

Two New Species of *Myodocha* (*Lygaeoidea*: *Rhyparochromidae*: *Myodochini*) with a Key to Species

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ABSTRACT Two new species of *Myodocha*, *Myodocha parcicoma* Cervantes and *Myodocha unispinopilosa* Cervantes, are described from Mexico and South America. A key to the 10 known species and new geographic records for the genus are provided. Species in this genus can be separated into two groups by the presence or absence of hairs on the neck region; other characters used to differentiate the species are length of rostrum, presence of tibial spines on forelegs in males; and shape and number of spines on forefemora of males and females. The last two characters (i.e., shape and number of spines on forefemora), although variable, show diverse patterns.

KEY WORDS Heteroptera, *Myodocha*, Rhyparochromidae, Mexico

THE GENUS *Myodocha* Latreille is differentiated from other Myodochini by the presence of a long neck, and posterior margins of ocelli are anterior of the posterior margins of the eyes. Oliver (1811) described *M. serripes*, which is distributed throughout the United States. Stål (1862) described *M. giraffa* in 1862, and *M. longicollis* and *M. unispinosa* in 1874, all from Mexico. Distant (1882) described *M. intermedia* and *M. inermiba*. Harrington (1980), in her review of the Myodochini of the world, included eight species in the genus *Myodocha*. Later, Harrington (1987) transferred *M. inermiba* to *Dushinckanus*. Barber (1954) described *M. fulvosa* from Cuba, and Slater (1998) described *M. froeschneri* from the West Indies and suggested that a review of the genus was needed.

Several hemipterologists have studied this genus and have mentioned the difficulty of separating some of the species. Thanks to the large amount of material deposited in Colección Nacional de Insectos in Mexico City and a study of rhyparochromids associated with figs in Mexico, we have found variability within the species, discovered two undescribed species, and found several characters that are useful at the species level.

Materials and Methods

Most of the material studied is deposited in Colección Nacional de Insectos in Mexico City, Instituto de Biología, U.N.A.M. (CNIN), but several other collections were checked during this study, including The American Museum of Natural History (AMNH); Richard M. Baranowski Collection, Homestead, FL (RMB); Colección Entomológica Instituto de Ecología, A.C. (IEXA); Florida State Collection of Arth-

ropods (FSCA); Natural History Museum London (BMNH); National Museum of Natural History, Washington, DC. (NMNH); and James A. Slater Collection, Storrs, CT (JAS). A few specimens from Universidad Central de Venezuela, Maracay (UCV), and from Universidad Católica, Quito, Ecuador (UCQE) also were checked. Measurements are base on 10 individuals and are given in millimeters \pm SD.

Results

Myodocha parcicoma new species (Figs. 1, 3H, 4H)

Head, pronotum, scutellum, pleurae, and coxae black. Head and neck slightly shiny; eyes brownish red; ocelli red; tylus brownish red; antennae four segmented, segment I dark brown or reddish brown, segments II, III, and IV light brown, segment IV with subbasal yellowish white annulus. Rostrum four segmented, segment I dark brown, segments II to IV light brown. Hemelytra with clavus dark brown, apex pale yellow; corium with anterior half of margin pale yellow, then dark brown, followed by subapical white area, apex dark brown, sometimes with pale yellow spot near claval suture; membrane dark brown with a white spot opposite corial apex. Forefemur brown with basal fourth and subapical annulus pale yellow; middle and hindfemora pale yellow, distal third dark brown with pale yellow subapical annulus; tibiae and tarsi I and II pale yellow, tarsi III brown; abdomen with first three visible segments dark brown, segments IV to IX reddish brown. Head convex, with a few long hairs between eyes and ocelli; long isolated hairs on ventral

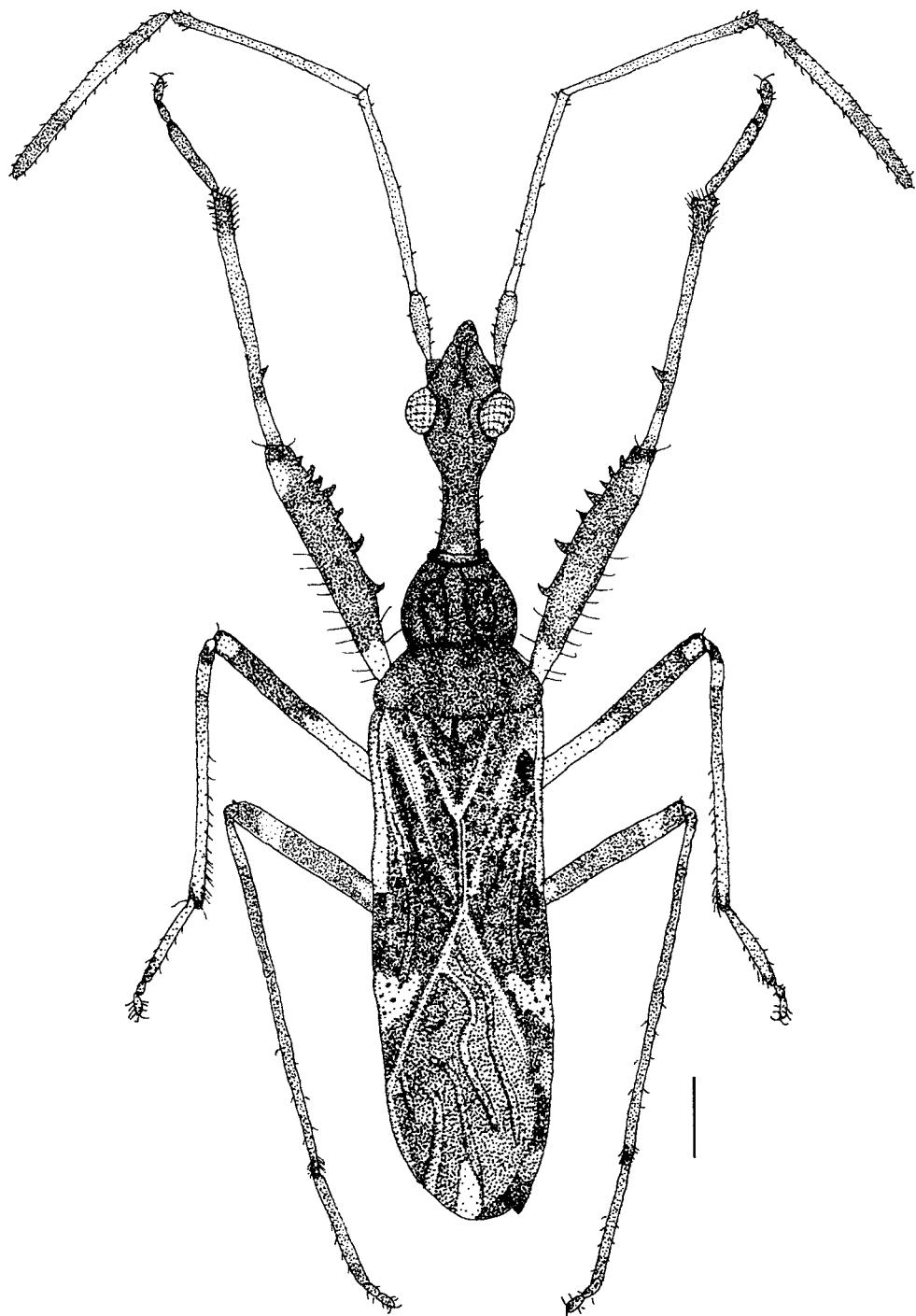


Fig. 1. Male adult of *M. parcicoma* new species.

surface of neck; rostral segment I not surpassing posterior margin of eyes, II not reaching prosternum, III reaching base of forelegs, IV reaching or sometimes surpassing posterior margin of procoxae. Posterior lobe of pronotum, scutellum, clavus, and corium with

numerous punctures. Pleura with isolated punctures. Legs shiny, hairs short, slightly longer on forefemora; forecoxae of males and females with a single spine. Forefemora with rows of external and internal spines, those of most males with five or six spines in external

row, six or seven in internal row; those of most females with one large and two or three small spines in external row, two or three spines in internal row. Foretibiae of males with one large and three small spines, foretibiae of females unarmed. Tibiae of all legs on males and females with spine-like hairs. Abdomen with ventral surface covered by short decumbent silver hairs.

Male. Body length, 9.97 ± 0.18 ; head length, 2.62 ± 0.03 ; width across eyes, 1.22 ± 0.08 ; interocular distance, 0.56 ± 0.08 ; interocellar distance, 0.24 ± 0.24 ; postocular distance, 1.46 ± 0.08 ; antennal segments: I, 0.86 ± 0.05 ; II, 2.32 ± 0.12 ; III, 2.18 ± 0.12 ; IV, 2.52 ± 0.12 ; rostral segments: I, 0.99 ± 0.06 ; II, 1.17 ± 0.06 ; III, 1.21 ± 0.05 ; IV, 0.56 ± 0.06 ; pronotum length, 1.82 ± 0.09 ; width across humeral angles, 1.89 ± 0.06 ; width across anterior margin, 0.60 ± 0.02 ; scutellum length, 1.07 ± 0.05 ; scutellum width, 0.85 ± 0.07 ; foreleg: femora length, 3.06 ± 0.15 ; tibiae length, 2.76 ± 0.12 ; tarsi length: I, 0.96 ± 0.06 ; II, 0.17 ± 0.01 ; III, 0.27 ± 0.02 .

Female. Body length, 10.36 ± 0.36 ; head length, 2.62 ± 0.09 ; width across eyes, 1.25 ± 0.04 ; interocular distance, 0.54 ± 0.03 ; interocellar distance, 0.27 ± 0.26 ; postocular distance, 1.41 ± 0.11 ; antennal segments: I, 0.82 ± 0.06 ; II, 2.23 ± 0.11 ; III, 2.08 ± 0.11 ; IV, 2.40 ± 0.11 ; rostral segments: I, 1.02 ± 0.05 ; II, 1.23 ± 0.07 ; III, 1.26 ± 0.08 ; IV, 0.58 ± 0.05 ; pronotum length, 1.83 ± 0.08 ; width across humeral angles, 2.0 ± 0.08 ; width across anterior margin, 0.62 ± 0.05 ; scutellum length, 1.13 ± 0.07 ; scutellum width, 0.94 ± 0.11 ; foreleg: femora length, 2.91 ± 0.15 ; tibiae length, 2.72 ± 0.16 ; tarsi length: I, 0.94 ± 0.06 ; II, 0.17 ± 0.01 ; III, 0.28 ± 0.01 .

