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## ADDITIONAL PHALANGIDA FROM MEXICO

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The present paper is a continuation of the studies of the authors on the phalangid fauna of Mexico (see Amer. Mus. Novitates, nos. 1163 and 1211, 1942, and 1249, 1944).

In this paper the writers have decided to recognize Soerensen's Stygnopsidae<sup>1</sup> placed as a subfamily, Stygnopsinae (Phalangodidae),<sup>2</sup> by Mello-Leitao. This subfamily is distinguished from Phalangodinae by the lack of the maxillary lobe of the second coxa and by having large open spiracles.

A discovery of interest is that of a new gonyleptid from western Mexico.

The writers are again indebted to Drs. C. Bolívar and F. Bonet of Mexico, D. F., for making these specimens available for study. These men were ably assisted in the finding of these animals by their colleagues Drs. D. Peláez, B. Osorio, M. Diaz, G. Tellez, J. Alvarez, M. Cárdenas, and M. Correa.

All holotypes of new species are deposited in the collection of the American Museum of Natural History. Paratypes are deposited in the collection of the American Museum of Natural History and in the personal collections of Drs. C. Bolívar and F. Bonet.

## SUBORDER LANIATORES THORELL

### PHALANGODIDAE Simon

#### Phalangodinae Roewer

#### GUERROBUNUS, NEW GENUS

Dorsum with five distinct areas, boundaries of areas parallel. Eye tubercle present, removed from the anterior margin of the cephalothorax, and unspined. Dorsal areas and free tergites without median armature. First dorsal area without a median line. Tarsal segments: 3-4-5-5. Distitarsus of first tarsus with two segments, of second, two segments.

GENOTYPE: *Guerrobunus minutus*, new species.

*Guerrobunus* differs from other genera of Phalangodinae in the number of tarsal segments, the number of segments in the distitarsi of the first and second tarsi, and the lack of spination of the eye tubercle.

<sup>1</sup> Soerensen, Wm., 1932, K. Danske Vidensk. Selskabs Skr., ser. 9, vol. 3, p. 272.

<sup>2</sup> Mello-Leitao, C., 1938, Ann. Acad. Brasileira Sci., vol. 10, no. 2, pp. 135-137.

### *Guerrobunus minutus*, new species

Figures 1-3

FEMALE: Total length of body, 1.6 mm. Cephalothorax, 0.4 mm. Width of body at widest portion, 1.0 mm.

|            | I       | II       |
|------------|---------|----------|
| Trochanter | 0.1 mm. | 0.12 mm. |
| Femur      | 0.6     | 0.90     |
| Patella    | 0.3     | 0.40     |
| Tibia      | 0.4     | 0.70     |
| Metatarsus | 0.4     | 0.60     |
| Tarsus     | 0.4     | 0.90     |
| Total      | 2.2 mm. | 3.62 mm. |

|            | III     | IV      |
|------------|---------|---------|
| Trochanter | 0.1 mm. | 0.2 mm. |
| Femur      | 0.6     | 0.9     |
| Patella    | 0.3     | 0.3     |
| Tibia      | 0.4     | 0.7     |
| Metatarsus | 0.6     | 0.9     |
| Tarsus     | 0.5     | 0.6     |
| Total      | 2.5 mm. | 3.6 mm. |

Dorsum coarsely granulate, all areas and free tergites without median armature. A transverse row of small tubercles across the posterior margin of the fifth area and each free tergite. Boundaries of the five areas parallel to one another, boundaries poorly delineated, marked only by slight depressions. First area without a median line. Eye tubercle rounded, covered with coarse granulations, slightly separated from the anterior margin of the cephalothorax, eyes at base. Anterior lateral margin of the cephalothorax with several small spinules on either side. A row of larger granulations along the lateral margin of the scute. Entire dorsum strongly arched. On the cephalothorax the arching gives the impression of a slight elevation posterior to the eye tubercle. Venter and coxae smooth, a transverse row of granulations across each free sternite. Anal operculum with small tuberculations. Third coxa with lateral teeth on the anterior and posterior margins, other coxae with granulations at the distal portions. First coxa with two larger tubercles on the distal anterior margin. Spiracles not visible.

Legs clothed throughout with scattered hairs; femora, patellae, and tibiae slightly roughened. Metatarsi not divided into calcaneus and astragalus, but with a slight constriction at the distal portion. Tarsal segments: 3-4-5-5. Distitarsus of first tarsus with two segments, of second, two segments. Proximal segment of the third and fourth tarsi somewhat longer than the other segments. The fourth tarsus on the left side of the paratype shows a reduced number of tarsal segments, but it is obvious that the proximal segment remained undivided. Third and fourth double tarsal claws simple, without scopulae.

Palpus: trochanter, 0.2 mm. long; femur, 0.5; patella, 0.4; tibia, 0.4; and tarsus, 0.4. Total length, 1.9 mm. Palpus armed retrolaterally as in figure 3; pro-laterally the femur has an apical median spine; the patella has two large spine-bearing tubercles as well as many granulations; the tibia has four spine-bearing tubercles; and the tarsus has two large and one small spine-bearing tubercles. Entire

dorsal surface of all segments but the tarsus tuberculate.

Chelicera normal, somewhat curved distally. Proximal segment with a tubercle at the proximal lateral margin, also with a slight elevation.

Entire animal and appendages light reddish. Tarsi of legs almost white. Eyes black, contrasting strongly.

TYPE LOCALITY: Female holotype and female paratype from "El Resumidero" del Rio de San Jeronimo, Michapa, Guerrero, October 18, 1942 (C. Bolívar and C. Tellez).

#### MONTABUNUS, NEW GENUS

Dorsum with five distinct areas, boundaries not parallel. First area without a median line. All dorsal areas and free tergites without median armature. Eye tubercle removed from the anterior margin of the cephalothorax, unspined. Tarsal segments: 4-4-6-6. Distitarsus of first tarsus with two segments, of second, two.

GENOTYPE: *Montabunus foliorum*, new species.

This genus is related to *Monterella* Goodnight and Goodnight, differing in the number of tarsal segments.

