated against diplopod records in the Zoological Record. For this checklist, species citations were compared to the original literature, and figures are listed. The locality information for every Venezuelan diplopod species record in the literature was reviewed and the distribution for each species is listed containing all geographic data from the literature.

**GBIF analysis:** GBIF (<http://www.gbif.org/occurrence>) was queried for 'Diplopoda' from 'Venezuela' on two occasions: June 2016 and December 8, 2016 [GBIF.org (8th December 2016) GBIF Occurrence Download [http://doi.org/10.15468/dl.s4bd7g](https://doi.org/10.15468/dl.s4bd7g) and February 2018, GBIF Occurrence Download <https://doi.org/10.15468/dl.sooiul>]. The occurrence data were downloaded as DarwinCore Archives, the resulting zipped occurrences.txt files were opened in Excel, which permits to specify how the data are delimited.

Localities: Locality information found in the literature is variable and frequently incomplete, resulting in uncertain geographical positions, especially if the cited locality names refer to more than one location. In the older literature, GPS coordinates were rarely recorded. For the following localities, additional locality information was retrieved from expedition reports and related publications.

**Rancho Grande (Aragua State):** This locality is located in the National Park of Aragua [now called Henri Pittier National Park, the first National Park of Venezuela, established in 1937]. Rancho Grande is located in north-central Venezuela (ca. 10°21'N, 67°41'W), 80 kilometers west of Caracas, at an elevation of 1100 m in the undisturbed montane cloud forest which covers part of the Caribbean range of the Andes (Beebe & Crane 1947, contains maps and ecological descriptions).

**Caripito (Monagas State):** Apparently, there is more than one locality with the same name referred to as Caripito in Monagas State. However, Beebe & Crane (1947) (in-text fig. 1, map) gave a location 550 km east of Caracas (10°07'04"N, 63°06'07"W) for the expeditions of the New York Zoological Society that occurred in this locality.

**Las Trincheras:** There are 46 localities in Venezuela with the name “Las Trincheras”. Silvestri (1898), cited ‘Las Trincheras’ for at least two localities: near Caracas (Miranda State) and near San Esteban (Carabobo State). We hypothesize that the latter refers to Las Trincheras near San Esteban National Park, Carabobo State, with the possible coordinates: 07°40'00"N, 67°37'00"W. In most cases in the literature, Las Trincheras is listed alone, without further indication of the specific locality.

**San Esteban (Carabobo State):** This locality is most likely in the area of San Esteban National Park.

**La Mocha (Miranda State):** La Mocha is located near Caracas according to Silvestri (1898), and Silvestri (1903) (see also Terver *et al.* 1968: 202). It is also spelled La Moca and La Moka in the original literature.

**La Guaira (Vargas State):** This locality occurs several times, also with the alternate spelling La Guayra. This locality likely refers to La Guaira in Vargas State, about 30 km southeast of Caracas (ca. 10°36'0"N, 66°55'59"W).

#### Museum/Collection acronyms

\* GBIF data providers

AMNH	American Museum of Natural History, New York, USA
BMNH	British Museum of Natural History [=The Natural History Museum], London, UK
FMNH*	Field Museum of Natural History, Chicago, USA
GMUG	Universität Göttingen, Geowissenschaftliches Zentrum, Göttingen, Germany
HNHM	Hungarian Natural History Museum, Budapest, Hungary
ISBR	Institut of Speleology, Bucharest, Romania
INHS*	Illinois Natural History Survey, Urbana-Champaign, Illinois, USA
MAGS	Dr. Miguel Ángel González-Sponga personal collection. Currently all the type series of his collection are hosted at the MIZA, Maracay, Venezuela
MHNG	Muséum d'Histoire Naturelle, Geneva, Switzerland
MCZ*	Museum of Comparative Zoology, Harvard University, Cambridge, USA
MIZA	Museo del Instituto de Zoología Agrícola "Francisco Fernández Yépez", Universidad Central de Venezuela, Maracay, Venezuela
MNHN*	Muséum National d'Histoire Naturelle, Paris, France [specimens identified by either Brölemann or Mauriès]
MNRJ	Museu Nacional, Rio de Janeiro, Brazil
MSNG	Museo Civico di Storia Naturale “Giacomo Doria”, Genova, Italy
SMF*	Senckenberg Museum, Frankfurt, Germany
NHMW	Naturhistorisches Museum Wien, Austria
UMZC	Cambridge University Museum of Zoology, Cambridge, UK
UNIPD	University of Padova, Padova, Italy
USNM*	National Museum of Natural History, Smithsonian Institution, Washington, DC, USA
VMNH	Virginia Museum of Natural History, Martinsville, Virginia
ZMHB	Zoologisches Museum, Humboldt University, Berlin, Germany
ZMUC*	Zoological Museum, University of Copenhagen, Denmark

ZMUH      Zoologisches Museum, Universität Hamburg, Germany  
ZSM\*      Zoologische Staatssammlung Munich, Germany

## Abbreviations

BHL	Biodiversity Heritage Library (BHL), online at [ <a href="https://www.biodiversitylibrary.org/">https://www.biodiversitylibrary.org/</a> ]
HT	Holotype
ST	Syntypes
PT	Paratype(s)

**Online data searches:** For this study, we searched institutional online collection databases and conducted searches in aggregator sites, namely iDigBio and GBIF. These searches were filtered for the class Diplopoda and country Venezuela. The iDigBio search yielded 32 diplopod records from three publishers (FMNH, INHS, MCZ) in 2016. In 2018, the search yielded 97 records from 6 publishers (FMNH, INHS, UMZC, MCZ, USNM, ZMUC). Of these 97 records, 60 were actually Diplopoda, the remaining records did not belong to Arthropoda.

The two occurrence files from GBIF were downloaded as DarwinCore Archives. The 2016 query resulted in 240 records, based on 14 datasets; the 2018 query yielded 129 records based on 11 datasets. The 2016 query contained numerous duplications (mainly from ZSM), which did not appear in the 2018 query. The core occurrence records from data providers in GBIF remained unchanged, thereby indicating quiescence in research, specimen identification, collection digitization, and cataloging for the Diplopoda from Venezuela. The occurrence records obtained through GBIF and iDigBio queries did not add new species records that were not previously reported in the published literature. Data fragmentation issues seemed to be an issue: for example the ZMUC harbors types of 20 species reported from Venezuela (see text); however, only five of these are represented in the occurrence records in GBIF and iDigBio. The FMNH houses types of 6 species from Venezuela. While these specimen records and their catalog numbers are present in the GBIF occurrence data set, their type status is not indicated.

	GBIF	GBIF	Comments
	2018	2016	
Total datasets	11	14	
Total records	129	240	All occurrence records belong to the class Diplopoda
MNHN	36	36	7 types reported from GBIF, 37 types expected
SysTax	3	32	SysTax is an aggregator, which includes literature citations and ZSM specimens; <a href="http://www.biologie.uni-ulm.de/systax/">http://www.biologie.uni-ulm.de/systax/</a>
FMNH	24	24	Type status of 6 types not shown in GBIF and iDigBio
USNM	15	15	2 types missing from GBIF records
INHS	9	9	Repository of Causey types
ZMUC	5	5	15 types missing from GBIF records
MCZ	3	3	4 types and three specimens expected and 4 types missing.
Naturgucker	2	2	Live observations
SMF	2	2	<i>Amplinus beebei</i> Chamberlin, 1950 and <i>Aphelidesmus confluens</i> Chamberlin, 1950
Edaphobase	1	1	A single record of <i>Amplinus ater</i> (Peters, 1864), <a href="https://portal.edaphobase.org/">https://portal.edaphobase.org/</a>
SNSB-ZSM	0	46	SNSB = Staatliche Naturwissenschaftliche Sammlungen Bayerns, includes the ZSM
ZSM	0	36	The ZSM data set contains many replicates and may have been duplicated.
ZSM/Myr	29	29	The 2016 and 2018 queries returned identical specimen records
UMZC	0	4	No dataset in 2018 query, but now present in iDigBio data set

## Discussion

The knowledge of the fauna of Venezuela with regards to the class Diplopoda is in its infancy. The published specimen records for Venezuela consist almost exclusively of primary descriptions of the 157 species, most of which are known only from the type specimens and thus from a single locality. Further citations often carry the name in lists. The historical lack of collecting efforts to sample millipedes is evident; from five of the 23 Venezuelan states and

one Capital District, not a single millipede species record exists in the literature (Anzoátegui, Zulia, Guárico, Nueva Esparta, Cojedes), and from 11 states only 1–3 specimen records are reported in the published literature. Numerous specimen records have been reported from Aragua (44), Carabobo (28) and Miranda (55). The lack of a broader understanding of species distributions for most taxa precludes the biogeographical analysis of endemism for diplopod species of Venezuela; for example, only eighteen species are recorded from more than one state. Furthermore, just a few of the millipede species described from Venezuelan specimens have been recollected and recorded from any of the surrounding countries.

The faunistic knowledge of these ecologically important soil macroinvertebrates can only be improved by an extensive and systematic collecting effort, covering the various habitats and regions of the country. In many natural history collections, specimens of species-rich groups remain unrecognized in collections among unsorted and unidentified back logs. It is likely that these back logs harboring Venezuelan diplopod specimens exist in various natural history museums. In fact, just one paper has been published about the Venezuelan millipedes from one scientific collection (Causey 1954), where the author described specimens hosted in the Illinois Natural Collection Survey. Once sorted and identified, specimen data are accessible only if they are digitized and available electronically to serve as a resource for more comprehensive biodiversity research.

Rather recently, biodiversity occurrence data have entered the digital age (Ball-Damerow *et al.* 2019). Natural history museums invested heavily in digitizing the occurrence data of their holdings, employing a variety of databases. Online service of the data, and standardization with Darwin Core, made these accessible to a world wide audience. The aggregator GBIF was established in 2001, and the aggregated data records have grown to over 1.08 billion records in 2019 (GBIF.org, 2019). Obtaining biodiversity data for high diversity groups, such as invertebrates and for highly undersampled regions represents a significant problem (Ariño *et al.* 2013). A recent survey showed that approximately 53% of all mollusks holdings in U.S. and Canadian collections are digitized in some form, albeit many of them still lodged in local databases and not yet mobilized online (Sierwald *et al.* 2018). Our searches on aggregator sites GBIF and iDigBio confirmed that biodiversity data for understudied groups, such as millipedes, remain limited and rely on traditional literature surveys. Online taxonomic authority files, such MilliBase, support digitization efforts at museums, but digitization of arthropod taxa lags far behind (Schuh *et al.* 2010)

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## Checklist of the millipedes of Venezuela

### Order Polyxenida

#### Family Lophoproctidae (2 species)

## Genus *Ancistroxenus* Schubart, 1947

### *Ancistroxenus comans* (Loomis, 1934)

*Lophoproctus comans* Loomis, 1934. Smithsonian Miscellaneous Collections, 89(14): 4, 5, plate 1, fig. 1; HT FE-MALE (USNM).

*Ancistroxenus tupiensis* Schubart, 1947. Boletim do Museu Nacional, Rio de Janeiro, 82: 41, plate 14, figs. 39–41; ST MALE/FEMALES (MNRJ); synonymized under *comans* by Ishii *et al.* 1999. Amazoniana, 15(3/4): 251.

*Plesioproctus comans*—Condé 1964. Revue Française d' Entomologie, 31(1): 61–66, figs. 1–2.

*Plesioproctus comans*—Terver *et al.* 1968. Entomologiske Meddelelser, 36(2): 191, figs. 1–7 (reports *A. comans* from Venezuela).

*Plesioproctus comans*—Hoffman 1999. Virginia Museum of Natural History. Special Publication Number 8: 13.

*Ancistroxenus comans*—Ishii *et al.* 1999. Amazoniana, 15(3/4): 251, figs. 47–52.

*Ancistroxenus comans*—Nguyen Duy-Jacquemin 2002. Zoosistema, 24(2): 464, fig. 5.

*Ancistroxenus comans*—Hoffman *et al.* 2002. In Adis (Ed.), Amazonian Arachnida and Myriapoda: 531.

*Ancistroxenus comans*—Nguyen Duy-Jacquemin & Geoffroy 2003. African Invertebrates, 44(1): 97.

Distribution in Venezuela: Las Trincheras, without further detail (Terver *et al.* 1968); most likely referring to Las Trincheras, near Valencia, Carabobo State.

### *Ancistroxenus obscurisetus* (Silvestri, 1898)

*Lophoproctus obscuriseta* Silvestri, 1898. Anales del Museo Nacional de Buenos Aires, 6: 54; HT (ZMUC); ST (USNM).

*Lophoproctus obscuriseta*—Silvestri 1903. Bollettino dei Musei di Zoologia e di Anatomia Comparata R. Università di Torino, 18(433): 20.

*Plesioproctus obscurisetus*—Terver *et al.* 1968. Entomologiske Meddelelser, 36(2): 201, figs. 8–11 (lectotype designation).

*Ancistroxenus obscurisetus*—Nguyen Duy-Jacquemin 2002. Zoosistema, 24(2): 469.

*Ancistroxenus obscurisetus*—Nguyen Duy-Jacquemin & Geoffroy 2003. African Invertebrates, 44(1): 97.

Distribution in Venezuela: Caracas, Distrito Capital (former Distrito Federal), Miranda State; La Moka (near Caracas according to Silvestri 1898; 1903); Las Trincheras, Carabobo State (Terver *et al.* 1968).

## Family Polyxenidae (1 species)

## Genus *Macro xenodes* Silvestri, 1948

### *Macro xenodes meinerti* (Silvestri, 1898)

*Polyxenus Meinerti* Silvestri, 1898. Anales del Museo Nacional de Buenos Aires, 6: 53; HT (ZMUC); ST (USNM) [type species of *Macro xenodes*].

*Polyxenus Meinerti*—Silvestri 1903. Bollettino dei Musei di Zoologia e di Anatomia Comparata R. Università di Torino, 18(433): 18.

*Macro xenodes meinerti*—Silvestri 1948. Bollettino del Laboratorio di Entomologia Agraria “Filippo Silvestri”, 8: 216.

*Macro xenodes meinerti*—Nguyen Duy-Jacquemin & Geoffroy 2003. African Invertebrates, 44(1): 99.

Distribution in Venezuela: Caracas, Distrito Capital (former Distrito Federal), Miranda State (Silvestri 1898).

## Order Glomeridesmida

## Family Glomeridesmidae (3 species)

## Genus *Glomeridesmus* Gervais, 1844

***Glomeridesmus obvius*** Chamberlin, 1950

*Glomeridesmus obvius* Chamberlin, 1950. *Zoologica*, New York, 35(2): 136; HT (AMNH).

*Glomeridesmus obvius*—Jeekel 2003. *Myriapod Memoranda*, VI: 105.

Distribution in Venezuela: Rancho Grande, Aragua State (Chamberlin 1950; see Beebe & Crane 1947).

***Glomeridesmus porcellus*** Gervais et Goudot, 1844

*Glomeridesmus porcellus* Gervais et Goudot, 1844. *Annales de la Société Entomologique de France*, 2: 27–29; HT gender unknown, (possibly MNHN 2992) [type species of *Glomeridesmus*].

*Glomeridesmus porcellus*—Gervais 1844. *Annales des Sciences Naturelles*, 2: 62, plate 5, figs. 4–6.

*Glomeridesmus porcellus*—Gervais 1847. In Walckenaer (Ed.), *Histoire Naturelle des Insects. Aptéres*, 4: 87, plate 44, figs. 6–6b.

*Glomeridesmus porcellus*—Brölemann 1898a. *Annales de la Société Entomologique de France*, 67(3): 257, plate 20, figs. 11–19 (MALE specimen).

*Glomeridesmus porcellus*—Hennings 1906. *Zeitschrift für Wissenschaftliche Zoologie*, 80: 582, plate 31, fig. 2.

*Glomeridesmus porcellus*—Carl 1914. *Mémoires de la Société des Sciences Naturelles de Neuchâtel*, 5: 966.

*Glomeridesmus porcellus*—Chamberlin 1923. *Occasional Papers of the Museum of Zoology, University of Michigan* 113: 3.

*Glomeridesmus porcellus*—Attems 1926. In Kükenthal und Krumbach (Eds.), *Handbuch der Zoologie*, 4: 115, figs. 115, 117.

*Glomeridesmus porcellus*—Carl 1942. *Revue Suisse de Zoologie*, 49: 139, figs. 1–7, 14–16, 19.

*Glomeridesmus porcellus*—Jeekel 2003. *Myriapod Memoranda*, VI: 106.

Distribution in Venezuela: Colonia Tovar, Tovar Municipality, Aragua State (Brölemann 1898a); also reported from Colombia.

***Glomeridesmus virescens*** Silvestri, 1898

*Glomeridesmus virescens* Silvestri, 1898. *Anales del Museo Nacional de Buenos Aires*, 6: 55; HT (ZMUC).

*Glomeridesmus virescens*—Jeekel 2003. *Myriapod Memoranda*, VI: 106.

Distribution in Venezuela: La Moka, near Caracas according to Silvestri (1898; 1903), Miranda State.

Specimens of the order Glomeridesmida reported in collections: FMNH (catalog #594, 13076, 56296, 56297, 103666, 103078, all from Aragua State).

## Order Polydesmida

### Family Aphelidesmidae (11 species)

#### Subfamily Aphelidesminae

##### Genus *Aphelidesmus* Brölemann, 1898

***Aphelidesmus asper*** Attems, 1937

*Aphelidesmus asper* Attems, 1937. *Das Tierreich*, 68: 132; ST MALE (NHMW3413).

*Aphelidesmus asper*—Jeekel 2000. *Myriapod Memoranda*, II: 89.

Distribution: Venezuela, without further detail (Attems 1937).

***Aphelidesmus aterrimus*** (Attems, 1899)

*Euryurus aterrimus* Attems, 1899. *Denkschriften der Kaiserlichen Akademie der Wissenschaften zu Wien, Mathematisch-Naturwissenschaftliche Classe*, 68: 278, plate 7, fig. 162; ST MALE (NHMW).

*Aphelidesmus aterrimus*—Carl 1914. *Mémoires de la Société des Sciences Naturelles de Neuchâtel*, 5: 940 (Colombia localities).

*Aphelidesmus aterrimus*—Attems 1914a. *Archiv für Naturgeschichte*, 80 A(4): 207.

*Aphelidesmus aterrimus*—Attems 1937. Das Tierreich, 68: 130, fig. 167.

*Aphelidesmus aterrimus*—Jeekel 2000. Myriapod Memoranda, II: 89.

Distribution: Venezuela, without further detail (Attems 1899; 1937).

#### ***Aphelidesmus frangens* Chamberlin, 1950**

*Aphelidesmus frangens* Chamberlin, 1950. Zoologica, New York, 35(2): 141, fig. 15; HT MALE (AMNH); PT FEMALE (USNM).

*Aphelidesmus frangens*—Jeekel 2000. Myriapod Memoranda, II: 90.

Distribution in Venezuela: Rancho Grande, Aragua State (Chamberlin 1950; see Beebe & Crane 1947).

#### ***Aphelidesmus hermaphroditus* Brölemann, 1898**

*Aphelidesmus hermaphroditus* Brölemann, 1898b. Annales de la Société Entomologique de France, 67(3): 323, plate 28, figs. 4–16; ST MALE/FEMALE (MNHN) MY 2267, 2268, 2269, 2270, 2271 [type species of *Aphelidesmus*].

*Aphelidesmus hermaphroditus*—Attems 1899. Denkschriften der Kaiserlichen Akademie der Wissenschaften zu Wien, Mathematisch-Naturwissenschaftliche Classe, 68: 435.

*Aphelidesmus hermaphroditus*—Verhoeff 1910. Zoologischer Anzeiger, 35: 733, 735.

*Aphelidesmus hermaphroditus*—Carl 1911. Compte rendu des séances de la Société de Physique et d’Histoire Naturelle du Genève, 28: 38 (Colombia localities).

*Aphelidesmus hermaphroditus*—Carl 1914. Mémoires de la Société des Sciences Naturelles de Neuchâtel, 5: 940 (Colombia localities).

*Aphelidesmus hermaphroditus*—Attems 1914. Archiv für Naturgeschichte, 80 A(4): 207.

*Aphelidesmus hermaphroditus*—Attems 1937. Das Tierreich, 68: 130, fig. 166.

*Aphelidesmus hermaphroditus*—Hoffman 1954. Journal of the Washington Academy of Sciences, 44(2): 56.

*Aphelidesmus hermaphroditus*—Jeekel 2000. Myriapod Memoranda, II: 9, see note below.

Distribution in Venezuela: Sarare River, without further detail (Brölemann 1898b; Attems 1937), most likely referred to the Sarare river, Apure State.

Note: Brölemann (1900: 122) described the subspecies *Aphelidesmus hermaphrodites kervillei* from Colombia, which was listed with a full species rank by Jeekel 2000. Myriapod Memoranda, II: 91. Jeekel also lists a citation for ‘*Euryurus hermaphroditus*’ by Brölemann, 1905 in the Annales de la Société Entomologique de France, 74 on page 77. The 1905 Brölemann article (Myriapodes de Costa-Rica) includes the pages 337–380. This article does not list *Euryurus hermaphroditus*. We are not aware that the name ‘*Euryurus hermaphroditus*’ was used in print.

### **Subfamily Amplininae**

#### **Genus *Amplinus* Attems, 1898**

##### ***Amplinus abstrusus* (Karsch, 1881)**

*Polydesmus abstrusus* Karsch, 1881b. Archiv für Naturgeschichte, 47: 37, plate 3, fig. 6, Lectotype MALE (659a) (ZMHB 659b); synonymized by Brölemann (1898a): Annales de la Société Entomologique de France, 67(3): 283 under *Polydesmus ater* (Peters, 1864), see below.

*Pachyurus (Amplinus) abstrusus*—Attems 1898. Denkschriften der Kaiserlichen Akademie der Wissenschaften zu Wien, Mathematisch-Naturwissenschaftliche Classe, 67: 264, listed as valid species.

*Pachyurus abstrusus*—Attems 1899. Denkschriften der Kaiserlichen Akademie der Wissenschaften zu Wien, Mathematisch-Naturwissenschaftliche Classe, 68: 283, plate 12, figs 287–289 (lists MALE specimens deposited in SMF), (MCZ 42206).

*Amplinus abstrusus*—Attems 1938. Das Tierreich, 69: 309, fig. 346.

*Pseudamplinus abstrusus*—Hoffman 1954. Journal of the Washington Academy of Sciences, 44(2): 51 (treated as a valid species).

*Pseudamplinus abstrusus*—Jeekel 1963. Studies on the fauna of Suriname and other Guyanas, 4(11): 71.

- *abstrusus*—Moritz & Fischer 1978a. Mitteilungen aus dem Zoologischen Museum in Berlin, 54(1): 111, type specimen catalog, species names listed in alphabetical order without generic assignment
- Amplinus abstrusus*—Hoffman 1976. Revue Suisse de Zoologie, 83(1): 40 (by implication, synonymized *Pseudamplinus* under *Amplinus*).

Distribution in Venezuela: San Esteban near Puerto Cabello, Carabobo State (Attems, 1899, specimen in MCZ).

#### ***Amplinus ater* (Peters, 1864)**

*Polydesmus ater* Peters, 1864a. Monatsberichte der Königlichen Preussischen Akademie der Wissenschaften zu Berlin, 1864: 541; ST FEMALE (ZMHB 277, 278).

[*Polydesmus (Pachyurus) abstrusus* Karsch, 1881. Archiv für Naturgeschichte, 47: 37, plate 3, fig. 6; synonymized by Brölemann, 1898a. Annales de la Société Entomologique de France, 67(3): 283 under *Polydesmus ater*, see *Amplinus abstrusus* above].

*Platyrhachus* [recte: *Platyrhacus*] *ater*—Brölemann 1898a. Annales de la Société Entomologique de France, 67(3): 283, plate 23, figs. 72–74 (MALE specimens).

*Pachyurus (Amplinus) ater*—Attems 1898. Denkschriften der Kaiserlichen Akademie der Wissenschaften zu Wien, Mathematisch-Naturwissenschaftliche Classe, 67: 264.

*Pachyurus ater*—Attems 1899. Denkschriften der Kaiserlichen Akademie der Wissenschaften zu Wien, Mathematisch-Naturwissenschaftliche Classe, 68: 285 (lists specimens deposited at NHMW).

