

M I L W A U K E E P U B L I C M U S E U M

CONTRIBUTIONS *in Biology and Geology*

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(Crustacea:Isopoda)
Atlas for Mexico**

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Abstract

An atlas for 86 terrestrial isopod species (33 genera, 16 families) reported from Mexico is presented based on records in the literature. Publications with diagnostic illustrations are cited and Mexican type localities given. State checklists are generated based on citations for the first records in the literature. A map for each species presents a visual summary of its recorded distribution in the country.

Introduction

Several comprehensive works have been produced which summarized information about North American terrestrial isopods. Richardson (1905) covered marine, terrestrial, and freshwater species in her still useful *Monograph on the Isopods of North America*. Mexican localities were given for seven of the oniscideans included in this work, which appeared in the Smithsonian Institution's *Bulletin of the United States National Museum* series, and included USNM (now NMNH) numbers where appropriate for type specimen material. Richardson included the original descriptions in quotes in those instances where she was not able to examine specimens. Van Name (1936) provided a compilation of descriptions and illustrations for all American land and freshwater species, followed by two supplements (1940, 1942). Van Name's types as well as other significant type material supporting his work at the American Museum of Natural History (AMNH) in New York were deposited there. The work of Hatch (1947) included a summary of distribution records for North America. The Hatch Collection is part of the University of Washington's Burke Museum holdings.

Beginning in 1950, and for well over a decade thereafter, E. Rioja of the Institute of Biology of the National Autonomous University of Mexico published an impressive series of papers on the Mexican fauna, including numerous new species descriptions. Most of these were published by the Institute of Biology in their annals.

Primary among summary works with a focus on Mexico is the monograph of University of Utah researcher S.B. Mulaik, translated into Spanish (Mulaik 1960). In his unpublished dissertation, Mulaik (1954) had noted the low number of Mexican species previously reported in comprehensive works, and he attributed that to the lack of collections from Mexico. Though a number of the taxa that he introduced have been subsequently reclassified, the sheer quantity of new species that Mulaik (1960) described and illustrated, the first state records given, and the bibliographic compilation of the older literature in his monograph (as prepared for publication by the expert on Mexican cave fauna, F. Bonet) make it a reference still of great importance. The types were placed on deposit in the Escuela Nacional de Ciencias Biologicas in Mexico, with some duplicate paratypes in the museum at the University of Utah. As

stated by Bonet in the preliminary note to the 1960 translation, some details were changed from the 1954 unpublished thesis. Included among the discrepancies between the two are collection data and species name differences. That could lead to some question of authorship for the later work, although Mulaik's cooperation in the preparation of that publication was noted explicitly.

Vandel (1965) published a detailed review of all North American caver-nicoles in the family Trichoniscidae, based largely on the collection of Thomas C. Barr. Barr-collected type material is on deposit at the National Museum of Natural History (NMNH). Beginning in 1971 and continuing into the 1980s, Reddell (1981a), sometimes in collaboration with coauthors (Reddell and Elliot 1973a and b, Reddell and Mitchell 1971a and b), produced a series of checklists of the cave fauna of Mexico. These were gathered into a compilation (Reddell 1981b) which summarized records for cave-dwelling oniscideans. Souza-Kury (2000) presented a recent summary of the Mexican fauna. The landmark publications cited above have been the major sources for this atlas, as supplemented by volumes of the *Zoological Record*, particularly the Geographical Indices through volume 137 (2000/2001).

This atlas consists of four sections. The first is a taxonomic listing of all terrestrial isopod species having records in the literature from Mexico. The second section is an alphabetical list of species and provides sources of diagnostic illustrations in the literature, as well as details on habitat information and collecting locality data. The third section gives species lists for each state, with the first citation from the literature documenting the presence there of each species. Finally, Mexican maps present a visual summary of the current state records.

Publishing in English, we hope to draw the attention of other English-speakers like ourselves to the high potential interest of Mexican terrestrial isopods. As there are many oniscideans whose ranges cross North American political borders, we hope that future research projects of biogeographers and other interested zoologists will similarly transcend such artificial barriers. Our present effort is merely one step in that direction, and our eventual goal is to foster increased communication between those of us who may speak different languages but who share a common zoological interest in contributing to a better knowledge of the fauna. However in spite of those good intentions, because of our shortcomings in terms of familiarity with the Spanish language literature, there are no doubt more than the usual number of records that we have unfortunately missed in this compilation.

Classification And Summary

The classification used and the order of families listed in this summary are based on Erhard (1998), Holdich et al. (1984), and Schmidt (2002, 2003). For more taxonomic information including lists of synonyms, see Leistikow and Wägele's (1999) immensely valuable, indexed checklist of New World

terrestrial isopods. More recently a “World catalog of terrestrial isopods” was published by Schmalfuss (2003). The world list of terrestrial isopods that appears on the Smithsonian Institution’s National Museum of Natural History website [<http://www.nmnh.si.edu/iz/isopod/>] is searchable and is updated regularly. If there are nomenclatural discrepancies in the literature, the name as it appears on this website will be the one used here.

Order ISOPODA,

Suborder ONISCIDEA Latreille 1829 (86)

I. DIPLOCHETA Vandel 1957 (3)

Family LIGIIDAE Brandt & Ratzeburg 1831 (3)

Ligia baudiniana H. Milne Edwards 1840

Ligia exotica Roux 1828

Ligia occidentalis Dana 1853

II. HOLOVERTICATA Erhard 1998 (83)

TYLIDA Erhard 1998 (2)

Family TYLIDAE H. Milne Edwards 1840 (2)

Tylös niveus Budde-Lund 1885

Tylös punctatus Holmes & Gay 1909

ORTHOGONOPODA Tabacaru & Danielopol 1996 (81)

EUONISCOIDA Vandel 1943 (81)

SYNOCHETA Legrand 1946 (14)

Family TRICHONISCIDAE Sars 1899 (14)

Brackenridgia acostai (Rioja 1951)

Brackenridgia bridgesi (Van Name 1942)

Brackenridgia palmitensis (Mulaik 1960)

Brackenridgia villalobosi (Rioja 1950)

Cylindroniscus cavicola (Mulaik 1960)

Cylindroniscus maya Rioja 1957

Cylindroniscus vallesensis Schultz 1970

Cylindroniscus yucatanensis (Mulaik 1960)

Haplophthalmus danicus Budde-Lund 1880

Mexiconiscus laevis (Rioja 1956)

Miktoniscus medcofi Van Name 1940

Trichoniscus nocturni Mulaik 1960

Trichoniscus orchidicola Mulaik 1960

Typhlotricholigioides aquaticus Rioja 1952

CRINOCHETA Legrand 1946 (67)

Family ONISCIDAE Latreille 1806 (1)

Oniscus asellus Linnaeus 1758

Family PHILOSCIIDAE Kinahan 1957 (10)

Androdeloscia formosa (Mulaik 1960)

Noctunus vespertilio Mulaik 1960

Littorophiloscia richardsonae (Holmes & Gay 1909)

- Littorophiloscia tropicalis* Taiti & Ferrara 1986
Oxalaniscus ctenoscioides (Mulaik 1960)
Philoscia colimensis Mulaik 1960
Philoscia guerrerensis Mulaik 1960
Philoscia veracruzana Mulaik 1960
Quintanoscia contoyensis (Mulaik 1960)
Troglophiloscia laevis Schultz 1977
- Family PLATYARTHRIDAE Verhoeff 1949 (9)
Trichorhina atoyacensis Mulaik 1960
Trichorhina boneti Rioja 1956
Trichorhina heteropthalma Lemos de Castro 1964
Trichorhina macrophthalma Mulaik 1960
Trichorhina mulaiki Schmalfuss 2003
Trichorhina pearsei (Creaser 1938)
Trichorhina vandeli Rioja 1955
Trichorhina xoltumae Mulaik 1960
Trichorhina zimpanensis Mulaik 1960
- Family RHYSCOTIDAE Budde-Lund 1904 (2)
Rhyscotooides parallelus (Budde-Lund 1893)
Rhyscotus colimensis Mulaik 1960
- Family ALLONISCIDAE Schmidt 2003 (3)
Alloniscus mirabilis (Stuxberg 1875)
Alloniscus perconvexus Dana 1856
Alloniscus thalassophilus Rioja 1964
- Family DETONIDAE Budde-Lund 1906 (2)
Armadilloniscus holnesi Arcangeli 1933
Armadilloniscus lindahli (Richardson 1905)
- Family STENONISCIDAE Budde-Lund 1904 (1)
Stenoniscus pleonalis Aubert & Dollfus 1890
- Family ARMADILLIDAE Brandt & Ratzeburg 1831 (24)
Cubaris acapulcensis (Mulaik 1960)
Cubaris benitensis (Mulaik 1960)
Cubaris bolivari (Mulaik 1960)
Cubaris minuta (Mulaik 1960)
Cubaris mirandai Rioja 1954
Cubaris murina Brandt 1833
Venezillo articulatus Mulaik 1960
Venezillo boneti Mulaik 1960
Venezillo cacahuamilpensis (Bilimek 1867)
Venezillo chiapensis Rioja 1955
Venezillo dugesii (Dollfus 1896)
Venezillo llamasii Rioja 1954
Venezillo macrosoma Mulaik 1960
Venezillo mexicanus (Verhoeff 1933)
Venezillo nevadensis Mulaik 1960