#### *Montabunus foliorum*, new species

Figures 4-6

MALE: Total length of body, 2.4 mm. Cephalothorax, 0.9 mm. Width of body at widest portion, 1.8 mm.

|            | I       | II      |
|------------|---------|---------|
| Trochanter | 0.2 mm. | 0.3 mm. |
| Femur      | 1.0     | 1.4     |
| Patella    | 0.4     | 0.5     |
| Tibia      | 0.7     | 1.1     |
| Metatarsus | 0.9     | 1.0     |
| Tarsus     | 0.6     | 1.2     |
| Total      | 3.8 mm. | 5.5 mm. |
|            | III     | IV      |
| Trochanter | 0.4 mm. | 0.4 mm. |
| Femur      | 1.2     | 1.4     |
| Patella    | 0.4     | 0.4     |
| Tibia      | 1.0     | 1.2     |
| Metatarsus | 1.1     | 1.6     |
| Tarsus     | 0.7     | 0.7     |
| Total      | 4.8 mm. | 5.7 mm. |

Dorsum with five areas, first area without a median line, boundaries not parallel. Median portion of the third area extending caudad so as to separate the fourth area into two portions. Abdominal scute covered thickly with small tubercles except on the boundaries between the areas. In the median portions of areas I, II, and III, there is a slightly raised portion which is more thickly tuberculate. A transverse row of larger tubercles across the posterior margin of the fifth area and the free tergites. A larger obtuse tubercle on the lateral margin on the bulge in the region of area I. Cephalothorax not so heavily tuberculate as the abdomen. Anterior lateral margin of cephalothorax with a few very small projecting tubercles. Eye tubercle rounded, clearly separated from the anterior margin of the cephalothorax; tubercle thickly tuberculate, eyes at base. Venter and coxae roughly granulate. Anal operculum and free sternites with numerous small tubercles. Lateral teeth on the anterior and posterior margins of coxa III. Coxa IV with an internal dorsal distal spine. Spiracles hidden.

Legs clothed throughout with hairs. All segments but tarsi thickly covered with small, hair-tipped tubercles. Metatarsi not divided into astragalus and calcaneus. Trochanter III globular. Tarsal segments: 4-4-6-6. Distitarsus of first tarsus with two segments, of second, two segments. Last segment of second tarsus somewhat longer.

Palpus: trochanter, 0.3 mm. long; femur, 0.7; patella, 0.4; tibia, 0.5; and tarsus, 0.3. Total length, 2.2 mm. Palpus armed retrolaterally as in figure 4. Prolaterally the femur has a median apical spine, the patella has two spines, the tibia has four, and the tarsus has three. Dorsal portion of all segments but the tarsus tuberculate.

Chelicera normal, a very slight elevation on the dorsal portion of the proximal segment; with scattered hairs and small tubercles.

Dorsum reddish brown with darker brown mottlings on the cephalothorax, the lateral margins of the scute, and the median central portion of the areas. Venter

concolorous with the dorsum. Appendages lighter yellowish red, with darker mottlings which are particularly prominent on the legs where they give a shaded appearance. Tarsi very light.

FEMALE: Total length of body, 2.6 mm. Cephalothorax, 0.9 mm. Width of body at widest portion, 2.1 mm.

Similar in appearance to male.

TYPE LOCALITY: Male holotype from woods of pines and oaks, Chipinque, Monterrey, Nuevo Leon, July 15, 1942 (C. Bolívar, F. Bonet, D. Peláez, and B. Osorio). Female paratypes from same locality, September 25, 1943 (F. Bonet).

### Stygnopsinae Soerensen

#### *Hoplobunus barretti* Banks

*Hoplobunus barretti* BANKS, 1900, Jour. New York Ent. Soc., vol. 8, p. 200; ROEWER, 1912, Arch. Naturgesch., vol. 78, sect. A, no. 3, p. 149; 1923, Die Weberknechte der Erde, p. 112; GOODNIGHT AND GOODNIGHT, 1942, Amer. Mus. Novitates, no. 1211, p. 1, figs. 1-6.

Spiracles widely expanded; the row of projections on the anterior margin of the first coxa are tubercles rather than lateral teeth. Maxillary lobes of the second coxae lacking. There is considerable variation in the size of the chelicera. The femur of the palpus lacks the median apical spine but has a dorsal apical one. Prolaterally the tibia and tarsus of the palpus are armed as on the retrolateral surface.

RECORDS: Mineral de El Chico, Hidalgo, forest of white fir at 2800 meters, under bark, June 27 and 28, 1943 (C. Bolívar, F. Bonet, B. Osorio, and D. Peláez).

#### *Chiniquiplobunus osorioi* Goodnight and Goodnight

*Chiniquiplobunus osorioi* GOODNIGHT AND GOODNIGHT, 1944, Amer. Mus. Novitates, no. 1249, p. 1, figs. 4-9.

RECORDS: Gruta Palmito, Bastamente, Nuevo Leon, September 15, 1942 (C. Bolívar), and Cueva Garcia, Nueva Leon, September 19, 1942 (C. Bolívar).

#### *Serrobunus boneti* Goodnight and Goodnight

*Serrobunus boneti* GOODNIGHT AND GOODNIGHT, 1942, Amer. Mus. Novitates, no. 1211, p. 2, figs. 7-11.

RECORD: Cueva Pinta, Valles, San Luis Potosi, September 21, 1942 (C. Bolívar).

## COSMETIDAE Simon

### Cosmetinae Cambridge

#### COLIMA, NEW GENUS

Dorsum with five areas, first and second area with low paired tubercles, third area with paired small spines. Free tergites and remaining area without median armature. Basal segments of third and fourth legs enlarged over those of the first and second. Tarsal segments: 5—more than 6—6—more than 6. Distitarsus of first tarsus with three segments, of second, three segments.

GENOTYPE: *Colima multimaculata*, new species.

*Colima* differs from other genera of the subfamily Cosmetinae in the dorsal armature and in the number of tarsal segments.