*Amplinus ater*—Schubart 1934. Die Tierwelt Deutschlands und der angrenzenden Meeresteile, 28: 305.

*Amplinus ater*—Attems 1938. Das Tierreich, 69: 313 (uncertain species).

*Pseudamplinus ater*—Hoffman 1954. Journal of the Washington Academy of Sciences, 44(2): 50 (treated as a valid species, “presumably” belonging to *Amplinus*).

*Pseudamplinus ater*—Jeekel 1963. Studies on the fauna of Suriname and other Guyanas, 4(11): 71.

*Amplinus ater*—Hoffman 1976. Revue Suisse de Zoologie, 83(1): 40 (by implication, synonymized *Pseudamplinus* under *Amplinus*).

– *ater*—Moritz & Fischer 1978a. Mitteilungen aus dem Zoologischen Museum in Berlin, 54(1): 112, type specimen catalog, species names listed in alphabetical order without generic assignment.

Distribution in Venezuela: Caracas, Miranda State (Attems 1899); San Esteban, without detailed information, probably San Esteban National Park, in Carabobo State (Brölemann 1898a).

#### ***Amplinus beebei* Chamberlin, 1950**

*Amplinus beebei* Chamberlin, 1950. Zoologica, New York, 35(2): 140, fig. 13; HT MALE (AMNH); PT MALE (USNM).

*Pseudamplinus beebei*—Hoffman 1954. Journal of the Washington Academy of Sciences, 44(2): 51.

*Pseudamplinus beebei*—Jeekel 1963. Studies on the fauna of Suriname and other Guyanas, 4(11): 71.

*Amplinus beebei*—Hoffman 1976. Revue Suisse de Zoologie, 83(1): 40 (by implication, synonymized *Pseudamplinus* under *Amplinus*).

Note: Hoffman (1999: 385) stated that several species from Venezuela placed in this genus in the past are ‘probably referable to some other taxon’.

Distribution in Venezuela: Rancho Grande, Aragua State (Chamberlin 1950; see Beebe & Crane 1947).

### **Genus *Meridiurus* Vohland, 1998**

#### ***Meridiurus venitus* Vohland, 1998**

*Meridiurus venitus* Vohland, 1998. Amazoniana, 15(1/2): 135, figs. 34–38 HT MALE VMNH [type species of the genus *Meridiurus*].

Distribution in Venezuela: Vohland stated the locality as: ‘Cueva de Venito, Edo Mérida’, possibly referring to Cueva de Benito, Guaraque Municipality, Mérida State.

## Genus *Protaphelidesmus* Brölemann, 1916

### *Protaphelidesmus ligula* (Brölemann, 1898)

*Platyrhachus* [recte: *Platyrhacus*] *ligula* Brölemann, 1898a. Annales de la Société Entomologique de France, 67(3): 282, plates 23, 24, figs. 75–82; HT MALE (MNHN).

*Pachyurus ligula*—Attems 1899. Denkschriften der Kaiserlichen Akademie der Wissenschaften zu Wien, Mathematisch-Naturwissenschaftliche Classe, 68: 285.

*Protaphelidesmus ligula*—Brölemann 1916. Annales de la Société Entomologique de France, 84: 599.

*Protaphelidesmus ligula*—Attems 1938. Das Tierreich, 69: 314, fig. 352.

*Protaphelidesmus ligula*—Jeekel 1963. Studies on the fauna of Suriname and other Guyanas, 4(11): 70.

*Protaphelidesmus ligula*—Vohland 1998. Amazoniana, 15(1/2): 134, figs. 17–24.

Distribution in Venezuela: Colonia Tovar, Tovar Municipality, Aragua State (Brölemann 1898a).

## Genus *Varyomus* Hoffman, 1954

### *Varyomus confluens* (Chamberlin, 1950)

*Aphelidesmus confluens* Chamberlin, 1950. Zoologica, New York, 35(2): 141, fig. 14; HT MALE (AMNH); PT MALE, PT FEMALE (USNM).

*Varyomus confluens*—Hoffman 1954. Journal of the Washington Academy of Sciences, 44(2): 56, fig. 4.

*Varyomus confluens*—Jeekel 1963. Studies on the fauna of Suriname and other Guyanas, 4(11): 72.

*Varyomus confluens*—Vohland 1998. Amazoniana, 15(1/2): 135, fig. 25.

Distribution in Venezuela: Rancho Grande, Aragua State (Chamberlin 1950; see Beebe & Crane 1947; listed as northern Venezuela by Vohland 1998).

### *Varyomus levigatus* (Attems, 1944)

*Protaphelidesmus levigatus* Attems 1944. Zoologischer Anzeiger, Leipzig, 144(11/12): 237, fig. 23; ST (NHMW3415).

*Varyomus levigatus*—Jeekel 1963. Studies on the fauna of Suriname and other Guyanas, 4(11): 72.

*Varyomus levigatus*—Vohland 1998. Amazoniana, 15(1/2): 135.

Distribution in Venezuela: Venezuela, without exact locality data (Attems 1944).

## Family Chelodesmidae (38 species)

### Subfamily Chelodesminae

The tribes Batodesmini, Chelodesmini, Chondrodesmini, Leptodesmini, Lepturodesmini, Tachelodesmini, and Trichomorphini are recorded from Venezuela

## Tribe Batodesmini, Cook, 1896

### Genus *Alocodesmus* Silvestri, 1896

#### *Alocodesmus gracilicornis* (Brölemann, 1898)

*Leptodesmus gracilicornis* Brölemann, 1898a. Annales de la Société Entomologique de France, 67(3): 292, plate 25, figs. 114–120, plate 26, figs 121–126; HT MALE (MNHN).

*Leptodesmus gracilicornis*—Attems 1899. Denkschriften der Kaiserlichen Akademie der Wissenschaften zu Wien, Mathematisch-Naturwissenschaftliche Classe, 68: 428, in subgenus *Odontopeltis*.

*Leptodesmus (Desmoleptus) gracilicornis*—Attems 1931b. Zoologica Stuttgart, 30(79): 21(in key to species).

*Leptodesmus (Desmoleptus) gracilicornis*—Attems 1938. Das Tierreich, 69: 31, fig. 31.

*Alocodesmus gracilicornis*—Jeekel 1952. Entomologische Berichten, 14(323): 73.

*Alocodesmus gracilicornis*—Hoffman 1969. Papéis Avulsos de Zoología, 22(25): 268.

*Maracayopus venezuelanus* Verhoeff 1938. Zoologische Jahrbücher, 71(1/2): 4, plate 1 figs. 1–4; ST MALE (ZMHB) 12695; ST MALE (ZSM) and several specimens; synonymized with *gracilicornis* by Jeekel (1952: 73).

*Alocodesmus venezuelanus*—Attems 1940. Das Tierreich, 70: 551, fig. 699, synonymized genus *Maracayopus* under *Alocodesmus*.

[—*venezuelanus*—Moritz & Fischer 1978a. Mitteilungen aus dem Zoologischen Museum in Berlin, 54(1): 131; listed in type catalog, not a generic transfer].

*Dromodesmus celer* Chamberlin 1950. Zoologica, New York, 35(2): 142, fig. 17; HT MALE (AMNH), collected in Rancho Grande, near Valencia, Aragua State (see Beebe & Crane 1947); synonymized with *gracilicornis* by Jeekel 1952. Entomologische Berichten, 14(323): 73.

Distribution in Venezuela: San Esteban, without specific information, but probably San Esteban National Park, Carabobo State; Maracay, Aragua State (*Maracayopus venezuelanus* Verhoeff, 1938).

#### ***Alocodesmus hansi*** Silvestri, 1898

*Alocodesmus Hansenii* Silvestri, 1898. Anales del Museo Nacional de Buenos Aires, 6: 56; HT MALE (ZMUC).

*Leptodesmus Hensi* [sic]—Attems 1899. Denkschriften der Kaiserlichen Akademie der Wissenschaften zu Wien, Mathematisch-Naturwissenschaftliche Classe, 68: 428, in subgenus *Odontopeltis*.

*Alocodesmus hansi*—Attems 1938. Das Tierreich, 69: 136 (insufficiently described species).

Distribution in Venezuela: La Moka, near Caracas according to Silvestri (1898; 1903), Miranda State.

#### ***Alocodesmus rapidus*** Silvestri, 1898

*Alocodesmus rapidus* Silvestri, 1898. Anales del Museo Nacional de Buenos Aires, 6: 58; HT MALE (possibly in ZMUC).

*Leptodesmus rapidus*—Attems 1899. Denkschriften der Kaiserlichen Akademie der Wissenschaften zu Wien, Mathematisch-Naturwissenschaftliche Classe, 68: 428, in subgenus *Odontopeltis*.

*Alocodesmus rapidus*—Attems 1938. Das Tierreich, 69: 136 (insufficiently described species).

Distribution in Venezuela: Venezuela, without exact locality data.

### **Genus *Curimaguana* Hoffman, 2007**

#### ***Curimaguana granulata* (Hoffman, 1982)**

*Curimaguana granulata* Hoffman, 1982. Journal of Natural History, 16(5): 646; HT MALE, PT MALE and PT FE-MALE (VMNH).

*Curimaguana granulata*—Hoffman 2007. Myriapodologica, 9(1): 1, **nom. nov.** for *Curimagua*, preoccupied by *Curimagua* Forster & Platnick, 1977 (Araneae, Symphytognathidae).

*Vigilia granulata*—Özdikmen 2009. Munis Entomology & Zoology, 4(1): 180.

Note: The generic name *Vigilia* was unnecessarily introduced as a substitute name for the pre-occupied generic name *Curimagua* Hoffman, 1982, overlooking the replacement name *Curimaguana* Hoffman, 2007 established two years prior. Thus, *Vigilia* became an instantaneous junior objective synonym of *Curimaguana*. (It would have served the author of this unnecessary replacement name well to heed his own recommendations as expressed in the etymology of the generic name). Furthermore, it is a recommendation and a hallmark of the cooperative nature of the international scientific community to follow the code in all aspects: Article 25, recommendation C is applicable in this case.

Distribution in Venezuela: Valle de Curimagua (cave), Falcon State.

### **Genus *Tunochilus* Chamberlin, 1950**

#### ***Tunochilus marcuzzii* Hoffman, 1982**

*Tunochilus marcuzzii* Hoffman, 1982. Journal of Natural History, 16(5): 642, figs. 17–26; HT MALE (UNIPD).

Distribution in Venezuela: Caracas, Miranda State.

***Tunochilus marginis*** Chamberlin, 1950

*Tunochilus marginis* Chamberlin, 1950. *Zoologica*, New York, 35(2): 143; HT FEMALE (AMNH), PT FEMALE (USNM).

*Tunochilus marginis*—Hoffman 1982. *Journal of Natural History*, 16(5): 641, figs. 14–16 [type species of *Tunochilus*].

Distribution in Venezuela: Rancho Grande, Henri Pittier National Park, Aragua State (see Beebe & Crane 1947; Hoffman 1982).

**Tribe Chelodesmini Hoffman, 1978**

**Genus *Eumastostethus* Hoffman, 1978**

***Eumastostethus cuisinieri*** Hoffman, 1978;

*Eumastostethus cuisinieri* Hoffman, 1978. *Revue Suisse de Zoologie*, 85(3): 547, figs. 5–14 [type species of *Eumastostethus*], HT MALE (MHNG).

Distribution in Venezuela: Labeled ‘Botanamo (forêt)’, possibly Botanamo River ca. 07N, 61W, 50 km west of Tumerero, Bolívar State (Hoffman 1978).

**Genus *Leptherpum* Attems, 1931**

***Leptherpum carinovatum*** (Attems, 1898)

*Leptodesmus carinovatus* Attems, 1898. *Denkschriften der Kaiserlichen Akademie der Wissenschaften zu Wien, Mathematisch-Naturwissenschaftliche Classe*, 67: 376, plate 6, figs. 127–129, plate 7, fig. 154; ST MALE (ZMUH); [type species of *Leptherpum*].

*Leptodesmus carinovatus*—Attems 1901. *Mitteilungen aus dem Museum in Hamburg*, 18(2): 85; considered a mis-identification by Pocock (1909). *Biologia Centrali-Americanana, Zoologia*: 165; Loomis (1968) suggests that it is probably *Chondrodesmus singularis*.

*Leptodesmus carinovatus*—Brölemann 1904. *Revista do Museu Paulista*, 6: 74 (Group du *Leptodesmus plataleus*).

*Leptodesmus carinovatus*—Brölemann 1909. *Catalogos da Fauna Brazileira*, 2: 64.

*Dirhabdophallus carinovatus*—Pocock 1909. *Biologia Centrali-Americanana, Zoologia*: 165.

*Leptherpum carinovatum*—Attems 1931b. *Zoologica*, Stuttgart, 30(3/4)(Heft 79): 49, fig. 71.

*Leptherpum carinovatum*—Attems 1938. *Das Tierreich*, 69: 91, fig. 104.

*Leptherpum carinovatum carinovatum*—Jeekel 1950. *Entomologische Berichten*, 13(299): 71 (by implication, introduced a new subspecies).

*Leptherpum carinovatum*—Jeekel 1963. *Studies on the Fauna of Suriname and other Guyanas*, 4: 127.

Country: Brazil; specimens from Venezuela deposited in UMZC, identified as *L. carinovatum*.

***Leptherpum huebneri*** (Attems, 1901)

*Leptodesmus Hübneri* Attems, 1901. *Mitteilungen aus dem Naturhistorischen Museum in Hamburg*, 18: 93, plate 2, figs. 22–23; HT MALE (ZMUH).

*Leptherpum hübnéri*—Attems 1931b. *Zoologica*, Stuttgart, 30(3/4) (Heft 79): 48.

*Leptherpum hübnéri*—Attems 1938. *Das Tierreich*, 69: 91, fig. 103.

*Leptodesmus (Leptodesmus) huebneri*—Weidner 1960. *Mitteilungen aus dem Hamburgischen Zoologischen Museum und Institut*, 58: 84.

*Leptherpum huebneri*—Jeekel 1963. *Studies on the fauna of Suriname and other Guyanas*, 4(11): 120.

Distribution in Venezuela: Southern Venezuela (Attems 1901).

**Tribe Chondrodesmini Hoffman, 1978**

**Genus *Chondrodesmus* Silvestri, 1897**

***Chondrodesmus acanthurus*** (Peters, 1864)

*Polydesmus (Oxyurus) acanthurus* Peters, 1865. Monatsberichte der Königlichen Preussischen Akademie der Wissenschaften zu Berlin, 1864(7): 532, HT FEMALE (ZMB).

*Leptodesmus acanthurus* —Attems 1898. Denkschriften der Kaiserlichen Akademie der Wissenschaften zu Wien, Mathematisch-Naturwissenschaftliche Classe, 67: 378, examined FEMALE specimens from Venezuela, deposited in NHMW.

*Chondrodesmus acanthurus*—Carl 1914. Mémoires de la Société des Sciences Naturelles de Neuchâtel, 5: 888, figs. 115–116.

*Chondrodesmus acanthurus*—Attems 1938. Das Tierreich, 69: 88 (uncertain species).

*Chondrodesmus acanthurus*—Loomis 1968. Bulletin of the United States National Museum, 266: 12.

*Chondrodesmus acanthurus*—Hoffman 1999. VNHM Special Publication, 8: 270, no definite localities established.

Country: Panama; distribution in Venezuela: uncertain, MCZ 42285: specimen record from Venezuela in Attems collection.

***Chondrodesmus araguanus*** Chamberlin, 1952

*Chondrodesmus araguanus* Chamberlin, 1952a. Annals of the Entomological Society of America, 45: 567, fig. 14; HT MALE (FMNH 265); ‘HT’ MALE (USNM).

*Chondrodesmus araguanus*—Sierwald *et al.* 2005. Zootaxa, 1005: 25

Distribution in Venezuela: Hacienda La Trinidad near Maracay, Aragua State.

***Chondrodesmus attemsi*** Carl, 1914

*Leptodesmus Goudoti*—Attems, 1898. System der Polydesmiden I: 375, plate VI, figs. 125, 126 [nec *Leptodesmus goudoti* (Gervais, 1847)].

*Chondrodesmus attemsi* Carl, 1914. Mémoires de la Société des Sciences Naturelles de Neuchâtel, 5: 895.

*Chondrodesmus attemsi*—Attems 1938. Das Tierreich, 69: 83, fig. 95.

*Chondrodesmus attemsi*—Weidner 1960. Mitteilungen des Hamburgischen Zoologischen Museums und Instituts, 58: 81.

*Chondrodesmus attemsi*—Mortiz & Fischer 1978. Mitteilungen des Zoologischen Museums, Berlin, 54 (1): 112.

Distribution in Venezuela: Puerto Cabello, Carabobo State.

***Chondrodesmus frauenfeldianus*** (Humbert & deSaussure, 1870)

*Polydesmus (Oxyurus) frauenfeldianus* Humbert & deSaussure, 1870. Revue et Magasin de Zoologie pure et appliquée, 22: 172, HT (MHNG).

*Polydesmus (Oxyurus) frauenfeldianus*—deSaussure & Humbert 1872. Mission scientifique au Mexique et dans l’Amérique centrale, Zool., VI, 2: 30, 41; plate 1, fig. 7.

*Leptodesmus Frauenfeldianus*—Silvestri 1896. Bollettino dei Musei di Zoologia e di Anatomia Comparata R. Università di Torino, 11(254): 5.

*Leptodesmus frauenfeldianus*—Attems 1898. Denkschriften der Kaiserlichen Akademie der Wissenschaften zu Wien, Mathematisch-Naturwissenschaftliche Classe, 67: 379.

*Chondrodesmus frauenfeldianus*—Carl 1914. Mémoires de la Société des Sciences Naturelles de Neuchâtel, 5: 886.

*Chondrodesmus frauenfeldianus*—Attems 1938. Das Tierreich, 69: 89 (species uncertain).

*Leptodesmus frauenfeldianus*—Loomis 1964. Fieldiana, Zoology, 47(1): 130.

*Chondrodesmus frauenfeldianus*—Loomis 1968. Bulletin of the United States National Museum, 266: 12, new localities.

Country: Colombia; according to Attems (1938): New Granada [includes Venezuela].

***Chondrodesmus plataleus*** (Karsch, 1881)

*Polydesmus (Oxyurus) plataleus* Karsch, 1881 Archiv für Naturgeschichte, 47(1): 40, plate 3, fig. 14; HT MALE (ZMHB 658).

*Leptodesmus plataleus*—Brölemann 1898a. Annales de la Société Entomologique de France, 67(3): 290, plate 25, figs. 108–113 (MALE specimens).

*Leptodesmus plataleus*—Attems 1898. Denkschriften der Kaiserlichen Akademie der Wissenschaften zu Wien, Mathematisch-Naturwissenschaftliche Classe, 67: 407 (insufficiently known species).

*Leptodesmus plataleus*—Attems 1899. Denkschriften der Kaiserlichen Akademie der Wissenschaften zu Wien, Mathematisch-Naturwissenschaftliche Classe, 68: 427.

*Leptodesmus plataleus*—Brölemann 1900. Mémoires de la Société Zoologique de France, 13: 92.

*Dirhabdophallus plataleus*—Pocock 1909. Biologia Centrali-Americana: 162.

*Leptodesmus plataleus*—Attems 1938. Das Tierreich, 69: 50 (generic position uncertain, and refers to entry on page 84).

*Chondrodesmus plataleus*—Attems 1938. Das Tierreich, 69: 84, fig. 97.

—*plataleus*—Moritz & Fischer 1978a. Mitteilungen aus dem Zoologischen Museum in Berlin, 54(1): 127.

Distribution in Venezuela: San Esteban, without exact locality data, but probably San Esteban National Park at Carabobo State (Brölemann 1898a).

#### ***Chondrodesmus plataleus plataleus* (Karsch, 1881)**

*Leptodesmus plataleus plataleus*—Brölemann 1898b. Annales de la Société Entomologique de France, 67(3): 328.

*Chondrodesmus plataleus plataleus*—Attems 1938. Das Tierreich, 69: 85.

Distribution in Venezuela: Puerto Cabello, San Esteban, Carabobo State.

#### ***Chondrodesmus plataleus flavigorus* Brölemann, 1898**

*Leptodesmus plataleus flavigorus* Brölemann, 1898b. Annales de la Société Entomologique de France, 67(3): 328, plate 29, figs. 30–33; HT MALE (MNHN).

*Leptodesmus plataleus flavigorus*—Attems 1899. Denkschriften der Kaiserlichen Akademie der Wissenschaften zu Wien, Mathematisch-Naturwissenschaftliche Classe, 68: 428.

*Chondrodesmus plataleus flavigorus*—Attems 1938. Das Tierreich, 69: 85.

Distribution in Venezuela: Bas Sarare, Llanos región.

#### ***Chondrodesmus profugus* Attems, 1931**

*Chondrodesmus profugus* Attems, 1931. Zoologica, Stuttgart, 30(3/4) (Heft 79): 46, figs. 67–68.

*Chondrodesmus profugus*—Attems 1938. Das Tierreich, 69: 87, fig. 101.

*Chondrodesmus profugus*—Weidner 1960. Mitteilungen des Hamburgischen Zoologischen Museums und Instituts, 58: 81.

Country: Venezuela or Brazil.

#### ***Chondrodesmus voglii* Verhoeff, 1938**

*Chondrodesmus (Chondropeltis) voglii* Verhoeff, 1938. Zoologische Jahrbücher, 71(1/2): 7, plate 1, figs. 5–7; ST MALE/FEMALE (ZMHB 12700); (ZSM) [type species of *Chondropeltis*].

*Chondrodesmus voglii*—Attems 1940. Das Tierreich, 70: 550, fig. 698.

—*voglii*[sic]—Moritz & Fischer 1978a. Mitteilungen aus dem Zoologischen Museum in Berlin, 54(1): 131, type specimen catalog, species names listed in alphabetical order.

Distribution in Venezuela: Caracas, Miranda State; Maracay, Aragua State.

### **Tribe Leptodesmini, Attems, 1898**

#### **Genus *Leptodesmus* deSaussure, 1859**

##### ***Leptodesmus contristatus* Brölemann, 1898**

*Leptodesmus contristatus* Brölemann, 1898b. Annales de la Société Entomologique de France, 67(3): 325; HT FE-MALE (MNHN).

*Leptodesmus contristatus*—Attems 1899. Denkschriften der Kaiserlichen Akademie der Wissenschaften zu Wien, Mathematisch-Naturwissenschaftliche Classe, 68: 427.

*Leptodesmus contristatus*—Attems 1938. Das Tierreich, 69: 49 (generic position uncertain).

Distribution in Venezuela: Low Sarare River, without exact locality data.

***Leptodesmus flagellatus*** Demange, 1985

*Leptodesmus flagellatus* Demange, 1985. Bulletin du Muséum National d'Histoire Naturelle, 7(4): 800, figs. 3–4; HT MALE (MNHN).

Distribution in Venezuela: Cordillère de Mérida, several states.

***Leptodesmus godoii*** Schubart, 1946

*Leptodesmus godoii* Schubart, 1946. Anais da Academia Brasileira de Ciências, 18: 169, plate 1, fig. 3.

*Leptodesmus godoii*—Schubart 1955. Arquivos do Museu Nacional, 42: 515 (species group A).

*Leptodesmus godoii*—Schubart 1956. Revista Brasileira de Biologia, 16(3): 366.

*Leptodesmus godoii*—Hoffman 1971. Arquivos de Zoologia, 20(4): 246, figs. 15–16 (species group G).

Country: Brazil; distribution in Venezuela: MCZ specimen from Puerto Cabello, Carabobo State, identification uncertain.

***Leptodesmus propinquus*** Demange, 1985

*Leptodesmus propinquus* Demange, 1985. Bulletin du Muséum National d'Histoire Naturelle, 7(4): 798, figs. 12–14; HT MALE (MNHN).

Distribution in Venezuela: Cordillère de Mérida, several states.

**Tribe Lepturodesmini Hoffman, 1975**

**Genus *Eressea* Hoffman, 1975**

***Eressea phana*** (Chamberlin, 1950)

*Ankylophallus phanus* Chamberlin, 1950. Zoologica, New York, 35(2): 142, fig. 16; HT MALE (AMNH) [type species of *Eressea*].

*Eressea phana*—Hoffman 1975b. Studies on Neotropical Fauna and Environment, 10(2): 194, figs. 14–16.