- Venezillo oaxacanus* (Van Name 1936)
Venezillo osorioi Mulaik 1960
Venezillo pleogoniophorus (Rioja 1951)
Venezillo schultzei Verhoeff 1933
Venezillo soyatlanensis Mulaik 1960
Venezillo stuckensis Mulaik 1960
Venezillo sylvicola (Mulaik 1960)
Venezillo tanneri (Mulaik & Mulaik 1942)
Venezillo walkeri (Pearse 1911)
- Family ARMADILLIDIIDAE Brandt 1833 (1)
Armadillidium vulgare (Latrielle 1804)
- Family SCLEROPACTIDAE Verhoeff 1938 (2)
Sphaerarmadillo huatuscensis Mulaik 1960
Sphaerarmadillo schwarzi Richardson 1907
- Family PORCELLIONIDAE Brandt & Ratzeburg 1831 (8)
Agabiformius lents (Budde-Lund 1885)
Porcellio laevis Latrielle 1804
Porcellio scaber Latrielle 1804
Porcellio scabriusculus Mulaik 1960
Porcellionides floridana Garthwaite & Sassaman 1985
Porcellionides pruinosus (Brandt 1933)
Porcellionides saussurei Dollfus 1896
Porcellionides virgatus (Budde-Lund 1885)
- Family CYLISTICIDAE Verhoeff 1949 (1)
Cylisticus convexus (DeGeer 1778)
- Family TRACHELIPODIDAE Strouhal 1953 (3)
Nagurus cristatus (Dollfus 1889)
Trachelipus rathkii (Brandt 1833)
Trachelipus richardsonae Mulaik 1960

Alphabetical List Of Species, Sources Of Illustrations, Locality And Habitat Data

Each terrestrial isopod known to occur in Mexico is listed alphabetically. Only those synonyms used in the sources cited here are added after the currently accepted name for each species. See Richardson (1905), Van Name (1936), Leistikow and Wägele (1999) and Schmalfuss (2003) for more complete lists of synonyms.

Publications with diagnostic drawings, photographs, or scanning electron micrographs are cited alphabetically by author. This is by no means an exhaustive listing, because for some species, many duplicate illustrations have appeared in the literature. Wherever possible, sources of illustrations from Spanish language publications will be included. Secondary references are sometimes given, especially where access to the original publication may be difficult.

Our goal has been to compile a bibliographic guide to information currently recorded in the literature for Mexican isopods. Complete species treatments ideally include locality and habitat data, etymology and diagnostic traits for each. However, the sources available vary widely in the nature of their treatments, and our compilation reflects this variability. The Remarks section under each species is used to note briefly the additional data available in the sources cited, especially details about type localities in Mexico. A minority (31/86 = 36%) of the isopods recorded are species whose type localities are not in Mexico.

Close to one third (24/86) of the species known from Mexico have been collected from caves. Reddell (1981b) found a 50/50 proportion between the troglophilic and troglobitic species, and added that some of these cave dwellers "may prove to be identical with forms inhabiting the endogean zone" — an indication of how little was (and still is) known of these oniscideans. Two of the more famous of these caves are featured in Appendix II.

Abbreviations. — Codes for the states of Mexico are: AGS, Aguascalientes; BCN, Baja California [Norte]; BCS, Baja California Sur; CAM, Campeche; CHIS, Chiapas; CHIH, Chihuahua; COAH, Coahuila; COL, Colima; DF, Distrito Federal; DGO, Durango; GTO, Guanajuato; GRO, Guerrero; HGO, Hidalgo; JAL, Jalisco; MEX, Mexico; MICH, Michoacan; MOR, Morelos; NAY, Nayarit; NL, Nuevo Leon; OAX, Oaxaca; PUE, Puebla; QRO, Queretaro; QROO, Quintana Roo; SLP, San Luis Potosi; SIN, Sinaloa; SON, Sonora; TAB, Tabasco; TAMPS, Tamaulipas; TLAX, Tlaxcala; VER, Veracruz; YUC, Yucatan; ZAC, Zacatecas.

Agabiformius latus Synonyms: *Metaponorthus ixma*, *M. hidalgensis*, *Porcellio gertschi*

Sources of illustrations: Mulaik (1960) Figs. 315-319 (*M.h.*) and Figs. 662-664 (*P.g.*), Schultz (1972) Fig. 5A-F, Schultz (1984b) Fig. 2E-G.

Remarks: Collecting locality—Cueva de los Lagos COAH (Schultz 1965).

Alloniscus mirabilis

Sources of illustrations: Garthwaite and Lawson (1992) Fig. 14, Schultz (1984a) Figs. 3-4 and 5A-D.

Remarks: Habitat—littoral (Schultz 1984a).

Alloniscus perconvexus

Sources of illustrations: Garthwaite and Lawson (1992) Fig. 13, Mulaik (1960) Figs. 173-180, Richardson (1905) Figs. 652-654, Schultz (1984a) Figs. 1-2.

Remarks: Mulaik (1960) lists three Baja California localities. Habitat—littoral (Garthwaite and Lawson 1992).

Alloniscus thalassophilus

Sources of illustrations: Rioja (1964) Figs. 1-36.

Remarks: Type locality—Isla de Istapan, near Zihuatanejo GRO (Rioja 1964). Habitat—supralittoral (Rioja 1964).

Androdeloscia formosa Synonyms: *Philoscia formosa*

Sources of illustrations: Leistikow (2000) Figs. 19-22, Mulaik (1960) Figs. 231-238.

Remarks: Type locality—Villahermosa TAB (Mulaik 1960). Transferred from *Philoscia* and redescribed under this new genus by Leistikow (2000).

Armadillidium vulgare

Sources of illustrations: Garthwaite and Lawson (1992) Fig. 19, Mulaik (1960) Figs. 322-325, Richardson (1905) Fig. 706, Van Name (1936) Figs. 157-159.

Remarks: Collecting localities include Mexico City DF and “Moralia” (sic) Morelia MICH in Hatch collection (Hatch 1947).

Armadilloniscus holmesi Synonyms: *A. tuberculatus*

Sources of illustrations: Garthwaite, Lawson and Taiti (1992) Fig. 1c, 2d-f and 3d, Holmes and Gay (1909) Fig. 5, Mulaik (1960) Figs. 93-105, Van Name (1936) Fig. 46.

Remarks: Van Name (1936) quoted the Holmes and Gay (1909) original description of *A. tuberculatus* and said that its type was in the U.S. National Museum. Habitat—littoral (Hatch 1947).

Armadilloniscus lindahli Synonyms: *Actoniscus lindahli*, *Scleropactes cedrosensis*

Sources of illustrations: Garthwaite and Lawson (1992) Fig. 12, Mulaik (1960) Figs. 342-346, Richardson (1905) Figs. 679-680.

Remarks: Habitat—littoral (Garthwaite and Lawson 1992). Found on Isla Cedros, Baja California (Mulaik 1960). Types are in the museum of the Cincinnati Society of Natural History, Cat. No. 16365 (Richardson 1905).

Brackenridgia acostai Synonyms: *Protrichoniscus acostai*

Sources of illustrations: Mulaik (1960) Figs. 552-570, Rioja (1951a) Figs. 1-13 and 15-23, Rioja (1955c) Figs. 19-26.

Remarks: Type locality—Cueva de la toma de Agua CHIS (Rioja 1951a).

Named for the collector, geologist Carlos Acosta (Rioja 1951a).

Brackenridgia bridgesi Synonyms: *Protrichoniscus bridgesi*

Sources of illustrations: Mulaik (1960) Figs. 27-38, Rioja (1950) Figs. 1-20, Vandel (1965) Fig. 5, Van Name (1942) Figs. 4-5.

Remarks: Type locality—Cave at Pujal SLP, collector—Mr. W. Bridges (Van Name 1942). Mulaik (1960) added the locality Cueva de los Sabinos. According to Reddell (1981b), both of these locations are within 20 km of Ciudad Valles in the Sierra de El Abra region of San Luis Potosi. Vandel (1965) mapped seven collecting localities (including both of the above mentioned), three from the Thomas C. Barr Collection. Although Mulaik (1960) said that his *P. potosinus* differed from *P. bridgesi* in numerous details, Vandel (1965) synonymized *P. potosinus* under *P. bridgesi*.

Brackenridgia palmitensis Synonyms: *Protrichoniscus palmitensis*

Sources of illustrations: Mulaik (1960) Figs. 39-48.

Remarks: Type locality—Cueva del Palmito, Bustamante NL (Mulaik 1960).

Lacking eyes and pigment (Mulaik 1960).

Brackenridgia villalobosi Synonyms: *Protrichoniscus villalobosi*

Sources of illustrations: Mulaik (1960) Figs. 527-551, Rioja (1950) Figs. 21-49, Rioja (1951a) Fig. 14, Vandel (1965) Fig. 8.

Remarks: Type locality—Cueva de Ojo de Agua Grande, near Cordoba VER (Rioja 1950). Vandel (1965) listed two collecting localities, one from the Thomas C. Barr Collection.

Cubaris acapulcensis Synonyms: *Armadillo acapulcensis*

Sources of illustrations: Mulaik (1960) Figs. 362-365.

Remarks: Type locality—Near Acapulco GRO (Mulaik 1960). Also found at Tierra Colorado GRO (Mulaik 1960).

Cubaris benitensis Synonyms: *Armadillo benitensis*

Sources of illustrations: Mulaik (1960) Figs. 366-372.

Remarks: Type locality—Isla Benito, Baja California (Mulaik 1960).

Cubaris bolivari Synonyms: *Armadillo bolivari*

Sources of illustrations: Mulaik (1960) Figs. 356-361.

Remarks: Type locality—Atoyac VER (Mulaik 1960). C. Bolivar and F. Bonet collected the types (Mulaik 1960).

Cubaris minuta Synonyms: *Armadillo minutus*

Sources of illustrations: Mulaik (1960) Figs. 352-355.

Remarks: Type locality—Miramar, Manzanillo COL (Mulaik 1960). Named for its minute size, about 3 mm (Mulaik 1960).

Cubaris mirandai Synonyms: *Armadillo mirandai*

Sources of illustrations: Mulaik (1960) Figs. 490-506, Rioja (1954) Figs. 1-18.

Remarks: Type locality—Cueva de Ojo de Agua Grande, Paraje Nuevo, Cordoba VER (Rioja 1954). Named for botanist Dr. Faustino Miranda, who accompanied the Instituto de Biología expedition in the exploration of this cave (Rioja 1954).

Cubaris murina Synonyms: *Armadillo murinus*

Sources of illustrations: Mulaik (1960) Figs. 443-450, Van Name (1936) Figs. 235-236.

Remarks: Collecting locality—Guanajuato MEX (De Borre 1886). Van Name (1936) quoted the original description of Brandt and gave the habitat as the vicinity of towns and cities.

Cylindroniscus cavicola Synonyms: *Antroniscus cavicola*

Sources of illustrations: Mulaik (1960) Figs. 59-64.

Remarks: Type locality—Gruta del Palmito, Bustamente NL (Mulaik 1960). Differs from *C. yucatanensis* in features of leg VII and in having more teeth in the first maxillae (Mulaik 1960).

Cylindroniscus maya Synonyms: *Antroniscus balamensis*

Sources of illustrations: Mulaik (1960) Figs. 56-58 and 571-598, Rioja (1957) Figs. 1-28.

Remarks: Type locality—Cenote de Sambulha, near Sur de Motul YUC (Rioja 1957). Type specimens (females only) in the collection of the Instituto de Biología (Rioja 1957).

Cylindroniscus vallesensis

Sources of illustrations: Schultz (1970) Figs. 1-19.

Remarks: Type locality—Cueva Pinta, 8 mi NE of Valles SLP (Schultz 1970). Reddell (1981b) noted immature specimens from Sotano de Yerbania cave SLP.

Cylindroniscus yucatanensis Synonyms: *Antroniscus yucatanensis*

Sources of illustrations: Mulaik (1960) Figs. 49-55.

Remarks: Type locality—Santa María, Tecax YUC (Mulaik 1960). Holotype is male and lacks pigment (Mulaik 1960).

Cylisticus convexus

Sources of illustrations: Mulaik (1960) Figs. 249-253, Richardson (1905) Fig. 665, Schmidt (2003) Figs. 142-148, Van Name (1936) Figs. 147A and 148.

Remarks: Van Name (1942) noted specimens from Tacubaya, near Mexico City. F. Bonet collected this species at Tixtla GRO (Mulaik 1960).

Haplophthalminus danicus

Sources of illustrations: Mulaik (1960) Figs. 82-86, Van Name (1936) Fig. 37.

Remarks: Collected in Mexico City DF by F. Bonet (Mulaik 1960).

Hoctunus vespertilio

Sources of illustrations: Mulaik (1960) Figs. 186-195.

Remarks: Type locality—Cueva de Hoctún, Hoctún YUC (Mulaik 1960). Taken in bat guano (Mulaik 1960).

Ligia baudiniana Synonyms: *Ligyda baudiniana*

Sources of illustrations: Ives (1891) Pl.VI Fig. 2; Mulaik (1960) Figs. 10, 12-13, 15, 17, 19; Richardson (1905) Figs. 719-723, Schultz (1972) Fig. 2G-J.

Remarks: Type locality—San Juan d'Ulloa, the fortress of the harbor of Vera Cruz (Ives 1891). Habitat—littoral (Van Name 1936).

Ligia exotica Synonyms: *Ligyda exotica*

Sources of illustrations: Mulaik (1960) Figs. 11, 14, 16, 18; Richardson (1905) Figs. 716-718; Schultz (1972) Fig. 2K-L; Van Name (1936) Figs. 5c, 8.

Remarks: Habitat—littoral (Van Name 1936). Topolobampo, collecting locality (Richardson 1905).

Ligia occidentalis Synonyms: *Ligyda occidentalis*

Sources of illustrations: Garthwaite and Lawson (1992) Fig. 2, Mulaik (1960) Fig. 20, Richardson (1905) Figs. 724-725.

Remarks: Habitat—littoral (Van Name 1936).

Littorophiloscia richardsonae Synonyms: *Philoscia richardsonae*

Sources of illustrations: Garthwaite and Lawson (1992) Fig. 7, Holmes and Gay (1909) Fig. 6, Mulaik (1960) Figs. 217-223, Taiti and Ferrara (1986) Figs. 2-3, Van Name (1936) Fig. 89.

Remarks: Van Name (1936) has quoted the original description. Habitat—littoral (Hatch 1947).

Littorophiloscia tropicalis

Sources of illustrations: Taiti and Ferrara (1986) Fig. 9.

Remarks: Habitat—littoral (Taiti and Ferrara 1986).

Mexiconiscus laevis Synonyms: *Cordioniscus laevis*, *M. tlamay[a]ensis*, *Xilitloniscus laevis*

Sources of illustrations: Bowman (1965) Figs. 1-30, Mulaik (1960) Figs. 513-526, Rioja (1955b) Figs. 1-14, Schultz (1964) Figs. 1-19, Schultz (1968) Figs. 2, 5, 8, 11, 14, 17, 20, 24-25.

Remarks: Type locality—Cueva de la Hoya, Ahuacatlan, Municipio de Xilitla SLP (Rioja 1955b). Found in aquatic habitats also and therefore possibly amphibious (Vandel 1970). Reddell (1981b) listed six other San Luis Potosi caves where this species has been found.

Miktoniscus medcofi Synonyms: *Trichoniscus medcofi*, *T. veracrucensis*

Sources of illustrations: Mulaik (1960) Figs. 65-73, Van Name (1940) Fig. 2.

Remarks: Habitat—native habitat unknown (Van Name 1940).

Nagurus cristatus Synonyms: *Leptotrichus emarginatus*, *Nagara cristata*

Sources of illustrations: Van Name (1936) Fig. 146.

Remarks: Habitat—woodlands, wetlands (Van Name 1936).

Oniscus asellus

Sources of illustrations: Mulaik (1960) Figs. 181-185, Richardson (1905) Fig. 657, Schmidt (2003) Figs. 129-135, Van Name (1936) Figs. 97-98.

Remarks: Habitat—woodlands and grasslands (Harding and Sutton 1985).

Oxalaniscus ctenoscoioides Synonyms: *Philoscia ctenoscoioides*
Sources of illustrations: Leistikow (2000) Figs. 7-10, Mulaik (1960) Figs. 224-230.

Remarks: Type locality—Ruinas de Palenque CHIS (Mulaik 1960). Transferred from *Philoscia* and redescribed under this new genus as *O. ctenoscoioides* (sic) by Leistikow (2000).

Philoscia colimensis Synonyms: *P. colima*

Sources of illustrations: Mulaik (1960) Figs. 196-207.

Remarks: Type locality—Cuyutlan COL (Mulaik 1960). Holotype and paratypes are all females (Mulaik 1960).

Philoscia guerrerensis

Sources of illustrations: Mulaik (1960) Figs. 215-216.

Remarks: Type locality—Icacos, Acapulco GRO (Mulaik 1960). Mulaik (1960) said the closest relative to this isopod was the species now known as *Oxalaniscus ctenoscoioides*.

Philoscia veracruzana

Sources of illustrations: Mulaik (1960) Figs. 208-214.

Remarks: Type locality—Veracruz VER (Mulaik 1960). Also collected from El Hule OAX, both lots having F. Bonet as the collector (Mulaik 1960).

Porcellio laevis

Sources of illustrations: Garthwaite and Lawson (1992) Fig. 17, Mulaik (1960) Figs. 292-298, Richardson (1905) Fig. 666, Schultz (1972) Fig. 7A-F, Van Name (1936) Fig. 129, Van Name (1940) Fig. 27.

Remarks: Richardson (1905) gave “Alvarez...at an altitude of 8,000 feet” among the Mexican localities listed for this species.

Porcellio scaber Synonyms: *P. marginalis*, *P. montezumae*

Sources of illustrations: Garthwaite and Lawson (1992) Fig. 15, Mulaik (1960) Figs. 281-291, Richardson (1905) Fig. 623, Van Name (1936) Figs. 2-3 and 127A and 128, Van Name (1940) Fig. 28.

Remarks: Van Name (1936) cited a low altitude locality in Veracruz and a higher altitude one in Puebla as given by Saussure (1857, 1858). “Moralia” (sic) Morelia MICH (Hatch 1947). *P. marginalis* was collected in moss in Orizaba VER by F. Bonet on January 14, 1942 (Mulaik 1960).

Porcellio scabriuscules

Sources of illustrations: Mulaik (1960) Figs. 277-280.

Remarks: Type locality—Km.132 on the Mexico to Laredo highway (Mulaik 1960). Mulaik (1960) said that the single male holotypic specimen “did not afford opportunity to examine” the pleopods.

Porcellionides floria

Sources of illustrations: Garthwaite and Lawson (1992) Fig. 18; Garthwaite and Sassaman (1985) Figs. 1A-C, 2.

Remarks: Habitat—riparian (Garthwaite and Sassaman 1985).

Porcellionides pruinosus Synonyms: *Metoponorthus pruinosus*

Sources of illustrations: Mulaik (1960) Figs. 299-303, Richardson (1905) Fig. 674, Schultz (1972) Fig. 6H-L, Van Name (1936) Fig. 133-134.

Remarks: Locality data—Mexico City, Atepec near Ixtlan (Hatch 1947).

Porcellionides saussurei Synonyms: *Metoponorthus saussurei*

Sources of illustrations: Mulaik (1960) Figs. 320-321, Richardson (1905) Fig. 673, Van Name (1936) Fig. 137, Van Name (1940) Fig. 14.

Remarks: Type locality—Cordova VER, altitude: over 2800 feet (Van Name 1940). Richardson (1905) included Dollfus' original description and an English adaptation of it. Van Name (1942) listed this species from Ciudad del Maiz SLP also.

Porcellionides virgatus Synonyms: *Metoponorthus virgatus*

Sources of illustrations: Mulaik (1960) Figs. 304-314, Van Name (1936) Fig. 135, Van Name (1940) Fig. 30A.

Remarks: Richardson (1905) included Budde-Lund's original description and an English adaptation of it. Habitat—woodlands (Schultz 1982).

Quintanoscia contoyensis Synonyms: *Philoscia contoya*

Sources of illustrations: Leistikow (2000) Figs. 1-6, Mulaik (1960) Figs. 239-248.

Remarks: Type locality—Isla Contoy QROO (Mulaik 1960). Transferred from *Philoscia* and redescribed under this new genus by Leistikow (2000).

Rhyscotoides parallelulus Synonyms: *R. laxus*, *Rhyscotus laxus*

Sources of illustrations: Mulaik (1960) Figs. 110-115 and Van Name (1936) Figs. 150c, 150m, 150s, 154.

Remarks: Collected by F. Bonet from Cuyutlan COL and Acapulco GRO (Mulaik 1960).

Rhyscotus colimensis

Sources of illustrations: Mulaik (1960) Figs. 106-109.

Remarks: Type locality—Cuyutlan COL (Mulaik 1960). Mulaik (1960) used number of ocelli to distinguish this species (about 10) from *R. laxus* (about 15).

Spherarmadillo huatuscensis Synonyms: *S. huatusco*

Sources of illustrations: Mulaik (1960) Figs. 326-333.

Remarks: Type locality—Huatusco VER (Mulaik 1960). Alcohol-preserved holotypic female is ivory in color (Mulaik 1960).

Spherarmadillo schwarzi Synonyms: *S. cavernicola*, *S. cuevicola*

Sources of illustrations: Mulaik (1960) Figs. 334-341,

Richardson (1907) Figs. a-g, Van Name (1936) Fig. 171.
Remarks: *S. cavernicola* was collected in Cueva de los Sabinos Valles SLP by C. Bolivar, F. Bonet, D. Pelaez, and B.F. Osorio Tafall on April 2, 1942 (Mulaik 1960). *S. schwarzi* type is in the U.S. National Museum (Richardson 1907).

Stenoniscus pleonalis Synonyms: *S. contoyensis*
Sources of illustrations: Mulaik (1960) Figs. 87-92, Vandel (1960) Figs. 206-210.
Remarks: Holotype of *S. contoyensis* from Isla Contoy QROO 'believed to be a female' and one paratype, both less than 2 mm in length (Mulaik 1960).

Trachelipus rathkii Synonyms: *Tracheoniscus rathkei*
Sources of illustrations: Van Name (1936) Figs. 147B and 149, Van Name (1940) Fig. 31.
Remarks: Van Name (1936) noted specimens from Cuatotolapam VER that were identified, with some doubt, by Richardson, who stated that they differed somewhat in the markings from those from the United States.

Trachelipus richardsonae
Sources of illustrations: Mulaik (1954) Figs. 261-276.
Remarks: Type locality—Huatusco VER (Mulaik 1960). Taken among fallen leaves by M. Cardenas on October 2, 1942 (Mulaik 1960).

Trichoniscus hoctuni
Sources of illustrations: Mulaik (1960) Figs. 80-81.
Remarks: Type locality—Cueva de Hoctun, Hoctun YUC (Mulaik 1960). Type specimens lack pigment and were taken in bat guano (Mulaik 1960).

Trichoniscus orchidicola
Sources of illustrations: Mulaik (1960) Figs. 74-79.
Remarks: Type locality—Mexico [No state, therefore no map in this atlas]. Habitat—found in supply of orchids (Mulaik 1960).

Trichorhina atoyacensis
Sources of illustrations: Mulaik (1960) Figs. 127-130.
Remarks: Type locality—Cueva de Atoyac, Atoyac VER (Mulaik 1960). Mulaik (1960) said the type specimens, collected in 1941, lacked eyes and pigment.

Trichorhina boneti
Sources of illustrations: Mulaik (1960) Figs. 618-630, Rioja (1955b) Figs. 15-27.
Remarks: Type locality—Cueva de Ahuate, Xilitla SLP (Rioja 1955b). See Reddell (1981b) for discussion of possible synonymy with *T. pearsei*.

Trichorhina heteropthalma

Sources of illustrations: Lemos de Castro (1964) Figs. 1-2.
Remarks: Habitat—cave (Lemos de Castro 1964).

Trichorhina macropthalma

Sources of illustrations: Mulaik (1960) Figs. 158-172.
Remarks: Type locality—Villahermosa TAB (Mulaik 1960).
Distinctive traits of this species (Mulaik 1960) are prominent eyes and a body length of about 2 mm.

Trichorhina mulaiki Synonyms: *T. squamata*

Sources of illustrations: Mulaik (1960) Figs. 151-157,
Van Name (1936) Fig. 322.
Remarks: Van Name (1936) gave the following locality and habitat data—Chilopa (sic), probably Chilapa, in the humus of a mountain forest GRO.

Trichorhina pearsei Synonyms: *Porcellio pearsei*,
T. yucatanensis

Sources of illustrations: Creaser (1938) Figs. 1-8, Mulaik (1960) Figs. 146-150 and 654-661.
Remarks: Type locality (*P. p.*)—Balaam Canche Cave, near Chichen Itza YUC (Creaser 1938). Type locality for *T. yucatanensis*—Cueva de Gorgosa, Oxkutzcab YUC (Mulaik 1960). Reddell (1981b) listed seven cave localities.

Trichorhina vandeli

Sources of illustrations: Mulaik (1960) Figs. 631-653, Rioja (1955a) Figs. 1-23.
Remarks: Type locality—Cerro Hueco, Tuxtla, Gutierrez CHIS (Rioja 1955a). Type material is in the collection of the Instituto de Biología (Rioja 1955a).

Trichorhina xoltemae

Sources of illustrations: Mulaik (1960) Figs. 116-126.
Remarks: Type locality—Xoltum YUC (Mulaik 1960). Mulaik (1960) described this species as lacking eyes and pigment.

Trichorhina zimapanensis

Sources of illustrations: Mulaik (1960) Figs. 131-145.
Remarks: Type locality—Six miles north of Zimapán HGO (Mulaik 1960). Mulaik (1960) described the unique traits of this species as lack of eyes, white coloration, and an acutely pointed telson.

Troglophiloscia laevis

Sources of illustrations: Schultz (1977) Figs. 1-18.
Remarks: Type locality—Actún Xpuhil YUC (Schultz 1977). Reddell (1981b Fig. 9) mapped the type locality, 3 km south of Calcehtok, and said the species was known only from a single male.

Tylos niveus

Sources of illustrations: Mulaik (1960) Figs. 5-9, Richardson (1905) Fig. 645, Schultz (1972) Fig. 2F.

Remarks: Habitat—littoral (Schultz and Johnson 1984).

Tylos punctatus

Sources of illustrations: Van Name (1936) Figs. 251-253.

Remarks: Habitat—sand beaches (Hamner, Smith and Mulford 1968), where detailed study of its distribution as related to moisture and other factors was reported by Hayes (1977).

Typhlotricholigoides aquaticus

Sources of illustrations: Mulaik (1960) Figs. 599-617, Rioja (1952) Figs. 1-26, Schultz (1994) Figs. 1-2.

Remarks: Type locality—Cueva del Ojo de Agua Grande, Paraje Nuevo, Cordoba VER (Rioja 1952). Found in travertine pools filled with water left from flooding deep within the cave (Reddell 1981b).

Venezillo articulatus Synonyms: *Armadillo articulata*

Sources of illustrations: Mulaik (1960) Figs. 415-422.

Remarks: Type locality—Cueva de Juxtlahuaca, Colotlipa GRO (Mulaik 1960). Also collected from Presa de Guadalupe SLP by C. Bolivar and B.F. Osorio Tafall on August 22, 1943 (Mulaik 1960).

Venezillo boneti Synonyms: *Armadillo boneti*

Sources of illustrations: Mulaik (1960) Figs. 380-385.

Remarks: Type locality—Cueva de Juxtlahuaca, Colotlipa GRO (Mulaik 1960). F. Bonet collected the types and also collected specimens from Huixtla CHIS (Mulaik 1960).

Venezillo cacahuamilpensis Synonyms: *Armadillo cacahuamilpensis*

Sources of illustrations: Mulaik (1960) Figs. 386-400, Rioja (1954) Figs. 19-36.

Remarks: Type locality—Cacahuamilpa Caverns, near Cuernavaca GRO (Mulaik 1960). Also collected from two other caves in Guerrero state (Mulaik 1960).

Venezillo chiapensis Synonyms: *Armadillo chiapensis*

Sources of illustrations: Mulaik (1960) Figs. 473-482, Rioja (1955a) Figs. 24-33.

Remarks: Type locality—Cueva de Zapaluta, Comitan CHIS (Rioja 1955a). Type material is in the collection of the Instituto de Biología (Rioja 1955a).

Venezillo dugesii Synonyms: *Armadillo dugesii*, *Cubaris dugesii*

Sources of illustrations: Mulaik (1960) Figs. 439-442, Richardson (1905) Fig. 695.

Remarks: Type locality—Mexico; Richardson (1905) included Dollfus' original description and an English adaptation of it

and gave as localities Corritos and Morelia but did not specify the Mexican state for these. Mulaik (1960) said the species is known from Michoacan and possibly from San Luis Potosi.

Venezillo llamasi Synonyms: *Armadillo llamasi*

Sources of illustrations: Mulaik (1960) Figs. 483-489, Rioja (1954) Figs. 37-43.

Remarks: Type locality—Cueva de Patla, Hydroelectric Plant of Tepexi, 8 km southwest of Villa Juarez, on the bank of the River Necaxa PUE (Rioja 1954). Named for R. Llamas, Director of the Instituto de Biología (Rioja 1954).

Venezillo macrosoma Synonyms: *Armadillo macrosoma*

Sources of illustrations: Mulaik (1960) Figs. 423-427.

Remarks: Type locality—Isla de San Pedro Martir, Baja (Mulaik 1960). Known from the female holotype only (Mulaik 1960).

Venezillo mexicanus Synonyms: *Armadillo mexicanus*,
Cubaris mexicana

Sources of illustrations: Mulaik (1960) Figs. 435-438, Van Name (1936) Fig. 321, Verhoeff (1933) Figs. 1-4.

Remarks: Type locality—Near Chilopa (probably Chilapa) GRO (Van Name 1936). Habitat—in the humus of a mountain forest (Van Name 1936).

Venezillo nevadensis Synonyms: *Armadillo nevadensis*

Sources of illustrations: Mulaik (1960) Figs. 401-403.

Remarks: Type locality—Nevado de Colima JAL (Mulaik 1960). Known from the male holotype only (Mulaik 1960).

Venezillo oaxacanus Synonyms: *Armadillo oaxacanus*,
Cubaris oaxacana

Sources of illustrations: Mulaik (1960) Figs. 410-414, Van Name (1936) Fig. 215.

Remarks: Type locality—San Gerónimo OAX (Van Name 1936). The type is a 14 mm long female—AMNH 6517 (Van Name 1936).

Venezillo osorioi Synonyms: *Armadillo osorioi*

Sources of illustrations: Mulaik (1960) Figs. 428-434.

Remarks: Type locality—Cueva Acuitlapán GRO (Mulaik 1960). B.F. Osorio Tafall and others collected the type; also known from Cueva del Palmito NL (Mulaik 1960).

Venezillo pleogoniophorus Synonyms: *Armadillo pleogoniophorus*, *Cubaris pleogoniophorus*

Sources of illustrations: Mulaik (1960) Figs. 451-459 and 464-472, Rioja (1951b) Figs. 1-17, Rioja (1954) Figs. 44-46.

Remarks: Type locality—Cueva de los Sabinos, Ciudad Valles SLP (Rioja 1951b). Known from the type locality only (Mulaik 1960).

Venezillo schultzei Synonyms: *Armadillo schultzei*, *Cubaris schultzei*

Sources of illustrations: Mulaik (1960) Figs. 460-463; Van Name (1936) Fig. 320.

Remarks: Type locality—Chilopa (probably Chilapa) GRO (Van Name 1936). Habitat—mountain forest (Van Name 1936).

Venezillo soyatlanensis Synonyms: *Armadillo soyatlanensis*

Sources of illustrations: Mulaik (1960) Figs. 404-409.

Remarks: Type locality—Las Humedades, Ameria COL (Mulaik 1960). Collected from San Luis Soyotlan (sic) JAL (Mulaik 1960).

Venezillo stuckchensis Synonyms: *Armadillo stuckchensis*

Sources of illustrations: Mulaik (1960) Figs. 373-379.

Remarks: Type locality—Santiago, Baja California (Mulaik 1960). Male holotype collected under rocks on March 23, 1945 (Mulaik 1960).

Venezillo sylvicola Synonyms: *Armadillo sylvicola*

Sources of illustrations: Mulaik (1960) Figs. 347-351.

Remarks: Type locality—Potrero Grande COL (Mulaik 1960). Leistikow and Wägele (1999) placed this species under *Venezillo*.

Venezillo tanneri Synonyms: *Cubaris tanneri*

Sources of illustrations: Mulaik and Mulaik (1942) Figs. 31-39.

Remarks: Schultz (1965) reported localities in Mexico.

Venezillo walkeri Synonyms: *Armadillo walkeri*, *Cubaris walkeri*

Sources of illustrations: Mulaik (1960) Figs. 507-512, Pearse (1911) Figs. 1a-f, Van Name (1936) Fig. 208.

Remarks: Type locality—Cuatolapam VER (Pearse 1911). The type is in the University of Michigan Museum (Pearse 1911).

State Species Lists

Under First Published Record, this section gives the first records from the literature for each Mexican state. Each state name is followed by its postal code abbreviation. The *Merriam-Webster's Geographical Dictionary* Third Edition (1997) was consulted to determine the correct state for a given locality, if not specified in the publication. Because some sources in the literature do not separate Baja California into separate northern and southern entities, we report those two states as one in this listing. The number for total species is given in parentheses. The state having the highest number of species recorded is Veracruz with 17. Sixty-two percent of the species have been recorded from one state only, 20% from two states, and 17% from three.

<u>Mexican State</u>	<u>First Published Record</u>
AGUASCALIENTES, AGS (0)	—
BAJA CALIFORNIA NORTE/SUR (13)	
<i>Alloniscus mirabilis</i>	Schultz 1984a
<i>Alloniscus perconvexus</i>	Mulaik 1960
<i>Armadilloniscus holmesi</i>	Mulaik 1960
<i>Armadilloniscus lindahli</i>	Garthwaite et al. 1985
<i>Cubaris benitensis</i>	Mulaik 1960
<i>Ligia baudiniana</i>	Mulaik 1960
<i>Ligia exotica</i>	Mulaik 1960
<i>Ligia occidentalis</i>	Richardson 1905
<i>Littorophiloscia richardsonae</i>	Mulaik 1960
<i>Porcellio laevis</i>	Richardson 1905
<i>Porcellionides floria</i>	Garthwaite & Sassaman 1985
<i>Tylos punctatus</i>	Hamner, Smith & Mulford 1968
<i>Venezillo macrosoma</i>	Mulaik 1960
<i>Venezillo stuckensis</i>	Mulaik 1960
CAMPECHE, CAM (0)	—
CHIAPAS, CHIS (6)	
<i>Brackenridgia acostai</i>	Rioja 1951a
<i>Oxalaniscus ctenoscioides</i>	Mulaik 1960
<i>Trichorhina mulaiki</i>	Verhoeff 1933
<i>Trichorhina vandeli</i>	Rioja 1955c
<i>Venezillo boneti</i>	Mulaik 1960
<i>Venezillo chiapensis</i>	Rioja 1955c
CHIHUAHUA, CHIH (0)	—
COAHUILA, COAH (2)	
<i>Agabiformius latus</i>	Schultz 1965
<i>Venezillo tanneri</i>	Schultz 1965
COLIMA, COL (7)	
<i>Cubaris minuta</i>	Mulaik 1960
<i>Oniscus asellus</i>	Mulaik 1960
<i>Philoscia colimensis</i>	Mulaik 1960

<i>Rhyscotoides parallelus</i>	Mulaik 1960
<i>Rhyscotus colimensis</i>	Mulaik 1960
<i>Venezillo soyatlanensis</i>	Mulaik 1960
<i>Venezillo sylvicola</i>	Mulaik 1960
DISTRITO FEDERAL, DF (6)	
<i>Armadillidium vulgare</i>	Hatch 1947
<i>Cylisticus convexus</i>	Van Name 1942
<i>Haplophthalmus danicus</i>	Mulaik 1960
<i>Mexiconiscus laevis</i>	Vandel 1970
<i>Oniscus asellus</i>	Mulaik 1960
<i>Porcellionides pruinosus</i>	Hatch 1947
DURANGO, DUR (0)	
GUANAJUATO, GTO (1)	
<i>Cubaris murina</i>	Borre 1886
GUERRERO, GRO (15)	
<i>Alloniscus thalassophilus</i>	Rioja 1964
<i>Cubaris acapulcensis</i>	Mulaik 1960
<i>Cylisticus convexus</i>	Mulaik 1960
<i>Oniscus asellus</i>	Mulaik 1960
<i>Philoscia guerrerensis</i>	Mulaik 1960
<i>Porcellio laevis</i>	Reddell 1981b
<i>Rhyscotoides parallelus</i>	Mulaik 1960
<i>Trichorhina mulaiki</i>	Verhoeff 1933
<i>Venezillo articulatus</i>	Mulaik 1960
<i>Venezillo boneti</i>	Mulaik 1960
<i>Venezillo cacahuamilpensis</i>	Bilimek 1867
<i>Venezillo mexicanus</i>	Verhoeff 1933
<i>Venezillo oaxacanus</i>	Van Name 1936
<i>Venezillo osorioi</i>	Mulaik 1960
<i>Venezillo schultzei</i>	Verhoeff 1933
HIDALGO, HGO (4)	
<i>Agabiformius lensus</i>	Mulaik 1960
<i>Mexiconiscus laevis</i>	Rioja 1955c
<i>Porcellio scabriusculus</i>	Souza-Kury 2000
<i>Trichorhina zimpanensis</i>	Mulaik 1960
JALISCO, JAL (2)	
<i>Venezillo nevadensis</i>	Mulaik 1960
<i>Venezillo soyatlanensis</i>	Mulaik 1960
MEXICO, MEX (3)	
<i>Cubaris murina</i>	Borre 1886
<i>Venezillo articulatus</i>	Souza-Kury 2000
<i>Venezillo cacahuamilpensis</i>	Reddell 1981b
MICHOACAN, MICH (3)	
<i>Armadillidium vulgare</i>	Hatch 1947
<i>Porcellio scaber</i>	Hatch 1947
<i>Venezillo dugesii</i>	Dollfus 1896

MORELOS, MOR (2)	
<i>Nagurus cristatus</i>	Mulaik 1960
<i>Venezillo oaxacanus</i>	Souza-Kury 2000
NAYARIT, NAY (1)	
<i>Porcellionides virgatus</i>	Mulaik 1960
NUEVO LEON, NL (4)	
<i>Brackenridgia palmitensis</i>	Mulaik 1960
<i>Cylindroniscus cavicola</i>	Mulaik 1960
<i>Venezillo osorioi</i>	Mulaik 1960
<i>Venezillo tanneri</i>	Schultz 1965
OAXACA, OAX (2)	
<i>Philoscia veracruzana</i>	Mulaik 1960
<i>Venezillo oaxacanus</i>	Mulaik 1960
PUEBLA, PUE (2)	
<i>Porcellio scaber</i>	Saussure 1857, 1858
<i>Venezillo llamasii</i>	Rioja 1954
—	
QUERETARO, QRO (0)	
QUINTANA ROO, QROO (5)	
<i>Cubaris murina</i>	Armas de & Juarrero de Varona 1997
<i>Oxalaniscus ctenoscioides</i>	Mulaik 1960
<i>Quintanoscia contoyensis</i>	Mulaik 1960
<i>Stenoniscus pleonalis</i>	Mulaik 1960
<i>Tylos niveus</i>	Mulaik 1960
SAN LUIS POTOSI, SLP (10)	
<i>Agabiformius latus</i>	Van Name 1942
<i>Brackenridgia bridgesi</i>	Van Name 1942
<i>Cylindroniscus vallesensis</i>	Schultz 1970
<i>Mexiconiscus laevis</i>	Rioja 1955a
<i>Porcellionides saussurei</i>	Van Name 1942
<i>Spherarmadillo schwarzi</i>	Mulaik 1960
<i>Trichorhina boneti</i>	Rioja 1955b
<i>Venezillo articulatus</i>	Mulaik 1960
<i>Venezillo dugesii</i>	Dollfus 1896
<i>Venezillo pleogoniophorus</i>	Rioja 1951b
SINALOA, SIN (1)	
<i>Ligia exotica</i>	Richardson 1905
SONORA, SON (3)	
<i>Ligia occidentalis</i>	Mulaik 1960
<i>Porcellionides floria</i>	Garthwaite & Sassaman 1985
<i>Tylos punctatus</i>	Van Name 1940
TABASCO, TAB (5)	
<i>Androdeloscia formosa</i>	Mulaik 1960
<i>Nagurus cristatus</i>	Mulaik 1960
<i>Oxalaniscus ctenoscioides</i>	Mulaik 1960
<i>Trichorhina macropthalma</i>	Mulaik 1960
<i>Venezillo soyatlanensis</i>	Mulaik 1960

TAMAULIPAS, TAMPS (3)	
<i>Brackenridgia bridgesi</i>	Vandel 1965
<i>Porcellionides virgatus</i>	Mulaik 1960
<i>Spherarmadillo schwarzi</i>	Reddell 1981b
TLAXCALA, TLAX (0)	—
VERACRUZ, VER (17)	
<i>Brackenridgia bridgesi</i>	Mulaik 1960
<i>Brackenridgia villalobosi</i>	Rioja 1950
<i>Cubaris bolivari</i>	Mulaik 1960
<i>Cubaris mirandai</i>	Rioja 1954
<i>Ligia baudiniana</i>	H. Milne Edwards 1840
<i>Ligia exotica</i>	Mulaik 1960
<i>Miktoniscus medcofi</i>	Mulaik 1960
<i>Philoscia veracruzana</i>	Mulaik 1960
<i>Porcellio scaber</i>	Saussure 1857, 1858
<i>Porcellionides saussurei</i>	Richardson 1905
<i>Spherarmadillo huatuscensis</i>	Mulaik 1960
<i>Spherarmadillo schwarzi</i>	Mulaik 1960
<i>Trachelipus rathkii</i>	Pearse 1911
<i>Trachelipus richardsonae</i>	Mulaik 1960
<i>Trichorhina atoyacensis</i>	Mulaik 1960
<i>Typhlotricholigoides aquaticus</i>	Rioja 1952
<i>Venezillo walkeri</i>	Pearse 1911
YUCATAN, YUC (14)	
<i>Cylindroniscus maya</i>	Rioja 1957
<i>Cylindroniscus yucatanensis</i>	Mulaik 1960
<i>Hoctonus vespertilio</i>	Mulaik 1960
<i>Ligia baudiniana</i>	Ives 1891
<i>Littorophiloscia tropicalis</i>	Souza-Kury 2000
<i>Porcellio laevis</i>	Creaser 1938
<i>Porcellionides floridana</i>	Garthwaite & Sassaman 1985
<i>Porcellionides pruinosus</i>	Creaser 1938
<i>Trichoniscus hoctuni</i>	Mulaik 1960
<i>Trichorhina atoyacensis</i>	Mulaik 1960
<i>Trichorhina heterophthalma</i>	Armas de & Juarrero de Varona 1997
<i>Trichorhina pearsei</i>	Mulaik 1960
<i>Trichorhina xoltecumae</i>	Mulaik 1960
<i>Troglophiloscia laevis</i>	Schultz 1977
ZACATECAS, ZAC (0)	—

Maps

Maps giving the published records follow the Literature Cited section. Introductory Map 1 identifies the Mexican states by keying the name of the state to a numbered listing that precedes it. The species distribution maps appear in alphabetical order, with the states marked from which each terrestrial isopod has been recorded.

The purpose of the maps is to present preliminary visual summaries of these species distributions. The state records show the patchiness of terrestrial isopod occurrences as they have been reported. The current picture is unfortunately one based on scanty collecting. A more realistic plotting of their actual distributions awaits a future when the presence of terrestrial isopods in the country, and in North America as a whole, has been documented in greater detail than it is at present.

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MAP 1 Mexican State Names

1. Baja California
2. Baja California Sur
3. Sonora
4. Chihuahua
5. Coahuila
6. Sinaloa
7. Durango
8. Nuevo Leon
9. Zacatecas
10. Tamaulipas
11. Nayarit
12. Aquascalientes
13. San Luis Potosi
14. Jalisco
15. Guanajuato
16. Queretaro
17. Hidalgo
18. Colima
19. Michoacan
20. Mexico
21. Distrito Federal
22. Tlaxcala
23. Morelos
24. Puebla
25. Guerrero
26. Veracruz
27. Tabasco
28. Campeche
29. Yucatan
30. Quintana Roo
31. Oaxaca
32. Chiapas



Agabiformius latus



Alloniscus mirabilis



Alloniscus perconvexus



Alloniscus thalassophilus



Androdeloscia formosa



Armadillidium vulgare



Armadilloniscus holmesi



Armadilloniscus lindahli



Brackenridgia acostai



Brackenridgia bridgesi



Brackenridgia palmitensis



Brackenridgia villalobosi



Cubaris acapulcensis



Cubaris benitensis



Cubaris bolivari



Cubaris minuta



Cubaris mirandai



Cubaris murina



Cylindroniscus cavicola



Cylindroniscus maya



Cylindroniscus vallesensis



Cylindroniscus yucatanensis



Cylisticus convexus



Haplophthalmus danicus



Hoctonus vespertilio



Ligia baudiniana



Ligia exotica



Ligia occidentalis



Littorophiloscia richardsonae



Littorophiloscia tropicalis



Mexiconiscus laevis



Miktoniscus medcofi



Nagurus cristatus



Oniscus asellus



Oxalaniscus ctenoscioides



Philoscia colimensis



Philoscia guerrerensis



Philoscia veracruzana



Porcellio laevis



Porcellio scaber



Porcellio scabriusculus



Porcellionides floria



Porcellionides pruinosus



Porcellionides saussurei



Porcellionides virgatus



Quintanoscia contoyensis



Rhyscotoides parallelus



Rhyscotus colimensis



Spherarmadillo huatuscensis



Spherarmadillo schwarzi



Stenoniscus pleonalis



Trachelipus rathkii



Trachelipus richardsonae



Trichoniscus noctuni



Trichorhina atoyacensis



Trichorhina boneti



Trichorhina heterophthalma



Trichorhina macrophthalma



Trichorhina mulaiki



Trichorhina pearsei



Trichorhina vandeli



Trichorhina xoltecumae



Trichorhina zimapanensis



Troglophiloscia laevis



Tylos niveus



Tylos punctatus



Typhlotricholigioides aquaticus



Venezillo articulatus



Venezillo boneti



Venezillo cacahuamilpensis



Venezillo chiapensis



Venezillo dugesi



Venezillo llamasii



Venezillo macrosoma



Venezillo mexicanus



Venezillo nevadensis



Venezillo oaxacanus



Venezillo osorioi



Venezillo pleogoniophorus



Venezillo schultzei



Venezillo soyatlanensis



Venezillo stuckchensis



Venezillo sylvicola



Venezillo tanneri



Venezillo walkeri

Appendix II: Photographs

Through fortuitous happenstance, the Milwaukee Public Museum collections include historic photographs of significant oniscidean collecting sites in Mexico. As noted previously, one third of all the country's terrestrial isopods have been collected from caves. Two endemic species whose names reflect this origin are *Trichorhina atoyacensis* from Atoyac Cave and *Venezillo cacahuamilpensis* from Cacahuamilpa Cave. The fragile nature of such habitats and the attendant importance of conservation measures to protect them were documented by photographer Sumner Matteson, who noted damage done by casual visitors to the area.

The following information about the images of Mexican caves and the accompanying photo captions (Atoyac—Figs. 1-3 and Cacahuamilpa—Fig. 4-5) were provided by the Milwaukee Public Museum Photo Archivist, Susan Otto.

These photographs were taken by Sumner W. Matteson (1867-1920) while he was in Mexico (December 1906 to Autumn 1907). After photographing the city life during the spring of 1907, Matteson, an avid mountain climber, spent the summer photographing Mexico's rugged countryside.

According to Matteson's notes, Atoyac Cave had been discovered the previous year. On one of the photographs is written: "Discovered a year ago and apparently never before entered by humans. Although it is now locked and barred it is already badly defaced with names, some of which look American. The most conspicuous of all was 'Parker the Oliver,' which disgraces everything and everyone associated with it."

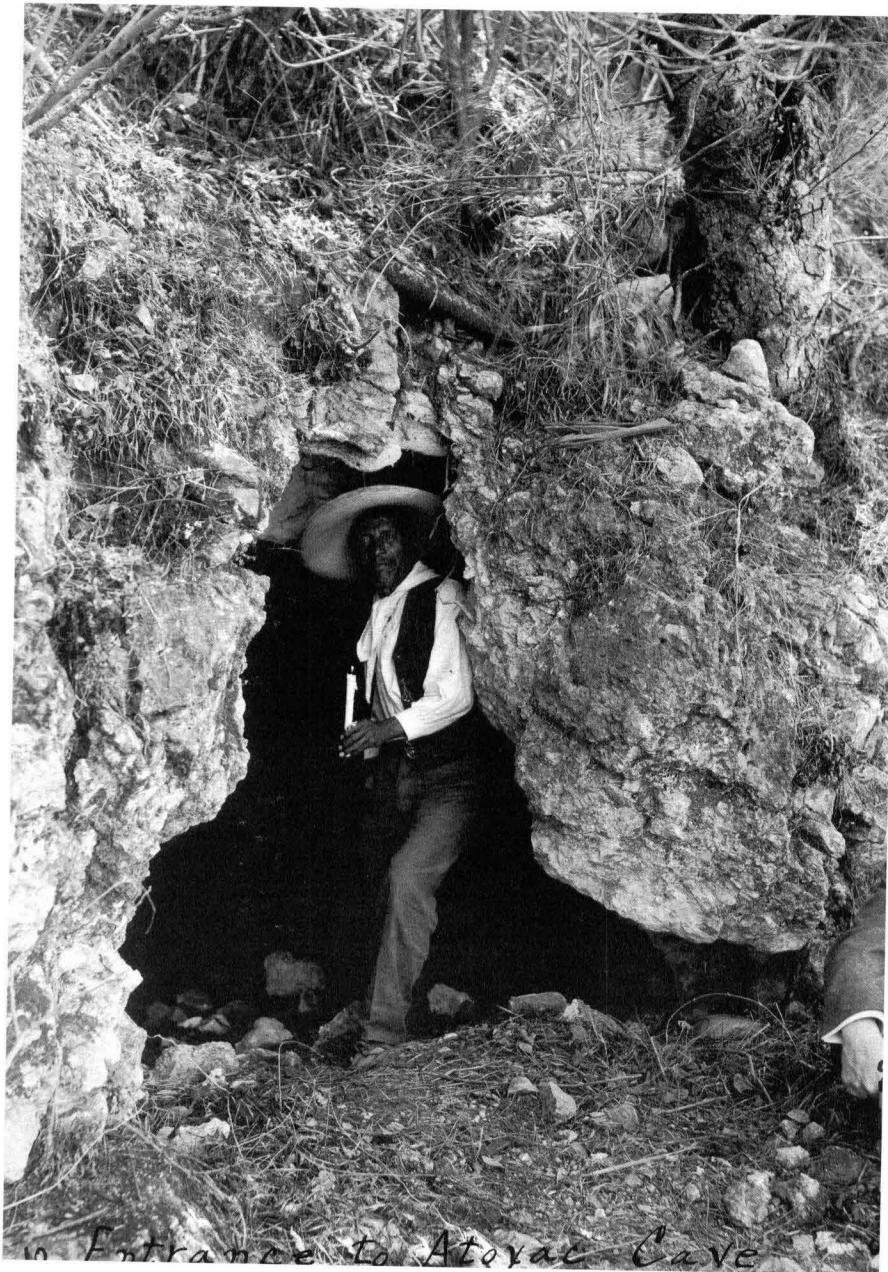


FIGURE 1 Entrance to the Atoyac Cave, State of Veracruz. Sumner W. Matteson, 1907 (SWM1-D082).

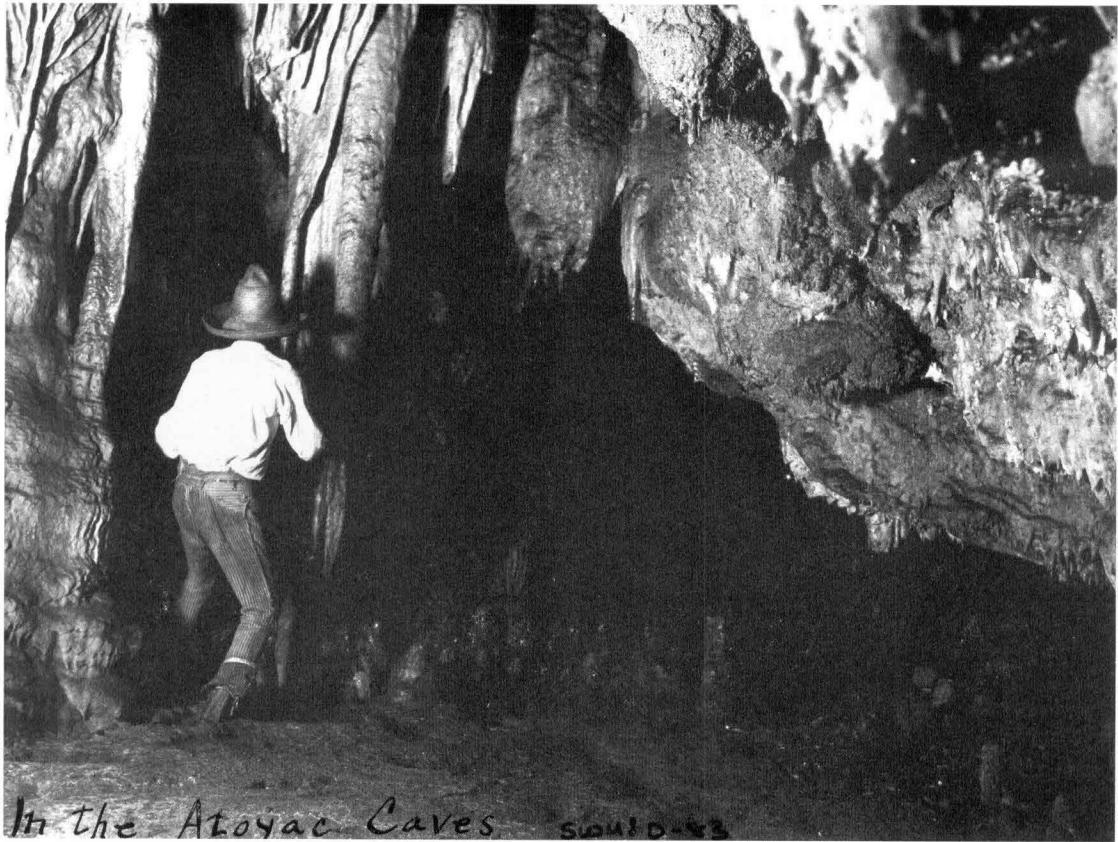


FIGURE 2 In the Atoyac Cave. Sumner W. Matteson, 1907 (SWM1-D083).

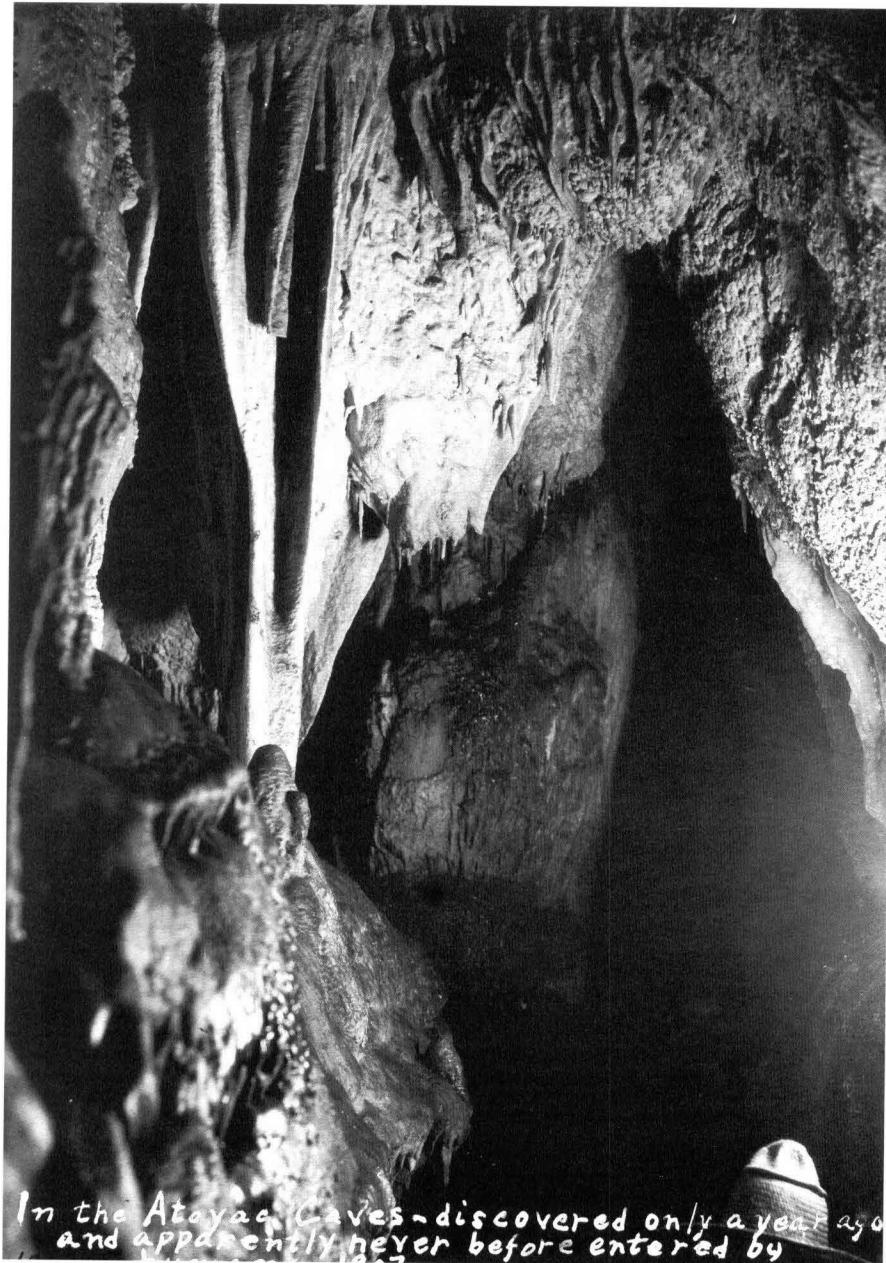


FIGURE 3 In the Atoyac Cave. Sumner W. Matteson, 1907 (SWM1-D084).

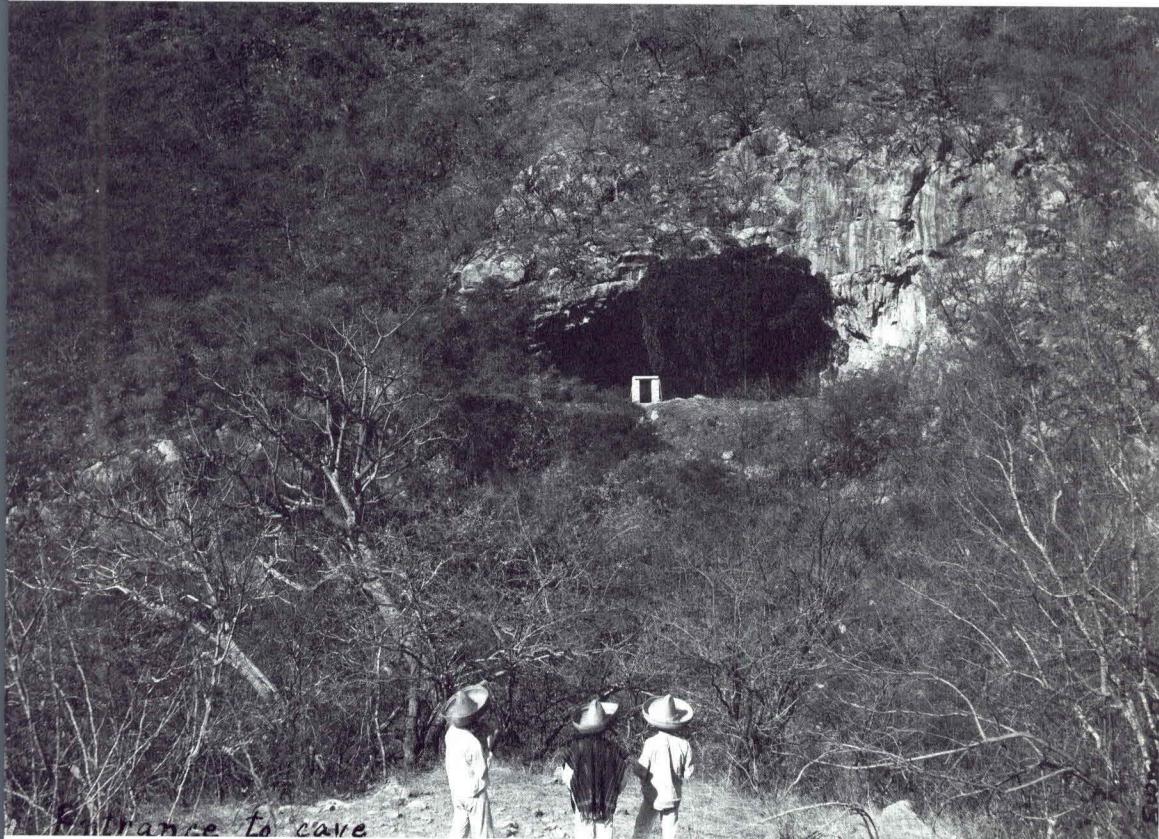
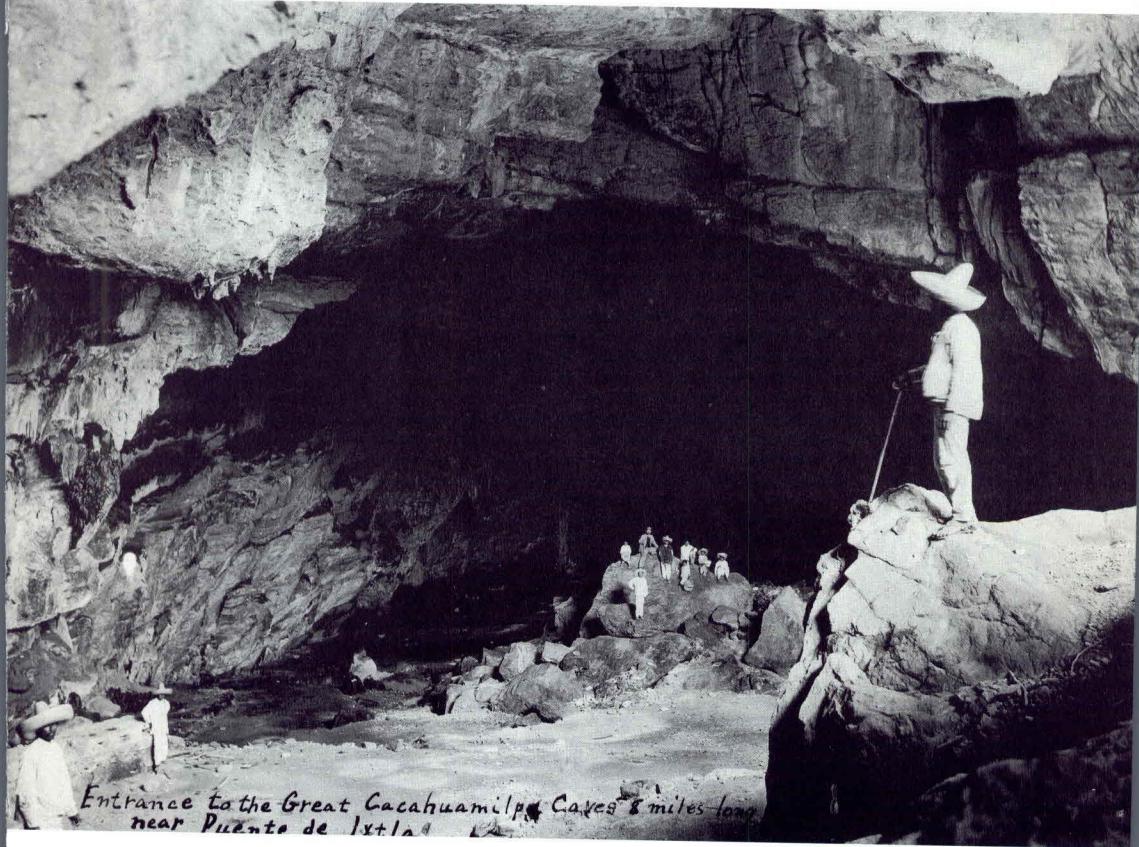


FIGURE 4 Entrance to Cacahuamilpa Cave, State of Guerrero. Sumner W. Matteson, 1907 (SWM1-D041).



Entrance to the Great Cacahuamilpa Caves 8 miles long
near Puente de Ixtla

FIGURE 5 Entrance to Cacahuamilpa Cave, 8 miles long, near Puente de Ixtla.
Sumner W. Matteson, 1907 (SWM1-D040).