Etymology. From latin *parci* = isolated; and *coma* = hair on the head

Holotype Male. QUINTANA ROO: Felipe Carrillo Puerto, 20-VI-1984, L.Cervantes, 1♂ (CNIN).

Paratypes. MEXICO: CAMPECHE: Bolonchen de Rejon, 15-VI-1985, H.Velasco, F. Arias, M.Vertiz, 6♂ 11♀. QUINTANA ROO: Felipe Carrillo Puerto, 17-VI-1984, H. Hernandez 1♂; km 146 Chetumal-Cancun, 3-V-1982, A. Ibarra, V. Melendez, 5♂ 4♀; km 146 Chetumal-Cancun, 16-VIII-1982, M. Garcia, 1♂; Chuyaxche, 19-VI-1984, F. Heredia, 1♂; km 146 Chetumal-Cancun, 17-III-1982, M. Garcia, A. Ibarra, 2♀ (CNIN) 1♀ (JAS). YUCATAN: Tizimin, 15-IX-1994, E. Barrera, 1♀; X-Can, 30-IV-1982, V. Melendez, 1♀ (CNIN); Chuminopolis, 4-7-VIII-1952, J. & D. Pallister, 1♂ (JAS); Chuminopolis, 4-7-VIII-1952, J. & D. Pallister, 2♀, 1♂; Chichen Itza, 17-VII-1952, J. & D. Pallister, 1♂; 20-VII-1952, J. & D. Pallister, 1♀ (AMNH). BELIZE: Toledo, 25 miles northwest Punta Gorda, 28-VIII 4-IX-1979, P.S. Broomfield (B.M. 1979-33), primary and secondary forest, 1♀. Cayo Roaring Creek near Belmopan, 16-VII-1978, P.S. Broomfield (B.M. 1979-33), primary and secondary forest, 1♀ (BMNH).

Diagnosis. Body elongated and narrow, with a few patches of long hairs on head and ventral region of neck.

Myodocha unispinopilosa new species

(Figs. 2, 3E, 4E)

(Head, antennal segment I, rostral segment I, dark brown to black specially head; head shiny. Eyes reddish brown, ocelli usually pinkish. Antennal segments II and III pale brown with apices brown; and IV with base and apical third brown, remainder pale yellow or white. Rostral segments II and IV yellowish brown with tip of fourth slightly darker. Pronotum, pleurae, coxae, and scutellum, dark brown to black. Forefemur with basal fourth pale yellow, grading to brown; middle and hindfemora with basal half pale yellow, grading to brownish. Tibiae and tarsi yellow with apices of tibiae and tarsi III slightly darker. Most of corium and hemelytral membrane dark brown to black. Hemelytra with corium usually with only a subapical white maculae with an irregular bow tie shape. Veins slightly paler than hemelytral membrane. Basal three abdominal segments dark shiny brown, segments IV to IX slightly paler and reddish.

Head convex, with numerous long hairs behind eyes and covering entire neck region. Rostral segment I slightly surpassing posterior margin of eyes, segment II surpassing anterior margin of pronotum, segment III usually reaching mesocoxae, and segment IV at least reaching metacoxae. Collar, posterior pronotal lobe, scutellum, clavus, and corium punctuated. Scutellum covered with long hairs. Forecoxae armed with a small spine. Femora covered by long hairs; tibiae with short hairs and some spine-like hairs. Forefemora of males and females with two rows of spines, external row with three small spines and one large; internal row with only two or three small spines. Tibiae of males unarmed; abdominal sterna covered by short silvery hairs.

Male. Body length, 9.53 ± 0.42 ; head length, 2.65 ± 0.08 ; width across eyes, 1.10 ± 0.04 ; interocular distance, 0.48 ± 0.03 ; interocellar distance, 0.22 ± 0.22 ; postocular distance, 1.39 ± 0.1 ; antennal segments: I, 0.74 ± 0.03 ; II, 2.32 ± 0.09 ; III, 2.08 ± 0.11 ; IV, 2.38 ± 0.26 ; rostral segments: I, 1.19 ± 0.06 ; II, 1.6 ± 0.06 ; III, 1.84 ± 0.09 ; IV, 0.65 ± 0.05 ; pronotum length, 1.55 ± 0.08 ; width across humeral angles, 1.73 ± 0.09 ; width across anterior margin, 0.60 ± 0 ; scutellum length, 1.03 ± 0.08 ; scutellum width, 0.85 ± 0.06 ; foreleg: femora length, 2.82 ± 0.09 ; tibiae length, 2.59 ± 0.07 ; tarsi length: I, 0.88 ± 0.05 ; II, 0.17 ± 0.02 ; III, 0.3 ± 0.02 .

Female. Body length, 10.07 ± 0.21 ; head length, 2.69 ± 0.06 ; width across eyes, 1.2 ± 0.06 ; interocular distance, 0.52 ± 0.03 ; interocellar distance, 0.21 ± 0.21 ; postocular distance, 1.36 ± 0.08 ; antennal segments: I, 0.76 ± 0.06 ; II, 2.24 ± 0.08 ; III, 1.98 ± 0.08 ; IV, 2.26 ± 0.07 ; rostral segments: I, 1.24 ± 0.04 ; II, 1.72 ± 0.06 ; III, 1.97 ± 0.05 ; IV, 0.66 ± 0.05 ; pronotum length, 1.68 ± 0.09 ; width across humeral angles, 1.89 ± 0.08 ; width across anterior margin, 0.63 ± 0.03 ; scutellum length, 1.09 ± 0.07 ; scutellum width, 0.92 ± 0.07 ; foreleg: femora length, 2.77 ± 0.08 ; tibiae length, 2.60 ± 0.04 ; tarsi length: I, 0.91 ± 0.03 ; II, 0.18 ± 0.02 ; III, 0.3 ± 0.02 .

Etymology. *M. unispino* due to the similarity with *M. unispinosa*; pilosa because has neck and head covered by numerous hairs.

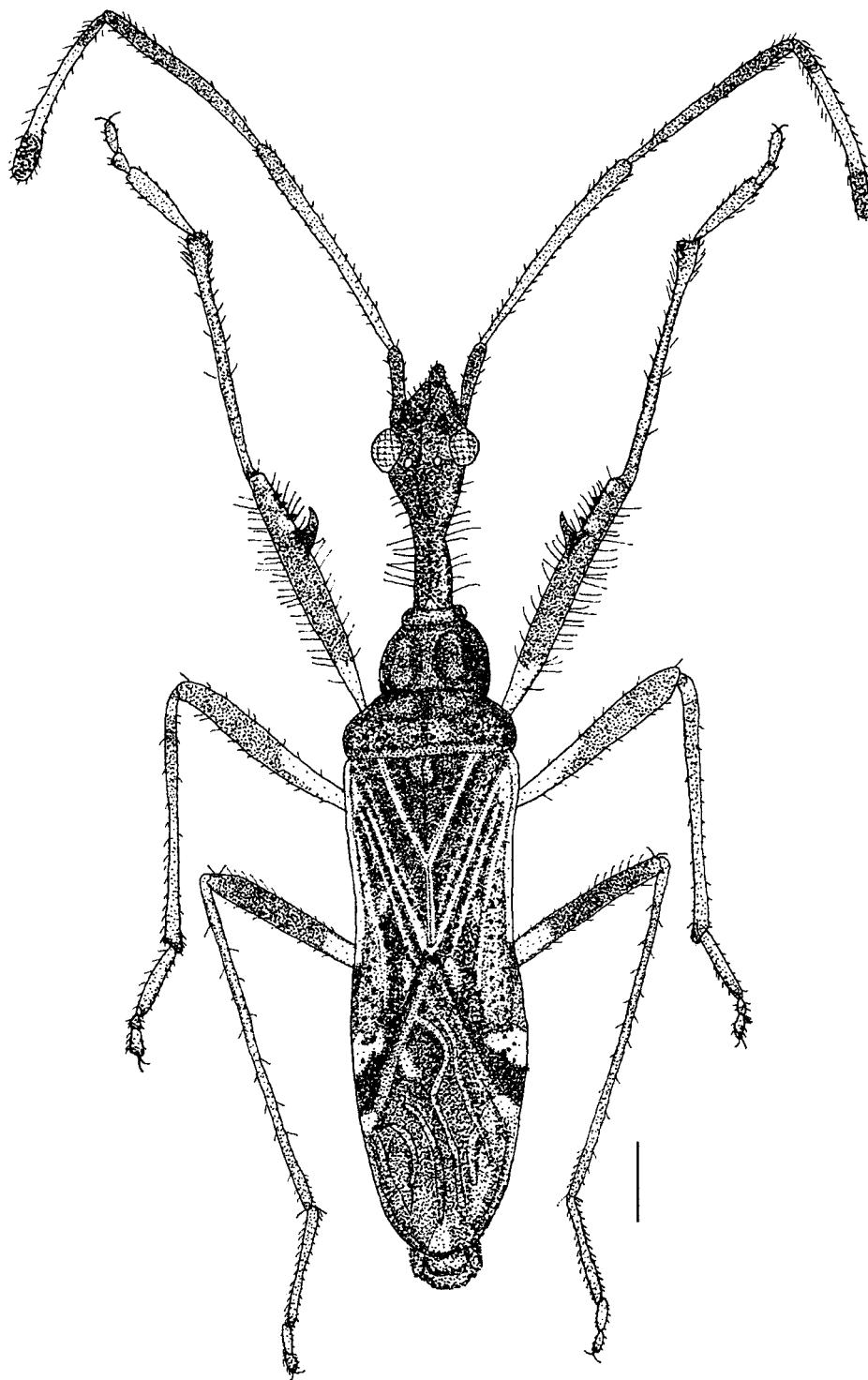


Fig. 2. Male adult of *M. unispinopilosa* new species.

Holotype Male. MEXICO: Veracruz, Actopan, La Mancha, 27-IX-2003, L. Cervantes, 1♂ (IEXA).

Paratypes. BRAZIL: Para, Jassitara, 20 km north northwest of Santarem, 18-VII-1973, R. Schuh, 1♀

(AMNH). COSTA RICA: Parque Nacional Corcovado, Estacion Sirena, 6-8-II-1981, H. Brailovsky, E. Barrera, 1♂ (CNIN); Waldeck, 28-VII-1935 on cacao, C. H. Ballou, 1♀ (UCV). ECUADOR: Pichincha, Ma-

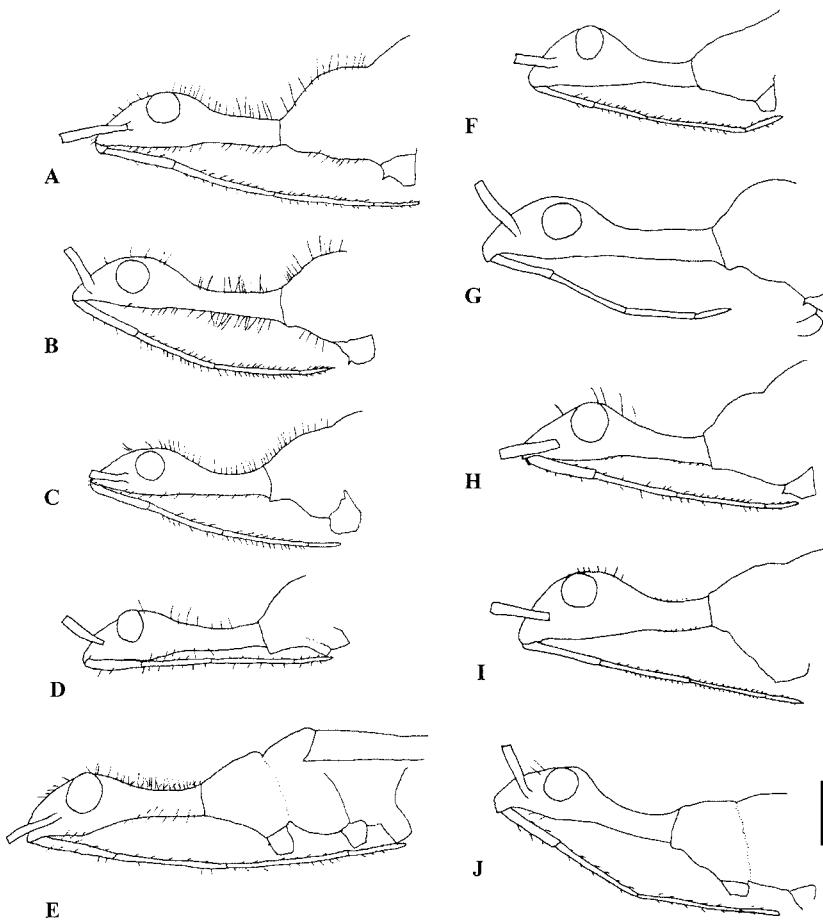


Fig. 3. Heads of *Myodocha* spp. showing hairs and length of rostrum. (A) *M. giraffa* Stål. (B) *M. longicollis* Stål. (C) *M. serripes* Olivier. (D) *M. annulicornis* Blatchley. (E) *M. unispinopilosa* new species. (F) *M. fulvosa* Barber. (G) *M. intermedia* Distant. (H) *M. parcicoma* new species. (I) *M. froeschneri* A. Slater. (J) *M. unispinosa* Stål.

quipucuna, Biological Reserve, 2-3-VIII-1998, W. Opitz, 1♀ (AMNH). GUATEMALA: Los Amates, 25-II-1905, C. J. Drake, 1♀ (NMNH). HONDURAS: Punta Gorda, II-1932, C. J. Drake, 1♂. MEXICO: CHIAPAS: Ixtacomitan, Ejido Matamoros, 10-XII-1985, F. Arias, 1♀; La Trinitaria, Independencia, 12-II-1987, F. Arias, 1♂ 2♀; Lacanja, Chansayab, 16-I-1977, P. Reyes, 1♀; Bonampak, 2-V-1978, H. Brailovsky, 5♀; 3-V-1978, 4-V-1978, H. Brailovsky, at light, 1♀; E. Barrera, 1♀; 20-V-1980, H. Brailovsky, 1♂; 21-V-1980, E. Barrera, 2♂ 1♀ 20-V-1984, M. García, E. Barrera, 1♂ 6♀; 20-22-V-1984 M. García, E. Barrera, 1♂ 6♀; 23-25-V-1984 M. García, E. Barrera, 2♀; Corozal, 25-V-1984, L. Cervantes, 1♂; Boca Lacantún, 24-V-1984, A. Ibarra, 1♂; Ocósingo, Montes Azules, 30-IV-1986, L. Cervantes, 1♀; Agua Azul, 1-V-1978, E. Barrera, 1♂; 22-V-1979, L. Rivera, 1♂ 2♀; km 98 Palenque-Bonampak, 20-V-1980, H. Brailovsky, 2♀; Rio Santo Domingo, 7-IV-1979, E. Barrera, 800 m, 3♂ 5♀; Frontera Corozal, Reserva Lacandona, 11-X-2004, A. Ibarra, 21♀ 21♂. GUERRERO: km 100 Coyuca de Catalán-Zihuatanejo, 8-VI-1984, H. Brailovsky, 1♂. OAXACA: San Mateo

Yetla, 25-V-1990, E. Barrera, A. Cadena, 1♂; 26-V-1990, E. Barrera, A. Cadena, 1♂ 1♀; Tuxtepec, Arroyo Choapan, 20-VII-1987, R. Barba, L. Cervantes, 2♀; Valle Nacional, Arroyo Blanco, 13-III-1989, A. Cadena, L. Cervantes, 1♂; 24-V-1990, E. Barrera, A. Cadena, 3♀; Valle Nacional, 13-IX-1982, A. Ibarra, 1♀; 23-IX-1982, A. Ibarra, 1♂ 3♀; Chiltepec, 24-V-1990, E. Barrera, A. Cadena, 1♀; Tuxtepec, 12-IX-1979, E. Barrera, 1♂. VERACRUZ: Pazapan, Ocote Chico, 2-II-1978, G. Ortega, 1♀; San Andres Tuxtla, Los Tuxtlas, 22-VII-1972, H. Brailovsky, 1♀; 1-II-1978, E. Mariño, 1♀; 4-II-1978, H. Brailovsky, 1♂; 21-VI-1979, E. Barrera, 1♀; 18-IX-1979, R. Sánchez, 1♂; 18-I-1980, E. Barrera, H. Brailovsky, 3♂ 1♀; 2-II-1980, J. Razowski, 1♂ 2♀; 23-VIII-1982, at light, 1♀; 20-II-1985, H. Velasco, 1♀; 21-II-1985, F. Arias, 1♀; 24-28-II-1985, A. Ibarra, 1♀; 5-IV-1985, A. Ibarra, 1♂; 20-IV-1985, A. Ibarra, 1♀; 21-IV-1985, A. Ibarra, 1♂; 23-IV-1985, A. Ibarra, 1♀; 27-IV-1985, C. Mayorga, 2♂ 2♀; 29-IV-1985, C. Mayorga, 1♂; 14-V-1985, L. Cervantes, 2♂; 17-V-1985, L. Cervantes, 1♀; 19-V-1985, L. Cervantes, 3♀; 20-V-1985, L. Cervantes, 1♂; 12-VI-1985, L. Cervantes, 1♀;

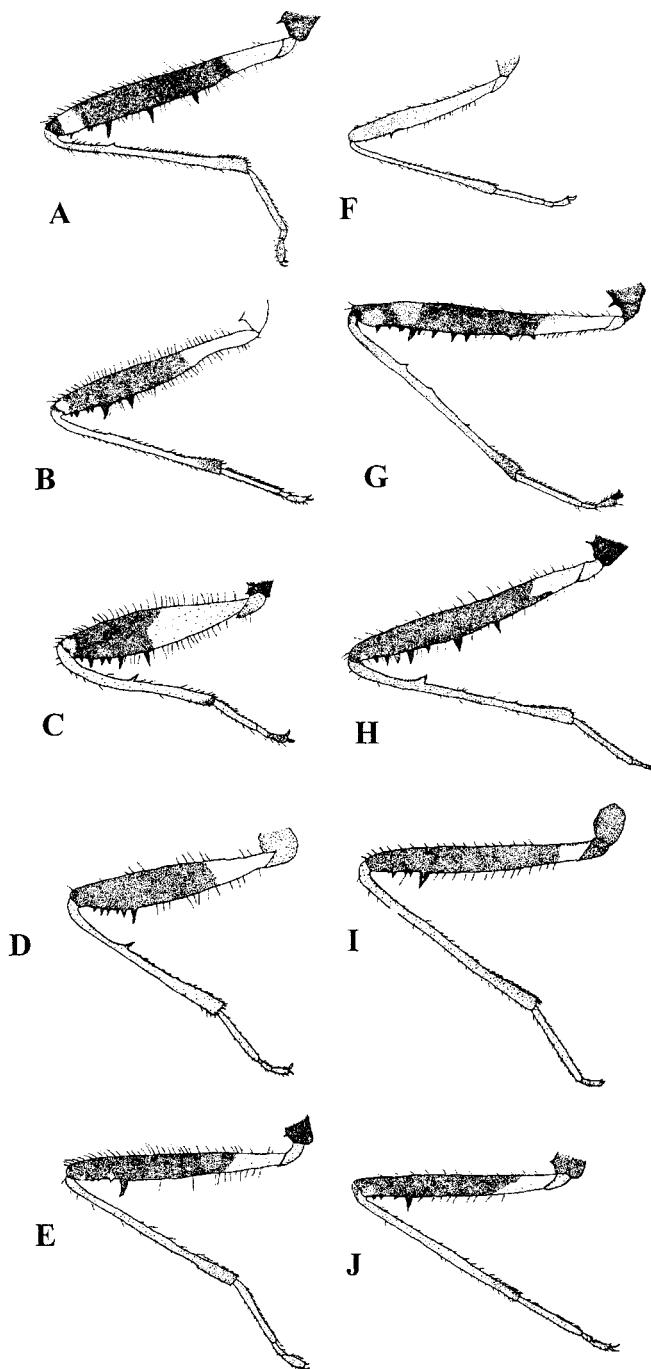


Fig. 4. Foreleg of *Myodocha* spp. showing spines and color patterns. (A) *M. giraffe*. (B) *M. longicollis*. (C) *M. seripes*. (D) *M. annulicornis*. (E) *M. unispinopilosa* new species. (F) *M. fulvosa*. (G) *M. intermedia*. (H) *M. parcicoma* new species. (I) *M. froeschneri* Slater. (J) *M. unispinosa* Stål.

14-VI-1985, L. Cervantes, 1♂; 18-VI-1985, L. Cervantes, 1♂ 2♀; 6-VII-1985, C. Mayorga, 1♀; 13-IX-1985, J. Aguilar, 1♂ 1♀; 18-IX-1985, L. Cervantes, 1♂; 17-IX-1987, F. Arias, 1♀; 3-15-XII-1988, E. Mejorada, 1♀; 18-IV-1989, E. Barrera, J. Colin, 1♂; 15-VI-1989, J.

Colin, H. Rojas, 2♂; 11-VII-1989, J. Colin, H. Rojas, 1♂; 19-VI-2002, A. Sanchez, 1♀; 17-I-2002, A. Sanchez, 1♂; San Andres Tuxtla, Laguna Escondida, 2-III-1989, L. Cervantes, J. Colin, 1♀; 1-3-IV-1993, H. Brailovsky, 2♂ 4♀; Catemaco, Las Margaritas, 16-VII-1988, A. Ca-

dena, L. Cervantes, 1♀; Catemaco, 1-IV-1952 1♀; 11-IX-1969 1♀; 1-X-1975, E. Barrera, 1♀; Catemaco, Coyame, 4-V-1975, J. Butze, at light, 1♀; Las Cabañas, 28-III-1976, J. Bueno, at light, 1♀; Vista Hermosa, Cerro Pelon, 16-VIII-1980, S. Zaragoza, 1♂; Paraje Nuevo, 15-V-1952 at light, 1♀ (CNIN). PANAMA: Gatun Lake, Tres Ríos Plantation, 8-VIII-1931, T. Ozschokke, 1♂ (Van Duze Collection) (UCV). VENEZUELA: Carabobo, Rio Borburata, 250 m, 17-24-VI-1971, F. Fernández, J. Salcedo, 2♀ (UCV).

Diagnosis. This species can be distinguished from other species of *Myodocha* because the head and neck are covered with numerous long hairs, and the rostrum reaches the metacoxae.

***Myodocha annulicornis* Blatchley**
(Figs. 3D, 4D)

Old Records. USA: Florida (Blatchley 1926; Slater and Baranowski 1990).

***Myodocha froeschneri* A. Slater**
(Figs. 3I, 4I)

Old Records. HAITI: Enneri, Darlington. DOMINICAN REPUBLIC: San Rafael, 4 km southwest of Santiago Rodriguez; Barahona, 9.2 km northwest of Paraíso; La Vega, 1 km north of Jarbacoa. JAMAICA: St. Andrews; Balaclava (A. Slater 1998).

New Records. HAITI: Port Prince, 9-VIII-1925, W. A. Hoffman, 1♀ (NMNH).

***Myodocha fulvosa* Barber**
(Figs. 3F, 4F)

Old Records. CUBA: S. la Grande; Mina Carlota, Trinidad Mts.; Guantanamo; Cayamas (Barber 1954).

New Records. PUERTO RICO: Soroa, VI-1965, P. Alayo, 1♀ (CNIN). TRINIDAD: Port of Spain 1911, H. Caracciola, 1♂ (BMNH).

***Myodocha giraffa* Stål**
(Figs. 3A, 4A)

Old Records. MEXICO: Sinaloa, Presidio de Mazatlán (Distant 1880-1893).

New Records. GUATEMALA: San Jerónimo, 1♀ (CNIN); Chiquimula, XII-1930, J. J. White, 1♂. HONDURAS: Punta Gorda, II-1931, J. J. White, 1♀ (NMNH). MEXICO: CHIAPAS: Villa Corzo, El Salitral, 10-VII-1988, L. Cervantes, 1♂; Jaltenango, Finca Prusia, 21-I-1985, H. Velasco, 1♂; Guadalupe Zaju, III-1946, A. Diaz, 1♀. GUERRERO: Iguala, Cerro Tuxpan, 24-V-1985, H. Brailovsky, 1♀; 12-VII-1988, H. Perez, 1♀; Puerto El Balsamo, 6-VIII-1995, G. Nogueiras, 1♀; Atoyac-Nueva Delhi, El Ranchito, 20-IV-1988, L. Cervantes, 1♀; Granados, 26-III-1972, H. Brailovsky, 1♀. HIDALGO: Tlanchinol, 3.5 km north of Tlanchinol, 6-V-1994, J. Blackaller, 1♂ (CNIN); Minera Autlán, 31-VII-1982, L. O'Brien, 1♀ 1♂ (NMNH). JALISCO: Sierra de Manantlan, 13-IX-1995, G. Nogueiras; 1♀. ESTADO DE MEXICO: Valle de

Bravo, 24-X-2004, W. Sohn, 1♂; Malinalco, 19-XI-1980, H. Brailovsky, 1♀ (CNIN). JALISCO: Huascato, XII-1923, W. Mann, 1♂ (NMNH). MICHOACAN: km 27 northeast of Coalcomán-Las Nieves, 6-V-1983, E. Barrera, 1♀; Villa Victoria, 1995, G. Nogueiras, 1♀. NAYARIT: Compostela, 21-X-1982, A. Ibarra, 1♀; km 98 Guadalajara-Tepic, 27-VII-1984, M. García, 1♀; Isla María Madre, Campamento Mariano Escobedo, I-XII-1986, L. Cervantes, R. Barba, 1♀ 1♂. OAXACA: Portillo del Rayo, 30-V-1987, L. Cervantes, 1♂; Domin-guillo, 20-VIII-1998, S. Zaragoza, 1♀; km 5 Oaxaca-Guelatao, 29-VI-1996, H. Brailovsky, 1♂; Pochutla, Pluma Hidalgo, 9-III-1995, E. Barrera, 1♀; km 164 Oaxaca-Pto. Escondido, 25-VI-1996, J. Blackaller, 1♀. PUEBLA: Xicotépec de Juarez, 20-I-1994, H. Brailovsky, 1♀; Tlalchichilco, Malacate Hidroelectrica, 11-VII-1996, E. Barrera, 1♀ (CNIN). SAN LUIS POTOSI: Ciudad del Maiz, 23-VII-1982, L. O'Brien, 1♀ (NMNH). QUERETARO: 4 km north of La Lagunita, 15-IX-1998, H. Brailovsky, 1♀ (CNIN). TAMAULIPAS: Gomez Farias, 7-VIII-1983, J. Peck, 1♀ (AMNH); Gomez Farias, Altacima, 17-IX-2003, L. Cervantes, 1♀ (IEXA). VERACRUZ: Fortin, 28-VI-1963, R. Woodruff, 1♀ (FSCA); Orizaba, Jalapilla, 5-I-2000, H. Brailovsky, 11♂, 5♀; Orizaba, Ixtaczoquitlan, 4-V-2000, E. Barrera, 1♀; Chocaman, 6-I-2000, H. Brailovsky, 2♀; Huatusco, 12-X-1974, E. Mariño, 1♂; 11-XI-1974, H. Brailovsky, 1♂ 1♀; 20-III-1975, E. Barrera, M. Moron, 2♂, 1♀; Xalapa, 24-IX-1981, M. Duarte, 1♂; 14-VI-1984, J. Peña, 1♀; IX-1984, J. Peña, 1♀; 10-IX-1984, J. Peña, 1♀; 12-XI-1984, J. Peña, 1♀; 2-I-1985, J. Peña, 1♀; 9-I-1985, J. Peña, 1♀; 1-V-1985, J. Peña, 1♂; 20-X-1985, J. Peña, 1♀; Puente Nacional, 13-VIII-1974, H. Brailovsky, 1♀; Coscomatepec, Rio Jamapa, 2-IX-1982, J. Bueno, 1♀; Tlapacoyan, 24-V-1985, C. Bolívar, 1♀; Zongolica, 29-IV-1967, L. Rivera, 1♂; 30-VI-1967, L. Rivera, 1♂; Texolo, 14-IX-2003, R. Mariño, 1♀ (CNIN).

***Myodocha intermedia* Distant**
(Figs. 3G, 4G)

Old Records. GUATEMALA: Las Mercedes, Pantaleón, Aceituno, Senahu. MEXICO: Guerrero, Chilpancingo; Veracruz, Atoyac, Orizaba, Xalapa (Distant 1880-1893).

New Records. BELIZE: Cayo, Roaring Creek near Belmopan, 16-VII-1978, P. Broonfield, 1♂ (BMNH). COLOMBIA: Choco, Quebrada Docordo 110 km north of Palestina, 20-I-1971, B. Malkin, 1♂ (CNIN); Choco, Caño Taparral, 20 km north of Palestina 5-XII-1968, B. Malkin, 1♂ (AMNH). COSTA RICA: Chachahua, Acajuela, 24-II-1982, E. Barrera, 1♂ (CNIN); Punta Arenas, Golfito, 1948, P. Allen, 1♀ 1♂; Heredia, La Selva, 11-II-1976, Schroepfer, 1♀ 4♂; 14-X-1981, C. Griswold, 1♂; Heredia, La Selva, Viejo de Sarapiquí, 18-II-1985, L. Herman, 1♂ (AMNH); Turquilla, Schild-Burgdorf, 1♀; Cairo, 21-IV-1944, 1♀; Heredia, La Selva, 21-III-1988, W. Steiner, 1♂; 25-VII-1989, D. Furth, 1♀ (NMNH). ECUADOR: Pastaza, Rio Cuisimi, 150 km southeast of Puyo, 15-V-1971, B. Malkin, 1♀ 1♂; Santo Domingo de los Colorados, 1905,

P. Rivet, 1♂ (CNIN), Limoncocha, 31-III-1974, D. Engleman, 1♀ (NMNH). GUATEMALA: Alta Vera Paz, 14-IV-, 2♂; Alta Vera Paz, Cacao, 29-III-?, E. Schwarz, 1♂; Cayuca, VI-1915, W. Schau, 1♀ 1♂; Polochi River, IX-1905, S.P.G., 1♀ (NMNH). HONDURAS: Lancetilla, VIII, Stadelmann, 1♀ (AMNH). MEXICO: CAMPECHE: Calakmul, Aguada Grande, 19-VII-1997, A. Contreras, 1♂ (CNIN); Calakmul, Chicana, 16-XI-2001, L. Cervantes, 1♀ (IEXA). CHIAPAS: Ocosingo, Chajul, Montes Azules, 1-VI-2000, L. Cervantes, 1♂ (IEXA); 10-VII-1987, L. Cervantes 2♀ 3♂; 21-VII-1994, G. Rios, 1♂; 29-VII-1995, G. Rios, 1♀; 14-IV-1993, R. Ayala, 1♀ 1♂; 13-IX-1993, Villavicencio, 1♂; Bonampak 22-V-1980, E. Mariño, 1♂; Palenque, 3-VII-1980, H. Almeida, 1♂; Ocozocuautla, 23-IV-1995, B. Gomez, 1♂; km 141 San Cristobal de las Casas-Comitan, 24-VII-1978, G. Ortega, 1♂ (CNIN). NAYARIT: 18 km southwest Compostela, 20-VII-1974, M. Perkins, 2♂ (NMNH). OAXACA: km 13 Huajuapan-Tehuacan, 31-VIII-1990, A. Cadena, 1♂; San Mateo Yetla, 23-IX-1989, A. Cadena, 1♀ (CNIN); Palomares, 7-?-1909, 2♂ (AMNH). TABASCO: Villahermosa, Agua Blanca, 17-VI-1989, L. Cervantes, 1♀. VERACRUZ: km 40 Xalapa-Veracruz, 17-IX-1989, E. Barrera, 2♀ 1♂; Fortin, VII-1939, D. Pelaez, 1♂; Metlac, 5-XI-1975, H. Brailovsky, 1♂; Huatusco, 11-XI-1974, H. Brailovsky, 1♂; Tlapacoyan, 18-IV-1946, D. Pelaez, 1♂; San Andres Tuxtla, Estacion Biologia Los Tuxtlas, 19-IX-1989, H. Brailovsky, 4♀ 4♂ (NMNH); San Andres Tuxtla, Estacion Los Tuxtlas, several dates and collectors, 124♀ 97♂ (CNIN). PANAMA: La Chorrera, 6-VI-1948, R.P. 1♀ (AMNH); La Chorrera, 18-V-1912, A. Busck, 1♂; 12-V-1912, A. Busck, 1♀ 1♂; El Valle del Cocale, 24-V-1975, D. Engleman, 1♀; Porto Bello, 7-III-1911, E. Schwarz, 1♂; 18-IV-1912, A. Busck, 1♂; 19-III-1911, A. Busck, 1♀; 25-II-1911, 1♀; Cabima, 25-V-1911, A. Busck, 1♀ 1♂; Cerro Campana, 26-XII-1975, Stockwell, 1♀; Isla de Maje, 15-V-1976, Stockwell, 1♀ 1♂; Maje Station, 17-V-1974, D. Engleman, 3♀ 4♂; Chepo, Altos de Maje, 17-V-1975, Stockwell, 1♀; 15-V-1976, D. Engleman, 1♀; Bocas de Corriente Grande, 4-II-1980, H. Wolda, 1♀ 1♂; Canal Zone, Achioite Road, 19-V-1976, D. Engleman, 1♂; Canal Zone, Coco Solo Hospital, 8-VII-1974, D. Engleman, 1♂; Bocas del Toro, Almirante, 4-VII-1974, D. Engleman, 1♀ 2♂; Fort Sherman, 31-VII-1974, D. Engleman, 1♀; Trinidad River, 2-V-1911, A. Busck, 1♀ 2♂; Canal Zone, Corazal, 29-IV-1911, A. Busck, 1♀; Barro Colorado, 23-V-1964, W. Duckworth, 1♀; Chiriqui, Fortuna, 10-II-1977, H. Wolda, 1♀; 8-X-1977, H. Wolda, 1♂ (NMNH); Barro Colorado Island, 24-X-?, M. Bates, 1♀; 24-VII-, G. Fairchild (AMNH); Gatun Lake, 8-IX-1931, T. Ozschokke, 3♂ (CNIN). PERU: Valle of River Huallaga, 17-I-1954, F. Woytkowski, 1♀ 2♂; 21-III-1954, F. Woytkowski, 1♀; 6-III-1954, F. Woytkowski, 1♂; 22-II-1954, F. Woytkowski, 1♂. VENEZUELA: Cumaragua, J. Blanco, 1♂ (NMNH); Zulia, Kasmera Yasa, Sierra de Perija, 19-IX-1961, C. Rosales, 1♀ (CNIN).

Myodocha longicollis Stål
(Figs. 3B, 4B)

Old Records. GUATEMALA: San Geronimo, San Juan. MEXICO: Guerrero, Chilpancingo, Tepetlapa; Veracruz, Cordoba (Distant 1880-1893).

New Records. COLOMBIA: Santander, Rio Opon tributary of Rio Magdalena, 31-XII-1948, L. Richter, 1♀. COSTA RICA: Punta Arenas, Peninsula de Osa, 24-III-1991, M. Stark, 1♀; Cartago, Osori, VII-1981, N. Krauss, 1♀ (AMNH); Tuirrialba, 6-IX-1920, A. Alfaro, 1♀. EL SALVADOR: San Jacinto, 2-VI-1925, K. Salmon, 1♀ (NMNH); Quezaltepeque, 4-VIII-1963, D. Cavagnaro, 1♂. GUATEMALA: Guatemala, 4-XI-1980, G. Robles, 1♀ (CNIN); Chiquimula, XI-1930, J. White, 1♀ (NMNH). HONDURAS: Lancetilla, 3-X-1955, M. Bates, 1♀ (AMNH). Atlantida, Rio Cangrejal, 13-VIII-1992, L. Stange, nymph; Cortes, Lima, 9-VIII-1968, D. Habock, 2 nymphs; Francisco Morazan, 25 km south of Talanga, 11-V-1993, L. Stange, 1♀; El Paraiso, Yuscaran, Rio Aguacate, 12-V-1993, L. Stange, 1♀ (FSCA). MEXICO: CAMPECHE: Bolonchen de Rejon, 15-VI-1985, M. Vertiz, 2♀; Escarcega, El Tormento, 18-VI-1989, L. Cervantes, 1♀; Campeche, 10-VII-1971, H. Brailovsky, 1♀ (CNIN); Escarcega, 28-V-2001, L. Cervantes, 2♀ 1♂; Calakmul, Xpuhil, 29-V-2001, L. Cervantes, 1♂; Calakmul, Chicana, 8-I-2003, L. Cervantes, 1♂ (IEXA). CHIAPAS: San Cristobal de las Casas, IX-1943, D. Pelaez, 1♀; Corozal, 25-V-1984, A. Ibarra, 1♂; Reserva El Ocote, 3-V-1993, E. Barrera, 1♀; Frontera, 6-IV-1979, E. Barrera, 1♂; Agua Azul, 1-V-1978, E. Barrera, 1♀; Arriaga, 23-VIII-1985, H. Velasco, 5♀ 1♂; km 114 Huixtla-Comitan, 2-VII-1988, L. Cervantes, 1♀ 2♂; Rizo de Oro, 10-X-1990, C. Beault-espacher, 3♂; Ocozocuautla, 22-XII-1975, A. Espinosa, 2♀; Palenque, 22-VI-1979, E. Barrera, 2♀ 1♂; Mapastepec, Puerta de Oro, 11-VIII-1991, C. Mayorga, 1♀ (CNIN); Tonala, 31-VII-1909, H. Barber (NMNH). ESTADO DE MEXICO: Acamochitlan, El Zapote, 21-II-1984, E. Barrera, 1♀. GUERRERO: Cacahuamilpa, 23-VI-1943, P. Ramirez, 1♀; Rodecia, 11-VII-1971, H. Brailovsky, 9♀ 8♂; 11-VIII-1971, H. Brailovsky, 1♀ 2♂; 12-VIII-1971, H. Brailovsky, 1♀ 2♂; 17-VIII-1971, H. Brailovsky, 5♀ 2♂; Iguala, Cerro Tuxpan, 12-VII-1988, H. Perez, 2♀; Ixtapa Zihuatanejo, 27-XII-1993, H. Brailovsky, 1♀; 11-VIII-1971, H. Brailovsky, 1♂; 29-XII-1989, H. Brailovsky, 1♀; Puerto El Balsamo, 6-VIII-1995, G. Nogueira, 1♀; Mochitlan, Acahuizotla, 20-VI-1989, L. Delgado, 1♂; 22-VI-1982, E. Barrera, 10♀ 8♂; 5-VI-1986, C. Deloya, 1♂; 1-VIII-1986, A. Martinez, 3♀ 2♂; Agua de Obispo, L. Vazquez, 1♂; Los Arenales, 11-VIII-1975, E. Barrera, 1♂; km 20 Chilpancingo-Acapulco, 29-VI-1983, M. Garcia, 1♂; Acapulco, 24-VIII-1984, H. Brailovsky, 1♀; Tecpan, 12-VIII-1971, H. Brailovsky, 1♀ 2♂; Altamirano, 15-IX-1952, 1♀; 15 km north of Iguala, 15-I-1986, H. Brailovsky, 2♂; Taxco, 11-XI-1988, H. Brailovsky, 1♀. HIDALGO: Xiquila, 27-VIII-1989, E. Barrera, 1♂; km 9 Huejutla-Atlapexco, 28-VIII-1999, E. Barrera, 2♂; km 12 Huejutla-Atlapexco, 4-VIII-1989, E. Barrera, 1♂. JALISCO: Chamela, several dates and collectors, 29♀ 25♂; Chamela, Arroyo Maderas, 29-

IX-1977, H. Brailovsky, 1♀ 1♂; km 43 Barra de Navidad-Pto. Vallarta, 13-VIII-1990, E. Ramirez, 1♀ 5♂; Sierra de Manantlan, 16-IX-1995, G. Nogueira, 3♀ 3♂; 11-VIII-1997, G. Nogueira, 1♀ 1♂; Rio Cuitzmal, 26-I-1990, E. Ramirez, 1♂; Pto. Vallarta, 23-VI-1991, A. Martin, 1♂; Los Angeles Locos, 14-VI-1994, G. Nogueira, 1♂; El Tuito, 27-XI-1990, E. Gonzalez, 1♂; km 84 Barra de Navidad-Pto. Vallarta, Rio san Nicolas, 1-XI-1991, E. Ramirez, 1♀; 26-XI-1990, E. Ramirez, 2♂; San Buenaventura, 3-VII-1997, S. Zaragoza, 2♀ 2♂; 5-XII-1996, S. Zaragoza, 1♂; 1-IX-1997, S. Zaragoza, 1♂. MICHOACAN: El Limon, 24-III-1986, E. Barrera, 3♀ 2♂; Villa Victoria, 31-1995, G. Nogueira, 6♀ 3♂; Huetamo, 27-X-2001, H. Brailovsky, 1♂; Pedernales, Arroyo Frio, 19-IX-1987, E. Barrera, 2♀ 2♂; Arteaga, km 26 Playa Azul-Arteaga, 13-II-1983, H. Brailovsky, 1♂; Chupio, Arroyo Frio, 2-VI-1980, L. Cervantes, 1♀. MORELOS: Huautla, 5-VII-1995, H. Brailovsky, 1♀; 4 km west of Huautla, 12-VII-1996, A. Perez, 1♂; Alpuyeca, 6-IX-1980, E. Barrera, 1♂. NAYARIT: Huaynamota, Rio Santiago, 13-VII-1991, E. Barrera, 9♀ 5♂; 15-IX-1991, E. Barrera, 2♂; 17-IX-1991, E. Barrera, 1♀; Rincon de Guayabitos, 14-VIII-1981, R. Zurbia, 1♀; 16-VIII-1981, R. Zurbia, 1♀ 1♂; 19-VIII-1981, R. Zurbia, 1♂; 2-IX-1980, J. Valdez, 1♂; Reacomodo, Los Sabinos, 10-IX-1991, E. Barrera, 1♀; Jesus Maria, 22-X-1989, A. Cadena, 2♀ (CNIN). NAYARIT: 18 km southwest Compostela, 20-VII-1974, M. Perkins, 2♀ 3♂ (NMNH). OAXACA: Pochutla, Finca Progreso, 2-VI-1987, L. Cervantes, 7♀ 2♂; Pochutla, 14-X-1985, E. Barrera, 1♀; 3-VI-1987, E. Barrera, 2♀; km 30 Tehuacan-Oaxaca, 11-X-1979, H. Brailovsky, 4♀ 4♂; Toltepec, 6-XI-1987, F. Arias, 1♂; Huajuapan de Leon, 26-X-1978, H. Brailovsky, 1♂; Pinotepa Nacional, 17-VI-1982, E. Barrera, 1♀ 4♂; Bethania, Rio Coapan 24-V-1981, J. Bueno, 1♀; Ciudad Aleman, 17-XI-1976, H. Brailovsky, 1♂; Tuxtepec, 10-XI-1974, H. Brailovsky, 1♀; 19-XI-1990, E. Barrera, 1♀; El Camaron, 19-IX-2003, H. Brailovsky, 1♂; 2 km southwest of Camaron, 12-VII-2000, E. Barrera, 1♀; Teotitlan, Rio Xiquila, 5-XI-1988, L. Cervantes, 1♀; km 26 Pto. escondido-Oaxaca, 3-VII-1990, E. Barrera, 1♀; Dominguillo, 26-VIII-1998, A. Soria, 1♀; 17-VII-1998, S. Zaragoza, 1♀ (CNIN); 2 miles SE Niltepec, 16-VIII-1966, J. Ivie, 1♀ 1♂ (AMNH). PUEBLA: Zinacatepec, 11-X-1979, H. Brailovsky, 1♀ 2♂; San Diego, 5-X-1953, 1♀; 19-IV-1952, 1♀; Villa Avila Camacho, Rio La Pita, 28-I-1985, E. Barrera, 1♂; Chietla, 9-VI-1999, H. Brailovsky, 2♂. QUERETARO: Chuveje, 21-VI-1998, L. Cervantes, 1♂; km 4.5 La Lagunita-Tilaco, 20-VII-1998, C. Mayorga, 1♀ 1♂; 4 km north of La Lagunita, 15-IX-1998, H. Brailovsky, 1♂. QUINTANA ROO: Felipe Carrillo Puerto 27-XII-1982, O. Canul, 1♂; Felipe Carrillo Puerto, Buenavista, 22-VI-1989, L. Cervantes, 1♀. SAN LUIS POTOSI: Ciudad Valles, 9-IV-1978, J. Figueroa, 3♀ 2♂; Tamuin, 29-VIII-1975, H. Brailovsky, 1♀; Tamazunchale, 13-IV-1952, 1♂. SINALOA: Panititlan, 19-X-1982, A. Ibarra, 1♀; Culiacan, 9-XI-1986, F. Arias, 1♀ (CNIN); Mazatlan, 31-VII-1959, R. Schrammel, 1♂ (AMNH); 16.4 miles N Culiacan, 24-VIII-1971, J. Cicerio, 1♀ 1♂ (FSCA). SONORA: Alamos, 8-XI-1986, E. Mariño, 2♀ 1♂; km 65 Guaymas-Ciudad Obregon, 6-XI-1986, E. Barrera, 1♂; Rancho Nuevo, 25-VII-1998, G. Nogueira, 1♀. TAMAULIPAS: Ciudad Victoria, 6-VII-1975, H. Brailovsky, 2♀ 1♂; Gomez Farias, 3-X-1985, L. Cervantes, 2♂; La Pesca, 8-X-1985, F. Arias, 1♀; 20 km west of Soto la Marina, 24-X-1985, S. Tufinio, 1♂ (CNIN); Gomez Farias, Emiliano Zapata, 29-III-2001, L. Cervantes, 2♂; Gomez Farias, Bocatoma, 20-IX-2001, L. Cervantes, 3♀ 1♂; Ciudad Mante, 1-XII-2003, L. Cervantes, 1♂; Ocampo, Ejido El Tigre, 15-IX-2003, L. Cervantes, 1♀ 1♂ (IEXA). VERACRUZ: Cuitlahuac, 13-VIII-1975, L. Rivera, 2♀ 1♂; San Andres Tuxtla, Los Tuxtlas, 16-V-1972, H. Brailovsky, 1♀; Palma Sola, VIII-1972, G. Halffter, 1♂; Tecolutla, 7-IX-1973, M. Senmache, 1♀; Soteapa, Ocotal Chico, 13-VIII-1980, S. Zaragoza, 2♀ 3♂; 27-XII-1978, H. Perez, 2♀; 14-VIII-1980, H. Perez, 1♀; 24-V-1982, H. Perez, 2♀; Fortin, 20-V-1976, H. Brailovsky, 1♀; Tinaja-Tierra Blanca, Rio Otapa, 17-XI-1976, E. Barrera, 2♀; Actopan, El Carrizal, 3-XII-1999, H. Brailovsky, 1♂; Catemaco, Pozolapa, 10-IX-1977, J. Figueroa, 3♂; Catemaco, Dos Amates, 11-VI-1964, 1♀ (CNIN); Catemaco, Palma Sola, 18-VII-1972, P. Reyes, 1♀; Catemaco, Playa Azul, 9-VIII-1966, J. Ivie, 1♀; Horconcitos, 30-VI-1926, C. Hoffman, 1♀ (AMNH); El Encanto, 19-VI-1965, J. Kikushima, 1♀; Dos Caminos, 7-VII-1975, L. Rivera, 4♀; Temporal, 28-VIII-1975, H. Brailovsky, 3♀ 1♂ (CNIN); Isla, 14-VIII-2002, L. Cervantes, 1♀; Actopan, La Mancha, 25-XI-1998, L. Cervantes, 1♀ 1♂; 26-XI-1998, L. Cervantes, 1♂; 22-X-1999, L. Cervantes, 1♀; 26-IX-2003, L. Cervantes, 1♀ (IEXA); Fortin, Sumidero, 7-IX-1968, Weems, 1♀ (FSCA). YUCATAN: Merida, 30-VII-1964, J. Spangler, 1♀ 1♂ (NMNH); Uxmal, km 11 Merida-Pto. Progreso, Hacienda Xacantum, 11-IX-1994, E. Barrera, 1♀; Uxmal, 18-VIII-1976, H. Brailovsky, 5♀ (CNIN); Colonia Yucatan, 20-VIII-1952, J. Pallister, 1♀; 24-VIII-1964, J. Pallister, nymph; Motul, 11-VII-1952, J. Pallister, nymph; Chuminopolis, 28-VI-1952, J. Pallister, 1♀; 10-VII-1952, J. Pallister, 1♀; 7-VIII-1952, J. Pallister, 4♀ 2♂; 8-VIII-1952, J. Pallister, 1♂; 8-IX-1952, J. Pallister, 4♀ 2♂; 18-IX-1952, J. Pallister, 1♂ (AMNH); Merida, 29-VII-1964, J. Spangler, 1♀ 1♂ (NMNH). PANAMA: Canal Zone, Police Pistol Range, 21-V-1982, C. Bennett, 1♀ (FSCA); Canal Zone, Coco Solo Hospital, 18-VIII-1971, D. Engleman, 1♂; 31-VIII-1972, D. Engleman, 1♀; 14-XII-1972, D. Engleman, 1♀; 18-XII-1972, D. Engleman, 1♀; Maiden Reservoir, 13-V-1972, 1♀; 16-IX-1972, 1♂; 31-VIII-1975, 2♂; Las Cumbres, 7-XII-1973, H. Wolda, 1♂; Barro Colorado, 1-III-1944, Zetek, 1♀ 1♂; VII-1941, Zetek, 1♀; Chorrera, 13-V-1912, A. Busck, 1♂; Cocle Prov. 3 miles E Rio Hato, 16-VIII-1975, H. Stockwell, 1♂ (NMNH). VENEZUELA: Maracay, El Limon, 5-VI-1977, J. Ayala 2♀ 2♂; Aragua, Rancho Grande, VIII-1978, H. Brailovsky, 1♂; 8-VII-1981, H. Brailovsky, 1♂; Portuguez, Guanare, 15-X-1975, C. Bordon, 2♀ 2♂; Caracas, E.S. 1♂ (CNIN); Aragua, Cagua, 10-X-1960, Borbon, 1♂ (NMNH).

***Myodocha seripes* Olivier**
 (Figs. 3C, 4C)

Old Records. CANADA: Ontario; Quebec. USA: Colorado; Connecticut; Florida; Illinois; Indiana; Iowa; Kansas; Louisiana; Maine; Maryland; Massachusetts; Michigan; Minnesota; Missouri; Nebraska; New Hampshire; New Jersey; New Mexico; New York; North Carolina; Ohio; Oklahoma; Pennsylvania; South Carolina; Tennessee; Texas; Vermont; Virginia (Slater 1964).

***Myodocha unispinosa* Stål**
 (Figs. 3J, 4J)

Old Records. COLOMBIA. GUATEMALA: Zapote, San Juan, San Geronimo. MEXICO: Tabasco, Teapa; Veracruz, Atoyax, Cordoba. NICARAGUA: Chontales. PANAMA: Bugaba, Volcan de Chiriquí. VENEZUELA: La Guayra (Distant 1880–1893).

New Records. BOLIVIA: Santa Cruz, 3.7 km south southeast Buena Vista, 15-XI-2001, M. Thomas, 12♀ 6♂ (FSCA); La Paz, Yungus, Santa Fe, 3-IV-1976, C. Ward, 1♀; Chapare, Sajta, XI-1993, 1♂; Chapare, Paracti, III-1993, G. Castillo, 1♀ 1♂. BRAZIL: Rondonia, 62 km southwest of Ariquemes, 10-IV-1992, J. Eger, 1♀; Bonfim, 26-I-1930, Davis, 1♂ (NMNH); Pernambuco, Carvaru, IV-1972, M. Alvarenga, 1♂. COLOMBIA: Putumayo, Santa Rosa, 15-X-1970, P. Burchard, 2♀ (AMNH) Cundinamarca, Fica Bella Vista near Sasalina, 21-IV-1965, P. Craig, 1♀; 9-VI-1965, P. Craig, 1♂. COSTA RICA: Cartago, km 20 Turrialba-Siquirres, 23-II-1980, E. Barrera, 1♂ (CNIN); Heredia, La Selva, 13-IV-1987, J. Hill, 1♀; Cartago, Pejibaye, 24-III-1987, W. Steiner, 2♀; Guanacaste, 17-XI-1991, A. Menke, 1♀. ECUADOR: Macra, Catacocha, 15-VIII-1977, L. Peña, 2♂; Los Rios, Rio Palenque, 7-III-1979, J. Anderson, 1♀; Napa Tena, 2-VI-1977, P. Spangler, 1♀; Cotopaxi, Latacunga, 2-VII-1975, Langley, 1♀; Limoncocha, 31-III-1974, D. Engleman, 1♀ 1♂ (NMNH); Pichinche, Valle Hermoso, 9-V-1997, 1♀; Azuay, Challoapac, 11-I-1997, A. Paucar, 1♀; Carchi, Maldonado, 24-X-1997, G. Onore, 1♀; Napo, Campanacocha, 23-I-1988, A. Troya, 1♀ 1♂; Esmeraldas, Cupa, Quiwinde, 2-VI-1985, P. Casares, 1♂; Los Rios, CCRP, 27-XII-1980, S. Sandoval, 1♂ (UCQE); Limoncocha, Rio Napo, 21-II-1974, B. Drummond, 1♀ 2♂; Rio Palenque, Los Rios, 11-VI-1974, J. Longino, 1♀ 2♂ (FSCA), Los Rios, Pichilingue, Quevedo, V-1976, A. Martinez, 1♀ 1♂; Los Rios, Ventanas, VIII-1974, Bordon, 1♀ (CNIN). FRENCH GUIANA: 30 km southeast of Rouraon Kaw Rd. 12-XII-2002, J. Eger, 1♀ (FSCA). GUATEMALA: Cacao, Trece Aguas, 14-IV-, Barber, 1♂ (NMNH); Agua Caliente, Kellerman, 2♀; Sananate, Kellerman, 1♀; Los Amates, Kellerman, 1♂ (AMNH). HONDURAS: Juticalpa, 16-VI-1974, L. O'Brien, 1♀; Punta Gorda, II-1931, J. Lutz, 1♀ 6♂ (NMNH); Atlantida, Lancetilla, 4-VI-1964, F. Blanton, 1♂ (FSCA). MEXICO: CAMPECHE: Escarcega, El Tormento, 18-VI-1989, L. Cervantes, 1♀ 2♂; Champon, El Zapote, 19-VI-1989, L. Cervantes, 2♀ 1♂; Calakmul, Ejido Gustavo Diaz Ordaz, Rio Escondido,

22-IX-1997, A. Contreras, 1♀; Calakmul, Xpuhil, 15-XI-2001, H. Brailovsky, 1♀ (CNIN); Calakmul, Chicana, 8-I-2003, L. Cervantes, 2♂; Calakmul, Xpuhil, 15-XI-2001, L. Cervantes, 1♀; km 25 Calakmul, 29-V-2001, L. Cervantes, 1♀ (IEXA). CHIAPAS: Bonampak, 2-V-1978, H. Brailovsky, 2♂; 21-V-1980, H. Brailovsky, 2♂; 25-V-1980, H. Brailovsky, 1♀ 1♂; 20-V-1984, E. Barrera, 9♀ 6♂; 22-V-1984, A. Ibarra, 4♀ 2♂; 25-V-1984, M. Garcia, 1♀ 1♂; Palenque, 17-VII-1978, E. Barrera, 1♂; 22-VI-1979, E. Barrera, 1♀ 3♂; 31-I-1985, M. Garcia, 1♀; Agua Azul, Frontera Corozal, 20-IV-2004, A. Ibarra, 1♂; Ocosocuautla, 16-I-1972, D. Breedlove, 1♀; Chintul, 6-III-1988, E. Barrera, 2♂; Corozal, 25-V-1984, E. Barrera, 1♀ 2♂; Huixtla, Finca Irlanda, 15-V-1986, M. Moron, 1♀; Ixhuatan, km 3 Pozo Rosario, La Trinitaria, 12-XII-1985, L. Cervantes, 2♂; San Antonio Independencia, 17-II-1987, M. Garcia, 1♀ 1♂; Comitan, Rio Blanco, 10-XII-1985, L. Cervantes, 1♂; Ocosingo, 21-VII-1978, E. Barrera, 1♀; Ocosingo, Agua Azul, 1-V-1978, E. Barrera, 1♀; 20-VII-1978, E. Barrera, 1♀ 1♂; 21-VII-1978, E. Barrera, 1♀ 2♂; Ocosingo, Chajul, Montes Azules, 16-VII-1987, L. Cervantes, 1♂; Mal Paso, 5-V-1981, C. Beaultespacher, 1♀; Tapachula, 5 km south of Palo Seco, 10-VIII-1991, C. Mayorga, 1♂; Mapastepec, Rancho Puerta de Oro, 11-VIII-1991, C. Mayorga, 1♀ 1♂; Simojovel, 24-V-1967, G. Halffter, 1♂; Escuintla, Finca Santa Isabel, 7-VII-1988, L. Cervantes, 1♂; Boca Lacantun, 24-V-1984, E. Barrera, 1♀. COLIMA: Tecoman, 11-II-1983, E. Barrera, 1♂. GUERRERO: Ixtapa Zihuatanejo, 20-XII-1994, H. Brailovsky, 1♀; Acahuizotla, 22-VI-1982, A. Ibarra, 1♀. HIDALGO: km 9 Huejutla-Atlapetco, 28-VIII-1999, E. Barrera, 1♂. JALISCO: Casimiro Castillo, 17-VI-1994, G. Noguera, 1♂. MICHOACAN: Pedernales, Arroyo Frio, 19-IX-1987, E. Barrera, 1♂. MORELOS: Cuernavaca, 18-IV-1982, C.R.B: 1♂; Cacahuamilpa, 11-IV-1970, P. Reyes, 1♂. NAYARIT: 25 km Tepic-Pto. Vallarta, 1-VIII-1984, M. Garcia, 1♀ 1♂; Rincon de Guayabitos, 16-VIII-1981, R. Zurbin, 3♀ 3♂ (CNIN); 16-VIII-1981, R. Zurbin, 1♀. OAXACA: Tolosa, 23-VIII-1947, B. Malkin, 1♀ (AMNH); Cerro Oro, 18-III-1975, E. Barrera, 1♀; San Mateo Yetla, 16-V-1990, A. Barrera, 1♀; 12-X-1990, E. Barrera, 1♀; Valle Nacional, 23-IX-1982, A. Ibarra, 2♀ 1♂; San Pedro Teutila, G. Noguera, 1♂; Arroyo El Frijol, 30-V-1976, E. Mariño, 1♀; Bethania, 18-III-1990, E. Barrera, 5♀; 13-IX-1979, E. Barrera, 1♀; 12-IX-1979, E. Mariño, 1♂; Bethania, Rio Coapan, 24-V-1981, J. Bueno, 1♂; Tuxtepec, 9-XI-1974, H. Brailovsky, 1♀; 10-XI-1974, H. Brailovsky, 1♂; Tuxtepec, Arroyo Choapan, 20-VII-1987, L. Cervantes, 5♀ 7♂; Sierra de Juarez, Metates, 16-IX-1982, A. Ibarra, 1♀ 1♂; km 40 Oaxaca-Tuxtepec, 11-IX-1979, E. Barrera, 1♀; Jacatepec, 16-XI-1979, M. Rivera, 2♂; Candelaria Loxicha, Finca Pacifico, 2-VI-1985, E. Barrera, 1♂; Monte Flor, 21-V-1957, L. Vazquez, 1♀ 1♂; Chiltepec, 24-V-1990, E. Barrera, 1♀; km 116 Tuxtepec-Palomares, 22-XI-1990, A. Cadena, 1♂; km 28 Huauth-Ayutla, 17-III-1989, L. Cervantes, 1♂. PUEBLA: Tlalchichilco, Malacate Hidroelectrica, 11-VI-1994, C. Mayorga, 1♀; Villa Juarez, 3-VIII-1953, 1♀ 1♂; Necaxa, 2-V-1975, M. Moron, 1♂; San Diego, Estación de Bombeo I, 3-III-1953, L. Vazquez, 1♂; Villa

Avila Camacho, Rio La Pita, 24-I-1985, H. Brailovsky, 2♀ 1♂; Hueytamalco, Rancho La Carolina, 4 km east of Ayotocoxo, IV-1989, W. Lopez, 1♀; Tenango de Doria, 5-II-1986, E. Barrera, 1♀; San Diego, 15-V-1953, L. Vazquez, 1♂; Patla, 1-V-1976, S. Zaragoza, 1♀ (CNIN); Hueytamalco, km 20 Hueytamalco-Ayotocoxo, 29-I-2002, L. Cervantes, 1♂ (IEXA). QUINTANA ROO: Felipe Carrillo Puerto, 6-X-1981, O. Canul, 1♂; 17-VI-1984, F. Heredia, 1♂; 20-VI-1984, M. Hernandez, 1♀; Felipe Carrillo Puerto, Buenavista, 18-III-1982, M. Garcia, 1♂; 22-VI-1989, L. Cervantes, 2♀ 2♂; km 146 Chetumal-Cancun, 3-V-1982, V. Melendez, 4♀. SAN LUIS POTOSI: Chapulhuacanito, 10-IV-1980, H. Brailovsky, 1♂; Tamazunchale, 10-IV-1980, E. Barrera, 1♀ (CNIN); 1 mile SW Tamazunchale, 25-VII-1966, J. Ivie, 1♀ 1♂ (AMNH). TABASCO: Chontalpa 20-I-1971, H. Brailovsky, 1♀ 1♂; Tlapa, Puyacatengo, 9-XII-1985, R. Barba, 1♀ (CNIN); Villahermosa, 13-VIII-1966, J. Ivie, 1♂ (AMNH). TAMAULIPAS: Gomez Farias; Gomez Farias, road to Ejido El Azteca, 11-X-2002, L. Cervantes, 2♂ (IEXA). VERACRUZ: Zongolica, Comalapa, 23-II-2001, L. Cervantes, 3♀; Zongolica, Zacatal Chico, 22-III-2003, L. Cervantes, 1♂; Misantla, 13-X-2001, L. Cervantes, 1♀; Tlapacoyan, Jilapa, 28-I-2002, L. Cervantes, 1♂; Tlahuicapan, km 10 Tlahuicapan-Sochiapan, 2-IV-2002, L. Cervantes, 1♂; Las Choapas, km 56 Las Choapas-Poblado Doce, 22-IV-2001, L. Cervantes, 1♀; Uxpanapa, km 62 Las Choapas-Poblado Doce, 3-IV-2002, L. Cervantes, 2♀ 1♂ (IEXA); Tlapacoyan, 24-V-1945, C. Bolivar, 1♀; 25-V-1985, J. Magro, 1♂; 2-VIII-1985, J. Bueno, 1♀; Poza Rica, 6-IX-1973, W. Olarte, 1♂; Poza Rica, Rio Cañones, 19-XI-1989, H. Brailovsky, 1♂; Texolo, 17-IX-1982, H. Brailovsky, 1♀; Fortin, 24-V-1974, H. Brailovsky, 1♂; Zongolica, 24-IX-1967, L. Rivera, 1♀; 30-XI-1967, L. Rivera, 1♀; Filobobos, 27-I-1996, H. Brailovsky, 1♀ 1♂; El Bastonal, El Ariete, 18-VII-1989, J. Colin, 1♂; Las Choapas, 25-V-1976, H. Brailovsky, 2♀; Las Choapas, Vista Hermosa, 21-IX-1979, H. Gonzalez, 1♂; Metlac, 5-XI-1975, H. Brailovsky, 1♂; 31-I-1976, G. Gonzalez, 1♀; 31-III-1976, E. Barrera, 1♀; Catemaco, 1-IV-1953, 1♀; 11-VI-1964, 1♀ 1♂; 9-IX-1975, E. Barrera, 1♀ 4♂; Catemaco, Rio Cuetzalapa, 3-III-1988, E. Barrera, 1♂; 40 km NE Cardel, 11-III-1984, H. Brailovsky, 1♀ 1♂; Soteapan, Ocotal Chico, 13-VIII-1980, S. Zaragoza, 2♀ 2♂; 14-VIII-1980, H. Perez, 1♀; 27-III-1982, H. Perez, 1♂; 24-V-1982, H. Perez, 1♀ 3♂; Cervantes, 2 km south of Naranjos, 20-X-1993, S. Zaragoza, 1♂; San Andres Tuxtla, Ejido Lazaro Cardenas, 12-VII-1989, J. Colin, 1♀ 2♂; San Andres Tuxtla, Estacion Biologia Los Tuxtlas, several dates and collectors, 281♀ 224♂ (CNIN); San Andres Tuxtla, Estacion Biologia Los Tuxtlas, several dates and collectors (IEXA); San Andres Tuxtla, Estacion Biologia Los Tuxtlas, 30-VIII-1988, S. Dunnkle, 1♂; VII-1984, G. Steck, 1♀ (FSCA); 19-IX-1989, E. Barrera, 1♂ (NMNH); San Andres Tuxtla, Rio Maquinas; Tierra Blanca, 11-VI, Goodnights, 1♂; Cordoba, 11-V-1946, J. Pallister, 1♀; 13-V-1946, J. Pallister, 1♀; Catemaco, 9-VIII-1966, J. Ivie, 1♀ 10♂; 6 miles west of Catemaco, 6-V-1964, J. Polhemus, 1♂ (AMNH). YUCATAN: Merida, 30-VII-1964, P. Span-

gler, 1♀ (NMNH). PANAMA: Boca de Corriente Grande, 19-IV-1980, H. Wolda, 2♀; Canal Zone, Es-cobal Road, 24-VI-1974, D. Engleman, 1♀ 2♂; Chepo, Altos de Majé, 15-V-1976, D. Engleman, 1♂; 17-V-1976, D. Engleman, 1♀; Rio Changuiola, 27-I-1980, D. Engleman, 1♀ 1♂; Mojinga, 20-XI-1951, F. Blanton, 1♀; Chiriquí, Renacimiento Santa Clara, 21-V-1977, D. Engleman, 1♀ 1♂. PERU: Paucartambo, Hacienda Maria, 21-II-1952, F. Woytkowski, 1♀; Satipo, VIII-1940, P. Papracyki, 1♀ (NMNH); Pucalpa, 15-V-1956, J. Schunke, 1♀ (AMNH). TRINIDAD: Arima Valley, 23-III-1952, 1♂; Port of Spain, I-1913, R. Thaxter, 1♀ (AMNH). UNITED STATES OF AMERICA: Texas, Brownsville, 6-IV-1959, P. Glich, 1♀ (CNIN). VENEZUELA: Caripito, 13-V-1942, 1♀; 1-VI-1942, 1♀ (AMNH); Acarigua, Est. Portuguesa, VI-1981, C. Drake, 1♂ (NMNH).

Key to *Myodocha* Species

1. Antennal segment IV uniformly dark colored *M. serripes* Olivier
1'. Antennal segment IV with pale yellow or white subbasal annulus 2
2. Scutellum covered by numerous erect hairs 3
2'. Scutellum glabrous 6
3. Rostrum reaching metacoxae (Fig. 3E)
 *M. unispinopilosa* n. sp.
- 3'. Rostrum reaching anterior third of procoxae (Fig. 3A, B, and D) 4
4. Forefemora with pale yellow or white subapical annulus (Fig. 4A) *M. giraffa* Stål
4'. Forefemora without a subapical annulus 5
5. Forefemora with three to four small spines followed by at least two large spines (Fig. 4B); tibia of males and females without spine
 *M. longicollis* Stål
- 5'. Forefemora with three to four small spines followed by only one large spine (Fig. 4D); tibia of males with a large spine
 *M. annulicornis* Blatchley
6. Head region and sometimes neck with isolated long hairs 7
6'. Head and neck region without long hairs 8
7. Forefemora with three to four small spines followed by numerous large and small spines; tibia of males with a large spine (Fig. 4H)
 *M. parcicoma* n. sp.
- 7'. Forefemora with three to four small spines followed by only one large spine; tibia of males and females without spine (Fig. 4I)
 *M. froeschneri* Slater
8. Rostrum not reaching procoxae, usually attaining front of prosternum (Fig. 3G)
 *M. intermedia* Distant
- 8'. Rostrum reaching at least procoxae 9
9. Rostrum reaching only procoxae (Fig. 3F); fourth antennal segment with apparent annulus delimited by pale brown coloration; forefemora also with pale coloration
 *M. fulvosa* Barber

- 9'. Rostrum extending beyond procoxae and sometimes reaching mesocoxae (Fig. 3J); fourth antennal segment with apparent annulus surrounded by dark brown coloration; forefemora with darker coloration
 *M. unispinosa* Stål

Discussion

Species of *Myodocha* can be separated into two groups depending on the presence or absence of hairs in the neck region; those with numerous hairs include *M. annulicornis*, *M. giraffa*, *M. longicollis*, *M. serripes*, *M. unispinopilosa*; those with few or no hairs include *M. froeschneri*, *M. fulvosa*, *M. intermedia*, *M. parcicoma*, and *M. unispinosa* (Figs. 3A–J).

Two other groups can be distinguished by the presence of a tibial spine in males: those with a spine include *M. annulicornis*, *M. giraffa*, *M. intermedia*, *M. parcicoma*, *M. serripes* (Fig. 4A, C, D, G, and H); those without a spine include *M. froeschneri*, *M. fulvosa*, *M. longicollis*, *M. unispinosa*, and *M. unispinopilosa* (Fig. 4B, E, F, I, and J). Other characters used to differentiate the species are length of rostrum (length of rostrum will probably depend on their feeding habits, as in some other Myodochini (Cervantes and Pacheco 2003), and shape and number of spines on forefemora of male and females. This last character, although variable, displays diverse patterns, as shown in Fig. 4A–J.

Little is known about the biology of *Myodocha*. Sweet (1964) studied the biology of *M. serripes* in Connecticut and found that this species has two generations per year, overwinters in the adult stage in woodlands, and migrates to field habitats in spring and feeds on seeds of diverse plants. Cervantes and Gámez (2005) described the life cycles of *M. intermedia* and *M. unispinosa*, both species are facultative seed predators of figs. *M. unispinosa* is the most widely distributed species, occurring in most Mexican tropical habitats. *M. longicollis* prefers drier habitats, whereas *M. giraffa* is found at higher altitudes in areas with montane cloud forest.

In the National Museum of Natural History, Washington, DC, there are four specimens from Yuto, Jujuy, Argentina—three females and a fifth instar that do not belong to any of the species keyed above. There were no males available; therefore, this new species is not described in the current study.

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