Distribution in Venezuela: Rancho Grande, Aragua State (see Beebe & Crane, 1947; Chamberlin 1950).

**Genus *Lepturodesmus* Silvestri, 1898**

***Lepturodesmus annulus*** (Brölemann, 1898)

*Cyclorhabdus annulus* Brölemann, 1898a. Annales de la Société Entomologique de France, 67(3): 279, plate 23, figs. 66–71; HT MALE (MNHN) [type species of *Cyclorhabdus*].

*Leptodesmus annulus*—Attems 1899. Denkschriften der Kaiserlichen Akademie der Wissenschaften zu Wien, Mathematisch-Naturwissenschaftliche Classe, 68: 427.

*Leptodesmus annulus*—Attems 1901. Mitteilungen aus dem Naturhistorischen Museum in Hamburg, 18(2): 88.

*Cyclorhabdus decoratus annulus*—Attems 1938. Das Tierreich, 69: 172, fig 188, reduced to subspecies.

*Leptodesmus annulus*—Hoffman 1975b. Studies on Neotropical Fauna and Environment, 10(2): 193, synonymized genera *Ankylophallus*, *Caracodesmus*, *Cyclorhabdus* and *Liorhabdus* under *Lepturodesmus*.

Distribution in Venezuela: Colonia Tovar, Tovar Municipality, Aragua State.

***Lepturodesmus decoratus*** (Peters, 1864)

*Polydesmus (Oxyurus) decoratus* Peters, 1864a. Monatsberichte der Königlichen Preussischen Akademie der Wissenschaften zu Berlin, 1864: 533; ST MALE/FEMALE (ZMHB 246, 247, 248).

*Leptodesmus decoratus*—Attems 1898. Denkschriften der Kaiserlichen Akademie der Wissenschaften zu Wien, Mathematisch-Naturwissenschaftliche Classe, 67: 386, plate 6, fig. 145.

*Leptodesmus decoratus*—Attems 1901. Mitteilungen aus dem Naturhistorischen Museum in Hamburg, 18(2): 88.

*Caracodesmus decoratus*—Verhoeff 1932. Zoologische Jahrbücher, 62(5/6): 472.

*Cyclorhabdus decoratus decoratus*—Attems 1938. Das Tierreich, 69: 172, fig. 187, subspecies delineation.

*Lepturodesmus decoratus*—Hoffman 1975b. Studies on Neotropical Fauna and Environment, 10(2): 193, synonymized genera *Ankylophallus*, *Caracodesmus*, *Cyclorhabdus* and *Liorhabdus* under *Lepturodesmus*.

—decorates—Moritz & Fischer 1978a. Mitteilungen aus dem Zoologischen Museum in Berlin, 54(1): 115, type specimen catalog, species names listed in alphabetical order.  
Distribution in Venezuela: Chacao y Toras, Caracas, Miranda State.

***Lepturodesmus meinerti* Silvestri, 1898**

*Lepturodesmus Meinerti* Silvestri, 1898. Anales del Museo Nacional de Buenos Aires, 6 (3): 67; HT MALE (ZMUC) [type species of *Lepturodesmus*].

*Lepturodesmus meinerti*—Attems 1899. Denkschriften der Kaiserlichen Akademie der Wissenschaften zu Wien, Mathematisch-Naturwissenschaftliche Classe, 68: 394.

*Lepturodesmus meinerti*—Attems 1940. Das Tierreich, 70: 490 (uncertain genus).

*Lepturodesmus meinerti*—Hoffman 1975b. Studies on Neotropical Fauna and Environment, 10(2): 190, figs. 5, 7–8, synonymized genera *Ankylophallus*, *Caracodesmus*, *Cyclorhabdus* and *Liorhabdus* under *Lepturodesmus*.

*Ankylophallus chacaitus* Chamberlin, 1941a. Bulletin of the University of Utah, 31(11): 26, species synonymized with *meinerti* by Hoffman (1975b: 190); HT MALE (USNM), Caracas, Miranda State.

*Ankylophallus chicaitus*[sic]—Chamberlin 1941c. Proceedings of the Biological Society of Washington, 54: 142.

*Liorhabdus beebei* Chamberlin, 1950. Zoologica, New York, 35(2): 142, figs. 18–19; HT MALE (AMNH); species synonymized with *meinerti* by Hoffman 1975b: 190.

Distribution in Venezuela: Chacaito River, Catuche River, Cahreb River (name of river uncertain), Caracas, Miranda State; Rancho Grande, Aragua State (see Beebe and Crane 1947).

***Lepturodesmus vallecolens* (Chamberlin, 1941)**

*Ankylophallus vallecolens* Chamberlin, 1941a. Bulletin of the University of Utah, 6(4): 26; HT MALE (USNM).

*Ankylophallus vallecolens*—Chamberlin 1941c. Proceedings of the Biological Society of Washington, 54: 142.

*Lepturodesmus vallecolens*—Hoffman 1975b. Studies on Neotropical Fauna and Environment, 10(2): 192, figs. 1–3, 10–11; synonymized genera *Ankylophallus*, *Caracodesmus*, *Cyclorhabdus* and *Liorhabdus* under *Lepturodesmus*.

*Ankylophallus encantadus*—Chamberlin, 1941a. Bulletin of the University of Utah, 6(4): 27; ST MALE (USNM); synonymized with *vallecolens* by Hoffman (1975b: 192).

*Ankylophallus encantadus*—Chamberlin 1941c. Proceedings of the Biological Society of Washington, 54: 142.

Distribution in Venezuela: El Encantado; El Valle, near Caracas, Miranda State.

**Tribe Trachelodesmini Hoffman, 1975**

**Genus *Hypodesmus* Hoffman, 1975**

***Hypodesmus broelemanni* Hoffman, 1975**

*Hypodesmus broelemanni* Hoffman, 1975a. Studies on Neotropical Fauna and Environment, 10(2): 132, figs. 1–7; HT MALE (VMNH) [type species of *Hypodesmus*].

Distribution in Venezuela: 15 km northwest of Maracay, Aragua State.

**Genus *Pansararium* Hoffman, 1975**

***Pansararium geayi* (Brölemann, 1898)**

*Leptodesmus Geayi* Brölemann, 1898b. Annales de la Société Entomologique de France, 67(3): 326, plates 28, 29, figs. 17–27; ST MALE/FEMALE (MNHN) [type species of *Pansararium*].

*Trachelodesmus Geayi*—Attems 1899. Denkschriften der Kaiserlichen Akademie der Wissenschaften zu Wien, Mathematisch-Naturwissenschaftliche Classe, 68: 253.

*Phlyzakium geayi*—Attems 1938. Das Tierreich, 69: 96, figs. 112–113.

*Pansararium geayi*—Hoffman 1975a. Studies on Neotropical Fauna and Environment, 10(2): 135.

Distribution in Venezuela: Upper and low Sarare River, without exact locality data.

## Genus *Phlyzakium* Attems, 1931

### *Phlyzakium attemsi* (Brölemann, 1898)

*Leptodesmus Attemsi* Brölemann, 1898a. Annales de la Société Entomologique de France, 67(3): 285, plates 24, 25, figs. 88–103; ST (MNHN) [type species of *Phlyzakium*].

*Trachelodesmus Attemsi*—Attems 1899. Denkschriften der Kaiserlichen Akademie der Wissenschaften zu Wien, Mathematisch-Naturwissenschaftliche Classe, 68: 253.

*Phlyzakium attemsi*—Attems 1931b. Zoologica, Stuttgart, 30(79): 51.

*Phlyzakium attemsi*—Attems 1938. Das Tierreich, 69: 95, figs. 109–110.

*Phlyzakium attemsi*—Hoffman 1975a. Studies on Neotropical Fauna and Environment, 10(2): 136, figs. 8–12.

Distribution in Venezuela: Colonia Tovar, Tovar Municipality, Aragua State.

### *Phlyzakium evolutum* (Brölemann, 1898)

*Leptodesmus evolutus* Brölemann, 1898a. Annales de la Société Entomologique de France, 67(3): 288, plate 25, figs. 104–107; ST MALE/FEMALE (MNHN).

*Trachelodesmus evolutus*—Attems 1899. Denkschriften der Kaiserlichen Akademie der Wissenschaften zu Wien, Mathematisch-Naturwissenschaftliche Classe, 68: 253.

*Phlyzakium evolutum*—Attems 1938. Das Tierreich, 69: 96, fig. 111.

*Phlyzakium evolutum*—Hoffman 1975a. Studies on Neotropical Fauna and Environment, 10(2): 136.

Distribution in Venezuela: Colonia Tovar, Tovar Municipality, Aragua State (Brölemann 1898a).

### *Phlyzakium nudipes* (Brölemann, 1898)

*Leptodesmus nudipes* Brölemann, 1898b. Annales de la Société Entomologique de France, 67(3): 328, plate 29, figs. 28–29; HT FEMALE (MNHN).

*Trachelodesmus nudipes*—Attems 1899. Denkschriften der Kaiserlichen Akademie der Wissenschaften zu Wien, Mathematisch-Naturwissenschaftliche Classe, 68: 253.

*Phlyzakium nudipes*—Attems 1938. Das Tierreich, 69: 96.

Note: species not discussed by Hoffman (1975a).

Distribution in Venezuela: Low Sarare River, without exact locality data.

## Genus *Trachelodesmus* Peters, 1864

### *Trachelodesmus arcticollis* (Peters, 1864)

*Polydesmus (Scytonotus) arcticollis* Peters, 1864a. Monatsberichte der Königlichen Preussischen Akademie der Wissenschaften zu Berlin, 1864: 539; ST FEMALE (ZMHB 259, 260) [type species of *Trachelodesmus*].

*Polydesmus (Trachelodesmus) arcticollis*—Peters 1864b. Monatsberichte der Königlichen Preussischen Akademie der Wissenschaften zu Berlin, Nachtrag, 1864: 623.

*Polydesmus (Scytonotus) arcticollis*—Cook & Cook 1894. Annals of the New York Academy of Sciences, 8: 236.

*Trachelodesmus arcticollis*—Cook 1896–97. Brandtia, 4: 17, type species designation.

*Trachelodesmus arcticollis*—Attems 1899. Denkschriften der Kaiserlichen Akademie der Wissenschaften zu Wien, Mathematisch-Naturwissenschaftliche Classe, 68: 253.

*Trachelodesmus arcticollis*—Attems 1940. Das Tierreich, 70: 491 (uncertain genus).

*Trachelodesmus arcticollis*—Hoffman 1975a. Studies on Neotropical Fauna and Environment, 10(2): 138, figs. 13–17.

*arcticollis*—Moritz & Fischer 1978a. Mitteilungen aus dem Zoologischen Museum in Berlin, 54(1): 112, type specimen catalog, species names listed in alphabetical order.

Distribution in Venezuela: Caracas, Miranda State (type specimens).

### *Trachelodesmus coronatus* (Brölemann, 1898)

*Leptodesmus coronatus* Brölemann, 1898a. Annales de la Société Entomologique de France, 67(3): 289; HT FE-MALE (MNHN).

*Trachelodesmus coronatus*—Attems 1899. Denkschriften der Kaiserlichen Akademie der Wissenschaften zu Wien, Mathematisch-Naturwissenschaftliche Classe, 68: 253.

*Phlyzakium coronatum*—Attems 1938. Das Tierreich, 69: 96.

*Trachelodesmus coronatus*—Hoffman 1975a. Studies on Neotropical Fauna and Environment, 10(2): 140.

Distribution in Venezuela: Colonia Tovar, Tovar Municipality, Aragua State (Brölemann 1898a).

#### ***Trachelodesmus uncinatus* Attems, 1898**

*Trachelodesmus uncinatus* [nomen nudum] Attems, 1898. Denkschriften der Kaiserlichen Akademie der Wissenschaften zu Wien, Mathematisch-Naturwissenschaftliche Classe, 67: plate 7, figs. 165–166, in plate legend; see explanation in Hoffman (1975a: 141) regarding first description date; ST MALE/FEMALE (ZMUH).

*Trachelodesmus uncinatus*—Attems 1899. Denkschriften der Kaiserlichen Akademie der Wissenschaften zu Wien, Mathematisch-Naturwissenschaftliche Classe, 68: 252, lists plate 11 (error pro plate 7, figs. 165–166; in Denkschriften volume 67).

*Trachelodesmus uncinatus*—Attems 1940. Das Tierreich, 70: 491 (uncertain genus).

*Trachelodesmus uncinatus*—Weidner 1960. Mitteilungen aus dem Hamburgischen Zoologischen Museum und Institut, 58: 92.

*Trachelodesmus uncinatus*—Hoffman 1975a. Studies on Neotropical Fauna and Environment, 10(2): 140, fig. 18. Distribution in Venezuela: Puerto Cabello, Carabobo State (type specimens).

### **Tribe Trichomorphini Hoffman, 1979**

#### **Genus *Trichomorpha* Silvestri 1897**

##### ***Trichomorpha hoffmani* Demange, 1985**

*Trichomorpha hoffmani* Demange, 1985. Bulletin du Muséum National d’Histoire Naturelle, 7(4): 801, figs. 5–7; HT MALE (MNHN).

*Trichomorpha hoffmani*—Sierwald 2009. Festschrift: 130.

Distribution in Venezuela: Cordillère de Mérida, northwestern Venezuela.

##### ***Trichomorpha lamottei* Demange, 1985**

*Trichomorpha lamottei* Demange, 1985. Bulletin du Muséum National d’Histoire Naturelle, 7(4): 802, figs. 8–9; HT MALE (MNHN).

Distribution in Venezuela: Cordillère de Mérida, northwestern Venezuela.

##### ***Trichomorpha spinosa* Demange, 1985**

*Trichomorpha spinosa* Demange, 1985. Bulletin du Muséum National d’Histoire Naturelle, 7(4): 802, figs. 10–11; HT MALE (MNHN).

Distribution in Venezuela: Cordillère de Mérida, northwestern Venezuela.

### **Family placement uncertain**

#### ***Trachelodesmus trachynotus* Brölemann, 1898**

*Trachelodesmus trachynotus* Brölemann, 1898a. Annales de la Société Entomologique de France, 67(3): 278, plate 23, figs. 63–65; ST FEMALE juv (MNHN).

*Trachelodesmus trachynotus*—Attems 1899. Denkschriften der Kaiserlichen Akademie der Wissenschaften zu Wien, Mathematisch-Naturwissenschaftliche Classe, 68: 253.

*Trachelodesmus trachynotus*—Attems 1940. Das Tierreich, 70: 49 (uncertain genus).

*Trachelodesmus trachynotus*—Hoffman 1975a. Studies on Neotropical Fauna and Environment, 10(2): 142 (familial placement uncertain).

Distribution in Venezuela: Colonia Tovar, Tovar Municipality, Aragua State (Brölemann 1898a).

## Family Cyrtodesmidae (4 species)

### Genus *Agnurodesmus* Silvestri, 1910

*Agnurodesmus verrucosus* (Brölemann, 1898)

*Trigonostylus (Crypturodesmus) verrucosus* Brölemann, 1898a. Annales de la Société Entomologique de France, 67(3): 276, plates 22, 23, figs. 49–62; ST MALE/FEMALE (MNHN) [type species of *Agnurodesmus*].

*Katantodesmus verrucosus*—Attems 1899. Denkschriften der Kaiserlichen Akademie der Wissenschaften zu Wien, Mathematisch-Naturwissenschaftliche Classe, 68: 387.

*Agnurodesmus verrucosus*—Silvestri 1910. Zoologischer Anzeiger, 35(12/13): 359.

*Agnurodesmus verrucosus*—Attems 1940. Das Tierreich, 70: 353, figs. 496–497.

*Agnurodesmus verrucosus*—Golovatch 2001. Amazoniana, 16(3/4): 332.

Distribution in Venezuela: San Esteban, without exact locality data, but probably San Esteban National Park, Carabobo State.

### Genus *Cyrtodesmus* Gervais, 1847

Note: Loomis (1964: 34) synonymized *Oncodesmus* under *Cyrtodesmus*. Hoffman (1999: 510) argued to maintain the generic name *Oncodesmus* for the type species *granosus*. Golovatch (2001: 332) recognized that several species assigned to *Cyrtodesmus* are insufficiently known prohibiting unambiguous generic placement. The genus deserves a comprehensive revision.

*Cyrtodesmus crassisetis* (Brölemann, 1898)

*Trigonostylus crassisetis* Brölemann, 1898a. Annales de la Société Entomologique de France, 67(3): 275, plate 22, figs. 46–48; ST FEMALE (MNHN).

*Trigonostylus crassisetis*—Attems 1899. Denkschriften der Kaiserlichen Akademie der Wissenschaften zu Wien, Mathematisch-Naturwissenschaftliche Classe, 68: 382.

*Trigonostylus crassisetis*—Attems 1940. Das Tierreich, 70: 344, fig. 486.

*Trigonostylus crassisetis*—Loomis 1964. Fieldiana, 47(1): 34 (possibly to be placed into another genus).

*Cyrtodesmus crassisetis*—Golovatch 2001. Amazoniana, 16(3/4): 332 (by implication).

Distribution in Venezuela: Colonia Tovar, Tovar Municipality, Aragua State (Brölemann 1898a).

*Cyrtodesmus promaculatus* (Silvestri, 1898)

*Oncodesmus promaculatus* Silvestri, 1898. Anales del Museo Nacional de Buenos Aires, 6 (ser. 2, vol. 3): 60; HT (ZMUC).

*Oncodesmus promaculatus*—Attems 1899. Denkschriften der Kaiserlichen Akademie der Wissenschaften zu Wien, Mathematisch-Naturwissenschaftliche Classe, 68: 382.

*Oncodesmus promaculatus*—Attems 1940. Das Tierreich, 70: 348.

*Cyrtodesmus (Oncodesmus) promaculatus*—Loomis 1964. Fieldiana, 47(1): 51.

*Cyrtodesmus promaculatus*—Golovatch 2001. Amazoniana, 16(3/4): 332 (tentatively implied).

Distribution in Venezuela: Catuche River, Caracas, Miranda State.

*Cyrtodesmus spinosus* (Brölemann, 1898)

*Trigonostylus spinosus* Brölemann, 1898a. Annales de la Société Entomologique de France, 67(3): 273, plate 22, figs. 39–45; ST MALE/FEMALE (MNHN) [Type species of *Trigonostylus*].

*Trigonostylus spinosus*—Attems 1899. Denkschriften der Kaiserlichen Akademie der Wissenschaften zu Wien, Mathematisch-Naturwissenschaftliche Classe, 68: 382.

*Trigonostylus spinosus*—Attems 1914a. Archiv für Naturgeschichte, 80 A(4): 184.

*Trigonostylus spinosus*—Attems 1940. Das Tierreich, 70: 344, figs. 485–485a.

*Cyrtodesmus spinosus*—Loomis 1964. Fieldiana, 47(1): 34 (tentatively implied).

*Cyrtodesmus spinosus*—Golovatch 2001. Amazoniana, 16(3/4): 332 (tentatively implied).

Distribution in Venezuela: San Esteban, without exact locality data, but probably refers to San Esteban National Park, Carabobo State.

### Family Trichopolydesmidae (4 species)

Note: Recently, Golovatch (2013) synonymized the family Fuhrmannodesmidae to which the genera *Cryptogonodesmus* and *Cutervodesmus* were previously assigned, under Trichopolydesmidae.

### Genus *Cryptogonodesmus* Silvestri, 1898

#### *Cryptogonodesmus clavidives* Silvestri, 1898

*Cryptogonodesmus clavidives* Silvestri, 1898. Anales del Museo Nacional de Buenos Aires, 6 (ser. 2, vol. 3): 60; HT MALE (ZMUC) [type species of *Cryptogonodesmus*].

*Cryptogonodesmus clavidives*—Attems, 1899: Denkschriften der Kaiserlichen Akademie der Wissenschaften zu Wien, Mathematisch-Naturwissenschaftliche Classe, 68: 377.

*Cryptogonodesmus clavidives*—Attems 1940. Das Tierreich, 70: 180.

*Cryptogonodesmus clavidives*—Golovatch 1994. Amazoniana, 13(1/2): 137.

Distribution in Venezuela: La Moka (near Caracas according to Silvestri 1898); Miranda State.

### Genus *Cutervodesmus* Kraus, 1957

#### *Cutervodesmus bordoni* (Tabacaru, 1996)

*Venezuelodesmus bordoni* Tabacaru, 1996. Mémoires du Muséum National d'Histoire Naturelle, (Zoologie), 169: 70, fig. 2A; ST MALE/FEMALE (possibly in ISBR); species description in key.

*Cutervodesmus bordoni*—Golovatch 1996. Amazoniana, 14(1/2): 140.

Distribution in Venezuela: Parque Nacional Henri Pittier, Aragua and Carabobo State.

#### *Cutervodesmus decui* (Tabacaru, 1996)

*Venezuelodesmus decui* Tabacaru, 1996. Mémoires du Muséum National d'Histoire Naturelle, (Zoologie), 169: 70, figs. 2B–2C; ST MALE (possibly in ISBR); PT MALE and FEMALE (MNHN MY3496); HT MALE, ST MALE (possibly in ISBR); species description in key [type species of *Venezuelodesmus*].

*Cutervodesmus decui*—Golovatch 1996. Amazoniana, 14(1/2): 140.

Distribution in Venezuela: La Pastora Hill, Capadare, Falcón State.

#### *Cutervodesmus orghidani* (Tabacaru, 1996)

*Venezuelodesmus orghidani* Tabacaru, 1996. Mémoires du Muséum National d'Histoire Naturelle, (Zoologie), 169: 71; HT MALE (possibly in ISBR); species description in key.

*Cutervodesmus orghidani*—Golovatch 1996. Amazoniana, 14(1/2): 140.

Distribution in Venezuela: Road to Cueva del Tigre, La Pastora Hill, Falcón State

### Family Oniscodesmidae (4 species)

### Genus *Detodesmus* Cook, 1896

#### *Detodesmus aurantiacus* (Peters, 1864)

*Oniscodesmus aurantiacus* Peters, 1864a. Monatsberichte der Königlichen Preussischen Akademie der Wissenschaften zu Berlin, 1864: 530; ST (ZMHB 245, 233), types not listed by Mortiz & Fischer's type catalogs [type species of *Detodesmus*]

*Detodesmus aurantiacus*—Cook 1896–97. Brandtia, 5: 28.

[*Oniscodesmus aurantiacus*—Brölemann 1898a. Annales de la Société Entomologique de France, 67(3): 296, plate 26, figs. 127–141, figures made from specimens from San Esteban, see below, described by Chamberlin as *Detodesmus boremanni* [sic].

*Detodesmus aurantiacus*—Cook 1899. Proceedings of the United States National Museum, 21(1154): 457, plate

30, figs. 1a–1c (figures made from Peters's type specimen according to Chamberlin 1941b, see below under *Detodesmus brolemani* [sic]).

*Oniscodesmus aurantiacus*—Attems 1899. Denkschriften der Kaiserlichen Akademie der Wissenschaften zu Wien, Mathematisch-Naturwissenschaftliche Classe, 68: 384.

*Detodesmus aurantiacus*—Attems 1940. Das Tierreich, 70: 342, figs. 482–483.

*Glomerisphaerium aurantiacus*—Verhoeff 1941. Titschack (Ed.), Beiträge zur Fauna Perus, 2: 51.

*Detodesmus aurantiacus*—Jeekel 1970. Nomenclator: 327 (by implication; *Glomerisphaerium* is a junior objective synonym of *Detodesmus*).

*Oniscodesmus aurantiacus villosus* Brölemann 1898a. Annales de la Société Entomologique de France, 67(3): 297; ST MALE/FEMALE (MNHN).

Distribution in Venezuela: Caracas, Miranda State (Peters 1864); Colonia Tovar, Tovar Municipality, Aragua State (Brölemann 1898a).

#### ***Detodesmus brolemani* Chamberlin, 1941**

*Oniscodesmus aurantiacus* [non Peters according to Chamberlin 1941]—Brölemann 1898a: Annales de la Société Entomologique de France, 67(3): 296, plate 26, figs. 127–141; ST MALE/FEMALE (MNHN).

*Detodesmus brolemani* [error pro *brolemani*] Chamberlin, 1941b. Journal of Entomology and Zoology, Pomona College, 33(1): 58.