#### *Colima multimaculata*, new species

Figures 12 and 13

MALE: Total length of body, 5.4 mm. Cephalothorax, 1.9 mm. Width of body at widest portion, 4.1 mm.

|            | I       | II       |
|------------|---------|----------|
| Trochanter | 0.5 mm. | 0.5 mm.  |
| Femur      | 1.8     | 3.6      |
| Patella    | 0.7     | 1.0      |
| Tibia      | 1.2     | 2.7      |
| Metatarsus | 1.9     | 3.7      |
| Tarsus     | 1.4     | 2.5      |
| Total      | 7.5 mm. | 14.0 mm. |
|            | III     | IV       |
| Trochanter | 0.5 mm. | 0.7 mm.  |
| Femur      | 2.6     | 2.7      |
| Patella    | 0.7     | 1.2      |
| Tibia      | 1.4     | 2.5      |
| Metatarsus | 2.2     | 3.9      |
| Tarsus     | 1.5     | 1.8      |
| Total      | 8.9 mm. | 12.8 mm. |

Dorsum finely granulate, a pair of very low spines on the third area, paired tubercles on the first and second areas. These latter are so small as to be discernible only under high magnification. Remaining areas and free tergites without median armature. A transverse row of tubercles on the posterior portion of the fifth area and on the free tergites. The transverse

row on the third free tergite larger. Eye tubercle low. Anterior lateral margin of the cephalothorax with one or two small projections. Venter and coxae granulate, anal operculum with scattered tubercles. A transverse row of small tubercles across the first coxa. The free sternites with only a transverse row of very small granulations. Coxae without lateral teeth. Fourth coxa widened, ventral portion with a large tubercle on either side just anterior to the stigmen. Fourth coxa with a dorsal distal spinous projection.

Legs clothed throughout with hairs. Fourth trochanter with a distal retrolateral spine. Third and fourth femora curved, fourth curved most strongly. Fourth femur very roughly granulate with heavy tuberculations at the distal portion. These are arranged in several rows. Distal portion of femora heavier. Fourth patella and tibia tuberculate. Retrolateral margin of tibia with five or six larger tubercles. Metatarsus with a row of tubercles, which are small, on the retrolateral margin. Basal segments of third and fourth legs slightly heavier than those of the first and second. Tarsal segments: 5-8 to 12-6-7. Distitarsus of first tarsus with three segments, of second, three segments. Basitarsus of first tarsus slightly enlarged.

Palpus: trochanter, 0.5 mm. long; femur, 1.2; patella, 0.7; tibia, 1.0; and tarsus, 0.5. Total length, 3.9 mm. Palpus characteristically flattened, a row of tubercles on the ventral margin of the femur.

Chelicera enlarged slightly. Proximal segment tuberculate.

Dorsum reddish brown, intricately mottled with darker brown; darker markings are more numerous at the posterior portion. Scattered pencilings of white over the entire dorsum including the free tergites. White markings more numerous at the posterior and lateral portions. White dottings at the lateral portions of the cephalothorax. Occasionally there are white markings on the free sternites. Venter, coxae, and appendages reddish brown, fourth leg somewhat darker.

FEMALE: Total length of body, 5.5 mm. Cephalothorax, 1.8 mm. Width of body at widest portion, 4.1 mm.

Similar in appearance to male, but with reduced tuberculations on the legs. Size of chelicera is smaller, and the basitarsus of tarsus I not enlarged. The ventral tubercle of the fourth coxa is extremely reduced.

TYPE LOCALITY: Male holotype and male and female paratypes from Colima, Colima, January 21, 1943 (F. Bonet).

In some specimens the spines of the third area are large, and in other individuals they are reduced almost to tubercles. There is considerable variation in the amount of white pencilings. In some specimens there is very little. One specimen has a nearly complete white V at the junction of the cephalothorax and abdomen. One specimen has only six segments in the tarsus of the fourth leg.

### *Cynorta cardenasi*, new species

Figure 11

MALE: Total length of body, 4.5 mm. Cephalothorax, 1.6 mm. Width of body at widest portion, 4.0 mm.

|            | I        | II       |
|------------|----------|----------|
| Trochanter | 0.4 mm.  | 0.4 mm.  |
| Femur      | 2.2      | 5.8      |
| Patella    | 0.7      | 1.0      |
| Tibia      | 1.5      | 4.9      |
| Metatarsus | 2.6      | 5.9      |
| Tarsus     | 1.6      | 2.8      |
| Total      | 9.0 mm.  | 20.8 mm. |
|            | III      | IV       |
| Trochanter | 0.5 mm.  | 0.8 mm.  |
| Femur      | 4.0      | 7.3      |
| Patella    | 1.0      | 1.1      |
| Tibia      | 2.3      | 4.8      |
| Metatarsus | 3.8      | 7.7      |
| Tarsus     | 1.7      | 2.2      |
| Total      | 13.3 mm. | 23.9 mm. |

Dorsum finely granulate, paired tubercles on the first area, paired spines on the third. Remaining areas and free tergites without median armature. Spines of the third area slightly curved caudad. A few very small tubercles in the median portion of the fourth area. A transverse row of small tuberculations on the posterior portion of the fifth area and each free tergite. Eye tubercle low, normal. Anterior margin of cephalothorax with the characteristic projections enclosing the chelicerae.

Venter and coxae granulate with scattered hairs. Each free sternite with a transverse row of granulations. An enlarged tubercle at the lateral margin of the second and third free sternites. Anal operculum granulate, fourth coxa somewhat widened, lateral surface visible from above. This surface is tuberculate. Fourth coxa with a large distal dorsal spine which projects over the fourth trochanter. Trochanters granulate, a distal posterior spine on the third and fourth trochanters. The spine on the fourth is large and curved.

Legs with small scattered hairs; femora, patellae, and tibiae with small tuberculations. Basal segments of third and fourth legs not enlarged. Fourth femur straight. Tarsal segments: 6-11-7-7. Distitarsus of first tarsus with three segments, of second, three segments. Basitarsus of first tarsus slightly enlarged.

Palpus: trochanter, 0.4 mm. long; femur, 1.0; patella, 0.5; tibia, 1.0; and tarsus, 0.4. Total length, 3.3 mm. Palpus characteristically flattened. Femur with a ventral row of sharp tuberculations. Tibia with a less prominent ventral row.

Chelicera very slightly enlarged. Proximal segments with numerous tuberculations.

Dorsum reddish brown, with a white pattern as follows: a V between the cephalothorax and abdomen, each arm ends in a lateral spot; a broken median line from the V to the posterior portion of the third area where it joins a bowed transverse line; a penciled line in the median portion of the posterior part of the first and second areas; an irregular marking in the median portion of the fourth area; a few scattered spots at the lateral portion of the scute. No white markings on the free tergites. Venter and coxae reddish brown, appendages somewhat lighter with darker mottlings.

TYPE LOCALITY: Male holotype from Acapulco, Guerrero, July 24, 1943 (M. Cárdenas). Found among the leaves of a bush.

*Cynorta cardenasi* is related to *C. skwarrae* Roewer, differing in the dorsal color pattern and in having tuberculations on the free tergites. Also the fourth and third femora are straight.

**Cynorta fortina**, new species

Figure 8

MALE: Total length of body, 5.1 mm. Cephalothorax, 1.2 mm. Width of body at widest portion, 1.2 mm.

|              | I               | II              |
|--------------|-----------------|-----------------|
| Trochanter   | 0.4 mm.         | 0.6 mm.         |
| Femur        | 3.2             | 7.5             |
| Patella      | 0.9             | 1.4             |
| Tibia        | 2.1             | 5.9             |
| Metatarsus   | 3.6             | 8.1             |
| Tarsus       | 2.4             | 4.5             |
| <b>Total</b> | <b>12.6 mm.</b> | <b>28.0 mm.</b> |
|              | III             | IV              |
| Trochanter   | 0.9 mm.         | 1.1 mm.         |
| Femur        | 5.6             | 7.5             |
| Patella      | 1.4             | 1.4             |
| Tibia        | 5.2             | 7.6             |
| Metatarsus   | 3.2             | 4.6             |
| Tarsus       | 3.0             | 3.4             |
| <b>Total</b> | <b>19.3 mm.</b> | <b>25.6 mm.</b> |

Dorsum finely granulate, paired tubercles on the first area, paired spines on the third. Spines of the third area medium in size. Remaining areas and free tergites unbedecked. Free tergites without tuberculations. Coxae and venter finely granulate. A transverse row of tubercles across the first coxa, a few lateral teeth on the anterior and posterior margins of the third coxa.

Legs clothed throughout with scattered hairs. Legs almost smooth, with only a few granulations on the proximal segments. Fourth femur straight. Distal portion of fourth tibia swollen. Tarsal segments: 6-14-9-10. Distitarsus of first tarsus with three segments, of second, three segments. Basitarsus of first tarsus slightly enlarged.

Palpus: trochanter, 0.6 mm. long; femur, 1.3; patella, 0.9; tibia, 1.2; and tarsus, 0.7. Total length, 4.7 mm. Palpus characteristically flattened. Femur with a ventral row of teeth.

Chelicera normal, a few granulations on the proximal segment.

Dorsum reddish brown with darker mottlings particularly on the lateral margins of the scute and on the posterior portion of the scute. Paired tubercles and spines very dark. A white V between the cephalothorax and abdomen, the arms of the V ending in an irregular white spot in the re-

gion of the second and third coxae; a broken median white line connects with a transverse white line just posterior to the spines. On either side a lateral line irregularly connects the anterior spot with the transverse posterior line. Irregular white markings on the fourth and fifth areas, free tergites without markings. Venter and coxae reddish brown. Palpi and chelicerae yellowish with much dark mottling. Legs yellow with black markings which give a mottled appearance particularly on the femora, patellae, and tibiae.

FEMALE: Total length of body, 5.1 mm. Cephalothorax, 1.2 mm. Width of body at widest portion, 4.1 mm.

Female similar to male except that it lacks the enlarged distal portion of the fourth tibia and the basitarsus of the first tarsus.

TYPE LOCALITY: Male holotype and male and female paratypes from Fortin, Vera Cruz, July 25, 1943 (C. Bolívar).

This species differs from other members of the genus *Cynorta* by having a distinctive dorsal color pattern.

**Metavonones hispidus** Cambridge

*Metavonones hispidus* CAMBRIDGE, 1904, Biologia Centrali-Americana, Arachnida, vol. 2, p. 553, pl. 52, fig. 6, 6a, 6b; ROEWER, 1923, Die Weberknechte der Erde, p. 308; GOODNIGHT AND GOODNIGHT, 1942, Amer. Mus. Novitates, no. 1211, p. 4, fig. 20.

RECORDS: Taxco, Guerrero, August 15, 1943 (C. Bolívar, D. Peláez, and B. Osorio); Oaxtepec, Morelos, July 4, 1943 (B. Osorio, M. Diaz, C. Bolívar); and Malinalco, Mexico, August 8, 1943 (C. Bolívar).

**Michella hoogstraali** Goodnight and Goodnight

*Michella hoogstraali* GOODNIGHT AND GOODNIGHT, 1942, Amer. Mus. Novitates, no. 1211, p. 5, fig. 14.

RECORD: Uruapan, Michoacan, April 24, 1943 (M. Cárdenas and M. Correa). Found in a garden under stones.

**GONYLEPTIDAE** Sundevall**Pachylinae** Roewer**PROSONTES**, NEW GENUS

Dorsal scute with five areas. Eye tubercle not on the anterior margin of the

cephalothorax, unspined, but with small tuberculations. All areas and free tergites without median armature. Anal operculum unbedecked. Femur of palpus without dorsal apical or median apical spine. Tarsal segments: 4—more than 6-5-5. Distitarsus of first tarsus with three segments, of second, three segments. Third and fourth tarsi without scopulae, double claws simple.

GENOTYPE: *Prosontes phalattes*, new species.

This genus is related to *Progyndes* Roewer, differing in the number of tarsal segments and the lack of the spine over the eye.

### *Prosontes phalattes*, new species

Figures 14-16

MALE: Total length of body, 3.7 mm. Cephalothorax, 1.1 mm. Width of body at widest portion, 2.9 mm.

|            | I       | II      |
|------------|---------|---------|
| Trochanter | 0.4 mm. | 0.4 mm. |
| Femur      | 1.2     | 1.9     |
| Patella    | 0.4     | 0.5     |
| Tibia      | 0.7     | 1.2     |
| Metatarsus | 1.0     | 1.6     |
| Tarsus     | 0.9     | 1.5     |
| Total      | 4.6 mm. | 7.1 mm. |
|            | III     | IV      |
| Trochanter | 0.4 mm. | 0.5 mm. |
| Femur      | 1.5     | 1.6     |
| Patella    | 0.5     | 0.8     |
| Tibia      | 1.0     | 1.6     |
| Metatarsus | 1.4     | 2.3     |
| Tarsus     | 0.8     | 1.0     |
| Total      | 5.6 mm. | 7.8 mm. |

Dorsum with five distinct areas. All areas and free tergites without median armature. Areas I to IV each with a transverse row of several small tubercles. These tubercles are extremely reduced on the first area. Fifth area and free tergites with a complete transverse row of prominent tubercles. First area without a median line. A row of tubercles on the lateral margin of the scute in the region of the abdominal bulge. Third area wider than the cephalothorax. Entire dorsum granulate. Eye tubercle unbedecked, but with small

tuberculations. Dorsal portion of anal operculum thickly covered with globose tuberculations. Each free sternite with a transverse row of tuberculations. Coxae granulate. Fourth coxae widened laterally. Lateral portion with numerous tuberculations which are visible from above. Fourth coxa ends in a large distal spine.

Legs with scattered hairs. Femora, patellae, and tibiae with tuberculations. These tuberculations are larger on the third and fourth legs. Third and fourth femora curved. Fourth trochanter with a retrolateral tubercle, fourth femur very heavily tuberculate, with several larger tuberculations on either side at the distal portion, the largest one being on the retrolateral margin. Fourth patella and tibia thickly tuberculate. All metatarsi with a suggestion of a false articulation at the distal portion. Tarsal segments: 4-7-5-5. Distitarsus of first tarsus with three segments, of second, three segments. The holotype has six segments on the second tarsus on the right side; however, all other specimens had seven on both sides. Tarsal claws simple; no scopulae. Basitarsus of first tarsus somewhat enlarged.

Palpus: trochanter, 0.4 mm. long; femur, 0.7; patella, 0.5; tibia, 0.5; and tarsus, 0.4. Total length, 2.5 mm. Palpus armed retrolaterally as in figure 15. Pro-laterally unarmed except for the ventral projection on the tarsus, which is visible in the figure. Femur without dorsal apical or median apical spines. Femur and tibia somewhat flattened, distal segments with scattered hairs.

Chelicera normal, with scattered hairs, proximal segment slightly enlarged and with granulations.

Dorsum reddish brown with much darker brown mottling. Areas are outlined in lighter coloring. There is much lighter mottling on the cephalothorax including the median portion of the eye tubercle which contrasts with the darker area around each eye. Venter and coxae reddish brown; chelicera, palpus, and legs I to III yellowish with much dark brown mottling. Fourth leg, except tarsus, reddish brown with dark mottlings. Tarsus lighter.

FEMALE: Total length of body, 3.9 mm.

Cephalothorax, 1.3 mm. Width of body at widest portion, 2.9 mm.

Female similar in appearance to male. Distal spine of the fourth coxa much reduced, basitarsus of first tarsus not enlarged. Tuberculations of the fourth leg much reduced. Palpus much flattened

(see fig. 16) and lacking the tarsal spur; femur with prominent ventral teeth. One female specimen had five segments in the tarsus of the first leg.

TYPE LOCALITY: Male holotype and male and female paratypes from Colima, Colima, January 21, 1943 (F. Bonet).

#### SUBORDER PALPATORES THORELL

#### Tribe DYSNOI Hansen and Soerensen

##### TROGULIDAE Simon

#### *Trilasma bolivari* Goodnight and Goodnight

*Trilasma bolivari* GOODNIGHT AND GOODNIGHT, 1942, Amer. Mus. Novitates, no. 1211, p. 7, figs. 16-18.

RECORDS: Rio Paso de Cortes, Pueblo, 3000 meters, July 18, 1943 (C. Bolívar); Nevada de Colima, Jalisco, woods of oak and pine, January 21, 1943 (F. Bonet); Mineral de El Chico, Hidalgo, woods of white fir, under bark, 2800 meters, June 27, 1943, also 3100 meters, June 28, 1943 (F. Bonet, C. Bolívar, and B. Osorio); and Salazar, D. F., September 30, 1942 (M. Cárdenas).

#### Tribe EUPNOI Hansen and Soerensen

##### PHALANGIIDAE Simon

##### Leiobuninae Banks

#### *Leiobunum alvarezii*, new species

Figure 19

MALE: Total length of body, 3.1 mm. Cephalothorax, 1.1 mm. Width of body at widest portion, 2.1 mm. Length of femora: I, 6.8 mm.; II, 11.1 mm.; III, 7.1 mm.; IV, 7.5 mm.

Dorsum granulate, eye tubercle in the median portion of the cephalothorax, canaliculate, smooth above. Supracheliceral lamella in the form of an expanded plate. Venter granulate, coxae coarsely granulate with rows of teeth on the anterior and posterior margins of all coxae.

Legs clothed throughout with hairs. Small dark spines present on the trochanters, femora, and patellae. Metatarsi with false articulations.

Palpus: trochanter, 0.3 mm. long; femur, 1.1; patella, 0.4; tibia, 0.8; and tarsus, 1.0. Total length, 3.6 mm. Palpus clothed throughout with hairs, a row of spines on the ventral margin of the femur. Femur not extended above the cephalothorax. Patella without apophysis.

Chelicera normal, with scattered hairs.

Penis alate.

Dorsum dark brown with a subobsolete broad median stripe on the abdomen and a suggestion of light punctations across each abdominal segment and the last thoracic segment. Lateral portion of cephalothorax lighter. Median portion dark. Eye tubercle, except at base, dark; a ring of black around each eye. Venter and coxae light brown. Trochanters and bases of femora dark brown, contrasting, remainder of legs golden brown. Palpus and chelicera yellowish. Palpus with some darker mottlings.

One male was much smaller than the holotype, being only 2.5 mm. in total length.

FEMALE: Total length of body, 3.2 mm. Cephalothorax, 1.2 mm. Width of body at widest point, 2.7 mm.

Female similar in appearance to male.

TYPE LOCALITY: Male holotype and male and female paratypes from Cuernavaca, Morelos, May 1, 1942 (J. Alvarez). Paratypes from Oaxtepec, Morelos, July 11, 1943 (C. Bolívar and B. Osorio).

This species differs from other members of the genus *Leiobunum* by having a distinctive dorsal color pattern.

#### *Leiobunum bogerti* Goodnight and Goodnight

*Leiobunum bogerti* GOODNIGHT AND GOODNIGHT, 1942, Amer. Mus. Novitates, no. 1163, p. 11, figs. 25, 27.



RECORD: Palo Alto, Jalisco, found on cultivated land on stones (F. Bonet).

***Leiobunum bolivari*, new species**

Figure 18

MALE: Total length of body, 3.2 mm. Cephalothorax, 1.2 mm. Width of body at widest portion, 2.2 mm. Length of femora: I, 8.7 mm.; II, 13.2 mm.; III, 9.7 mm.; IV, 11.2 mm.

Dorsum granulate, eye tubercle at the posterior portion of the cephalothorax, only very slightly canaliculate, smooth above. Supracheliceral lamella in the form of a pointed projection. Venter and coxae smooth, with a few scattered hairs. Lateral teeth present on anterior and posterior margins of all coxae.

Legs with scattered hairs, and with numerous small dark spines on the femora. Metatarsi with false articulations.

Palpus: trochanter, 0.2 mm. long; femur, 1.1; patella, 0.5; tibia, 0.6; and tarsus, 1.0. Total length, 3.4 mm. Femur with scattered hairs, similar hairs more numerous on the tibia and tarsus. Patella without apophyses. Femur not extended above the height of the cephalothorax.

Chelicera normal, with scattered hairs.

Penis alate.

Dorsum shimmering, metallic, varying from reddish gold to green depending on the direction of the light. Eye tubercle white, with a black ring around each eye. A strip of white along the anterior margin of the cephalothorax. A transverse row of small white punctations on the posterior segment of the cephalothorax. An irregular dorsal stripe of lighter grayish extending from the eye tubercle to the posterior portion of the abdominal scute. There are many white punctations scattered in this lighter area. Venter and coxae grayish, almost white. There are some brown mottlings, and the lateral teeth of the coxae are dark brown contrasting strongly with the gray of the coxae. Trochanters and bases of femora very dark brown, contrasting strongly with the coxae. Remainder of legs lighter, golden brown. Palpus light yellowish brown, a few darker brown mottlings on the femur and patella. Chelicera concolorous with the palpus.

FEMALE: Total length of body, 4.0 mm. Cephalothorax, 1.3 mm. Width of body at widest portion, 2.2 mm.

Identical in appearance with male.

TYPE LOCALITY: Male holotype and male and female paratypes from Michapa, Guerrero, October 24, 1942 (C. Bolívar).

*Leiobunum bolivari* is related to *L. viridorsum* Goodnight and Goodnight, differing in the color of the dorsum and by having contrasting teeth on the coxae.

***Leiobunum bruchi* Mello-Leitao**

Figure 21

*Leiobunum bruchi* MELLO-LEITAO, 1933, Ann. Acad. Brasileira Sci., vol. 5, p. 100, figs. 3, 4.

MALE: Total length of body, 4.4 mm. Cephalothorax, 1.4 mm. Width of body at widest portion, 2.7 mm. Length of femora: I, 6.7 mm.; II, 11.3 mm.; III, 6.6 mm.; IV, 9.2 mm.

Dorsum granulate, eye tubercle in the median portion of the cephalothorax, slightly canaliculate, smooth above. Supracheliceral lamella in the form of an expanded plate. Venter and coxae smooth, free sternites with transverse rows of larger granulations. Lateral teeth of coxae poorly developed, lacking on the posterior margins of coxae I and II.

Legs with spine-like hairs on the femora, patellae, and tibiae, larger on the femora. Metatarsi with false articulations.

Palpus: trochanter, 0.3 mm. long; femur, 1.3; patella, 0.6; tibia, 0.9; and tarsus, 1.1. Total length, 4.2 mm. Palpus clothed throughout with scattered hairs. Spine-like hairs present on the ventral and dorsal portions of all segments. Patella without apophyses. Femur does not extend above the surface of the eye tubercle.

Chelicera normal, with scattered hairs, a small tubercle at the proximal portion of the second segment.

Penis alate.

Dorsum dark brown, dorsal and caudal portions of the eye tubercle white. From the eye tubercle a broken median line, varying from light yellowish to white, extends to the distal portion of the dorsum where it widens into two white spots, one on each of the two free tergites. A ring of white around the opening of each stink

gland. Lateral portion of the abdomen and venter buff. Ventral part of venter, genital operculum, and coxae with much darker brown so as to appear only slightly lighter than the dorsum. Trochanters and bases of femora dark brown, somewhat darker than the coxae, but not contrasting. Legs light brown, femora with pale indefinite rings. Palpus: femur, patella, and tibia, and most of tarsus brownish, distal portion of tarsus yellowish. Chelicera yellowish, with much darker brown mottlings, particularly at the distal portion, proximal segment with a large dorsal brown spot.

RECORD: La Blanca, Tlalnepantla, Mexico; August 22, 1943 (C. Bolívar and B. Osorio).

#### *Leiobunum colimae*, new species

Figure 10

MALE: Total length of body, 4.4 mm. Cephalothorax, 1.3 mm. Width of body at widest portion, 2.8 mm. Length of femora: I, 8.7 mm.; II, 12.8 mm.; III, 8.6 mm.; IV, 11.1 mm.

Dorsum granulate, eye tubercle in the median portion of the cephalothorax, slightly canaliculate, smooth above except for a few minute tubercles; eye tubercle straight in front. Supracheliceral lamella in the form of an expanded plate. Venter granulate, a transverse row of granulations on each free sternite. Genital operculum and coxae roughly granulate. Lateral rows of teeth on the anterior and posterior margins of each coxa.

Legs with scattered hairs. Trochanters, femora, and patellae with small black spines. Metatarsi with false articulations.

Palpus: trochanter, 0.3 mm. long; femur; 1.1; patella, 0.5; tibia, 0.6; and tarsus, 1.0. Total length, 3.5 mm. Palpus with scattered hairs which are more numerous and longer on the tarsus. Ventral and distal portions of femur and entire patella with brown spinules. Patella without apophyses. Femur not extending above the surface of the cephalothorax.

Chelicera normal, with scattered hairs.

Penis alate.

Eye tubercle dark, brown above, lighter at base and in median furrow. Cephalothorax posterior to the eye tubercle and

dorsal portion of abdomen dark brown, somewhat metallic. Remainder of cephalothorax and lateral portion of abdomen yellowish. Cephalothorax with darker shadings. Venter and coxae yellowish, trochanters brownish, somewhat darker than the coxae, but not contrasting. Anterior and posterior portions of trochanters darker than the lateral portions. Legs brownish, darker distally. Palpus and chelicera yellowish, somewhat darker at base.

FEMALE: Total length of body, 5.6 mm. Cephalothorax, 1.4 mm. Width of body at widest portion, 4.1 mm.

Identical in appearance with the male.

TYPE LOCALITY: Male holotype and male and female paratypes from Laguna del Alcuahue, Tecoman, Colima, collected in a crevice of a cliff, January 19, 1943 (F. Bonet). Male paratypes from Fortin, Vera Cruz, August 25, 1943 (C. Bolívar).

This species differs from other members of the genus *Leiobunum* in its general appearance and coloration.

#### *Leiobunum consimile* Banks

*Leiobunum consimile* BANKS, 1900, Jour. New York Ent. Soc., vol. 8, p. 199; CAMBRIDGE, 1904, Biologia Centrali-Americana, Arachnida, vol. 2, p. 585.

*Leiobunum dugesi* BANKS, 1908, Proc. Ent. Soc. Washington, vol. 9, p. 37.

*Leiobunum consimile* ROEWER, 1910, Abhandl. Ver. Hamburg, vol. 19, no. 4, p. 232; 1923, Die Weberknechte der Erde, pp. 906-907.

RECORDS: Malinalco, Mexico, August 8, 1943 (C. Bolívar); Taxco, Guerrero, August 1, 1943 (C. Bolívar, D. Peláez, and B. Osorio); Potrero Grande, January 15, 1943 (F. Bonet).

#### *Leiobunum desertum* Goodnight and Goodnight

*Leiobunum desertum* GOODNIGHT AND GOODNIGHT, 1944, Amer. Mus. Novitates, no. 1249, p. 9, fig. 23.

RECORD: Oaxtepec, Morelos, July 4, 1943 (C. Bolívar, B. Osorio, M. Diaz).

#### *Leiobunum nigrigenum*, new species

Figure 22

MALE: Total length of body, 3.8 mm. Cephalothorax, 1.3 mm. Width of body

at widest portion, 3.2 mm. Length of femora: I, 7.7 mm.; II, 13.1 mm.; III, 7.8 mm.; IV, 12.3 mm.

Dorsum granulate, eye tubercle in the median portion of the cephalothorax, slightly canaliculate, smooth above except for scattered hairs. Supracheliceral lamella in the form of an expanded plate, with a slight median projection. Venter finely granulate, with scattered hairs. Coxae roughly granulate. Lateral teeth present on the anterior margins of all coxae and on the posterior margin of coxa IV. Teeth also present on the lateral margins of the genital operculum.

Legs long, with numerous small hairs which are more or less arranged in rows, otherwise smooth.

Palpus: trochanter, 0.3 mm. long; femur, 1.5; patella, 0.6; tibia, 1.1; and tarsus, 1.7. Total length, 5.2 mm. Palpus clothed throughout with hairs, large spine-like hairs present on the ventral and dorsal portions of all segments. These are particularly numerous on the ventral margin of the tibia. Proximal section of tibia swollen. Patella without apophyses. Femur not extended above the eye tubercle.

Chelicera normal, second segment with many spine-like hairs.

Penis alate.

Dorsum reddish brown, with a slightly darker median stripe extending from the anterior margin, enclosing the eye tubercle, narrowing at the anterior portion of the abdomen, and widening posteriorly. Eye tubercle black, lighter at base. Venter lighter reddish, coxae darker, mottled with black distally. Trochanters and bases of femora black, contrasting, legs dark brown, lighter distally. Femur of palpus mottled with dark brown, very dark at the distal tip. Patella dark, proximal portion of tibia somewhat lighter, mottled, distal two-thirds of tibia and the tarsus very much lighter. Chelicera light, claw tipped with black.

FEMALE: Total length of body, 5.7 mm. Cephalothorax, 1.4 mm. Width of body at widest portion, 3.7 mm.

Similar in appearance to male.

TYPE LOCALITY: Male holotype from Huatusco, Vera Cruz, October 11, 1943 (M.

Cárdenas). Male and female paratypes from same locality.

This species differs from other members of the genus *Leiobunum* by having a distinctive color pattern.

### *Leiobunum nycitocorpum* Goodnight and Goodnight

*Leiobunum nycitocorpum* GOODNIGHT AND GOODNIGHT, 1942, Amer. Mus. Novitates, no. 1163, p. 11, figs. 25, 27.

RECORD: Palo Alto, Jalisco, cultivated land (F. Bonet).

### *Leiobunum tascum*, new species

Figure 9

FEMALE: Total length of body, 5.1 mm. Cephalothorax, 1.6 mm. Width of body at widest portion, 2.6 mm. Length of femora: I, 6.9 mm.; II, 9.7 mm.; III, 6.8 mm.; IV, 9.1 mm.

Dorsum granulate, eye tubercle in the median portion of the cephalothorax, slightly canaliculate, smooth above. Venter smooth, coxae granulate. Supracheliceral lamella in the form of an expanded plate. Rows of poorly developed teeth on the anterior and posterior margins of all coxae.

Legs: femora and patellae with small dark spines, remainder of legs smooth, metatarsi with false articulations.

Palpus: trochanter, 0.3 mm. long; femur, 1.2; patella, 0.5; tibia, 0.8; and tarsus, 1.3. Total length, 4.1 mm. Palpus with scattered hairs. Small dark spines on the distal portion of the femur, patella, and proximal portion of the tibia. A row of spine-like hairs on the ventral proximal portion of the femur, apical median portion of the patella with a small but distinctive apophysis. Teeth of tarsal claw poorly developed. Femur not extending above the surface of the cephalothorax.

Chelicera normal, with scattered hairs.

Dorsum brownish, darker brown median stripe beginning at the anterior margin of the cephalothorax and extending to the posterior margin of the abdomen. A lighter brown area on either side of the abdominal portion of the central stripe. Lateral portion of dorsum pale. Entire dorsum posterior to the eye tubercle with numerous

light punctations, somewhat masked in the lighter area. Eye tubercle dark at the base and in the median sulcus, white around both eyes. Venter and coxae light buff. Trochanters I to III with dark brown areas, particularly on the anterior and posterior portions. These appear to contrast somewhat with the coxae. Trochanter IV not contrasting. Bases of femora dark brown, remainder of legs light brown, darker distally. Palpus and chelicera light, concolorous with the venter. Tips of cheliceral claws dark.

**TYPE LOCALITY:** Female holotype from Taxco, Guerrero, August 15, 1943 (C. Bolívar, B. Osorio, and D. Peláez).

This species is closely related to *L. desertum* Goodnight and Goodnight, differing in having an apophysis on the patella of the palpus and in the dorsal color pattern.

***Nelima tancitaro* Goodnight and Goodnight**

*Nelima tancitaro* GOODNIGHT AND GOODNIGHT, 1942, Amer. Mus. Novitates, no. 1211, p. 10, fig. 22.

**RECORD:** Colorines, Mexico, July 18, 1943 (B. Osorio).

In one specimen, the dorsal stripe has narrowed to a line which is continuous with that of the eye tubercle. The dorsum of this animal is darker than that of the holotype.

***Paranelima albalineata* Goodnight and Goodnight**

*Paranelima albalineata* GOODNIGHT AND GOODNIGHT, 1942, Amer. Mus. Novitates, no. 1211, p. 10, fig. 24.

**RECORD:** National Park, "El Chico," Hidalgo, 3000 meters, May 11, 1943 (C. Bolívar).

***Paranelima correa*, new species**  
Figure 20

**MALE:** Total length of body, 3.7 mm. Cephalothorax, 1.2 mm. Width of body at widest portion, 2.2 mm. Length of femora: I, 3.1 mm.; II, 5.1 mm.; III, 3.4 mm.; and IV, 4.7 mm.

Dorsum roughly granulate; eye tubercle in the median portion of the cephalothorax, smooth above except for dorsal granula-

tions, only slightly canaliculate, compressed. Supracheliceral lamella extended into a short spine. Venter almost smooth. Coxae and genital operculum with many small black spines which are particularly numerous on the lateral margins. Coxae without lateral teeth.

**Legs:** trochanters with dark spinules on the lateral margins; femora, patellae, and trochanters granulate with very small spines. Metatarsi and tarsi with small hairs. Metatarsi with false articulations.

**Palpus:** trochanters, 0.2 mm. long; femur, 0.7; patella, 0.4; tibia, 0.5; and tarsus, 0.7. Total length, 2.5 mm. Palpus with scattered hairs. Femur, patella, and tibia thickly covered with small dark spines. Patella with a very short median apophysis. Tarsal claw toothed.

Chelicera normal, with a few scattered hairs.

Dorsum buff, with a darker brownish median stripe extending from the anterior margin, widening in the region of the eye tubercle, and narrowing on the abdomen. On the abdomen, there is a somewhat lighter area bordering the stripe and merging into the extremely light lateral portion. Eye tubercle concolorous with the dorsum. Venter light, coxae light except for the lateral margins which are brown. Legs: trochanters and bases of femora light except for the lateral portion of the third and fourth which are brown; remainder of legs light brown with many darker brown mottlings. Palpus yellowish with much darker brown mottling on the femur, patella, and tibia. Chelicera very light, claws tipped with black.

**TYPE LOCALITY:** Male holotype from Uruapan, Michoacan, under stones, April 24, 1943 (M. Correa).

*Paranelima correa* differs from *P. lutzi* Goodnight and Goodnight by having a longer and more granulate body and by having a different dorsal color pattern.

***Paranelima lutzi* (Goodnight and Goodnight)**

*Glabrurus lutzi* GOODNIGHT AND GOODNIGHT, 1942, Amer. Mus. Novitates, no. 1163, p. 14, fig. 21.

*Paranelima lutzi* GOODNIGHT AND GOODNIGHT 1942, Amer. Mus. Novitates, no. 1211, p. 11.

RECORD: National Park, "El Chico," Hidalgo, 2800 meters, June 28, 1943 (C. Bolívar, B. Osorio, F. Bonet, and D. Peláez).

**Phalangiinae Simon**

**Diguetus spinulatus (Banks)**

*Leptobunus spinulatus* BANKS, 1898, Jour. New York Ent. Soc., vol. 6, p. 182; ROEWER, 1910, Abhandl. Ver. Hamburg, vol. 19, no. 4, p. 257.

*Diguetus raptator* ROEWER, 1912, Abhandl. Ver. Hamburg, vol. 20, no. 1, p. 272, pl. 1, fig. 25; 1923, Die Weberknechte der Erde, p. 863, fig. 1030.

*Hadrobunus spinulatus* ROEWER, 1923, Die Weberknechte der Erde, p. 920.

*Diguetus spinulatus* GOODNIGHT AND GOODNIGHT, 1942, Amer. Mus. Novitates, no. 1211, p. 11.

RECORD: Presa de Guadalupe, Mexico, August 22, 1943 (C. Bolívar and B. Osorio).

**Metopilio albispinulatus Goodnight and Goodnight**

*Metopilio albispinulatus* GOODNIGHT AND GOODNIGHT, 1944, Amer. Mus. Novitates, no. 1249, pp. 9, 10, fig. 21.

RECORDS: El Xitle, Mexico, D. F., October 12, 1942, (C. Tellez); Oaxtepec, Morelos, November 7, 1943 (C. Bolívar and B. Osorio).

**Metopilio armigerum (Cambridge)**

*Phalangium armigerum* CAMBRIDGE, 1904, Biologia Centrali-Americana, Arachnida, vol. 2, p. 479, pl. 54, figs. 8, 8a, 9, 9a.

*Metopilio armigerum* ROEWER, 1923, Die Weberknechte der Erde, p. 858.

RECORDS: El Parque, Morelos, August 28, 1943 (M. Cárdenas); Taxco, Guerrero, August 15, 1943 (C. Bolívar, D. Peláez, and B. Osorio); Malinalco, Mexico, August 8, 1943 (C. Bolívar).

**Metopilio diazi, new species**

Figure 7

MALE: Total length of body, 3.3 mm. Cephalothorax, 1.1 mm. