

INSECTA MUNDI

A Journal of World Insect Systematics

0125

An annotated list of the centipedes (Chilopoda) in the National
Collection of Arachnids, Instituto de Biología, Universidad
Nacional Autónoma de México

Fabio Germán Cupul-Magaña
Centro Universitario de la Costa
Universidad de Guadalajara
Av. Universidad de Guadalajara No. 203
Delegación Ixtapa, C.P. 48280
Puerto Vallarta, Jalisco, México

Date of Issue: June 18, 2010

Fabio Germán Cupul-Magaña

An annotated list of the centipedes (Chilopoda) in the National Collection
of Arachnids, Instituto de Biología, Universidad Nacional Autónoma de México
Insecta Mundi 0125: 1-10

Published in 2010 by

Center for Systematic Entomology, Inc.

P. O. Box 141874

Gainesville, FL 32614-1874 U. S. A.

<http://www.centerforsystematicentomology.org/>

Insecta Mundi is a journal primarily devoted to insect systematics, but articles can be published on any non-marine arthropod taxon. Manuscripts considered for publication include, but are not limited to, systematic or taxonomic studies, revisions, nomenclatural changes, faunal studies, book reviews, phylogenetic analyses, biological or behavioral studies, etc. **Insecta Mundi** is widely distributed, and referenced or abstracted by several sources including the Zoological Record, CAB Abstracts, etc.

As of 2007, **Insecta Mundi** is published irregularly throughout the year, not as quarterly issues. As manuscripts are completed they are published and given an individual number. Manuscripts must be peer reviewed prior to submission, after which they are again reviewed by the editorial board to insure quality. One author of each submitted manuscript must be a current member of the Center for Systematic Entomology.

Managing editor: Paul E. Skelley, e-mail: insectamundi@gmail.com

Production editor: Michael C. Thomas, e-mail: insectamundi@gmail.com

Editorial board: J. H. Frank, M. J. Paulsen

Subject editors: J. Eger, A. Rasmussen, F. Shockley, G. Steck, A. Van Pelt, J. Zaspel

Printed copies deposited in libraries of:

CSIRO, Canberra, ACT, Australia

Museu de Zoologia, São Paulo, Brazil

Agriculture and Agrifood Canada, Ottawa, Ontario, Canada

The Natural History Museum, London, England

Muzeum i Instytut Zoologii Pan, Warsaw, Poland

National Taiwan University, Taipei, Taiwan

California Academy of Sciences, San Francisco, CA, USA

Florida Department of Agriculture and Consumer Services, Gainesville, FL, USA

Field Museum of Natural History, Chicago, IL, USA

National Museum of Natural History, Smithsonian Institution, Washington, DC, USA

Electronic copies in PDF format:

Printed CD mailed to all members at end of year.

Florida Center for Library Automation: <http://purl.fcla.edu/fcla/insectamundi>

University of Nebraska-Lincoln, Digital Commons: <http://digitalcommons.unl.edu/insectamundi/>

Goethe Universität, Frankfurt am Mains: <http://edocs.ub.uni-frankfurt.de/volltexte/2010/14363/>

Author instructions available on the Insecta Mundi page at:

<http://www.centerforsystematicentomology.org/insectamundi/>

Printed Copy ISSN 0749-6737

On-Line ISSN 1942-1354

CD-ROM ISSN 1942-1362

An annotated list of the centipedes (Chilopoda) in the National Collection of Arachnids, Instituto de Biología, Universidad Nacional Autónoma de México

Fabio Germán Cupul-Magaña

Centro Universitario de la Costa

Universidad de Guadalajara

Av. Universidad de Guadalajara No. 203

Delegación Ixtapa, C.P. 48280

Puerto Vallarta, Jalisco, México

fabio_cupul@yahoo.com.mx

Abstract. The National Collection of Arachnids, Instituto de Biología, Universidad Nacional Autónoma de México (México City) houses 476 chilopod samples, of which 197 are determined to genus and/or species. These are documented here and represent several new state records. Topotypes of eight species of centipedes described by R. V. Chamberlin also documented.

Resumen. La Colección Nacional de Arácnidos, del Instituto de Biología de la Universidad Nacional Autónoma de México (Ciudad de México), resguarda 476 muestras de quilópodos, de los que 197 están determinadas a nivel de género y/o especie. Algunas de estas muestras corresponden a nuevos registros estatales. Se documentan los topotipos de ocho especies de ciempiés descritos por R. V. Chamberlin.

Introduction

A total of 175 chilopod species in 74 genera, 15 families, and four of all five global orders are currently known from México (Minelli 2006; Foddai et al. 2000, 2002; Shelley 2002; Cupul-Magaña 2009a). Although Mexican centipede studies originated with Perbosc (1839), significant numbers of new species were proposed in the early 1900s and the 1940s (Pocock 1895-1910; Chamberlin 1940, 1941a, 1941b, 1941c, 1942a, 1942b, 1943, 1944, 1945, 1947), and these works were summarized by Foddai et al. (2000, 2002), Shelley (2002) and Cupul-Magaña (2009a), their diversity and distribution in México is still poorly known and underestimated.

Almost all centipedes collected in México in prior years were deposited in foreign collections; however, a few national institutions have significant holdings, one being the National Arachnid Collection (CNAN), Instituto de Biología, Universidad Nacional Autónoma de México in México City. It was formally established in 1997, but some chilopods deposited in the collection date back to 1934. Because of the lack of Mexican specialists, the collection has never been fully curated (Brailovsky et al. 1993). To supplement the consolidations of Foddai et al (2002), Shelley (2002), Chagas and Shelley (2003), Shelley and Chagas (2004), and Cupul-Magaña (2009a), I review here the identified CNAN centipede holdings in an annotated checklist format. Such efforts are necessary to develop complete faunal inventories of México and other countries.

Material and methods

The entire CNAN chilopod collection was examined and databased in an excel file; it comprises 476 samples: one Scutigermorpha, 200 Lithobiomorpha, 206 Scolopendromorpha and 69 Geophilomorpha. Fourteen of these specimens were identified 66 years ago by R. V. Chamberlin, who deposited topotypes of eight lithobiomorphs species that he described in 1943 in the holdings (Hoffmann 1993): *Arcophilus toltecus* Chamberlin, 1943; *Arebius altimontis*, Chamberlin, 1943; *Aporonyx boneti* Chamberlin, 1943; *Brachygeophilus huleanus* Chamberlin, 1943; *Delobius corraei* Chamberlin, 1943; *Lamyctes tolucanus*, Chamberlin, 1943; *Mayobius atliacanus* Chamberlin, 1943; and *Mexicobius alvarezi* Chamberlin, 1943.

Unidentified material was examined with a Zeiss stereoscope (10x-40x magnification). I determined them using the publications of Pocock (1895-1910), Chamberlin (1915), Chamberlin (1943), Shelley (2002), Chagas (2003), Chagas and Shelley (2003), Shelley and Chagas (2004) and Edgecombe and Cupul-Magaña

(2008). Only the scolopendromorphs and scutigeromorphs were identified to genus or species; lithobiomorph and geophilomorph topotypes of Chamberlin (1943) are reported here, but all other materials remain determined only to order. Mexican Lithobiomorpha and Geophilomorpha need detailed taxonomic studies. Specimens examined were stored in glass tubes and preserved in 70% ethanol.

List of identified materials in the CNAN

Class Chilopoda Latreille, 1817

Subclass Notostigmophora Verhoeff, 1901

Order Scutigeromorpha Pocock, 1895

Family Scutigeridae Gervais, 1837

Subfamily Scutigerinae Verhoeff, 1904

***Scutigera lincei* (Wood, 1867)**

Type locality. USA, Texas.

Exemplars examined. Chiapas: selva Lacandona, municipality of Ocosingo, 15/VII/2004, 159 m elevation (elev.), 16° 45.586' N-91° 00.292' W, collector (coll.) J. L. Castelo, 1 exemplar (ex.), (**new state record**).

Geographical distribution. Costa Rica, Cuba, El Salvador, Grenada, Guatemala, Honduras, México, Nicaragua, Panama, and USA (Würmli 1973; Würmli and Negrea 1977; Edgecombe and Cupul-Magaña 2008).

Distribution in México. Chiapas, Guerrero, Jalisco, Michoacán, Oaxaca, and Veracruz (Edgecombe and Cupul-Magaña 2008).

Remarks. No type specimen is known for this species, originally described in *Cermatia* Leach, 1814. Its identity will remain uncertain until a type is discovered or designated. As the Mexican samples differ from the widely introduced, *Scutigera coleoptrata* (Linnaeus, 1758), I follow Würmli (1973) and Würmli and Negrea (1977) in assigning this form to *S. lincei*, but other species of *Scutigera* have been described from the southwestern United States—Texas (*S. buda* Chamberlin, 1944), México (*S. tancitarona* Chamberlin, 1942 and *S. poicila* Chamberlin, 1944), and Guatemala (*S. chichivaca* Chamberlin, 1944)—. If any of these species are valid, they surely range southward for into México, and conceivably, some or all of the Mexican records of *S. lincei* refer to one or more of these other species.

Subclass Pleurostigmophora Verhoeff, 1901

Order Lithobiomorpha Pocock, 1895

Family Lithobiidae Newport, 1844

***Arebius altimontis* Chamberlin, 1943**

Type locality. México, Distrito Federal, Desierto de los Leones.

Exemplars examined. Distrito Federal: Desierto de los Leones (topotypes), 22/II/1941, coll. F. Bonet, R. V. Chamberlin det., 3 exs.

Geographical distribution. México (Chamberlin 1943; Minelli 2006).

Distribution in México. Distrito Federal and Morelos (Chamberlin 1943).

***Delobius corraei* Chamberlin, 1943**

Type locality. México, Estado de México, Río Frío.

Exemplars examined. Estado de México: Río Frío (topotypes), 1/V/1941, coll. F. Bonet, R. V. Chamberlin det., 2 exs. Note: Río Frío is a place located in Estado de México and not in the Distrito Federal as was wrote in the original label (see Chamberlin 1943).

Geographical distribution. México (Chamberlin 1943; Minelli 2006).

Distribution in México. Estado de México.

***Labrobium boneti* Chamberlin, 1943**

Aporonyx boneti Chamberlin, 1943

Type locality. México, Distrito Federal, Desierto de los Leones.

Exemplars examined. Distrito Federal: Desierto de los Leones (topotype), 22/III/1941, under stones, coll. F. Bonet, R. V. Chamberlin det., 2 exs.

Geographical distribution. México (Chamberlin 1943; Minelli 2006).

Distribution in México. Distrito Federal (Chamberlin 1943).

***Mayobius atliacanus* Chamberlin, 1943**

Type locality. México, Guerrero, Atliaca.

Exemplars examined. Guerrero: Atliaca (topotype), 13/I/1941, coll. F. Bonet, R. V. Chamberlin det., 1 ex.

Geographical distribution. México (Chamberlin 1943; Minelli 2006).

Distribution in México. Guerrero (Chamberlin 1943).

***Mexicobius alvarezi* Chamberlin, 1943**

Type locality. México, Morelos, Parque Nacional Lagunas de Zempoala.

Exemplars examined. Morelos: Parque Nacional Lagunas de Zempoala (topotype), 5/V/1941, under stones, coll. F. Bonet, R. V. Chamberlin det., 2 exs.

Geographical distribution. México (Chamberlin 1943; Minelli 2006).

Distribution in México. Morelos (Chamberlin 1943).

Family Henicopidae Pocock, 1901***Lamyctes tolucanus* Chamberlin, 1943**

Type locality. Estado de México, Nevado de Toluca.

Exemplars examined. Estado de México: Nevado de Toluca (topotype), 27/IV/1941, under stones, coll. F. Bonet, R. V. Chamberlin det., 1 ex.

Geographical distribution. México (Chamberlin 1943; Minelli 2006).

Distribution in México. Estado de México and Morelos (Chamberlin 1943).

Order Scolopendromorpha Pocock, 1895**Family Scolopendridae Leach, 1815****Subfamily Scolopendrinae Leach, 1815*****Arthrorhabdus pygmaeus* (Pocock, 1895)**

Type locality. México, Guerrero, Amula. Note: The modern name of Amula is Almolonga.

Exemplars examined. Jalisco: Chamela, 25/X/2001, coll. J.L. Castelo, 1 ex. **Puebla:** Tierra Amarilla near Zapotitlán, 12/III/1999, coll. E. González, 1 ex. **San Luis Potosí:** Ciudad Valles-Río Verde Highway, 10/III/2000, 2 exs.

Geographical distribution. Belize (potential), México and southwestern USA (Shelley 2002; Shelley and Chagas 2004).

Distribution in México. Baja California Sur, Coahuila, Colima, Durango, Guerrero, Hidalgo, Jalisco, Morelos, Nayarit, Nuevo León, Oaxaca, Puebla, San Luis Potosí, Sinaloa, and Tamaulipas (Shelley 2002; Shelley and Chagas 2004).

Cormocephalus impressus Porat, 1976

Type locality. Dominican Republic (La Hispaniola).

Exemplars examined. Jalisco: Chamela, 20/X/2001, coll. Ricardo Durán, 1 ex.

Geographical distribution. Brazil, Ecuador, México, Peru, and Dominican Republic (Attems 1930; Schileyko 2002).

Distribution in México. México in general (without specific locality) and Jalisco (Cupul-Magaña 2009b).

Cormocephalus sp. Newport, 1844

Exemplars examined. Brazil: Manaus, 21/X/1993, coll. W. López-Forment, 1 ex.

Scolopendra morsitans Linnaeus, 1758

Type locality. India, with no more information.

Exemplars examined. Baja California Sur: Puerto Escondido, 18/I/1992, coll. W. López-Forment, 4 exs. **Estado de México:** Los Reyes Iztacala, 21/V/2001, coll. E. Hernández, 1 ex.; Bonsencheve Nacional Park, municipality of Villa de Allende, 28/III/2002, 3000 m elev., pine forest, colls. G. Medina, P. Martínez, O. Delgado, E. González, 1 ex., **(new state record)**. **Distrito Federal:** botanical garden, Ciudad Universitaria, 2/VIII/1971, coll. C.R. Beutelspacher, 1 ex.; Instituto de Biología offices, 14/IV/2009, 1 ex., **(new state record)**. **Oaxaca:** Domingullo, 25/XI/1997, coll. J.L. Castelo, 2 exs., **(new state record)**.

Geographical distribution (includes both indigenous and introduced occurrences). Africa, Arabian Peninsula, Atlantic Ocean Islands, Australia, Belize, Caribbean Islands (Anguilla, Antigua, Bahamas, Barbuda, Cayman Islands, Cuba, Curaçao, Dominica, Dominican Republic, Grenadines, Guadeloupe, Jamaica, Marie Galante, Martinique, Montserrat, Nevis, Puerto Rico, St.-Barthélemy, St. Kitts, St. Vincent, Trinidad and Tobago, Turks and Caicos Islands, US Virgin Islands), Costa Rica, Europe, India, Indian Ocean Islands, Indonesia, Japan, México, New Zealand, Pacific Islands, Papua New Guinea, Panama, Philippines, South America (Argentina, Brazil, Colombia, Ecuador, French Guiana, Guyana, Paraguay, Peru, Surinam, Venezuela), Taiwan, and USA (Florida) (Shelley et al. 2005).

Distribution in México. Baja California Sur, Colima, **Distrito Federal**, **Estado de México**, Jalisco, **Oaxaca**, Tamaulipas, Veracruz and Yucatán, Cayo Arenas, Gulf of México (Shelley et al. 2005; unpublished data).

Scolopendra polymorpha Wood, 1861

Type locality. USA, Kansas, Riley County, Fort Riley.

Exemplars examined. Baja California: Gulf of California, San Lorenzo Island, 14/II/1986, colls. F. Arias, L. Cervantes, 1 ex.; **Baja California Sur:** km. 100 La Paz-Colonia Constituyentes road, municipality of Constitución, 30/XII/1974, coll. L.F.C., 1 ex.; Gulf of California, Partida Norte Island (Cardonosa Island), 17/III/1986, coll. F. Arias, L. Cervantes, 1 ex.; microwave station “El Abulón”, municipality of San Ignacio, 14/VII/2004, 141 m elev., 27° 17' 29.4" N-113° 01' 55.2" W, colls. A. Valdez, O. Francke, E. González, 1 ex.; Sierra de La Laguna, 24/VIII/2004, 1800 m elev., 23° 33' 1.6" N-109° 59' 27.4" W, colls. R. Valdez, G. González, O. Francke, 1 ex. **Chihuahua:** Hidalgo del Parral, 2/XI/1951, 2 exs.; 12 km. Balleza road, Hidalgo del Parral, 4/VIII/2005, 2202 m elev., 26° 51.197' N-106° 06.756' W, colls. O. Francke, D. Sissom, K. McWest, C. Lee, H. Montaña, J. Ballesteros, L. Jarvis, C. Durán-Barrón, 1 ex.; km. 96 Hidalgo del Parral-Guadalupe y Calvo Highway, 4/VIII/2005, 2544 m elev., 26° 34.272' N-106° 17.451' W, colls. O. Francke, D. Sissom, K. McWest, C. Lee, H. Montaña, J. Ballesteros, L. Jarvis, C. Durán-Barrón, 1 ex.; road to Basaceachi, 31/VIII/2005, 28° 24.690' N-107° 24.143' W, 2188 m elev., colls. O. Francke, D. Sissom, K. McWest, C. Lee, H. Montaña, J. Ballesteros, L. Jarvis, C. Durán-Barrón, 3 exs. **Distrito Federal:** Valle Alegre, Ajusco, VIII/1939, 2 exs.; Ciudad Universitaria, México City, IV/1978, 1 ex.; Pedregal de San Ángel, VII/1981, coll. A. López-Forment, 1 ex., **(new state record)**. **Durango:** Vicente Guerrero, municipality of Vicente