Distribution in Venezuela: San Esteban, without exact locality data, but probably refers to San Esteban National Park, Carabobo State (Brölemann 1898a).

### **Genus *Oniscodesmus* Gervais & Goudot, 1844**

#### ***Oniscodesmus clarus* Chamberlin, 1950**

*Oniscodesmus clarus* Chamberlin 1950. Zoologica, New York, 35(2): 143; HT FEMALE? (AMNH).

Distribution in Venezuela: Rancho Grande, Aragua State (Chamberlin 1950; see Beebe & Crane 1947).

#### ***Oniscodesmus variegatus* Chamberlin, 1950**

*Oniscodesmus variegatus* Chamberlin 1950: Zoologica, New York, 35(2): 143; HT FEMALE (AMNH).

Distribution in Venezuela: Rancho Grande, Aragua State (Chamberlin 1950; see Beebe & Crane 1947).

### **Family Paradoxosomatidae (15 species)**

### **Genus *Asiomorpha* Verhoeff, 1939**

#### ***Asiomorpha coarctata* (DeSaussure, 1860)**

*Polydesmus coarctatus* DeSaussure, 1860. Mémoires de la Société de Physique et d'Histoire Naturelle de Genève, 15: 297, plate 18, fig. 18; ST FEMALE, (possibly in MHNG) or (MNHN) [type species of *Asiomorpha*].

*Orthomorpha coarctata*—Brölemann 1898a. Annales de la Société Entomologique de France, 67: 268.

*Orthomorpha coarctata*—Attems 1901. Mitteilungen aus dem Naturhistorischen Museum in Hamburg, 18: 85.

*Orthomorpha coarctata*—Jeekel 1963. Studies on the Fauna of Suriname and other Guyanas, 4(11): 22.

*Orthomorpha coarctata*—Drift 1963. Studies on the Fauna of Suriname and other Guyanas, 4(19): 6.

*Orthomorpha coarctata*—Loomis 1964. Fieldiana, Zoology {N.S.}, 47(1): 98.

*Asiomorpha coarctata*—Cupul-Magaña & Bueno-Villegas 2006. Dugesiana, 13(1): 45, fig. 1a–c.

*Orthomorpha coarctata*—Jeekel 2009. Myriapod Memoranda, XI: 27.

*Orthomorpha coarctata*—García *et al.* 2009. In Barois *et al.* (Eds.), Below Ground Biodiversity in Sierra de Santa Marta, Los Tuxtlas, Veracruz, Mexico: 145.

*Asiomorpha coarctata*—Cupul-Magaña 2011. BIOCYT, 4(16): 312, figs. 3, 6.

*Asiomorpha coarctata*—Cupul-Magaña & Shelley 2011. Dugesiana, 18(1): 92.

Distribution in Venezuela: La Guaira, Vargas Municipality, Vargas State; Maracay, Aragua State.

Note: *Asiomorpha coarctata* is widely distributed in the tropical parts of the Oriental, Australian and Ethiopean region. See Nguyen & Sierwald (2013: CheckList, 9(6): 1236) for a comprehensive synonymy and citation list. Jekel (1963: Studies on the Fauna of Suriname and other Guyanas, 4(11): 22; under *Orthomorpha coarctata*) summarizes the records of this species in the new world up to 1963. Below, only literature published after 1963 containing records of this species from Venezuela, South America and Mexico are listed.

## Genus *Iulidesmus* Silvestri, 1895

Note: Hoffman 2012 (Zootaxa, 3204: 67), synonymized *Mestosoma* under *Iulidesmus*.

### *Iulidesmus acariguensis* (González-Sponga, 2004)

*Neactoma* [error pro *Nearctoma*] *acariguensis* González-Sponga, 2004. Boletín de la Academia de Ciencias Físicas, Matemáticas y Naturales, 64(3–4): 10, plate 1, figs. 1–7; HT MALE, PT FEMALE (MIZA) (former MAGS-887a and 887b).

*Mestosoma acariguensis*—De Ascenção & Bueno-Villegas 2013. Munis Entomology and Zoology, 8(1): 446.

Distribution in Venezuela: “Ricardo Montilla” Biological Station near Acarigua, Páez Municipality, Portuguesa State.

### *Iulidesmus brionensis* (González-Sponga, 2004)

*Neactoma* [sic!] *brionensis* González-Sponga, 2004. Boletín de la Academia de Ciencias Físicas, Matemáticas y Naturales, 64(3–4): 12, plate 2, figs. 1–7; HT MALE, PT FEMALE (MIZA) (former MAGS-272a and 272b).

*Mestosoma brionensis*—De Ascenção & Bueno-Villegas 2013. Munis Entomology and Zoology, 8(1): 446.

Distribution in Venezuela: Birongo, Brión Municipality, Miranda State.

### *Iulidesmus casimaranus* (González-Sponga, 2004)

*Neactoma* [sic!] *casimiranus* González-Sponga, 2004. Boletín de la Academia de Ciencias Físicas, Matemáticas y Naturales, 64(3–4): 14, plate 3, figs. 1–7; HT MALE, PT MALE (MIZA) (former MAGS-861a and 861b).

*Mestosoma casimiranus*—De Ascenção & Bueno-Villegas 2013. Munis Entomology and Zoology, 8(1): 446.

Distribution in Venezuela: San Casimiro, San Casimiro Municipality, Aragua State.

### *Iulidesmus minaensis* (González-Sponga, 2004)

*Neactoma* [sic!] *minaensis* González-Sponga, 2004. Boletín de la Academia de Ciencias Físicas, Matemáticas y Naturales, 64(3–4): 14, plate 4, figs. 1–7; HT MALE, PT FEMALE (MIZA) (former MAGS-999a and 999b).

*Mestosoma minaensis*—De Ascenção & Bueno-Villegas 2013. Munis Entomology and Zoology, 8(1): 446.

Distribution in Venezuela: Las Minas residential area, San Antonio de los Altos, Los Salias Municipality, Miranda State.

### *Iulidesmus mirandensis* (González-Sponga, 2004)

*Neactoma* [sic!] *mirandensis* González-Sponga, 2004. Boletín de la Academia de Ciencias Físicas, Matemáticas y Naturales, 64(3–4): 16, plate 5, figs. 1–7; HT MALE, PT FEMALE (MIZA) (former MAGS-83a and 83b).

*Mestosoma mirandensis*—De Ascenção & Bueno-Villegas 2013. Munis Entomology and Zoology, 8(1): 446.

Distribution in Venezuela: Boca de Cuira, Acevedo Municipality, Miranda State.

### *Iulidesmus monaguensis* (González-Sponga, 2004)

*Neactoma* [sic!] *monaguensis* González-Sponga, 2004. Boletín de la Academia de Ciencias Físicas, Matemáticas y Naturales, 64(3–4): 18, plate 6, figs. 1–7; HT MALE, PT FEMALE (MIZA) (former MAGS-818a and 818b).

*Mestosoma monaguensis*—De Ascenção & Bueno-Villegas 2013. Munis Entomology and Zoology, 8(1): 446.

Distribution in Venezuela: Caripe, Caripe Municipality, Monagas State.

### *Iulidesmus punctiaguda* (González-Sponga, 2004)

*Neactoma* [sic!] *punctiaguda* González-Sponga, 2004. Boletín de la Academia de Ciencias Físicas, Matemáticas y Naturales, 64(3–4): 21, Plate 7, figs. 1–7; HT MALE, PT FEMALE (MIZA) (former MAGS-199a and 199b).

*Mestosoma punctiaguda*—De Ascençao & Bueno-Villegas 2013. Munis Entomology and Zoology, 8(1): 446.  
Distribution in Venezuela: Hacienda El Limón, road to Puerto Cruz, Vargas, Vargas State; Pico Dos Banderas, La Julia Pico Goering, El Ávila National Park, Sucre Municipality, Miranda State.

***Iulidesmus ramosus* (González-Sponga, 2004)**

*Neactoma [sic!] ramosa* González-Sponga, 2004. Boletín de la Academia de Ciencias Físicas, Matemáticas y Naturales, 64(3–4): 21, Plate 8, figs. 1–7; HT MALE, PT FEMALE (MIZA) (former MAGS-203a and 203b).

*Mestosoma ramosa*—De Ascençao & Bueno-Villegas 2013. Munis Entomology and Zoology, 8(1): 446.

Distribution in Venezuela: Hacienda El Limón, road to Puerto Cruz, Vargas, Vargas State; Guatopo National Park, Acevedo Municipality, Miranda State.

***Iulidesmus venezuelanus* (Verhoeff, 1938)**

*Habrodesmus venezuelanus* Verhoeff, 1938. Zoologische Jahrbücher (Syst.), 71(1/2): 13, figs. 13–15; ST (ZSM); ST FEMALE (ZMHB 7911).

*Habrodesmus venezuelanus*—Attems 1940. Das Tierreich, 69: 543 (incompletely described species).

*Mestosoma venezuelanum*—Jeekel 1963. Studies on the Fauna of Suriname and other Guyanas, 4(11): 38.

—*venezuelanus*—Moritz & Fischer 1978a. Mitteilungen aus dem Zoologischen Museum in Berlin, 54(1): 110, type specimen catalog, species names listed in alphabetical order.

*Habrodesmus venezuelanus*—Jeekel 2002. Myriapod Memoranda, V: 45, fig. 3.

*Iulidesmus venezuelanus*—Hoffman 2012. Zootaxa, 3204: 67.

*Iulidesmus venezuelanus*—Nguyen & Sierwald 2013. CheckList, 9(6): 1196.

*Nearctoma araguanum* Chamberlin, 1952a. Annals of the Entomological Society of America, 45: 582–583, plate 7, fig. 46; HT MALE, PT FEMALE (FMNH 939), type imaged; synonymized by Jeekel 2002: Myriapod Memoranda, V: 45; see also Sierwald *et al.* 2005: Zootaxa 1005: 37; listed by Nguyen & Sierwald 2013; 1196 incorrectly as *Nearctoma araguanus* (lapsus calami).

*Mestosoma araguanum*—Jeekel 1963. Studies on the Fauna of Suriname and other Guyanas, 4(11): 36.

*Iulidesmus araguanus*—Hoffman 2012. Zootaxa, 3204: 67, listed without reference to previous synonymy by Jeekel 2002.

Distribution in Venezuela: Hacienda La Trinidad, near Maracay, Aragua State (ZSM: nine specimen records, Maracay, Aragua State (GBIF)).

***Iulidesmus zeensis* (González-Sponga, 2004)**

*Neactoma [sic!] zeensis* González-Sponga, 2004. Boletín de la Academia de Ciencias Físicas, Matemáticas y Naturales, 64(3–4): 23, Plate 9, figs. 1–7; HT MALE, PT FEMALE (MIZA) (former MAGS-1095a and 1095b).

Distribution in Venezuela: Finca Campo Alegre, Zea Municipality, Mérida State.

**Genus *Montesecaria* Kraus, 1956**

***Montesecaria golovatchi* Jeekel, 2002.** Myriapod Memoranda, V: 42, figs 1–2; HT MALE, PT MALE, PT juv FEMALE, deposition of types unknown (most likely UNIPD).

*Montesecaria golovatchi*—Nguyen & Sierwald 2013. CheckList, 9(6): 1197.

Distribution in Venezuela: El Junquito, near Caracas (D.F.), 1900 m.a.s.l., clouded forest, August 1948, Miranda State.

**Genus *Onciurosoma* Silvestri, 1932**

***Onciurosoma cumbrense* (Brölemann, 1898)**

*Strongylosomum cumbrense* Brölemann, 1898a. Annales de la Société Entomologique de France, 67(3): 306; ST MALE/FEMALE (MNHN).

*Strongylosoma cumbrense*—Brölemann 1900. Mémoires de la Société Zoologique de France, 13: 125, plate 8, figs. 120–121.

*Onciurosoma cumbrense*—Jeekel 1963. Studies on the Fauna of Suriname and other Guyanas, 4(11): 56.  
*Onciurosoma cumbrense*—Jeekel 1968. Bronder-Offset Rotterdam, private published: 114.  
*Onciurosoma cumbrense*—Golovatch 1992. Amazoniana, 12(2): 231, figs. 33–34.  
*Onciurosoma cumbrense*—Jeekel 2002. Myriapod Memoranda, V: 49, fig. 4, several specimens examined.  
*Onciurosoma cumbrense*—Nguyen & Sierwald 2013. CheckList, 9(6): 1224.  
Distribution in Venezuela: Rancho Grande, Cordillera de la Costa, west of Caracas, Aragua State (Brölemann 1898a; see Beebe & Crane 1947; Chamberlin 1950); La Cumbre, without exact locality data; San Esteban, without exact locality data, but probably San Esteban National Park, Carabobo State.

***Onciurosoma neotropicum*** Silvestri, 1932  
*Onciurosoma neotropicum* Silvestri, 1932. American Museum Novitates, 565: 1, fig. 1; HT ST MALE/FEMALE (AMNH 6627) [type species of *Onciurosoma*].  
*Onciurosoma neotropicum*—Attems 1937. Das Tierreich, 68: 57, fig. 72.  
*Onciurosoma neotropicum*—Kraus 1956. Senckenbergiana Biologica, 37(5–6): 404.  
*Onciurosoma neotropicum*—Jeekel 1968. Bronder-Offset Rotterdam, private published: 114.  
*Onciurosoma neotropicum*—Golovatch 1992. Amazoniana, 12(2): 231, figs. 27–28.  
*Onciurosoma neotropicum*—Jeekel 2002. Myriapod Memoranda, V: 49–50.  
*Onciurosoma neotropicum*—Nguyen & Sierwald 2013. CheckList, 9(6): 1223.  
Distribution in Venezuela: Vegas Falls, Mt. Duida, 1570 m.a.s.l., [03°30'48"N, 65°37'34"W] Amazonas State (Silvestri 1932).

## Genus *Oxidus* Cook, 1911

### ***Oxidus gracilis*** (C.L. Koch, 1847)

*Fontaria gracilis* C.L. Koch, 1847. In: Panzer and Herrich-Schäffer (Eds.), Kritische Revision der Insectenfauna Deutschlands, III. Bändchen, Regensburg: 142; type deposition unknown [type species of the genus *Oxidus*].  
*Orthomorpha gracilis*—Chamberlin 1920. Bulletin of the Museum of Comparative Zoology, 64: 113.  
*Orthomorpha (Kalorthomorpha) gracilis*—Attems 1937. Das Tierreich, 68: 82, fig. 101, introduced almost worldwide, known from several South American countries.

*Orthomorpha gracilis*—Chamberlin 1941c. Proceedings of the Biological Society of Washington, 54: 142.  
*Orthomorpha gracilis*—Demange 1985. Bulletin du Muséum National d'Histoire Naturelle, {Sér. 4, Section A, Zoologie}, {4} 7(4): 796.  
Distribution in Venezuela: reported from El Valle, near Caracas, Miranda State (Chamberlin 1941c); Mérida city, Mérida State, collected by Bueno-Villegas in 2010; complete synonymy and citation list in Nguyen & Sierwald 2013: CheckList, 9(6): 1292.

## Genus *Strongylosoma* Brandt, 1833

### ***Strongylosoma vermiculare*** Peters, 1864

*Strongylosoma vermiculare* Peters, 1864a. Monatsberichte der Königlichen Preussischen Akademie der Wissenschaften zu Berlin, 1864: 536; ST MALE? (ZMHB 254).  
—*vermiculare*—Moritz & Fischer 1978a. Mitteilungen aus dem Zoologischen Museum in Berlin, 54(1): 110, type specimen catalog, species names listed in alphabetical order.  
*Strongylosoma vermiculare*—Jeekel 2002. Myriapod Memoranda, V: 50 (unrecognizable species).  
*Strongylosoma vermiculare*—Nguyen & Sierwald 2013. CheckList, 9(6): 1332 (listed under uncertain tribal position).  
Distribution in Venezuela: Caracas: Chacao, Miranda State (Peters 1864a).

## Family Platyrhacidae (1 species)

## **Genus *Platyrhacus* C.L. Koch, 1847**

*Platyrhacus venezuelianus* Brölemann, 1898

*Platyrhachus*[sic!] *venezuelianus* Brölemann, 1898b. Annales de la Société Entomologique de France, 67(3): 321; HT FEMALE (MNHN).

*Platyrhacus venezuelianus*—Jeekel 1963. Studies on the Fauna of Suriname and other Guyanas, 4(11): 92.

Distribution in Venezuela: Llanos de Venezuela, without exact locality data.

## **Family Pyrgodesmidae (9 species)**

### **Genus *Corypherepsis* Attems, 1914**

*Corypherepsis finitimus* (Brölemann, 1898)

*Cryptodesmus finitimus* Brölemann, 1898a. Annales de la Société Entomologique de France, 67(3): 271, plate 21, fig. 33; ST MALE/FEMALE (MNHN).

*Psochodesmus finitimus*—Attems 1899. Denkschriften der Kaiserlichen Akademie der Wissenschaften zu Wien, Mathematisch-Naturwissenschaftliche Classe, 68: 370.

*Corypherepsis finitimus*—Attems 1940. Das Tierreich, 70: 235, fig. 332.

Distribution in Venezuela: Corozal, without exact locality data, possibly Trujillo State. (Brölemann 1898a).

*Corypherepsis laceratus* (Brölemann, 1898)

*Cryptodesmus laceratus* Brölemann, 1898a. Annales de la Société Entomologique de France, 67(3): 269, plate 21, figs. 20–32; ST MALE/FEMALE (MNHN) [type species of *Corypherepsis*].

*Psochodesmus laceratus*—Attems 1899. Denkschriften der Kaiserlichen Akademie der Wissenschaften zu Wien, Mathematisch-Naturwissenschaftliche Classe, 68: 370.

*Corypherepsis lacerates*—Attems 1914. Archiv für Naturgeschichte, 80 A(4): 177.

*Corypherepsis lacerates*—Attems 1940. Das Tierreich, 70: 234, figs. 330–332.

Distribution in Venezuela: Colonia Tovar, Tovar Municipality, Aragua State (Brölemann 1898a).

*Corypherepsis simoni* (Brölemann, 1898)

*Cryptodesmus Simoni* Brölemann, 1898a. Annales de la Société Entomologique de France, 67(3): 271, plate 21, figs. 34–38; ST MALE/FEMALE (MNHN).

*Psochodesmus Simoni*—Attems 1899. Denkschriften der Kaiserlichen Akademie der Wissenschaften zu Wien, Mathematisch-Naturwissenschaftliche Classe, 68: 370.

*Corypherepsis simoni*—Attems 1940. Das Tierreich, 70: 235, figs. 333–334.

Distribution in Venezuela: San Esteban, without exact locality data in the original description, but probably refers to San Esteban National Park, Carabobo State (Brölemann 1898a).

## **Genus *Docodesmus* Cook, 1896**

*Docodesmus centralis* Silvestri, 1898

*Docodesmus centralis* Silvestri, 1898. Anales del Museo Nacional de Buenos Aires, 6 (ser. 2, vol. 3): 62; HT MALE (MSNG).

*Docodesmus centralis*—Golovatch 1997. Amazoniana, 14(3/4): 328.

*Docodesmus centralis*—Jorgensen & Sierwald 2010. International Journal of Myriapodology, 3(1): 42, *incertae sedis*.

Distribution in Venezuela: (Gambe?) La Guaira, Vargas State.

## **Genus *Enantigonodesmus* Silvestri, 1898**

*Enantigonodesmus planus* Silvestri, 1898

*Enantigonodesmus planus* Silvestri, 1898. Anales del Museo Nacional de Buenos Aires, 6 (ser. 2, vol. 3): 62; HT

MALE (ZMUC) [type species of *Enantigonodesmus*].  
*Enantigonodesmus planus*—Attems 1899. Denkschriften der Kaiserlichen Akademie der Wissenschaften zu Wien, Mathematisch-Naturwissenschaftliche Classe, 68: 374.  
Distribution in Venezuela: Catuche River (Caracas?), Miranda State.

### Genus *Schedypodesmus* Silvestri, 1898

***Schedypodesmus convexus*** Silvestri, 1898  
*Schedypodesmus convexus* Silvestri, 1898. Anales del Museo Nacional de Buenos Aires, 6: 61; HT ZMUC [type species of *Schedypodesmus*].  
*Schedypodesmus convexus*—Attems 1899. Denkschriften der Kaiserlichen Akademie der Wissenschaften zu Wien, Mathematisch-Naturwissenschaftliche Classe, 68: 358.  
Distribution in Venezuela: Las Trincheras, Valencia Municipality, Carabobo State.

### Genus *Stictodesmus* Silvestri, 1898

***Stictodesmus laetus*** Silvestri, 1898  
*Stictodesmus laetus* Silvestri, 1898. Anales del Museo Nacional de Buenos Aires, 6(3): 61; HT FEMALE (ZMUC).  
*Stictodesmus laetus*—Attems 1899. Denkschriften der Kaiserlichen Akademie der Wissenschaften zu Wien, Mathematisch-Naturwissenschaftliche Classe, 68: 363 (description of single FEMALE insufficient).  
Distribution in Venezuela: La Moka (near Caracas according to Silvestri, 1898, 1903), Miranda State.

### Genus *Tridesmus* Cook, 1896

Note: see discussion of genus name and status *Tridesmus* in Jorgensen & Sierwald 2010: International Journal of Myriapodology, 3(1): 38. The type species of this genus was never validly described.

***Tridesmus cognatus*** Silvestri, 1898  
*Tridesmus cognatus* Silvestri, 1898. Anales del Museo Nacional de Buenos Aires, 6 (ser. 2, vol. 3): 63; HT (ZMUC).  
*Cryptodesmus? Cognatus*—Attems 1899. Denkschriften der Kaiserlichen Akademie der Wissenschaften zu Wien, Mathematisch-Naturwissenschaftliche Classe, 68: 368.  
*Tridesmus cognatus*—Jorgensen & Sierwald 2010. International Journal of Myriapodology, 3(1): 38.  
Distribution in Venezuela: Caracas, Miranda State.  
***Tridesmus serratus*** Silvestri, 1898  
*Tridesmus serratus* Silvestri, 1898. Anales del Museo Nacional de Buenos Aires, 6(3): 63; HT (ZMUC).  
*Cryptodesmus (?) serratus*—Attems 1899. Denkschriften der Kaiserlichen Akademie der Wissenschaften zu Wien, Mathematisch-Naturwissenschaftliche Classe, 68: 368.  
*Tridesmus serratus*—Jorgensen & Sierwald 2010. International Journal of Myriapodology, 3(1): 38.  
Distribution in Venezuela: Dos Caminos, Caracas Municipality, Miranda State.

Specimens of the order Polydesmida reported in collections: FMNH (catalog # 3121116, 3121114, Miranda State; 3121144, Mérida State; 5930, 13077, 11538, Aragua State).

## Order Polyzoniida

### Family Siphonotidae (1 species)

## Genus *Rhinotus* Cook, 1896

*Rhinotus purpureus* (Pocock, 1894)

*Siphonotus purpureus* Pocock 1894. Journal of the Linnean Society of London, Zoology, 24(157): 479, plate 37, fig. 5; ST FEMALE (BMNH), from St. Vincent, Lesser Antilles.

*Siphonotus purpureus*—Loomis 1934. Smithsonian Miscellaneous Collections, 89(14): 9.

*Siphonoconus purpureus*—Causey 1965. Proceedings of the Louisiana Academy of Sciences, 28: 53, fig. 1.

*Rhinotus purpureus*—Hoffman 1977. Deutsche Entomologische Zeitschrift, NF 24(4–5): 429.

*Rhinotus purpureus*—Hoffman 1999. Virginia Museum of Natural History Special Publication Number 8: 36.

*Siphonotus africanus* Cook, 1896. American Naturalist, 30(358): 842, plate 18, figs. 1–15. ST (USNM) from Free-town, Sierra Leone; Hoffman 1977. Deutsche Entomologische Zeitschrift, NF 24(4–5): 429, suggested synonymy; listed as a potential synonym in Hoffman (1999).

*Siphonotus miamensis* Causey, 1953. Florida Entomologist, 36: 71, figs. 1–2. MALE HT (INHS) from Miami, Dade Co., Florida. Synonymized by Causey 1965. Proceedings of the Louisiana of Sciences, 28: 53.

Distribution in Venezuela: The presence of the species in Caracas, Venezuela was assumed by Hoffman (1999: 36).

## Order Siphonophorida

### Family Siphonophoridae (2 species)

#### Genus *Siphonophora* Brandt, 1837

*Siphonophora lineata* Peters, 1864

*Siphonophora lineata* Peters, 1864a. Monatsberichte der Königlichen Preussischen Akademie der Wissenschaften zu Berlin, 1864: 550; ST (ZMHB 232, 233).

*Siphonophora lineata*—Preudhomme de Borre 1884. Annales de la Société Entomologique de Belgique, 28: 81.

*Siphonophora lineata*—Brölemann 1898a. Annales de la Société Entomologique de France, 67(3): 303, plate 27, figs. 154–163 (MALE described).

*Siphonophora bilineata* [sic!]—Carl 1912. Revue Suisse de Zoologie, 20(9): 511.

*Siphonophora lineata*—Attems 1931a. Archiv für Hydrobiologie, Supplement, 8: 176.

*Siphonophora lineata*—Carl 1944. Revue Suisse de Zoologie, 51(7): 258.

—*lineata*—Moritz & Fischer 1978b. Mitteilungen aus dem Zoologischen Museum in Berlin, 54(2): 339.

*Siphonophora lineata*—Shelley 1996. Journal of Natural History, 30: 1808.

*Siphonophora lineata*—Jeekel 2001a. Myriapod Memoranda, III: 59.

Distribution in Venezuela: Colonia Tovar, Tovar Municipality, Aragua State (Brölemann 1898a), four MNHN specimen records, including one from Sucre State.

*Siphonophora meinerti* Silvestri, 1898

*Siphonophora Meinerti* Silvestri, 1898. Anales del Museo Nacional de Buenos Aires, 6: 54; HT FEMALE (ZMUC).

*Siphonophora meinerti*—Shelley 1996. Journal of Natural History, 30: 1808.

*Siphonophora meinerti*—Jeekel 2001a. Myriapod Memoranda, III: 61(doubtful species).

Distribution in Venezuela: Catuche River, without detailed information, possibly around Caracas City.

## Order Spirobolida

### Family Rhinocricidae (34 species)

#### Genus *Anadenobolus* Silvestri, 1897

*Anadenobolus monilicornis* (Porat, 1876)

*Spirobolus monilicornis* Porat, 1876. Bihang till Kongl. Svenska Vetenskaps-Akademiens Handlingar, 4(7): 31; HT

MALE (NHRS).

*Rhinocricus monilicornis*—Pocock 1894. Journal of the Linnean Society of London, Zoology, 24(157): 499.

*Rhinocricus monilicornis*—Chamberlin 1950. Zoologica, New York, 35(2): 140.

*Rhinocricus monilicornis*—Loomis 1936. Bulletin of the Museum of Comparative Zoology at Harvard, 80(1): 62.

*Anadenobolus monilicornis*—Hoffman 1999. Virginia Museum of Natural History Special Publication Number 8: 82.

*Anadenobolus monilicornis*—Marek *et al.* 2003. Zootaxa, 308: 38.

*Anadenobolus monilicornis*—Shelley 2014. Insecta Mundi, 0378: 3.

*Spirobolus heilprini* Bollman, 1889: Proceedings of the Academy of Natural Sciences of Philadelphia, 99: 127.

MALE HT (ANSP). Bermuda Islands. Synonymized by Pocock (1893a). The Annals and Magazine of Natural History, (6)11: 138.

*Spirobolus virescens* Daday, 1891a. Természettajzi Füzetek, 14(3/4): 140, plate 7, figs. 8–10. ST (HNHM); synonymized by Pocock 1893a. The Annals and Magazine of Natural History, (6)11: 138.

Distribution in Venezuela: FEMALE specimen from Venezuela, Caripito, Monagas State (Chamberlin 1950, deposited in AMNH). Hoffman (1999) considers that the type locality Brazil as probably incorrect.

### Genus *Metacricus* Chamberlin, 1953

#### *Metacricus modestus* Chamberlin, 1953

*Metacricus modestus* Chamberlin, 1953. American Midland Naturalist, 50: 141; ST MALE/FEMALE FMNH 935, 955; PT MALE (USNM) [type species of *Metacricus*]

*Metacricus modestus*—Marek *et al.* 2003. Zootaxa, 308: 38.

*Metacricus modestus*—Sierwald *et al.* 2005. Zootaxa, 1005: 48.

Distribution in Venezuela: Caracas, Distrito Capital (former Distrito Federal), Miranda State.

### Genus *Neocricus* Chamberlin, 1941

#### *Neocricus caudatus caudatus* (Newport, 1844)

*Spirobolus caudatus* Newport, 1844. The Annals and Magazine of Natural History, 13(84): 269; HT MALE (BMNH).

*Spirobolus caudatus*—Gray 1844. List of the specimens of Myriapoda in the collection of the British Museum: 13.

*Iulus caudatus*—Gervais 1847. Histoire Naturelle des Insectes Aptères, 4: 190.

*Spirobolus caudatus*—Bollman 1893. Bulletin of the United States National Museum, 46: 193.

*Spirobolus caudatus*—Pocock 1893b. The Annals and Magazine of Natural History, 11: 249.

*Rhinocricus caudatus*—Brölemann 1898a. Annales de la Société Entomologique de France, 67(3): 298, plate 27, figs. 142–145 (MALE specimens).

*Rhinocricus caudatus*—Brölemann 1898b. Annales de la Société Entomologique de France, 67(3): 330 (one FE-MALE specimen).

*Dinematocricus caudatus*—Brölemann 1913. Records of the Australian Museum, 10(6): 123.

*Rhinocricus caudatus*—Carl 1914. Mémoires de la Société des Sciences Naturelles de Neuchâtel, 5: 970 (confirms synonymy of *laetus* under *caudatus*).

*Neocricus caudatus*—Schubart 1951. Anais da Academia Brasileira de Ciências, 23(2): 240.

*Rhinocricus caudatus*—Jeekel 1963. Studies on the Fauna of Suriname and other Guyanas, 4(11): 6.

*Neocricus caudatus*—González-Sponga 2005. Revista de Investigación, 57: 14.

*Neocricus caudatus caudatus*—Marek *et al.* 2003. Zootaxa, 308: 38.

*Spirobolus (Rhinocricus) laetus* Karsch, 1881. Zeitschrift für die Gesammten Naturwissenschaften, 54: 70; ST (ZMHB), 173, 174, 178, 273, 456, 457, 459, 461, 857; assumed to be collected in the Moluccas; synonymized by Pocock 1893b. The Annals and Magazine of Natural History, 11: 249.

*Spirobolus laetus*—Preudhomme de Borre 1884. Annales de la Société Entomologique de Belgique, 28: 75.

*Spirobolus laetus*—Porat 1888. Annales de la Société Entomologique de Belgique, 32: 234.

—*laetus*—Moritz & Fischer 1975. Mitteilungen aus dem Zoologischen Museum in Berlin, 51(2): 249, type specimen

catalog, species names listed in alphabetical order.

“*Rhinocricus*” *laetus*—Jeekel 2001b. Myriapoda Memoranda, IV: 44. (Jeekel discusses synonymy with *caudatus* versus synonymy with *caudatus montanus*).

Distribution in Venezuela: Caracas, Miranda State (Brölemann 1898a); San Esteban, without detailed locality information, probably refers to San Esteban National Park in Carabobo State (Brölemann 1898a; González-Sponga 2005); Low Sarare River, Lara State, without detailed locality information; 15 GBIF specimen records from Trujillo, Miranda, and Mérida State (MNHN).

***Neocricus caudatus montana*** (Brölemann, 1898)

*Rhinocricus caudatus montana* Brölemann, 1898a. Annales de la Société Entomologique de France, 67(3): 299, plate 27, figs. 146–149; HT MALE (MNHN 4356).

*Neocricus caudatus montana*—Schubart 1951. Anais da Academia Brasileira de Ciências, 23(2): 240.

*Niocricus caudatus montana*—Jeekel 2001b. Myriapoda Memoranda, IV: 44 (discusses synonymy of *laetus* under *caudatus montana*).

*Neocricus caudatus montanus*[sic!]?—Marek *et al.* 2003. Zootaxa, 308: 39; *montana* [=mountainous region] is a noun in apposition.

Distribution in Venezuela: Colonia Tovar, Tovar Municipality, Aragua State (Brölemann 1898a).

***Neocricus chacaitus*** Chamberlin, 1941

*Neocricus chacaitus* Chamberlin, 1941a. Bulletin of the University of Utah, 31(11): 16; HT MALE MCZ; HT MALE (USNM).

*Neocricus chacaitus*—Chamberlin 1941c. Proceedings of the Biological Society of Washington, 54: 142.

*Neocricus chacaitus*—Marek *et al.* 2003. Zootaxa, 308: 39.

Distribution in Venezuela: Chacaíto River, Caracas City, Miranda State (Chamberlin 1941a).

***Neocricus conclusus*** Chamberlin, 1950

*Neocricus conclusus* Chamberlin, 1950. Zoologica, New York, 35(2): 138, figs. 22–23; HT MALE (AMNH).

*Neocricus conclusus*—Marek *et al.* 2003. Zootaxa, 308: 39.

Distribution in Venezuela: Rancho Grande, Aragua State (Chamberlin 1950; see Beebe & Crane 1947).

***Neocricus encantus*** Chamberlin, 1941

*Neocricus encantus* Chamberlin, 1941a. Bulletin of the University of Utah, 31(11): 15; HT FEMALE (MCZ); HT FEMALE (USNM).

*Neocricus encantus*—Chamberlin 1941c. Proceedings of the Biological Society of Washington, 54: 142.

*Neocricus encantus*—Chamberlin 1950. Zoologica, New York, 35(2): 136.

*Neocricus encantus*—Marek *et al.* 2003. Zootaxa, 308: 39.

Distribution in Venezuela: El Encanto, near Petare, Miranda State; Caripito, Monagas State; Rancho Grande, Aragua State (Chamberlin 1941a; see Beebe & Crane 1947).

***Neocricus foederatus*** Chamberlin, 1941

*Neocricus foederatus* Chamberlin, 1941a. Bulletin of the University of Utah, 31(11): 15; HT (USNM); ‘HT’ MALE (MCZ) [type species of *Neocricus*].

*Neocricus foederatus*—Chamberlin 1941c. Proceedings of the Biological Society of Washington, 54: 141.

*Neocricus foederatus*—Marek *et al.* 2003. Zootaxa, 308: 39.

Distribution in Venezuela: El Valle, Distrito Capital (former Distrito Federal), Caracas City, Miranda State (Chamberlin 1941a).

***Neocricus ireneei*** Chamberlin, 1953

*Neocricus ireneei* Chamberlin, 1953. American Midland Naturalist, 50: 143, figs. 5–6; HT MALE (FMNH 941), type imaged.

*Neocricus ireneei*—Marek *et al.* 2003. Zootaxa, 308: 39.

*Neocricus ireneei*—Sierwald *et al.* 2005. Zootaxa, 1005: 49.

Distribution in Venezuela: Probably near Caracas City, Miranda State (Chamberlin 1953).

***Neocricus permundus* Chamberlin, 1950**

*Neocricus permundus* Chamberlin, 1950. *Zoologica*, New York, 35(2): 136, figs. 3–4; HT MALE (AMNH); PT MALE (USNM).

*Neocricus permundus*—Marek *et al.* 2003. *Zootaxa*, 308: 39.

Distribution in Venezuela: Rancho Grande, Aragua State (Chamberlin 1950; see Beebe & Crane 1947).

***Neocricus ruberculinus* (Silvestri, 1898)**

*Rhinocricus ruberculinus* Silvestri, 1898: *Anales del Museo Nacional de Buenos Aires*, 6: 77; HT FEMALE (ZMUC).

*Neocricus ruberculinus*—Chamberlin 1950. *Zoologica*, New York, 35(2): 138.

*Neocricus ruberculinus*—Marek *et al.* 2003. *Zootaxa*, 308: 39.

Distribution in Venezuela: Caracas, Miranda State (Silvestri 1898); Rancho Grande, Aragua State (Chamberlin 1950).

***Neocricus tivior* Chamberlin, 1950**

*Neocricus tivior* Chamberlin, 1950. *Zoologica*, New York, 35(2): 138, figs. 5, 6; HT MALE (AMNH).

*Neocricus tivior*—Marek *et al.* 2003. *Zootaxa*, 308: 39.

Distribution in Venezuela: Banks of the Ocumare River, Aragua State.

**Genus *Rhinocricus* Karsch, 1881**

***Rhinocricus acrotypus* Chamberlin, 1950**

*Rhinocricus acrotypus* Chamberlin, 1950. *Zoologica*, New York, 35(2): 140, figs. 9–10; HT MALE AMNH.

*Rhinocricus acrotypus*—Marek *et al.* 2003. *Zootaxa*, 308: 47.

Distribution in Venezuela: Caripito, Monagas State.

***Rhinocricus araguensis* González-Sponga, 2005**

*Rhinocricus araguensis* González-Sponga, 2005. *Revista de Investigación*, 57: 16–18, plate 1, figs. 1–6, map 1; HT MALE, PT FEMALE (MIZA) (Former MAGS-245a and 245b).

Distribution in Venezuela: La Montañita, road between Tejerías and Tiara, Santos Michelena Municipality, Aragua State

***Rhinocricus autanensis* González-Sponga, 2005**

*Rhinocricus autanensis* González-Sponga, 2005. *Revista de Investigación*, 57: 19–21, plate 2, figs. 1–6, map 1; HT MALE, PT MALE (MIZA) (Former MAGS-285a and 285b).

Distribution in Venezuela: Caño Cabeza de Manteco, tributary to Autana River, Atures Municipality, Amazonas State.

***Rhinocricus avilensis* González-Sponga, 2005**

*Rhinocricus avilensis* González-Sponga, 2005. *Revista de Investigación*, 57: 22–24, plate 3, figs. 1–6, map 1; HT MALE, PT FEMALE (MIZA) (Former MAGS-511a and 511b).

Distribution in Venezuela: Quebrada Quintero, El Ávila National Park, Sucre Municipality, Miranda State.

***Rhinocricus caripensis* González-Sponga, 2005**

*Rhinocricus caripensis* González-Sponga, 2005. *Revista de Investigación*, 57: 25–27, plate 4, figs. 1–6, map 1; HT MALE, PT FEMALE (MIZA) (Former MAGS-821a and 821b).

Distribution in Venezuela: Caripe, around El Guácharo cave, Caripe Municipality, Monagas State.

***Rhinocricus carupanensis* González-Sponga, 2005**

*Rhinocricus carupanensis* González-Sponga, 2005. *Revista de Investigación*, 57: 28–30, plate 5, figs. 1–6, map 1; HT MALE, PT FEMALE (MIZA) (Former MAGS-471a and 471b).

Distribution in Venezuela: Around Carúpano, Bermúdez Municipality, Sucre State.

***Rhinocricus cuirensis*** González-Sponga, 2005

*Rhinocricus cuirensis* González-Sponga, 2005. Revista de Investigación, 57: 31–33, plate 6, figs. 1–7, map 1; HT MALE, PT FEMALE (MIZA) (Former MAGS-77a and 77b).

Distribution in Venezuela: Boca de Cuira, Acevedo Municipality, Miranda State.

***Rhinocricus charallavensis*** González-Sponga, 2005

*Rhinocricus charallavensis* González-Sponga, 2005. Revista de Investigación, 57: 34–36, plate 7, figs. 1–6, map 1; HT MALE (MIZA) (Former MAGS-235).

Distribution in Venezuela: Los Amarillos, old road from Caracas to Charallave, Cristóbal Rojas Municipality, Miranda State.

***Rhinocricus chiguaricensis*** González-Sponga, 2005

*Rhinocricus chiguaricensis* González-Sponga, 2005. Revista de Investigación, 57: 37–39, plate 8, figs. 1–6, map 1; HT MALE, PT FEMALE (MIZA) (Former MAGS-146a and 146b).

Distribution in Venezuela: Chiguará, Hacienda Buruquel, Sucre Municipality, Mérida State.

***Rhinocricus facatus*** (Karsch, 1881)

*Spirobolus (Rhinocricus) facatus* Karsch, 1881a. Zeitschrift für die Gesammten Naturwissenschaften, 54: 72; HT MALE (ZMHB 578).

—*facatus*—Moritz & Fischer 1975. Mitteilungen aus dem Zoologischen Museum in Berlin, 51(2): 248, type specimen catalog, species names listed in alphabetical order.

*Rhinocricus facatus*—Marek *et al.* 2003. Zootaxa, 308: 55.

Distribution in Venezuela: Caracas, Miranda State.

***Rhinocricus finitimus*** Chamberlin, 1950

*Rhinocricus finitimus* Chamberlin, 1950. Zoologica, New York, 35(2): 140, figs 11, 12 HT MALE (AMNH).

*Rhinocricus finitimus*—Marek *et al.* 2003. Zootaxa, 308: 55.

Distribution in Venezuela: Caripito, Monagas State.

***Rhinocricus flavocinctus*** (Karsch, 1881)

*Spirobolus (Rhinocricus) flavocinctus* Karsch, 1881a. Zeitschrift für die Gesammten Naturwissenschaften, 54: 72; ST MALE/FEMALE (ZMHB 531, 532, 533).

*Rhinocricus flavocinctus*—Brölemann 1898a. Annales de la Société Entomologique de France, 67(3): 300, figs. 130–133 (MALE specimens).

—*flavocinctus*—Moritz & Fischer 1975. Mitteilungen aus dem Zoologischen Museum in Berlin, 51(2): 248, type specimen catalog, species names listed in alphabetical order.

*Rhinocricus flavocinctus*—Marek *et al.* 2003. Zootaxa, 308: 55.

*Rinocricus flavocinctus*—González-Sponga 2005. Revista de Investigación, 57: 14.

Distribution in Venezuela: Caracas, Miranda State (Brölemann 1898a); Colonia Tovar, Tovar Municipality, Aragua State (Brölemann 1898a).

***Rhinocricus insignarius*** Silvestri, 1898

*Rhinocricus insignarius* Silvestri, 1898. Anales del Museo Nacional de Buenos Aires, 6: 77; HT FEMALE ZMUC.

*Rhinocricus insignarius*—Marek *et al.* 2003. Zootaxa, 308: 57.

Distribution in Venezuela: Las Trincheras, Valencia Municipality, Carabobo State.

***Rhinocricus meinerti*** Silvestri, 1898

*Rhinocricus meinerti* Silvestri, 1898. Anales del Museo Nacional de Buenos Aires, 6: 77; HT MALE ZMUC.

*Rhinocricus meinerti*—Marek *et al.* 2003. Zootaxa, 308: 60.

Distribution in Venezuela: Las Trincheras, Valencia Municipality, Carabobo State.

***Rhinocricus morechalus*** Causey, 1957

*Rhinocricus dispar* Causey, 1954. Proceedings of the Biological Society of Washington, 67: 60, figs. 9–11; HT MALE (INHS 12); name preoccupied by *Rhinocricus dispar* Silvestri, 1895a. Bollettino dei Musei di Zoologia e di Anatomia Comparata R. Università di Torino, 10(203): 12.

*Rhinocricus morechalus* Causey, 1957. nom. nov. pro *Rhinocricus dispar* Causey, 1954: Journal of the Kansas Entomological Society, 30(3): 120.

*Rhinocricus morechalus*—Marek et al. 2003. Zootaxa, 308: 61.

Distribution in Venezuela: Morechal, Delta-Amacuro State.

Note: González-Sponga 2005:14; cites *Rhinocricus dispar* Causey, 1954 from Morichal, Monagas State.

***Rhinocricus rubritypus*** Chamberlin, 1950

*Rhinocricus rubritypus* Chamberlin, 1950. Zoologica, New York, 35(2): 140; HT FEMALE (AMNH).

*Rhinocricus rubritypus*—Marek et al. 2003. Zootaxa, 308: 65.

Distribution in Venezuela: Rancho Grande, Aragua State (see Beebe & Crane 1947).

***Rhinocricus segnis*** Silvestri, 1898

*Rhinocricus segnis* Silvestri, 1898. Anales del Museo Nacional de Buenos Aires, 6: 76; HT MALE (ZMUC).

*Rhinocricus segnis*—Marek et al. 2003. Zootaxa, 308: 66.

Distribution in Venezuela: Caracas, Miranda State.

***Rhinocricus tacataensis*** González-Sponga, 2005

*Rhinocricus tacataensis* González-Sponga, 2005. Revista de Investigación, 57: 40–42, plate 9, figs. 1–6, map 1; HT MALE, PT MALE (MIZA) (Former MAGS-357a and MAGS-357b).

Distribution in Venezuela: Road between Cúa and Tácata, Urdaneta Municipality, Miranda State.

***Rhinocricus vargaensis*** González-Sponga, 2005

*Rhinocricus vargaensis* González-Sponga, 2005. Revista de Investigación, 57: 43–45, plate 10, figs. 1–6, map 1; HT MALE, PT FEMALE (MIZA) (Former MAGS-194a and MAGS-194b).

Distribution in Venezuela: Hacienda El Limón, road to Puerto Cruz, Carayaca parish, Vargas State.

***Rhinocricus variifasciatus*** Silvestri, 1898

*Rhinocricus variifasciatus* Silvestri, 1898. Anales del Museo Nacional de Buenos Aires, 6: 76; HT MALE (ZMUC).

*Rhinocricus variifasciatus*—Marek et al. 2003. Zootaxa, 308: 70.

Distribution in Venezuela: Las Trincheras, Caracas.

Note: for this specimen Silvestri cites Las Trincheras, Caracas, Miranda State. However, Las Trincheras is locality at Valencia Municipality, Carabobo State.

**Genus *Salpidobolus* Silvestri, 1897**

***Salpidobolus curvicornis*** (Verhoeff, 1938)

*Polyconoceras curvicornis* Verhoeff, 1938. Zoologische Jahrbücher, 71(1/2): 34, plate 2, figs. 26–28; HT MALE (ZSM) (GBIF record does not indicate type specimen).

*Salpidobolus curvicornis*—Hoffman 1974. Revue Suisse de Zoologie, 81(1): 193 (by implication, synonymized *Polyconoceras* under *Salpidobolus*).

*Salpidobolus curvicornis*—Marek et al. 2003. Zootaxa, 308: 78.

Distribution in Venezuela: Caracas City, Miranda State; Maracay, Aragua State.

**Family Spirobolellidae (1 species)**

**Genus *Microspirobolus* Silvestri, 1898**

***Microspirobodus pulchellus*** Silvestri, 1898

*Microspirobodus pulchellus* Silvestri, 1898. Anales del Museo Nacional de Buenos Aires, 6: 75; HT or CoType (ZMUC) [type species of *Microspirobodus*].

Distribution in Venezuela: Las Trincheras, San Esteban (Carabobo State). For this species Silvestri lists Las Trincheras in San Esteban.

Note: Specimens of the order Spirobolida reported in collections: FMNH (catalog # 5931, 11753 from Aragua State; 7950, from Táchira State); INHS (782, Miranda State); MNHN (eight specimen records); *Trigoniulus coral-limus* was observed in San Pablo, Yaracuy State (GBIF).

## Order Spirostreptida

### Family Pseudonannolenidae (1 species)

#### Genus *Epinannolene* Brölemann, 1903

***Epinannolene pittieri guacharensis*** Mauriès, 1969

*Epinannolene guacharensis* Mauriès, 1969. Boletín de la Sociedad Venezolana de Espeleología, 2(1): 36, fig. 1, HT MNHN (MY 5387).

*Epinannolene pittieri guacharensis*—Mauriès 1987. Bulletin du Muséum National d’Histoire Naturelle, Paris, Sér. 4, Section A, 9(1): 184; ranked as subspecies: *Epinannolene pittieri guacharensis*.

Distribution in Venezuela: El Guácharo cave, Caripe, Monagas State.

Note: *Epinannolene pittieri pittieri* was reported from Costa Rica, see Brölemann 1903. Annales de la Société Entomologique de France, 72: 136, figs. 3–7, ST MALE/FEMALE (MNHN) MY 5387 [type species of *Epinannolene*].

### Family Spirostreptidae (14 species)

#### Genus *Anethoporus* Chamberlin, 1918

***Anethoporus abstemius*** (Karsch, 1881)

*Spirostreptus (Nodopyge) abstemius* Karsch, 1881a. Zeitschrift für die Gesammten Naturwissenschaften, 54: 36; ST MALE/FEMALE (ZMHB 1060), Cuba.

*Spirostreptus abstemious*—Bollman 1887. Annals of the New York Academy of Sciences, 4(1/2): 42 (lists West Indies).

*Spirostreptus abstemious*—Pocock 1894. Journal of the Linnean Society of London, Zoology, 24(157): 482.

*Spirostreptus abstemious*—Attems 1914b. Zoologica, Stuttgart, 25(65, 66): 177, lists Cuba.

*Orthoporus abstemious*—Chamberlin 1918. Bulletin of the Museum of Comparative Zoology, 62(5): 182.

— *abstemius*—Moritz & Fischer 1974. Mitteilungen aus dem Zoologischen Museum in Berlin, 50(2): 353, type specimen catalog, species names listed in alphabetical order.

*Orthoporus abstemius*—Torre 1974. Ciencias Biológicas, 42: 11.

*Orthoporus abstemius*—Krabbe 1982. Abhandlungen des Naturwissenschaftlichen Vereins in Hamburg, (NF) 24: 353.

*Orthoporus abstemius*—González & Golovatch 1990. Editorial Academia, La Habana: 15.

*Anethoporus abstemius*—Hoffman 1996. Mitteilungen aus dem Zoologischen Museum in Berlin, 72(2): 329, figs. 1–2.

*Spirostreptus abstemious*—Hoffman 1999. Virginia Museum of Natural History. Special Publication Number 8: 9.

*Archispirostreptus guayrensis* Silvestri, 1896. Bollettino dei Musei di Zoologia e di Anatomia Comparata R. Università di Torino, 11(254): 2, fig. 1, PT MALE (SMF), “Brazil”, “La Guayra (=Venezuela?)”; synonymized with *A. abstemius* by Hoffman 1996: Mitteilungen aus dem Zoologischen Museum in Berlin, 72(2): 329.

*Spirostreptus guayrensis*—Attems 1914b. Zoologica, Stuttgart, 25(65, 66): 66, lists Brazil: La Guayre.

*Anethoporus guayrensis*—Krabbe 1982. Abhandlungen des Naturwissenschaftlichen Vereins in Hamburg, 24: 288, fig. 201.

*Metagonocoelius ornatus* Verhoeff 1942. Archiv für Naturgeschichte, 10(2): 292, figs. 6–8; HT (ZSM), “near San José del Ávila, Caracas”; synonymized by Hoffman 1996. Mitteilungen aus dem Zoologischen Museum in Berlin, 72(2): 329 [type species of *Metagonocoelius*], lists Venezuela.

*Metagonocoelius ornatus*—Attems 1950. Annalen des naturhistorischen Museums in Wien, 57: 207.

*Anethoporus ornatus*—Hoffman 1957. Lloydia, 20: 274, fig. 5.

*Anethoporus ornatus*—Krabbe 1982. Abhandlungen des Naturwissenschaftlichen Vereins in Hamburg, 24: 289.

Distribution in Venezuela: near San José del Avila, Caracas, Miranda State (Verhoeff 1942).

#### *Anethoporus leviceps* (Attems, 1950)

*Metagonocoelius leviceps* Attems, 1950. Annalen des Naturhistorischen Museums in Wien, 57: 208, figs. 21–23; HT MALE (NHMW).

*Anethoporus leviceps*—Hoffman 1957. Lloydia, 20: 272, fig. 4.

*Anethoporus leviceps*—Krabbe 1982. Abhandlungen des Naturwissenschaftlichen Vereins in Hamburg, 24: 288.

Distribution in Venezuela: no detailed locality data available.

### Genus *Nanostreptus* Silvestri, 1897

#### *Nanostreptus geayi* (Brölemann, 1898)

*Spirostreptus Geayi* Brölemann, 1898b. Annales de la Société Entomologique de France, 67(3): 332, figs. 38–45; HT MALE (MNHN).

*Spirostreptus geayi*—Brölemann 1900. Mémoires de la Société Zoologique de France, 13: plate 8, fig. 122. Brölemann (1900: 125) notes that the figure is meant to accompany the description of the species in Annales de la Société Entomologique de France, 67(3).

*Gymnostreptus geayi*—Attems 1914b. Zoologica, Stuttgart, 25(65, 66): 132, lists Venezuela: Haut et Bas Sarare.

*Spirostreptus geayi*—Carl 1914. Mémoires de la Société des Sciences Naturelles de Neuchâtel, 5: 969 (Colombia localities).

*Gymnostreptus geayi*—Chamberlin 1941c. Proceedings of the Biological Society of Washington, 54: 141.

*Kochliogonopus geayi*—Attems 1950. Annalen des Naturhistorischen Museums in Wien, 57: 189.

*Venezueneptus geayi*—Causey 1954. Proceedings of the Biological Society of Washington, 67: 58.

*Nanostreptus grayi* [sic]—Drift 1963. Studies on the Fauna of Suriname and other Guyanas, 4(19): 6–7.

*Nanostreptus geayi*—Krabbe, 1982. Abhandlungen des Naturwissenschaftlichen Vereins in Hamburg, 24: 344, fig. 240, lists *Kochliogonopus stechowi* and *Venezueneptus liber* in the synonymy of *Nanostreptus geayi*. *Nanostreptus* also listed as valid genus by Hoffman 1980.

*Nanostreptus geayi*—Jeekel 1999. Myriapod Memoranda, I: 63.

*Kochliogonopus stechowi* Verhoeff, 1938. Zoologische Jahrbücher, 71(1/2): 21, plate 2, figs. 20–24, 32; ST (ZSM), ST FEMALE (ZMHB 12608); synonymized with *geayi*, see note below [type species of *Kochliogonopus*].

*Kochliogonopus stechowi*—Schubart 1945. Anais da Academia Brasileira de Ciências, 17: 63.

*Kochliogonopus stechowi*—Demange 1970. Bulletin de l’Institut Fondamental d’Afrique Noire, 32(2): 383; lists *Nanostreptus* as a synonym of *Spirostreptus*: 403.

—*stechowi*—Moritz & Fischer 1974. Mitteilungen aus dem Zoologischen Museum in Berlin, 50(2): 373.

*Venezueneptus liber* Causey, 1954. Proceedings of the Biological Society of Washington, 67: 58, figs. 7–8; HT MALE (INHS 7), PT FEMALE (INHS 8); Demange (1970: 383); synonymized *liber* with *Kochliogonopus stechowi* [type species of *Venezueneptus*].

Note: Demange considered *Nanostreptus* a synonym of *Spirostreptus* (Demange 1970: 403) and synonymized *Venezueneptus liber* under *Kochliogonopus stechowi*, treating *Kochliogonopus* as a valid genus. Hoffman (1980) and Krabbe (1982) list *Kochliogonopus* as a synonym of *Nanostreptus* and considered *Nanostreptus* a valid genus. It is unclear at this point, who revalidated *Nanostreptus* and established the synonymy of *Kochliogonopus* under *Nanostreptus*. Krabbe (1982) listed *Kochliogonopus stechowi* as a synonym to *Nanostreptus grayi*. It is unclear who established this species-level synonymy.

Distribution in Venezuela: Morichal, Delta-Amacuro State; El Valle, near Caracas, Miranda State (Chamberlin 1941c); Upper and lower Sarare River, without exact locality data (Brölemann 1898b).

## Genus *Orthoporus* Silvestri, 1897

### *Orthoporus cavicollis* Karsch, 1881

*Spirostreptus (Nodopyge) cavicollis* Karsch, 1881a. Zeitschrift für die Gesammten Naturwissenschaften, 54: 33; ST MALE/FEMALE (ZMHB 464, 465, 523).

*Spirostreptus cavicollis*—Brölemann 1898b. Annales de la Société Entomologique de France, 67(3): 331.

*Spirostreptus cavicollis*—Attems 1914b. Zoologica, Stuttgart, 25(65, 66): 178.

— *cavicollis*—Moritz & Fischer 1974. Mitteilungen aus dem Zoologischen Museum in Berlin, 50(2): 357, type specimen catalog, species names listed in alphabetical order.

*Spirostreptus cavicollis*—Krabbe 1982. Abhandlungen des Naturwissenschaftlichen Vereins in Hamburg, 24: 442 (*nomen dubium*).

*Orthoporus cavicollis*—Hoffman 1996. Mitteilungen aus dem Zoologischen Museum in Berlin, 72(2): 332, figs. 6–9.

*Orthoporus cavicollis*—Hoffman 1999. Virginia Museum of Natural History Special Publication Number 8: 121.

*Spirostreptus cavicollis* var. *sararensis* Brölemann, 1898b. Annales de la Société Entomologique de France, 67(3): 331; HT FEMALE (MNHN).

*Spirostreptus cavicollis* var. *sararensis*—Attems 1914b. Zoologica, Stuttgart 25(65, 66): 178.

*Spirostreptus cavicollis sararensis*—Krabbe 1982. Abhandlungen des Naturwissenschaftlichen Vereins in Hamburg, 24: 442 (*nomen dubium*).

*Spirostreptus antillanus* Pocock, 1894. Journal of the Linnean Society of London, Zoology 24(157): 483, plate 38, fig. 1; Types (BMNH); synonymized by Hoffman 1996. Mitteilungen aus dem Zoologischen Museum in Berlin, 72(2): 332, figs. 6–9.

*Gymnostreptus (Orthoporus) antillanus*—Attems 1914b. Zoologica, Stuttgart, 25(65, 66): 135.

*Orthoporus antillanus*—Chamberlin 1918. Bulletin of the Museum of Comparative Zoology, 62(5): 183.

*Orthoporus antillanus*—Loomis 1934. Smithsonian Miscellaneous Collections, 89(14): 12.

*Scaphiostreptus antillanus*—Attems 1950. Annalen des Naturhistorischen Museums in Wien, 57: 233.

*Orthoporus antillanus*—Krabbe 1982. Abhandlungen des Naturwissenschaftlichen Vereins in Hamburg, 24: 353 (*nomen dubium*).

*Orthoporus antillanus*—Krabbe & Enghoff 1984. Entomologica Scandinavica, 15: 333, figs. 1–8.

*Orthoporus grenadæ* Chamberlin, 1918. Bulletin of the Museum of Comparative Zoology, 62(5): 183, Types (MCZ); synonymized with *antillanus* by Krabbe & Enghoff 1984. Entomologica Scandinavica, 15: 333, figs. 1–8; synonymized with *cavicollis* by Hoffman 1996. Mitteilungen aus dem Zoologischen Museum in Berlin, 72(2): 332, figs. 6–9.

*Orthoporus grenadæ*—Krabbe 1982. Abhandlungen des Naturwissenschaftlichen Vereins in Hamburg, 24: 354.

*Gymnostreptus (Trinidadius) klagesi*—Verhoeff 1942. Archiv für Naturgeschichte, 10(2): 297, figs. 4–5, Types (ZMHB); synonymized by Hoffman 1996. Mitteilungen aus dem Zoologischen Museum in Berlin, 72(2): 332, figs. 6–9 [type species of *Trinidadius*].

*Gymnostreptus (Trinidadius) klagesi*—Krabbe 1982. Abhandlungen des Naturwissenschaftlichen Vereins in Hamburg, 24: 382.

Distribution in Venezuela: Lower Sarare River, without exact locality data; Puerto Cabello, Carabobo State (Karsch 1881a; Attems 1914b).

### *Orthoporus centralis* Silvestri, 1898

*Orthoporus centralis* Silvestri, 1898. Anales del Museo Nacional de Buenos Aires, 6: 72; ST FEMALE (ZMUC).

*Gymnostreptus (Orthoporus) centralis*—Attems 1914b. Zoologica, Stuttgart, 25(65, 66): 135.

*Orthoporus centralis*—Krabbe 1982. Abhandlungen des Naturwissenschaftlichen Vereins in Hamburg, (NF) 24: 377, figs. 247a–b.

*Orthoporus centralis*—Golovatch 1997b. Bulletin de l'institut royal des sciences naturelles de Belgique, Entomologie, 67: 98.

Distribution in Venezuela: Valencia, Carabobo State; Las Trincheras, Carabobo State; La Moka (near Caracas according to Silvestri 1898; 1903), Miranda State (Attems 1914b).

***Orthoporus dorsovittatus* (Verhoeff, 1938)**

*Scaphiostreptus dorsovittatus* Verhoeff, 1938. Zoologische Jahrbücher, 71(1/2): 17, plate 2, figs. 16–19; ST (ZSM), ST FEMALE (ZMHB 12571).

*Torynopus dorsovittatus*—Verhoeff 1942. Archiv für Naturgeschichte, Zool., Abt. B, Berlin, 10(2): 293; 280, fig. 1, 290 (key).

*Scaphiostreptus dorsovittatus*—Attems 1950. Annalen des Naturhistorischen Museums in Wien, 57: 230; in identification key to species of the genus *Scaphiostreptus*.

—*dorsovittatus*—Moritz & Fischer 1974. Mitteilungen aus dem Zoologischen Museum in Berlin, 50(2): 360, type specimen catalog, species names listed in alphabetical order.

*Orthoporus dorsovittatus*—Krabbe 1982. Abhandlungen des Naturwissenschaftlichen Vereins in Hamburg, 24: 379.

Distribution in Venezuela: Caracas, Miranda State; Maracay, Aragua State (Verhoeff 1938).

***Orthoporus linaresi* (Mauriès, 1969)**

*Scaphiostreptus linaresi* Mauriès, 1969. Boletín de la Sociedad Venezolana de Espeleología, 2(1): 38, figs. 2–5, Types (MNHN).

*Orthoporus linaresi*—Krabbe 1982. Abhandlungen des Naturwissenschaftlichen Vereins in Hamburg, 24: 382.

*Orthoporus linaresi*—Hoffman 1996. Mitteilungen aus dem Zoologischen Museum in Berlin, 72(2): 334.

Distribution in Venezuela: El Guácharo cave, Caripe, Monagas State; La Guayra, Vargas State; Puerto Cabello, Carabobo State (Krabbe 1982).

***Orthoporus morechalensis* (Causey, 1954)**

*Chamberlineptus morechalensis* Causey, 1954. Proceedings of the Biological Society of Washington, 67: 57, figs. 4–6; HT MALE (INHS 22), PT FEMALE (INHS 21, 63530) [type species of the genus *Chamberlineptus*].

*Orthoporus americanus*—Demange 1970. Bulletin de l’Institut Fondamental d’Afrique Noire, 32(2): 390 synonymized *morechalensis* under *Orthoporus americanus* (= *Alloporus americanus* Silvestri, 1895b. Annali del Museo Civico di Storia Naturale “Giacomo Doria”, 14: 780) and synonymized. *Chamberlineptus* under *Orthoporus*; listed as valid species by Krabbe (1982: 383).

*Orthoporus morechalensis*—Krabbe 1982. Abhandlungen des Naturwissenschaftlichen Vereins in Hamburg, 24: 383.

Distribution in Venezuela: ‘Morechal, Delta-Amacuro’, possibly referring to Morichal and to the River (tributary to the Orinoco), Delta-Amacuro State.

***Orthoporus rostratus* (Voges, 1878)**

*Spirostreptus rostratus* Voges, 1878. Zeitschrift für Wissenschaftliche Zoologie, 31: 178, fig. 31, Types (GMUG).

*Gymnostreptus (Orthoporus) rostratus*—Attems 1914b. Zoologica, Stuttgart, 25(65, 66): 136.

*Scaphiostreptus rostratus*—Attems 1950. Annalen des Naturhistorischen Museums in Wien, 57: 231; in identification key to species of the genus *Scaphiostreptus*.

*Orthoporus rostratus*—Krabbe 1982. Abhandlungen des Naturwissenschaftlichen Vereins in Hamburg, 24: 388.

Distribution in Venezuela: Puerto Cabello, Carabobo State (Attems 1914b).

***Orthoporus simplex* (Chamberlin, 1952)**

*Scaphiostreptus simplex* Chamberlin, 1952b. Great Basin Naturalist, 12: 27, fig. 14; HT MALE (FMNH 990), type imaged.

*Orthoporus simplex*—Krabbe 1982. Abhandlungen des Naturwissenschaftlichen Vereins in Hamburg, 24: 388.

‘*Scaphiostreptus simplex*’—Sierwald *et al.* 2005. Zootaxa, 1005: 55, listed species under original name, not a nomenclatorial act.

Distribution in Venezuela: near Caracas, Miranda State.

***Orthoporus sulcaticollis*** (Dadday, 1891)

*Spirostreptus sulcaticollis* Daday, 1891b. Természetrajzi Füzetek, 14(3/4): 174, plate 7, figs. 1–3, Types (HNHM).

*Spirostreptus sulcaticollis*—Brölemann 1900. Mémoires de la Société Zoologique de France, 13: 124.

*Scaphiostreptus sulcaticollis*—Attems 1914b. Zoologica, Stuttgart, 25(65, 66): 94.

*Scaphiostreptus sulcaticollis*—Attems 1928. Annals of the South African Museum, 26: 341 (in key to species).

*Orthoporus sulcaticollis*—Krabbe 1982. Abhandlungen des Naturwissenschaftlichen Vereins in Hamburg, 24: 388.

Distribution in Venezuela: La Guayra, Casoni River (Daday 1891b; Brölemann 1900), possibly Caroni River near the border to Guayana (formerly British Guiana).

***Orthoporus vegetus*** (Silvestri, 1898)

*Orthoporus vegetus* Silvestri, 1898. Anales del Museo Nacional de Buenos Aires, 6: 73; HT MALE (possibly in ZMUC).

*Gymnostreptus (Orthoporus) vegetus*—Attems 1914b. Zoologica, Stuttgart, 25(65, 66): 136.

*Orthoporus vegetus*—Krabbe 1982. Abhandlungen des Naturwissenschaftlichen Vereins in Hamburg, 24: 389.

Distribution in Venezuela: Caracas, Miranda State (Attems 1914b).

**Genus *Spirostreptus* Brandt, 1833**

***Spirostreptus ergus*** Chamberlin, 1952

*Spirostreptus ergus* Chamberlin, 1952b. Great Basin Naturalist, 12: 29; HT FEMALE (FMNH 1014), type imaged.

*Spirostreptus? Ergus*—Krabbe 1982. Abhandlungen des Naturwissenschaftlichen Vereins in Hamburg, 24: 444 (*non men dubium*).

*Spirostreptus ergus*—Sierwald *et al.* 2005. Zootaxa, 1005: 55.

Distribution in Venezuela: Probably near Caracas (Chamberlin 1952b: 29).

***Spirostreptus galeanus*** Karsch, 1881

*Spirostreptus galeanus* Karsch, 1881a. Zeitschrift für die Gesammten Naturwissenschaften, 54: 50; ST FEMALE (ZMHB 493, 502, 848).

Non Syn: *Spirostreptus galeanus* Attems, 1897. Abhandlungen der Senckenbergischen Naturforschenden Gesellschaft, 23(3): 500, fig. 31, from Borneo; name preoccupied, = *Spirostreptus brölemani* see Brölemann 1898a. Annales de la Société Entomologique de France, 67(3): 303.

*Spirostreptus galeanus*—Brölemann 1898a. Annales de la Société Entomologique de France, 67(3): 303 (lists three specimens).

*Spirostreptus galeanus*—Brölemann 1900. Mémoires de la Société Zoologique de France, 13: 92.

—*galeanus*—Moritz & Fischer 1974. Mitteilungen aus dem Zoologischen Museum in Berlin, 50(2): 361, type specimen catalog, species names listed in alphabetical order.

Note: Species listed neither by Krabbe (1982) nor by Hoffman (1996).

Distribution in Venezuela: San Esteban, without exact locality data, but probably refer to San Esteban National Park at Carabobo State; Caracas, Miranda State; Colonia Tovar, Tovar Municipality, Aragua State (all Brölemann 1898a).

Note: Specimens of the order Spirostreptida reported in collections: FMNH (catalog #13078, Aragua State; 3121127, 3121115, Miranda State); INHS (catalog # 1256, 1257, Monagas, Delta-Amacuro States).

**Order Stemmiulida**

**Family Stemmiulidae (11 species)**

## Genus *Stemmiulus* Gervais, 1844

### *Stemmiulus amarilloensis* González-Sponga, 2001

*Stemmiulus amarilloensis* González-Sponga, 2001. Boletín de la Academia de Ciencias Físicas Matemáticas y Naturales, 61(3): 48, plate 1, figs. 1–5, map 1; HT MALE and PT FEMALE (MIZA), (former MAGS-234a and MAGS-234b).

Distribution in Venezuela: Los Amarillos, old road Caracas to Charallave, Guaicaipuro Municipality, Miranda State.

### *Stemmiulus bioculatus* (Gervais & Goudot, 1844)

*Iulus (Stemmiulus) bioculatus* Gervais & Goudot, 1844. Annales de la Société Entomologique de France, Sér. 2, 2: XXVIII.

*Stemmatoiulus bioculatus*—Silvestri 1896. Bollettino dei Musei di Zoologia e di Anatomia Comparata R. Università di Torino, 11(254): 2.

*Stemmatoiulus bioculatus*—Silvestri 1897. Bollettino dei Musei di Zoologia e di Anatomia Comparata R. Università di Torino, 12(305): 2, figs. 2–8.

*Stemmiulus bioculatus*—Brölemann 1898a. Annales de la Société Entomologique de France, 67(3): 297 (FEMALE specimen).

*Stemmiulus bioculatus*—Silvestri 1916. Bollettino del Laboratorio di Zoologia Generale e Agraria della R. Scuola Superiore d’Agricoltura in Portici, 10: 314, fig. XXI.

Distribution in Venezuela: San Esteban, without exact locality data, but probably refers to San Esteban National Park, Carabobo State (Brölemann 1898a; MNHN 1310).

### *Stemmiulus campoeliasensis* González-Sponga, 2001

*Stemmiulus campoeliasensis* González-Sponga, 2001. Boletín de la Academia de Ciencias Físicas Matemáticas y Naturales, 61(3): 50, plate 2, figs. 1–7, map 1; HT MALE and PT FEMALE MIZA (former MAGS-632a and MAGS-632b).

Distribution in Venezuela: Around Campo Elías, Campo Elías Municipality, Trujillo State.

### *Stemmiulus caracensis* González-Sponga, 2001

*Stemmiulus caracensis* González-Sponga, 2001. Boletín de la Academia de Ciencias Físicas Matemáticas y Naturales, 61(3): 50, plate 3, figs. 1–6, map 1; HT MALE, PT FEMALE (MIZA) (former MAGS-504a and MAGS-504b).

Distribution in Venezuela: Quintero ravine in El Ávila National Park, Sucre Municipality, Miranda State.

### *Stemmiulus corozalensis* González-Sponga, 2001

*Stemmiulus corozalensis* González-Sponga, 2001. Boletín de la Academia de Ciencias Físicas Matemáticas y Naturales, 61(3): 52, plate 4, figs. 1–4, map 1; HT MALE and PT FEMALE (MIZA) (former MAGS-751a and 751b).

Distribution in Venezuela: Corozal in El Ávila National Park, Vargas State.

### *Stemmiulus dentier* González-Sponga, 2001

*Stemmiulus dentier* González-Sponga, 2001. Boletín de la Academia de Ciencias Físicas Matemáticas y Naturales, 61(3): 55, plate 5, figs. 1–5, map 1; HT MALE, PT FEMALE (MIZA) (former MGAS-1053a and 1053b).

*Stemmiulus deantier*—De Ascenção & Bueno-Villegas 2013. Munis Entomology & Zoology, 8 (1): 444. Note: in the Etymology and diagnosis sections, and on plate 5, the author wrote “deantier” denoting the type locality “La Venezuela de Antier”.

Distribution in Venezuela: “La Venezuela de Antier” theme-park, road Mérida to Jají, Libertador Municipality, Mérida State.

### *Stemmiulus guatopensis* González-Sponga, 2001

*Stemmiulus guatopensis* González-Sponga, 2001. Boletín de la Academia de Ciencias Físicas Matemáticas y Naturales, 61(3): 55, plate 6, figs. 1–4, map 1; HT MALE, PT FEMALE (MIZA) (former MAGS-308a and 308b).

Distribution in Venezuela: Guatopo National Park, Acevedo Municipality, Miranda State.

***Stemmiulus guayasensis*** González-Sponga, 2001

*Stemmiulus guayasensis* González-Sponga, 2001. Boletín de la Academia de Ciencias Físicas Matemáticas y Naturales, 61(3): 57, plate 7, figs. 1–4, map 1; HT MALE, PT FEMALE (MIZA) (former MAGS-488a and 488b). Distribution in Venezuela: El Guapo-Guayas, Páez Municipality, Miranda State.

***Stemmiulus limonensis*** González-Sponga, 2001

*Stemmiulus limonensis* González-Sponga, 2001. Boletín de la Academia de Ciencias Físicas Matemáticas y Naturales, 61(3): 59, plate 8, figs. 1–4, map 1; HT MALE and PT FEMALE (MIZA) (former MAGS-706a and 706b).

Distribution in Venezuela: Hacienda El Limón, road to Puerto Cruz, Vargas Municipality, Vargas State.

***Stemmiulus macanillensis*** González-Sponga, 2001

*Stemmiulus macanillensis* González-Sponga, 2001. Boletín de la Academia de Ciencias Físicas Matemáticas y Naturales, 61(3): 59, plate 9, figs. 1–7, map 1; HT MALE and PT FEMALE (MIZA) (former MAGS-17a and 17b).

Distribution in Venezuela: Macanilla, in Guatopo National Park, Acevedo Municipality, Miranda State.

***Stemmiulus meinerti*** (Silvestri, 1898)

*Stemmatoiulus Meinerti* Silvestri, 1898. Anales del Museo Nacional de Buenos Aires, 6: 55; HT MALE (ZMUC).

*Stemmiulus meinerti*—Silvestri 1916. Bollettino del Laboratorio di Zoologia Generale e Agraria della R. Scuola Superiore d'Agricoltura in Portici, 10: 317, figs. 25 (1–10).

Distribution in Venezuela: La Moka (near Caracas according to Silvestri 1898; 1903), Miranda State.

**TABLE 1**

Order	Family	Number of	
		Genera	species
Polyxenida	Lophoproctidae	1	2
	Polyxenidae	1	1
Glomeridesmida	Glomeridesmidae	1	3
Polydesmida	Aphelidesmidae	5	11
	Chelodesmidae	14	38
	Cyrtodesmidae	2	4
	Trichopolydesmidae	2	4
	Oniscodesmidae	2	4
	Paradoxosomatidae	5	16
	Platyrhacidae	1	1
	Pyrgodesmidae	6	9
Polyzoniida	Siphonotidae	1	1
Siphonophorida	Siphonophoridae	1	2
Spirobolida	Rhinocricidae	5	34
	Spirobolellidae	1	1
Spirostreptida	Pseudonannolenidae	1	1
	Spirostreptidae	4	14
Stemmiulida	Stemmiulidae	1	11
Total	8	54	157

**Literature cited**

Ariño, A.H., Chavan, V. & Faith, D.P. (2013) Assessment of user needs of primary biodiversity data: Analysis, concerns, and challenges. *Biodiversity Informatics*, 8 (2), 59–93.

- https://doi.org/10.17161/bi.v8i2.4094
- Attems, C.G. (1897) Myriopoden. *Abhandlungen der Senckenbergischen Naturforschenden Gesellschaft, Frankfurt*, 23 (3), 473–536.
- Attems, C.G. (1898) System der Polydesmiden. I. Theil. *Denkschriften der Kaiserlichen Akademie der Wissenschaften zu Wien, Mathematisch-Naturwissenschaftliche Classe*, 67, 221–482.
- Attems, C.G. (1899) System der Polydesmiden. II. Theil. *Denkschriften der Kaiserlichen Akademie der Wissenschaften zu Wien, Mathematisch-Naturwissenschaftliche Classe*, 68, 251–435.
- Attems, C.G. (1901) Neue Polydesmiden des Hamburger Museums. *Mitteilungen aus dem Naturhistorischen Museum in Hamburg*, 18, 83–107.
- Attems, C.G. (1914a) Die indo-australischen Myriopoden. *Archiv für Naturgeschichte, Berlin*, 80 A (4), 1–398.
- Attems, C.G. (1914b) Afrikanische Spirostreptiden nebst Überblick über die Spirostreptiden orbis terrarum. *Zoologica, Stuttgart*, 25 (65 & 66), 1–235.
- Attems, C.G. (1926) Progoneata, Chilopoda, Insecta 1. In: Kükenthal und Krumbach, *Handbuch der Zoologie*, 4, 1–402.
- Attems, C.G. (1928) The Myriapoda of South Africa. *Annals of the South African Museum*, 26, 1–431.
- Attems, C.G. (1931a) Myriopoden von Java, Sumatra und Bali. *Archiv für Hydrobiologie*, 8 (Supplement), 115–192.
- Attems, C.G. (1931b) Die Familie Leptodesmidae und andere Polydesmiden. *Zoologica, Stuttgart*, 30 (79), 1–149.
- Attems, C.G. (1937) Myriapoda 3. Polydesmoidea I. Fam. Strongylosomidae. *Das Tierreich*, 68, 1–300.
- Attems, C.G. (1938) Polydesmoidea II. Fam. Leptodesmidae, Platyrhachidae, Oxydesmidae, Gomphodesmidae. *Das Tierreich*, 69, 1–487.
- Attems, C.G. (1940) Myriapoda 3: Polydesmoidea III: Fam. Polydesmidae, Vanhoeffeniidae, Cryptodesmidae, Oniscodesmidae, Sphaerotrichopidae, Peridontodesmidae, Rhachidesmidae, Macellolophidae, Pandirodesmidae. *Das Tierreich*, 70, 1–577. [includes, Nachtrag zum 1. Band: 539–550, ‘Nachtrag zum 2. Band: 550–568’ and index to families and genera for three volumes: Attems, 1937: Das Tierreich, 68; Attems, 1938: Das Tierreich, 69; Attems, 1940: Das Tierreich, 70]
- Attems, C.G. (1943) Myriopoden von Brasilien, gesammelt von E. Bresslau in den Jahren 1913/14. *Senckenbergiana Biologica*, 26, 434–458.
- Attems, C.G. (1944) Neue Polydesmoidea. *Zoologischer Anzeiger, Leipzig*, 144 (11/12), 223–253.
- Attems, C.G. (1950) Über Spirostreptiden (Diplopoda). *Annalen des Naturhistorischen Museums in Wien*, 57, 179–257.
- Ball-Damerow, J.E., Brenskelle, L., Barve, N., Soltis, P.S., Sierwald, P., Bieler, R., Ariño, A. & Guralnick, R. (2019) Research applications of primary biodiversity databases in the digital age. *bioRxiv*, The preprint server for biology, 1–52. [pre-print].  
<https://doi.org/10.1101/605071>
- Beebe, W. & Crane, J. (1947) Ecology of Rancho Grande, a subtropical cloud forest in northern Venezuela. *Zoologica*, 32, 43–66.
- Bollman, C.H. (1887) Notes on North American Julidae, with description of new species. *Annals of the New York Academy of Sciences*, 4 (1/2), 25–44.  
<https://doi.org/10.1111/j.1749-6632.1889.tb57031.x>
- Bollman, C.H. (1893) Notes upon a collection of myriapods belonging to the United States National Museum. *Bulletin of the United States National Museum*, 46, 190–200.
- Bollman, C.H. (1889) Notes on small collection of Myriapods from the Bermuda Islands. *Proceedings of the Academy of Natural Sciences of Philadelphia*, 99, 127–129.
- Brölemann, H.W. (1898a) Voyage de M. E. Simon au Venezuela (décembre 1887—août 1888) 27 mémoire (1). Myriapodes. *Annales de la Société Entomologique de France*, 67 (3), 241–313.
- Brölemann, H.W. (1898b) Myriapodes du Haut et Bas Sarare (Venezuela) donnés par M.F. Greay au Muséum d’Histoire Naturelle de Paris. *Annales de la Société Entomologique de France*, 67 (3), 314–336.
- Brölemann, H.W. (1900) Myriapodes d’Amérique. *Mémoires de la Société Zoologique de France*, 13, 89–131.
- Brölemann, H.W. (1902) Myriapodes du musée de São Paulo. *Revista do Museu Paulista*, 5, 35–237.  
<https://doi.org/10.5962/bhl.part.9824>
- Brölemann, H.W. (1903) Myriapodes recueillis a l’Isla de Cocos par M. le Professeur P. Boilley. *Annales de la Société Entomologique de France*, 72, 119–143.
- Brölemann, H.W. (1904) Myriapodes du Museu Paulista, II<sup>e</sup> Mémoire: Manaus. *Revista do Museu Paulista*, 6, 63–98.  
<https://doi.org/10.5962/bhl.part.26467>
- Brölemann, H.W. (1905) Myriapodes de Costa-Rica recueillis par M. le professeur P. Biolley. II<sup>e</sup> mémoire. *Annales de la Société Entomologique de France*, 74, 337–380.
- Brölemann, H.W. (1909) Os Myriapodos da Brasil. In: Museu Paulista (Ed.), *Catalogos da Fauna Brazileira*. Vol. 2. Museu Paulista, São Paulo, pp. 1–94.
- Brölemann, H.W. (1913) The Myriapoda in the Australian Museum. Part II. Diplopoda. *Records of the Australian Museum*, 10 (6), 77–158.  
<https://doi.org/10.3853/j.0067-1975.10.1913.899>
- Brölemann, H.W. (1916) Essai de Classification des Polydesmiens [Myriapodes]. *Annales de la Société Entomologique de France*, 84, 523–608.  
<https://doi.org/10.5962/bhl.part.24168>
- Carl, J. (1911) Sur un Diplopode hermaphrodite. *Compte rendu des séances de la Société de Physique et d’Histoire Naturelle*

- du Genève*, 28, 38–39.
- Carl, J. (1912) Sur quelques colobognathes du Muséum du Genève. *Revue Suisse de Zoologie*, 20 (9), 507–518.
- Carl, J. (1914) Die Diplopoden von Columbien nebst Beiträgen zur Morphologie der Stemmatoiuliden. *Mémoires de la Société des Sciences Naturelles de Neuchâtel, Switzerland*, 5, 821–993.
- Carl, J. (1942) Contribution à la connaissance de Limacomorpha. Essai de morphologie comparée. *Revue Suisse de Zoologie*, 49, 133–167.
- Carl, J. (1944) K. W. Verhoeff's System der Siphonophoriden kritisch betrachtet. *Revue Suisse de Zoologie*, 51 (7), 253–465.
- Causey, N.B. (1953) On a Florida millipede *Siphonotus miamiensis* n. sp. (Colobognatha: Polyzoniidae). *Florida Entomologist*, 36 (2), 71–72.  
<https://doi.org/10.2307/3492667>
- Causey, N.B. (1954) New Mexican and Venezuelan millipedes in the collection of the Illinois State Natural History Survey. *Proceedings of the Biological Society of Washington*, 67, 55–68.
- Causey, N.B. (1957) *Rhinocricus dispar* Causey: A preoccupied name. *Journal of the Kansas Entomological Society*, 30 (3), 120.
- Causey, N.B. (1965) Additions to the millipede genus *Siphonoconus*. *Proceeding of the Louisiana Academy of Sciences*, 28, 53.
- Cazorla, D. (2012) Listado de especies de ciempiés (Myriapoda, Chilopoda) conocidas en Venezuela. *Boletín de Malariaología y Salud Ambiental*, 52 (2), 295–300.
- Chamberlin, R.V. (1918) The Chilopoda and Diplopoda of the West Indies. *Bulletin of the Museum of Comparative Zoology at Harvard College*, 62 (5), 153–262.
- Chamberlin, R.V. (1920) The Myriapoda of the Australian region. *Bulletin of the Museum of Comparative Zoology*, 64 (1), 1–269.
- Chamberlin, R.V. (1923) Results of the Bryant Walker expeditions of the University of Michigan to Colombia, 1913, and British Guiana, 1914: The Diplopoda. *Occasional Papers of the Museum of Zoology of the University of Michigan*, 113, 1–83.
- Chamberlin, R.V. (1941a) New American millipedes. *Bulletin of the University of Utah*, 6 (4), 3–39.
- Chamberlin, R.V. (1941b) A new oniscodesmid diplopod from Barro Colorado, Id., with notes on two related forms. *Journal of Entomology and Zoology, Pomona College*, 33 (1), 57–58.
- Chamberlin, R.V. (1941c) On a collection of myriapods from Venezuela. *Proceedings of the Biological Society of Washington*, 54, 137–142.
- Chamberlin, R.V. (1950) Neotropical chilopods and diplopods in the collections of the Department of Tropical Research, New York Zoological Society. *Zoologica, New York*, 35 (2), 133–144.
- Chamberlin, R.V. (1952a) Some American polydesmid millipedes in the collection of the Chicago Museum of Natural History. *Annals of the Entomological Society of America*, 45, 553–584.  
<https://doi.org/10.1093/aesa/45.4.553>
- Chamberlin, R.V. (1952b) Further records and descriptions of American millipedes. *Great Basin Naturalist*, 12, 13–34.  
<https://doi.org/10.5962/bhl.part.21966>
- Chamberlin, R.V. (1953) Some American millipedes of the order Spirobolida. *American Midland Naturalist*, 50, 138–151.  
<https://doi.org/10.2307/2422159>
- Condé, B. (1964) *Lophoproctus comans* Loomis, type d'un remarquable genre inédit de Pénicillates (Diplopodes). *Revue Française d'Entomologie*, 31 (1), 61–66.
- Cook, O.F. (1896) A new character in the Colobognatha with drawings of *Siphonotus*. *American Naturalist*, 30 (358), 839–844.  
<https://doi.org/10.1086/276492>
- Cook, O.F. (1896–97) A series of occasional papers on Diplopoda and other Arthropoda. *Brandtia*, 1–75.  
<https://doi.org/10.5962/bhl.title.125177>
- Cook, O.F. (1899) American oniscoid Diplopoda of the order Merocheta. *Proceedings of the United States National Museum*, 21 (1154), 451–468.  
<https://doi.org/10.5479/si.00963801.21-1154.451>
- Cook O.F. & Cook, A.C. (1894) VIII. A monograph of *Scytonotus*. *Annals of the New York Academy of Sciences*, 8, 233–248.  
<https://doi.org/10.1111/j.1749-6632.1894.tb55422.x>
- Cupul-Magaña, F.G. (2011) Tres especies de milpiés paradoxosomatídos (Diplopoda: Polydesmida: Paradoxosomatidae) de México. *BIOCYT*, 4 (16), 311–315.
- Cupul-Magaña, F.G. & Bueno-Villegas, J. (2006) Primer registro de *Asiomorpha coarctata* (DeSaussure, 1860) (Diplopoda: Polydesmida; Paradoxosomatidae) para Jalisco y Nayarit, México. *Dugesiana*, 13 (1), 45–48.
- Cupul-Magaña, F.G. & Shelley, R.L. (2011) Nuevas localidades para ocho species de milpiés (Arthropoda: Diplopoda) en México. *Dugesiana*, 18 (1), 91–94.
- Daday, J. (1891a) A heidelbergi egyetem zoologai gyűjteménye nek idegenföldi Myriopodai [Ausländische Myriopoden der zoologischen Collection der Universität zu Heidelberg—Hungarian part with Latin descriptions]. *Természetrájzi Füzetek*, 14 (3/4), 135–154.
- Daday, J. (1891b) Ausländische Myriopoden der zoologischen Collection der Universität zu Heidelberg [German part]. *Természetrájzi Füzetek*, 14 (3/4), 172–193.
- De Ascenção, A.A. & Bueno-Villegas, J. (2013) Nomenclatural changes and corrections for millipede species described by Manuel A. González-Sponga from Venezuela (Myriapoda: Diplopoda). *Munis Entomology and Zoology*, 8 (1), 444–447.

- Demange, J.-M. (1970) Éléments d'une révision des Spirostreptidae. I. Étude de quelques caractères taxonomiques des Spirostreptinae. *Bulletin de l'Institut Fondamental d'Afrique Noire*, Série A, 32 (2), 366–411.
- Demange, J.-M. (1985) Myriapodes de la Cordillère de Mérida (Vénézuéla) (Diplopoda, Chilopoda) récoltés par le Pr M. Lamotte. *Bulletin du Muséum National d'Histoire Naturelle, Paris*, Série 4, Section A, Zoologie, 7 (4), 795–804.
- DeSaussure, H. (1860) Essai d'une faune des Myriapodes du Mexique avec la description de quelques espèces des autres parties de l'Amérique. *Mémoires de la Société de Physique et d'Histoire Naturelle de Genève*, 15, 259–393.  
<https://doi.org/10.5962/bhl.title.60509>
- DeSaussure, H. & Humbert, A. (1872) Etudes sur les myriapodes. *Mission scientifique au Mexique et dans l'Amérique Central, Zoologiques*, Partie 6, Sect 2, 1–211, pls. 1–6.
- Drift, J.V.D. (1963) A comparative study of the soil fauna in forests and cultivated land on sandy soils in Suriname. *Studies on the Fauna of Suriname and other Guyanas*, 4 (19), 1–43.
- García, J.A., Barois, I., De Los Santos, M., Rojas, P., Fragoso, C., Morón, M.A., Bueno-Villegas, J. & Sormani, C. (2009) Land Use and Diversity of the Soil Macrofauna in Santa Marta, Los Tuxtlas, Veracruz, Mexico. In: Barois, I., Huisings, E.J., Okoth, P., Trejo, D. & De Los Santos, M. (Eds.), *Below-Ground Biodiversity in Sierra Santa Marta, Los Tuxtlas, Veracruz, México*. Instituto de Ecología, A.C., Xalapa, pp. 135–190.
- GBIF.org (2016) Occurrence Download.  
<http://doi.org/10.15468/dl.ttuwdp>
- GBIF.org (2018) Occurrence Download.  
<https://doi.org/10.15468/dl.xuejkc>
- Gervais, F.P. (1844) Études sur les Myriapodes. *Annales des Sciences Naturelles*, 3 (Zoologie), 2, 51–80.
- Gervais, F.P. (1847) Myriapodes. In: Walckenaer, B. & Gervais, F.P. (Eds.), *Histoire Naturelle des Insectes Aptères*. Vol. 4. Librairie Encyclopédique de Roret, Paris, pp. 1–333 + 577–605.
- Gervais, F.P. & Goudot, J. (1844) Description des Myriapodes recueillis par Goudot en Colombie. *Annales de la Société Entomologique de France*, Série 2, 2 (Bulletin Section) XXVII–XXIX.
- Golovatch, S.I. (1992) Review of the Neotropical millipede genus *Onciurosoma* Silvestri, 1932, with the description of three new species from near Manaus, Central Amazonia, Brazil (Diplopoda, Poydesmida, Paradoxosomatidae). *Amazoniana*, 12 (2), 227–237.
- Golovatch, S.I. (1994) Further new Fuhrmannodesmidae from the environs of Manaus, Central Amazonia, Brazil, with a revision of *Cryptogonodesmus* Silvestri, 1898 (Diplopoda, Polydesmida). *Amazoniana*, 13 (1/2), 131–161.
- Golovatch, S.I. (1996) A new species of *Cutervodesmus* Kraus, 1957, from the environs of Manaus, Central Amazonia, Brazil, with notes on the genus (Diplopoda, Polydesmida, Fuhrmannodesmidae). *Amazoniana*, 14 (1/2), 137–141.
- Golovatch, S.I. (1997a) On some further neotropical Pyrgodesmidae, partly from the environs of Manaus, Central Amazonia, Brazil (Diplopoda, Polydesmida). *Amazoniana*, 14 (3/4), 323–334.
- Golovatch, S.I. (1997b) On the identity of some millipede species described by C. O. von Porat in 1888 (Diplopoda: Spirostreptida, Spirobolida). *Bulletin de l'institut royal des sciences naturelles de Belgique, Entomologie*, 67, 95–106.
- Golovatch, S.I. (2001) *Agnurodesmus siolii* n.sp., the first Cyrtodesmidae to be reported from Brazil, with remarks on the genus and family (Diplopoda, Polydesmida). *Amazoniana*, 16 (3/4), 325–336.
- Golovatch, S.I. (2013) A reclassification of the millipede superfamily Trichopolydesmoidea, with descriptions of two new species from the Aegean region (Diplopoda, Polydesmida). *ZooKeys*, 340, 63–78. <https://doi.org/10.3897/zookeys.340.6295>
- González, O.R. & Golovatch, S.I. (1990) *Catálogo de los diplópodos de Cuba*. Editorial Academia, La Habana, 37 pp.
- González-Sponga, M.A. (2001) Miriápodos de Venezuela. Nuevas especies de la familia Stemmiulidae. Parte I. (Diplopoda: Chordeumida). *Boletín de la Academia de Ciencias Físicas, Matemáticas y Naturales*, Caracas, 61 (3), 47–64.
- González-Sponga, M.A. (2004) Miriápodos de Venezuela. Descripción de nueve especies nuevas del género *Neactoma* Chamberlin, 1952 (Polydesmida: Strongylosomidae). *Boletín de la Academia de Ciencias Físicas, Matemáticas y Naturales*, Caracas, 64 (3–4), 9–16.
- González-Sponga, M. (2005) Miriápodos de Venezuela: Diez nuevas especies del género *Rhinocricus* (Spirobolida: Rhinocricidae). *Revista de Investigación*, 57, 13–48.
- Gray, J.E. (1844) *List of the specimens of Myriapoda in the collection of the British Museum*. Printed by order of the trustees, London, 17 pp.
- Hennings, C. (1906) Das Tömösvarysche Organ der Myriopoden II. *Zeitschrift für Wissenschaftliche Zoologie*, 80, 576–641.
- Hoffman, R.L. (1954) Further studies on American millipedes of the family Euryuridae (Polydesmida). *Journal of the Washington Academy of Sciences*, 44 (2), 49–58.
- Hoffman, R.L. (1957) Studies on spirostreptoid millipeds. IV. The genus *Anethoporus* Chamberlin. *Lloydia*, 20, 268–274.
- Hoffman, R.L. (1969) Chelodesmid studies. IV. A summary of the tribe Batodesmini, with the description of a new species of *Biporodesmus* from northwestern Brasil. *Papéis Avulsos de Zoologia*, 22 (25), 263–283.
- Hoffman, R.L. (1971) Chelodesmid studies V. Some new, redefined, and resurrected Brasilean genera. *Arquivos de Zoologia, São Paulo*, 20 (4), 225–277.  
<https://doi.org/10.11606/issn.2176-7793.v20i4p225-277>
- Hoffman, R.L. (1974) Studies on spiroboloid millipedes. X. Commentary on the status of *Salpidobolus* and some related rhinocricid genera. *Revue Suisse de Zoologie*, Genève, 81 (1), 189–203.  
<https://doi.org/10.5962/bhl.part.76001>
- Hoffman, R.L. (1975a) Chelodesmid Studies VI. A synopsis of the tribe Trachelodesmini (Diplopoda: Polydesmida). *Studies on*

- Neotropical Fauna and Environment*, 10 (2), 127–144.  
<https://doi.org/10.1080/01650527509360488>
- Hoffman, R.L. (1975b) Chelodesmid Studies. VII. A synopsis of the tribe Lepturodesmini (Polydesmida). *Studies on Neotropical Fauna and Environment*, 10 (2), 183–200.  
<https://doi.org/10.1080/01650527509360491>
- Hoffman, R.L. (1976) A new species in the diplopod genus *Amplinus* from El Salvador with comments on other members of the genus. *Revue Suisse de Zoologie, Genève*, 83 (1), 39–44.  
<https://doi.org/10.5962/bhl.part.91432>
- Hoffman, R.L. (1977) On the status of *Siphonotus brasiliensis* Brandt, and of the diplopod family Siphonotidae (Polyzoniida). *Deutsche Entomologische Zeitschrift, Neue Folge*, 24 (4–5), 425–431.  
<https://doi.org/10.1002/mmnd.4800240418>
- Hoffman, R.L. (1978) Chelodesmid Studies. XI. A new genus and species from Venezuela, referable to the new tribe Chondrodesmini. *Revue Suisse de Zoologie, Genève*, 85 (3), 543–551.  
<https://doi.org/10.5962/bhl.part.82244>
- Hoffman, R.L. (1980) *Classification of the Diplopoda*. Museum d’Histoire Naturelle, Genève, 237 pp.
- Hoffman, R.L. (1982) Chelodesmid studies. XVIII. On some new or poorly-known taxa in the tribe Batodesmini (Polydesmida: Chelodesmidae). *Journal of Natural History*, 16 (5), 633–654.  
<https://doi.org/10.1080/00222938200770481>
- Hoffman, R.L. (1996) Studies on spirostreptoid millipedes. XIX. Identity of some species described by F. Karsch in 1881. *Mitteilungen aus dem Zoologischen Museum in Berlin*, 72 (2), 327–337.  
<https://doi.org/10.1002/mmzn.4830720216>
- Hoffman, R.L. (1999) *Checklist of the millipedes of North and Middle America. Virginia Museum of Natural History Special Publication Number 8*. Virginia Museum of Natural History, Martinsville, Virginia, 584 pp.
- Hoffman, R.L. (2007) Replacement of the preoccupied generic name of a neotropical millipede taxon (Polydesmida: Chelodesmidae: Batodesmini). *Myriapodologica*, 9 (1), 1–8.
- Hoffman, R.L. (2012) On the identity of the generic name *Iulidesmus* Silvestri, 1895 (Polydesmida: Paradoxosomatidae). *Zootaxa*, 3204 (1), 65–68.  
<https://doi.org/10.11646/zootaxa.3204.1.7>
- Hoffman, R.L., Golovatch, S.I., Adis, J. & DeMorais, J.W. (2002) Diplopoda. In: Adis, J. (Ed.), *Amazonian Arachnida and Myriapoda: identification keys to all classes, orders, families, some genera, and lists of known terrestrial species*. Pensoft, Sofia-Moscow, pp. 505–533.
- Humbert, A. & deSaussure, H. (1870) Myriapoda Nova Americana: Descriptio de divers Myriapodes nouveaux du musée de Vienne. *Revue et Magasin de Zoologie pure et appliquée*, 22, 172–177.
- iDigBio (2016) Integrated Digitized Biocollections. Available from: <http://www.iDigBio.org/portal/recordsets/f6c42d02-7b83-4ef9-9417-02c7408cf29e> (accessed 24 June 2016)
- Ishii, K., Jacquemin-Nguyen Duy, M. & Condé, B. (1999) The first penicillate millipedes from the vicinity of Manaus Central Amazonia, Brazil (Diplopoda: Polyxenida). *Amazoniana*, 15 (3/4), 239–267.
- Jeekel, C.A.W. (1950) On some polydesmoid millipedes from Surinam. *Entomologische Berichten, Amsterdam*, 13 (299), 70–76.
- Jeekel, C.A.W. (1952) Milliped Miscellany. *Entomologische Berichten, Amsterdam*, 14 (323), 71–77.
- Jeekel, C.A.W. (1963) Diplopoda of Guiana. *Studies on the fauna of Suriname and other Guyanas*, 4 (11), 1–157.
- Jeekel, C.A.W. (1968) *On the classification and geographical distribution of the family Paradoxosomatidae (Diplopoda, Polydesmida)*. Private published, Broander-Offset Rotterdam, 162 pp.
- Jeekel, C.A.W. (1970) Nomenclator generum et familiarum Diplopodorum: A list of the genus and family-group names in the Class Diplopoda from 10<sup>th</sup> edition of Linnaeus, 1758, to the end of 1957. *Monografieën van de Nederlandse Entomologische Vereniging*, 5, 1–412.
- Jeekel, C.A.W. (1999) A new genus and species of Spirostreptidae from Suriname (Diplopoda). *Myriapod Memoranda*, I, 59–69.
- Jeekel, C.A.W. (2000) Notes on Aphelidesmidae from Guiana, with the description of two genera and two new species (Diplopoda, Polydesmida). *Myriapod Memoranda*, II, 71–93.
- Jeekel, C.A.W. (2001a) A bibliographic catalogue of the Siphonophorida (Diplopoda). *Myriapod Memoranda*, III, 44–71.
- Jeekel, C.A.W. (2001b) A collection of papers an notes on systematics and geography of Diplopoda and Chilopoda. *Myriapod Memoranda*, IV, 5–104.
- Jeekel, C.A.W. (2002) Paradoxosomatidae from Venezuela, with the description of a new species (Diplopoda, Polydesmida). *Myriapod Memoranda*, V, 40–51.
- Jeekel, C.A.W. (2003) A bibliographic catalogue of the order Glomeridesmida (Diplopoda). *Myriapod Memoranda*, VI, 102–109.
- Jeekel, C.A.W. (2009) Checklist of the Diplopoda reported from Suriname. *Myriapod Memoranda*, XI, 19–30.
- Jorgensen, M.C. & Sierwald, P. (2010) Review of the Caribbean pyrgodesmid genus *Docodesmus* with notes on potentially related genera (Diplopoda, Polydesmida, Pyrgodesmidae). *International Journal of Myriapodology*, 3 (1), 25–50.  
<https://doi.org/10.1163/187525410X12578602960461>
- Karsch, F. (1881a) Neue Juliden des Berliner Museums, als Prodromus einer Juliden- Monographie. *Zeitschrift für die Gesam*

- mten Naturwissenschaften, Leipzig, Stuttgart, 54, 1–79.
- Karsch, F. (1881b) Zum Studium der Myriopoda Polydesmia. *Archiv für Naturgeschichte*, Berlin, 47 (1), 36–49.  
<https://doi.org/10.5962/bhl.part.13208>
- Krabbe, E. (1982) Systematik der Spirostreptidae (Diplopoda, Spirostreptomorpha). *Abhandlungen des Naturwissenschaftlichen Vereins in Hamburg*, Neue Folge, 24, 1–476.
- Krabbe, E. & Enghoff, H. (1984) Morphological variability in a population of *Orthoporus antillanus* (Pocock, 1894) from Barbados, with notes on the taxonomic status of the species (Diplopoda: Spirostreptida, Spirostreptidae). *Entomologica Scandinavica*, 15, 333–339, figs. 1–20.
- Koch, C.L. (1847) System der Myriapoden. In: Panzer, G.W.F. & Herrich-Schäffer, G.A.W. (Eds.), *Kritische Revision der Insektenfauna Deutschlands, III. Bändchen*. Regensburg, pp. 1–191.
- Kraus, O. (1956) Über neotropische Strongylosomatidae (Diplopoda). *Senckenbergiana Biologica*, 37 (5/6), 403–419.  
<https://doi.org/10.2307/1933170>
- Loomis, H.F. (1934) Millipedes of the West Indies and Guiana collected by the Allison V. Armour Expedition in 1932. *Smithsonian Miscellaneous Collections*, 89 (14), 1–69.
- Loomis, H.F. (1936) The millipedes of Hispaniola, with descriptions of a new family, new genera, and new species. *Bulletin of the Museum of Comparative Zoology at Harvard University*, 80 (1), 1–191.
- Loomis, H.F. (1964) The millipedes of Panama (Diplopoda). *Fieldiana, Zoology*, New Series, 47 (1), 1–136.  
<https://doi.org/10.5962/bhl.title.3182>
- Loomis, H.F. (1968) A Checklist of the millipedes of Mexico and Central America. *Bulletin of the United States National Museum*, 266, 1–137.  
<https://doi.org/10.5479/si.03629236.266>
- Marek, P., Bond, J.E. & Sierwald, P. (2003) Rhinocricidae Systematics II: A species catalog of the Rhinocricidae (Diplopoda: Spirobolida) with synonymies. *Zootaxa*, 308 (1), 1–108.  
<https://doi.org/10.11646/zootaxa.308.1.1>
- Mauriès, J.-P. (1969) Diplópodos de la Cueva del Guácharo, Caripes, Venezuela (Recolectados por O. Linares & P. Strinati). *Boletín de la Sociedad Venezolana de Espeleología*, 2 (1), 35–43.
- Mauriès, J.-P. (1987) Cambalides nouveaux et peu connus d'Asie, d'Amérique et d'Océanie II. Pseudonannolenidae, Choctelidae (Myriapoda, Diplopoda). *Bulletin du Muséum National d'Histoire Naturelle, Paris*, Série 4, Section A, Zoologie, (4) 9 (1), 169–199.
- Moritz, M. & Fischer, S.-C. (1974) Die Typen der Myriapoden-Sammlung des Zoologischen Museums Berlin. I. Diplopoda. Teil 2: Craspedosomatida, Stemmiulida, Spirostreptida. *Mitteilungen aus dem Zoologischen Museum in Berlin*, 50 (2), 323–375.  
<https://doi.org/10.1002/mmnz.4830490209>
- Moritz, M. & Fischer, S.-C. (1975) Die Typen der Myriapoden-Sammlung des Zoologischen Museums Berlin. I. Diplopoda. Teil 3: Julida, Spirobolida. *Mitteilungen aus dem Zoologischen Museum in Berlin*, 51 (2), 199–255.  
<https://doi.org/10.1002/mmnz.4830510206>
- Moritz, M. & Fischer, S.-C. (1978a) Die Typen der Myriapoden-Sammlung des Zoologischen Museums Berlin. I. Diplopoda. Teil 4: Polydesmida. Teil 5: Ergänzungen. *Mitteilungen aus dem Zoologischen Museum in Berlin*, 54 (1), 99–160.  
<https://doi.org/10.1002/mmnz.4830540106>
- Moritz, M. & Fischer, S.-C. (1978b) Die Typen der Myriapoden-Sammlung des Zoologischen Museums Berlin. I. Diplopoda. Teil 6: Nachtrag zu den Teilen 1 bis 4. *Mitteilungen aus dem Zoologischen Museum in Berlin*, 54 (2), 333–343.  
<https://doi.org/10.1002/mmnz.4830540207>
- Newport, G. (1844) A list of the species of Myriapoda, Order Chilognatha contained in the cabinets of the British Museum, with descriptions of a new genus and thirty-two new species. *The Annals and Magazine of Natural History*, Series 1, 13 (84), 263–270.  
<https://doi.org/10.1080/03745484409442605>
- Nguyen, D.M. (2002) New species and distribution of the genera *Lophoturus* and *Ancistroxenus* (Myriapoda, Diplopoda, Penicillata) in the Caribbean and northern South America. *Zoosystema*, 24 (2), 451–470.
- Nguyen, D.M. & Geoffroy, J.-J. (2003) A revised comprehensive checklist, relational database, and taxonomic system of reference for the bristly millipedes of the world (Diplopoda, Polyxenida). *African Invertebrates*, 44 (1), 89–101.
- Nguyen, A.D. & Sierwald, P. (2013) A worldwide catalog of the family Paradoxosomatidae Daday, 1889 (Diplopoda: Polydesmida). *CheckList*, 9 (6), 1132–1353.  
<https://doi.org/10.15560/9.6.1132>
- Özdikmen, H. (2009) Substitute names for four preoccupied millipede genera (Diplopoda). *Munis Entomology & Zoology*, 4 (1), 180–183.
- Peters, W. (1864a) Hr. W. Peters gab eine Übersicht der im Königl. zoologischen Museum befindlichen Myriopoden aus der Familie der Polydesmi, so wie Beschreibungen einer neuen Gattung, *Trachyjulus*, der Juli und neuer Arten der Gattung *Siphonophora*. *Monatsberichte der Königlichen Preussischen Akademie der Wissenschaften zu Berlin*, 1864, 529–551.
- Peters, W. (1864b) Hr. W. Peters lieferte einen Nachtrag zu der am 18. Juli [Monatsberichte, 1864. p.529] gegebenen Übersicht der Polydesmi des Königl. zoologischen Museums. *Monatsberichte der Königlichen Preussischen Akademie der Wissenschaften zu Berlin*, 1864, 617–627.
- Pocock, R.I. (1893a) Report upon the Myriapoda of the 'Challenger' Expedition, with remarks upon the Fauna of Bermuda. *The*

- Annals and Magazine of Natural History*, Series 6, 11 (62), 121–142.  
<https://doi.org/10.1080/00222939308677479>
- Pocock, R.I. (1893b) Upon the identity of some of the types of Diplopoda contained in the collection of the British Museum, together with descriptions of some new species of exotic Iulidae. *The Annals and Magazine of Natural History*, 11, 248–254.  
<https://doi.org/10.1080/00222939308677511>
- Pocock, R.I. (1894) Contributions to our knowledge of the Arthropod Fauna of the West Indies. Part III. Diplopoda and Malacopoda, with a supplement on the Arachnida of the Class Pedipalpi. I. Diplopoda. *Journal of the Linnean Society of London*, 24 (157), 473–518.  
<https://doi.org/10.1111/j.1096-3642.1894.tb02494.x>
- Pocock, R.I. (1903–1910) Class Chilopoda and Diplopoda. In: Godman, F.D. & Salvin, O. (Eds.), *Biologia Centrali-Americanana*. Vol. 14. Porter, R.H., London, pp. 1–271.
- Porat, C.O. (1876) Om Några exotiska myriopoder. *Bihang till Kongl. Svenska Vetenskaps-Akademiens Handlingar*, 4 (7), 1–48.
- Porat, C.O.von. (1888) Über einige exotische Iuliden des Brüsseler-Museums. *Annales de la Société Entomologique de Belgique*, 32, 205–256.
- Preudhomme de Borre, A. (1884) Tentamen Catalogi Lysiopetalidarum, Julidarum, Archiulidarum, Polyzonidarum atque Siphonophoridarum hucusque descriptorum. *Annales de la Société Entomologique de Belgique*, 28, 46–82.
- Schileyko, A.A. (2014) A contribution to the centipede fauna of Venezuela (Chilopoda, Scolopendromorpha). *Zootaxa*, 3821 (1), 151–192. <https://doi.org/10.11646/zootaxa.3821.2.1>
- Schubart, O. (1934) Tausendfüßler oder Myriapoda. I: Diplopoda. Die Tierwelt Deutschlands und der angrenzenden Meeresteile, 28, 1–318.
- Schubart, O. (1945) Sobre os representantes Brasileiros da familia Spirostreptidae. *Anais da Academia Brasileira de Ciências*, 17, 51–87.
- Schubart, O. (1946) Contribuição ao conhecimento do gênero Leptodesmus (Família Leptodesmidae, Diplopoda). *Anais da Academia Brasileira de Ciências*, 18 (3), 165–202.
- Schubart, O. (1947) Os Diplopoda da viagem do naturalista antenor Leitao de Carvalho aos Rios Araguaia e Amazonas em 1939 e 1940. *Boletim do Museu Nacional, Rio de Janeiro*, New Series (Zoology), 82, 1–74.
- Schubart, O. (1951) Contribuição para a Fauna do Estado de São Paulo II. Os Rhinocricidae(Opisthospermophora, Diplopoda). *Anais da Academia Brasileira de Ciências*, 23 (2), 231–275.
- Schubart, O. (1955) Materiais para uma fauna a do estado de São Paulo. *Arquivos do Museu Nacional*, 42, 507–539.
- Schubart, O. (1956) “Leptodesmidae” brasileiras III. Espécies de Minas Gerais (Diplopoda: Proterospermophora). *Revista Brasileira de Biologia*, 16 (3), 355–367.
- Shelley, R.M. (1996) A redescription of *Siphonophora portoricensis* Brandt (Diplopoda: Siphonophorida: Siphonophoridae), with a catalogue of ordinal representative in the New World. *Journal of Natural History*, 30, 1799–1814.  
<https://doi.org/10.1080/00222939600771051>
- Shelley, R.M. (2014) A consolidated account of the polymorphic Caribbean milliped, *Anadenobolus monilicornis* (Porat, 1876) (Spirobolida: Rhinocricidae), with illustrations of the holotype. *Insecta Mundi*, 0378, 1–12.
- Schuh, R.T., Hewson-Smith, S. & Ascher, J.S. (2010) Specimen databases: A case study in entomology using web-based software. *American Entomologist*, 56 (4), 206–216.  
<https://doi.org/10.1093/ae/56.4.206>
- Sierwald, P. (2009) Contributions to myriapod taxonomy: the milliped and centiped genera and species described by Dr. Richard Lawrence Hoffman: 113–147. In: Roble, S.M. & Mitchell, J.C. (Eds.), *Festschrift in honor of Richard L. Hoffman's 80th birthday*. Virginia Museum of Natural History Special Publication 16. Virginia Museum of Natural History, Martinsville, Virginia, pp. 1–458.
- Sierwald, P., Bieler, R., Shea, E.K. & Rosenberg, G. (2018) Mobilizing mollusks: Status update on mollusk collections in the USA and Canada. *American Malacological Bulletin*, 36 (2), 177–215.  
<https://doi.org/10.4003/006.036.0202>
- Sierwald, P., Bond, J.E. & Gurda, G.T. (2005) The millipede type specimens in the collections of the Field Museum of Natural History. *Zootaxa*, 1005 (1), 1–64.  
<https://doi.org/10.11646/zootaxa.1005.1.1>
- Sierwald, P. & Spelda, J. (2018) MilliBase. Available from: <http://www.millibase.org> (acceseed 20 February 2018)
- Silvestri, F. (1895a) Viaggio del dottor Alfredo Borelli nella Repubblica Argentina e nel Paraguay. *Bollettino dei Musei di Zoologia e di Anatomia Comparata R. Università di Torino*, 10 (203), 1–12.  
<https://doi.org/10.5962/bhl.part.8048>
- Silvestri, F. (1895b) Chilopodi e diplopodi raccolti dal capitano G. Bove e dal Prof. L. Balzan nell'America meridionale. *Annali del Museo Civico di Storia Naturale "Giacomo Doria"*, 14, 764–783.
- Silvestri, F. (1896) Chilopodi e Diplopodi raccolti dal Dott. E. Resta a lay Guayra, nel Darien e a Cuenca. *Bollettino dei Musei di Zoologia e di Anatomia Comparata R. Università di Torino*, 11 (254), 1–6.
- Silvestri, F. (1897) Viaggio del Dr. Enrico Festa nell'Ecuador e regioni vicine. Chilopodi e Diplopodi. *Bollettino dei Musei di Zoologia e di Anatomia Comparata R. Università di Torino*, 12 (305), 1–19.  
<https://doi.org/10.5962/bhl.part.4563>

- Silvestri, F. (1898) Diagnósticos de nuevos Diplópodos Sudamericanos. *Anales del Museo Nacional de Buenos Aires*, 6, 53–79.
- Silvestri, F. (1903) Note Diplopodologiche. *Bollettino dei Musei di Zoologia e di Anatomia Comparata R. Università di Torino*, 18 (433), 1–21.  
<https://doi.org/10.5962/bhl.part.26628>
- Silvestri, F. (1910) Descrizioni preliminari di novi generi di Diplopodi. *Zoologischer Anzeiger, Leipzig*, 35 (12/13), 357–364.
- Silvestri, F. (1916) Contibuzione alla conoscenza degli Stemmiuloidea (Diplopoda). *Bollettino del Laboratorio di Zoologia Generale e e Agraria della R. Scuola Superiore d'Agricoltura in Portici*, 10, 287–354.
- Silvestri, F. (1932) Description of a new genus and two new species of South American Diplopoda of the family Polydesmidae. *American Museum Novitates*, 565, 1–4.
- Silvestri, F. (1948) Tavola sinottica dei generi dei Diplopoda Penicillata. *Bollettino del Laboratorio di Entomologia Agraria "Filippo Silvestri"*, 8, 214–220.
- Tabacaru, I. (1996) Sur la remarquable conformation des apophyses génitales mâles chez un polydesmide néotropical. *Mémoires du Muséum National d'Histoire Naturelle, Paris, Zoologie*, 169, 68–72.
- Terver, M., Terver, D. & Condé, B. (1968) Représentants contineaux du genre *Plesioproctus* (Diplopodes Pénicillates, Lophoproctidés). *Entomologiske Meddelelser*, 36 (2), 191–211.
- Torre, S.L. (1974) Lista preliminar de los diplópodos (Myriapoda, Diplopoda) de Cuba. *Ciencias Biológicas, Universidad de La Habana*, 42, 1–16.
- Verhoeff, K.W. (1910) Gynandromorphismus bei den Juliden. *Zoologischer Anzeiger*, 35, 733–735.
- Verhoeff, K.W. (1932) Diplopoden-Beiträge (124. Diplopoden-Aufsatz). *Zoologische Jahrbücher, Abteilung für Systematik, Ökologie und Geographie der Tiere*, 62 (5/6), 469–524.
- Verhoeff, K.W. (1938) Über Diplopoden des Zoologischen Museums in München. *Zoologische Jahrbücher Abteilung für Systematik, Ökologie und Geographie der Tiere*, 71, 1–54.
- Verhoeff, K.W. (1941) Chilopoden und Diplopoden. In: Titschack, E. (Ed.), *Beiträge zur Fauna Perus*, 2, pp. 1–55.
- Verhoeff, K.W. (1942) Über Spirostreptiden Südamerikas, vergleichende Morphologie und Mechanik der Gonopoden und eine neue Rhinocriciden-Gattung. *Archiv für Naturgeschichte, Zool., Abt. B, Berlin*, Neue Folge, 10 (2), 278–302.
- Voges, E. (1878) Beiträge zur Kenntniss der Juliden. *Zeitschrift für Wissenschaftliche Zoologie*, 31, 127–194.
- Vohland, K. (1998) Review of the millipede subfamily Amphilininae (Diplopoda, Polydesmida, Aphelidaemidae) with remarks on phylogeny and the description of some new South American genera and species. *Amazoniana*, 15 (1/2), 129–163.
- Weidner, H. (1960) Die Entomologischen Sammlungen des Zoologischen Staatsinstituts und Zoologischen Museums Hamburg. III. Teil. Chilopoda und Progoneata. *Mitteilungen aus dem Hamburgischen Zoologischen Museum und Institut*, 58, 57–104.

## Online Resources

[iDigBio.org/portal/recordset/97](http://iDigBio.org/portal/recordset/97) records, accessed on 2018-02-20T16:48:58.553905,  
 contributed by 9 Recordsets

SCAN, Symbiota Collections of Arthropods Network, availabe at: <https://scan-bugs.org/portal/index.php>  
 InvertEbase, available at: <http://invertebase.org/portal/index.php>

### Recordset identifiers:

- <http://www.idigbio.org/portal/recordsets/32d433aa-9e2b-4ff9-bc55-5c3e30112207> (24 records)
- <http://www.idigbio.org/portal/recordsets/3a5b5c9b-b241-4883-904a-b167a7edb41a> (22 records)
- <http://www.idigbio.org/portal/recordsets/a6eee223-cf3b-4079-8bb2-b77dad8cae9d> (15 records)
- <http://www.idigbio.org/portal/recordsets/dde625e8-cc2a-4877-9ec4-0b8a20dfded9> (9 records)
- <http://www.idigbio.org/portal/recordsets/774a153b-e556-47f6-95d1-bab49e61cc58> (9 records)
- <http://www.idigbio.org/portal/recordsets/8e58cd34-3cbb-46f7-9c25-527251881a6f> (6 records)
- <http://www.idigbio.org/portal/recordsets/110fcbc8-a5cc-4a3d-9508-f14d172492f7> (5 records)
- <http://www.idigbio.org/portal/recordsets/a8413649-05d9-46da-b137-1317a709453f> (4 records)
- <http://www.idigbio.org/portal/recordsets/271a9ce9-c6d3-4b63-a722-cb0adc48863f> (3 records)

Smithsonian National Museum of Natural History, Department of Entomology Collections (USNM); <http://collections.nmnh.si.edu/search/ento/>. Accessed June 15, 2016, Search: Types Search (15 records); Specimen Inventory (0 records); Species Inventory (0 records)

Museum of Comparative Zoology, Harvard University, MCZBASE; <http://mczbase.mcz.harvard.edu/SpecimenSearch.cfm>. Accessed June 15, 2016. Search: Invertebrate Zoology, Diplopoda, Venezuela (4 records, no types)

Field Museum of Natural History, Zoology Collections; <http://collections-zoology.fieldmuseum.org/>. Accessed June 15, 2016. Search: Diplopoda, Venezuela (20 records)

American Museum of Natural History Zoology Type Specimens, [http://research.amnh.org/iz/types\\_db/](http://research.amnh.org/iz/types_db/); accessed February 15, 2018; diplopod type specimens not databased

Natural History Museum (2014) Data Portal, Dataset: Collection specimens. Resource: Specimens. Diplopod type specimens not databased Available from: <http://data.nhm.ac.uk/dataset> (accessed 22 June 2016) <http://dx.doi.org/10.5519/0002965>  
ZMUC (2016 ) Online specimen Catalog. Entomology Department. Only five of the 24 ZMUC types are returned in a GBIF query Available from: <http://www.zmuc.dk/EntoWeb/collections-databaser/diplo.html> (accessed 25 June 2016)

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Species or genera currently considered junior synonyms are given in normal font, valid taxa are given in bold

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