Guerrero, 18/IX/2001, 2008 m elev., colls. M. Espino, D. García, E. González, 1 ex.; San Dimas, 12/VIII/2008, 1004 m elev., 24° 3.94' N-105° 53.15' W, coll. Diego García, 1 ex. **Hidalgo**: South of Ixmilucan, 29/IV/2005, 2003 m elev., 20° 24.535' N-99° 07.656' W, colls. A. Valdez, H. Montaña, O. Francke, A. Ballesteros, 1 ex., (**new state record**). **Morelos**: Cerro Tepozteco, 7/I/1948, 6 exs.; road to Las Granadas, 26/VI/1966, 1 ex., (**new state record**). **Nuevo León**: El Nogal, municipality of Agualeguas, III/2002, coll. P.B.N., 1 ex. **Oaxaca**: Cuicatlán, without date, 1 ex., (**new state record**). **Sinaloa**: El Fuerte, municipality of El Fuerte, VIII/2002, coll. P.B.N., 1 ex.; Sanalona dam, road to Tamazula, municipality of Culiacán, 18-19/VIII/2002, coll. P.B.N., 2 exs., (**new state record**). **Sonora**: Puerto Peñasco, 23/XI/1965, coll. L. Vázquez, 1 ex.; Cerro Prieto, 24/XI/1965, coll. L. Vázquez, 1 ex. **Tamaulipas**: Tampico, II/1949, 1 ex.; Nuevo Laredo, 11/X/1936, 2 exs., (**new state record**). **Zacatecas**: road to San Rafael de las Tablas, San Juan Capistrano, municipality of Valparaíso, 20/IX/2001, 1200 m elev., 1 ex.; Guayalejo, municipality of Llera de Canales, 25/V/2003, coll. P.B.N., 1 ex.

Geographical distribution. México and USA; introduced into Hawaiian Islands (Shelley 2002).

Distribution in México. Baja California, Baja California Sur, Chihuahua, Coahuila, **Distrito Federal**, Durango, Guerrero, **Hidalgo**, Jalisco, **Morelos**, Nuevo León, **Oaxaca**, Puebla, Querétaro, **Sinaloa**, Sonora, **Tamaulipas**, and Zacatecas (Shelley 2002; Cupul-Magaña 2009c).

Scolopendra viridis Say, 1821

Type locality. USA, unknown site in coastal Georgia or Florida.

Exemplars examined. **Baja California**: Gulf of California, Ángel de la Guarda Island, 7/II/1986, coll. F. Arias, 3 exs., (**new state record**). **Baja California Sur**: Gulf of California, San Marcos Island, 14/VIII/1986, coll. L. Cervantes, 1 ex. **Chiapas**: Yaxchoj, municipality of Comitán, IX/1960, 2 exs., (**new state record**). **Chihuahua**: km. 39 Las Juntas road, San Juanito, 1/VII/2005, 2298 m elev., 28° 06.123' N-107° 32.607' W, colls. O. Francke, D. Sissom, K. McWest, C. Lee, H. Montaña, J. Ballesteros, L. Jarvis, C. Duran-Barron, 1 ex.; km. 108 Creel-Cusarare road, 2/VII/2005, 2245 m elev., 27° 38.459' N-107° 33.192' W, colls. O. Francke, D. Sissom, K. McWest, C. Lee, H. Montaña, J. Ballesteros, L. Jarvis, C. Durán-Barrón, 1 ex.; Rancho San Lorenzo del Río, 31/VII/2005, 2031 m elev., 25° 10.506' N-108° 11.247' W, colls. O. Francke, D. Sissom, K. McWest, C. Lee, H. Montaña, J. Ballesteros, L. Jarvis, C. Durán-Barrón, 1 ex. **Colima**: Revillagigedo Archipelago, Socorro Island, I/1958, 2 exs., colls. G. Pérez, R. Lamothe; Socorro Island, 16/I/1958, 1 ex., colls. G. Pérez, R. Lamothe; Socorro Island, 20-22/VIII/1987, 2 exs., colls. L. Cervantes, R. Medina. **Distrito Federal**: Valle Alegre, Ajusco, VIII/1939, 2 exs.; Barranca de Tarango, 11/IX/1940, 1 ex.; Pedregal de San Ángel, 15/VI/1942, 23/IV/1949, 25/X/1959, 3/X/1970, 10/X/1970, and 17/VII/1971, 9 exs.; road to Arenal, 3/IV/1971, coll. H.G.A., 2 exs.; Sierra del Ajusco, 3/IV/1971, coll. H.G.A., 1 ex.; Tlalpan, 6/XI/1972, coll. J. Pites, 1 ex.; Xochimilco, X/1982, 1 ex.; Entomology Laboratory, Instituto de Biología, Ciudad Universitaria, X/1983, coll. C.R. Beutelspacher, 1 ex.; Santo Domingo, Coyoacán, III/2000, coll. E. González, 1 ex. **Durango**: Vicente Guerrero, inside greenhouse, 5/III/1999, coll. M. Quintos, 1 ex. **Estado de México**: Ozumba, 17/VI/1984, coll. R.H. Manzanilla, 2 exs.; La Cañada, Chalma, IX/1989, coll. W. López-Forment, 1 ex.; road to San Luis Anáhuac, municipality of Villa del Carbón, 12/X/2001, 2510 m elev., pine-oak forest, colls. O. Francke, E. González, 1 ex.; 3 km southeast of Temascalcingo, municipality of Temascalcingo, 13/X/2001, 2525 m elev., colls. O. Francke, E. González, 1 ex.; 10 km north of Sierra Nanchititla National Park, Tejupilco, 16/XII/2001, pine-oak forest, coll. E. González, 1 ex.; 2 km north of Sierra Nanchititla National Park, 16/XII/2001, pine-oak forest, colls. O. Francke, E. González, 1 ex.; Peña del Campanario, La Goleta, municipality of Tejupilco, 16/II/2002, 2500 m elev., oak forest, colls. E. González, S. Reynaud, 1 ex.; km. 48 Toluca-Temascal road, 15/III/2003, 2400 m elev., colls. S. Reynaud, E. González, 1 ex. **Guanajuato**: Cerro Prieto, municipality of Coroneo, 2-4/IV/1999, coll. J.L. Castelo, 1 ex.; San Antonio de Padua, municipality of León, II/2003, coll. P.B.N., 1 ex.; Cerro Prieto eastside, municipality of Coroneo, VII/2004, coll. J.L. Castelo, 1 ex. **Guerrero**: Las Granadas, IX/1969, coll. S. Flores, 1 ex.; Ometepec, 7-12/XII/1970, 1 ex.; Santa Cruz, municipality of Atenango del Río, 22/IV/2000, 900 m elev., tropical semideciduous forest, colls. E. González, O. Delgado, 1 ex. **Hidalgo**: Santa Catalina, I/1943, 1 ex. **Michoacán**: Maravatío, 22/V/1988, colls. H. Brailovsky, A. Cadena, C. Mayorga, L. Cervantes, 1 ex.; 3 km from Tolcayuca, 29/IV/

2005, 2528 m elev., 19° 58.720' N-98° 56.353' W, colls. A. Valdez, H. Montaña, O. Francke, A. Ballesteros, 1 ex.; Ixmiquilpan, without date, coll. E. González, 2 exs. **Morelos:** Tepoztlán, IV/1947, VI/1947, 3 exs.; Zacatepec, 15/VII/1949, 1 ex.; Cerro Tepozteco, municipality of Tepoztlán, 20/V/1971, 6 exs.; Tehuiztla, 10/III/1981, colls. J. Langarica, M. Galicia, 1 ex.; Miacatlán, 15/VII/1991, coll. W. López-Forment, 2 exs.; Cuernavaca, 22/VIII/1997, coll. E. Gaytán, 1 ex.; Cuautla, 27/XII/2003, coll. H. Brailovsky, 1 ex.; Cuautla, 8/IX/2007, coll. H. Brailovsky, 1 ex.; Cuautla, 3/I/2009, coll. H. Brailovsky, 1 ex.; Tepoztlán, without date, 2 exs. **Oaxaca:** Temascal, 21/III/1975, coll. Zaragoza, 1 ex.; km. 171 Teotitlán-Oaxaca road, 15/III/1989, 2200 m elev., coll. L. Cervantes, 1 ex.; Mazunte, 9/IV/1999, coll. E.G.S., 1 ex.; Cuicatlán-Oaxaca road, 9/II/2005, 1574 m elev., 17° 34.914' N-96° 56.928' W, colls. O. Francke, M. Córdoba, A. Jaimes, G. Montiel, 1 ex. **Puebla:** Mesa del Riego, municipality of Tehuacán, 8/IX/1960, 1 ex.; Cerro Tres Chichis, north of Zapotitlán, 16/XI/1998, 2030 m elev., coll. E. González, 1 ex.; Cerro del Campanario, 18/XI/1998, 2030 m elev., coll. E. González, 1 ex.; Valle de Tehuacán, 9-13/II/1999, coll. E. González, 2 exs.; San Antonio Texcala, 11/III/1999, coll. E. G. S., 1 ex. **Sonora:** Cerro Prieto, municipality of Puerto Peñasco, 24/XI/1965, coll. C.R. Beutelspacher, 2 exs.; Benjamín Hill, 3/XI/1986, 1 ex. **Tamaulipas:** Guayalejo, municipality of Llera de Canales, VIII/2003, coll. P.B.N., 1 ex. **Veracruz:** km. 13 road to Coatepec from Huatusco, municipality of Huatusco, 12/III/1989, 600 m elev., colls. L. Cervantes, A. Cadena, 1 ex.; Playa Chachalacas, municipality of Úrsulo Galván, 26/III/2002, coll. L. Olguín, 1 ex. **Zacatecas:** Zacatecas City, 13/VI/2009 to 3/VII/2009, coll. G. Montiel, 1 ex.

Geographical distribution. Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, México, Panama, and USA (Shelley 2002; Cupul-Magaña 2007; Cupul-Magaña 2009c).

Distribution in México. Baja California, Baja California Sur, **Chiapas**, Chihuahua, Coahuila, Colima, Distrito Federal, Durango, Estado de México, Guanajuato, Guerrero, Hidalgo, Jalisco, Michoacán, Morelos, Nayarit, Nuevo León, Oaxaca, Puebla, Querétaro, San Luis Potosí, Sinaloa, Sonora, Tamaulipas, Veracruz, and Zacatecas (Shelley 2002; Cupul-Magaña 2007; Cupul-Magaña 2009c)

Subfamily Otostigminae Kraepelin, 1903

Rhysida immarginata (Porat, 1876)

Type locality. Philippines Islands, Manila.

Exemplars examined. **Chiapas:** Ocotál, municipality of Comitán, 10/IX/1960, 1 ex.; Tuxtla Gutiérrez, 22/XII/1998, coll. C.R. Beutelspacher, 1 ex.; without date, 1 ex., (**new state record**). **Guerrero:** Acahuizotla, XI/1968, coll. W. López-Forment, 1 ex., (**new state record**). **Tabasco:** Coconá, municipality of Teapa, 12/IV/1960, 1 ex.; 14/IV/1969, 1 ex., (**new state record**). **Panama:** Isla del Rey, Bahía de las Perlas, 27/III/1992, coll. W. López-Forment, 5 exs.

Distribution in México. **Chiapas**, Durango (Pocock 1895-1910), **Guerrero**, and **Tabasco**.

Geographical distribution. Cuba, Democratic Republic of the Congo, El Salvador, Guatemala, India, México, South America, South-Eastern Asia, Sri Lanka, and Sudan (Minelli 2006).

Rhysida longipes (Newport, 1845)

Type locality. Unknown.

Exemplars examined. **Campeche:** Ciudad del Carmen, 5/IV/1999, 1 ex., (**new state record**). **Michoacán:** 15 km from Villa Madero, 12/X/1999, coll. E. González, 1 ex., (**new state record**).

Geographical distribution (indigenous and introduced occurrences): Central (without specific country) and South America (Brazil, Peru, Venezuela), China, Chagos Archipelago, Haiti, India, Madagascar, Maldives, Mauricio and Rodriguez Islands, México, Occidental Africa, Puerto Rico, Saint Kitts and Nevis, Seychelles Archipelago, Somalia, Taiwan, Tanzania, USA, U.S. Virgin Islands, and Yemen (Koch 1985; Lewis and Wranik 1990; González-Sponga 2002; Lewis 2002a; 2002b; Schileyko 2002; Shelley 2002; Chao and Chang 2003; Shelley and Edwards 2004; Minelli 2006; Lewis and Cole 2007).

Distribution in México. **Campeche**, Chiapas, Gulf of California Islands (Isabel Island), Guerrero, Jalisco, Michoacán, and Sinaloa (Cupul-Magaña and Bueno-Villegas 2007).

Family Scolopocryptopidae Pocock, 1896
Subfamily Scolopocryptopinae Pocock, 1896

***Scolopocryptops ferrugineus* (Linnaeus, 1767)**

Type locality. West Africa.

Exemplars examined. Guerrero: Omiltemi Park, 8/III/2003, 19° 58.720' N-99° 41.740' W, colls. E. González, O. Francke, 1 ex. **San Luis Potosí:** Ciudad Valles, 10/VII/2000, 1 ex., **(new state record).**

Geographical distribution. Bahamas, Cameroon (West Africa), Colombia, Cuba, Dominica, Ecuador, El Salvador, Guadeloupe, Guatemala, Grenada, Haiti, Honduras, Jamaica, Martinica, México, Peru, Saint Vincent, and Venezuela (Chagas 2003).

Distribution in México. Guerrero, **San Luis Potosí**, and Veracruz.

Remark. *Scolopocryptops gracilis* Wood, 1862 (Shelley 2002) has been documented in Baja California, and *Scolopocryptops ferrugineus* (Linnaeus, 1767) occurs in Guerrero (Pocock 1895-1910) and Veracruz (Chagas 2003). Chilobase (Minelli 2006) also record *S. melanostomus* Newport, 1845 from México in general, so just three species of *Scolopocryptops* has been documented to occur in the country.

***Scolopocryptops melanostomus* Newport, 1845**

Type locality. West Indies, Saint Vincent.

Exemplars examined. Chiapas: 12/IV/1968, in bromeliad, 2 exs., **(new state record).** **Estado de México:** Nanchititla National Park, 16/XII/2001, pine-oak forest, colls. O. Francke, E. González, 3 exs., **(new state record).** **Veracruz:** Cerro El Vigía, 18/II/1967, in bromeliad *Vriesa gladioliflora*, 1 ex.; Estación de Biología Los Tuxtlas, 16/XI/1968, 13/VIII/1969, and 10/I/1975, in bromeliad *Aechmea bracteata*, coll. C.R.B., 4 exs., **(new state record).**

Geographical distribution. Brazil, Colombia, Costa Rica, Fiji, Guatemala, Haiti, Honduras, Indonesia, México, Philippines, Papua New Guinea, Peru, Puerto Rico, Saint Vincent and The Grenadines, and Venezuela (Attems 1930, Chagas 2003, Minelli 2006).

Distribution in México. Chiapas, **Estado de México**, and Veracruz.

***Scolopocryptops sexspinosus* (Say, 1821)**

Type locality. USA, unknown location in Georgia or Florida.

Exemplars examined. USA: New York, 1/IX/1970, coll. W. López-Forment, 1 ex.

Geographical distribution. Canada and USA (Shelley 2002).

Family Cryptopidae Kohlrausch, 1881
Subfamily Cryptopinae Kohlrausch, 1881

***Cryptops* spp. Leach, 1815**

Exemplars examined. Chiapas: Comitán, 9/IX/1960, 1 ex.; Tuxtla Gutierrez, 18/IX/1965, 1 ex., **(new state record for family and genus).** **Hidalgo:** Tula, 1/III/1953, 1 ex., **(new state record for family and genus).** **Jalisco:** San Martín Volcano, 30/I/2001, 3 exs.; Chamela, 21/X/2001, and 22/X/2008, coll. J.L. Castelo, 2 exs., **(new state record for family and genus).** **Morelos:** road to Las Granadas, 26/VI/1966, 2 exs. **Oaxaca:** Santo Tomás Teipan, municipality of San Bartolo Yuatepec, 20-25/III/2002, cloud forest, coll. S. Reynaud, 1 ex., **(new state record for family and genus).** **Veracruz:** Cerro El Vigía, municipality of Santiago Tuxtla, 8/II/1967, 1 ex.

Distribution in México. Occurrence of Cryptopidae and *Cryptops* has been documented for Guerrero and Veracruz (Verhoeff 1934, Chamberlin 1939, 1943, Minelli 2006). New records from Chiapas, Hidalgo, Jalisco, and Oaxaca.

Order Geophilomorpha Leach, 1815
Family Geophilidae

Watophilus hulenius* (Chamberlin, 1943)Brachygeophilus huleanus* Chamberlin, 1943**Type locality.** México, Oaxaca, El Hule.**Exemplars examined. Oaxaca:** El Hule (topotype), 13/II/1941, coll. F. Bonet, R. V. Chamberlin det., 1 ex.**Geographical distribution.** México (Chamberlin 1943).**Distribution in México.** Oaxaca (Chamberlin 1943).**Family Himantariidae*****Arcophilus toltecus* Chamberlin, 1943****Type locality.** México, Estado de México, Río Frío.**Exemplars examined. Estado de México:** Río Frío (topotype), 1/V/1941, coll. F. Bonet, R. V. Chamberlin det., 2 exs. Note: Río Frío is a place located in Estado de México and not in the Distrito Federal.**Geographical distribution.** México (Chamberlin 1943).**Distribution in México.** Estado de México (Chamberlin 1943), misstated as Distrito Federal.**Acknowledgments**

I am grateful to Armando Escobedo and Silvia de la Parra for their support during my stay in México City and Griselda Montiel, technician of the Nationals Collections, for her assistance during my visit. Dr. Oscar Francke, curator of the CNAN and Dra. Tila María Pérez, curator of National Collection of Acari provided access to their collections. The University of Guadalajara provided an academic grant that founded my visit. Dr. Rowland Shelley, North Carolina State Museum of Natural Sciences, and Dr. Julián Bueno-Villegas, Universidad Autónoma del Estado de Hidalgo, provided pre-submission reviews.

Literature Cited

- Attems, C. 1930.** Myriapoda 2. Scolopendromorpha. Das Tierreich 54: 1-308.
- Brailovsky, H., C. R. Betuelsbacher, and S. Zaragoza y Caballero. 1993.** La colección Entomológica. p. 67-100. *In*: H. Brailovsky, and B. Gómez Varela (eds.). Colecciones Biológicas Nacionales del Instituto de Biología: Colecciones Zoológicas. Instituto de Biología-UNAM; México. 196 p.
- Chagas, A. Jr. 2003.** Revisão das espécies neotropicais de Scolopocryptopinae (Chilopoda: Scolopendromorpha: Scolopocryptopidae). Unpublished M.Sc. dissertation, Universidade Federal do Rio de Janeiro, May 2003. 79 p.
- Chagas, A. Jr., and R. M. Shelley. 2003.** The centipede genus *Newportia* Gervais, 1847, in Mexico: description of a new troglomorphic species; redescription of *N. sabina* Chamberlin, 1942; revival of *N. azteca* Humbert & Saussure, 1869; and a summary of the fauna (Scolopendromorpha: Scolopocryptopidae: Newportiinae). Zootaxa 379: 1-20.
- Chamberlin, R. V. 1915.** New chilopods from Mexico and the West Indies. Bulletin of the Museum of Comparative Zoology 59: 493-541.
- Chamberlin R. V. 1939.** Four new centipedes of the genus *Cryptops*. The Pan-Pacific Entomologist 15(2): 63-65.
- Chamberlin, R. V. 1940.** Two new geophiloid chilopods from Mexico and Texas. Proceedings of the Biological Society of Washington 53: 65-66.
- Chamberlin, R. V. 1941a.** New chilopods from Mexico. The Pan-Pacific Entomologist 17(4): 184-188.
- Chamberlin, R. V. 1941b.** New genera and species of American lithobiid centipeds. Bulletin of the University of Utah 31(13): 3-23.
- Chamberlin, R. V. 1941c.** New genera and species of North American geophiloid centipeds. Annals Entomological Society of America 34: 773-790.
- Chamberlin, R. V. 1942a.** On centipeds and millipeds from Mexican caves. Bulletin of the University of Utah 33(4): 3-19.

- Chamberlin, R. V. 1942b.** On ten new centipedes from Mexico and Venezuela. *Proceedings of the Biological Society of Washington* 55: 17-24.
- Chamberlin, R. V. 1943.** On Mexican centipeds. *Bulletin of the University of Utah* 33(6): 1-55.
- Chamberlin, R. V. 1944.** Chilopods in the collections of Field Museum of Natural History. *Field Museum of Natural History* 28(4): 175-216.
- Chamberlin, R. V. 1945.** On three lithobioid chilopods. *Entomological News* 56: 197-199.
- Chamberlin, R. V. 1947.** A new geophiloid centipede taken at the Mexican border. *Entomological News* 58: 260-261.
- Chao, J. L., and H. W. Chang. 2003.** The scolopendromorph centipedes (Chilopoda) of Taiwan. *African Invertebrates* 44(1): 1-11.
- Cupul-Magaña, F. G. 2007.** *Scolopendra viridis* Say, 1821. *Dugesiana* 14(2): 89-93.
- Cupul-Magaña, F. G. 2009a.** Lista nominal de especies de ciempiés (Chilopoda) para México. *BIOCYT* 2(6): 48-54.
- Cupul-Magaña, F. G. 2009b.** Redescubrimiento de *Cormocephalus impressus* (Chilopoda: Scolopendromorpha: Scolopendridae) para México. *BIOCYT* 2(8): 48-54.
- Cupul-Magaña, F. G. 2009c.** Nuevas localidades para quilópodos (Chilopoda) en la costa de Jalisco y Sinaloa, México. *Dugesiana* 16(2): 81-85.
- Cupul-Magaña, F. G., and J. Bueno-Villegas. 2007.** Primer registro de *Rhysida longipes* (Chilopoda: Scolopendromorpha: Scolopendridae) en el Parque Nacional Isla Isabel, Golfo de California, México. *Dugesiana* 14(1): 39-41.
- Edgecombe, G. D., and F. G. Cupul-Magaña. 2008.** Primer registro de *Scutigera linnei* (Wood, 1867) para Jalisco y anotaciones sobre los escutigermorfos de México (Chilopoda: Scutigermorpha: Scutigeridae). *Dugesiana* 15(1): 17-19.
- Foddai, D., L. A. Pereira, and A. Minelli. 2000.** A catalogue of the geophilomorph centipedes (Chilopoda) from Central and South America including Mexico. *Amazoniana* 16(1/2): 59-185.
- Foddai, D., L. A. Pereira, and A. Minelli. 2002.** Geophilomorpha. p. 417-427. *In:* J. Llorente-Bousquest, and J. J. Morrone (eds.). Biodiversidad, taxonomía y biogeografía de artrópodos de México: hacia una síntesis de su conocimiento, Vol. III. CONABIO-UNAM; México. 690 p.
- González-Sponga, M. A. 2002.** Miriápodos de Venezuela. Descripción de siete nuevas especies del género *Rhysida* y redescrípción de *Rhysida longipes* Newport, 1845 (Chilopoda: Scolopendridae). *Aula y Ambiente* 2(4): 49-60.
- Hoffmann, A. 1993.** Las colecciones de artrópodos de A. Hoffmann. Cuadernos 19. Instituto de Biología-UNAM; México. 43 p.
- Koch, L. E. 1985.** The taxonomy of Australian centipedes of the genus *Rhysida* Wood (Chilopoda: Scolopendridae: Otostigminae). *Journal of Natural History* (19): 205-214.
- Lewis, J. G. E. 2002a.** The scolopendromorph centipedes of Mauritius and Rodriguez and their adjacent islets (Chilopoda: Scolopendromorpha). *Journal of Natural History* 36: 79-106.
- Lewis, J. G. E. 2002b.** A re-examination of 11 species of *Otostigmus* from the Indo-Australian region described by R.V. Chamberlin based on type specimens in the collection of the Museum of Comparative Zoology, Harvard (Chilopoda; Scolopendromorpha; Scolopendridae). *Journal of Natural History* (36): 1687-1706.
- Lewis, J. G. E., and W. Wranik. 1990.** On the centipedes of Yemen. *Zoology of the Middle East* (4): 61-70.
- Lewis, J. G. E., and N. C. Cole. 2007.** *Rhysida longipes longipes* (Newport, 1845) in the Chagos Islands, Indian Ocean (Chilopoda, Scolopendromorpha, Scolopendridae). *Phelsuma* (15): 82-84.
- Minelli, A. (Ed.). 2006.** Chilobase: a web resource for Chilopoda taxonomy. Electronic database accessible at <http://chilobase.bio.unipd.it/>. Captured on 27 April 2006.
- Pocock, R. I. 1895-1910.** Chilopoda and Diplopoda. *Biologia Centrali-Americana* 14: 1-217 p., 15 pl.
- Perbosc, M. 1839.** Insectes nouveaux découverts au Mexique. *Revue Zoologique par La Société Cuvierienne* 2: 261-264.
- Schileyko, A. A. 2002.** Scolopendromorpha. p. 479-500. *In:* J. Adis (ed.). *Amazonian Arachnida and Myriapoda*. Pensoft Publishers; Sofia-Moscow. 590 p.

- Shelley, R. M. 2002.** A synopsis of the North American centipedes of the order Scolopendromorpha (Chilopoda). Virginia Museum of Natural History Memoir (5): 1-108.
- Shelley, R. M., and A. Jr. Chagas. 2004.** The centipede genus *Arthrorhabdus* Pocock, 1891, in the western hemisphere: potential occurrence of *A. pygmaeus* (Pocock, 1895) in Belize (Scolopendromorpha: Scolopendridae: Scolopendrinae). Western North American Naturalist 64(4): 532-537.
- Shelley, R. M., and G. B. Edwards. 2004.** A fourth Floridian record of the centipede genus *Rhysida* Wood, 1862; potential establishment of *R. l. longipes* (Newport, 1845) in Miami-Dade County (Scolopendromorpha: Scolopendridae: Otostigminae). Entomological News 115(2): 116-119.
- Shelley, R. M., G. B. Edwards, and A. Jr. Chagas. 2005.** Introduction of the centipede *Scolopendra morsitans* L., 1758, into northeastern Florida, the first authentic North American record, and review of its global occurrences (Scolopendromorpha: Scolopendridae: Scolopendrinae). Entomological News 116(1): 39-58.
- Verhoeff, K. W. 1943.** Beiträge zur systematik und geographie der chilopoden. Zoologische Jahrbücher 66: 1-112.
- Würmli, M. 1973.** Die Scutigeromorpha (Chilopoda) von Costa Rica. Ueber *Dendrothereua arborum* Verhoeff, 1944. Studies on Neotropical Fauna and Environment 8: 75-80.
- Würmli, M., and S. Negrea. 1977.** Les scutigéromorphes de l'île de Cuba (Chilopoda: Scutigeromorpha). Fragmenta Faunistica 23: 75-81.

Received January 19, 2010; Accepted April 7, 2010.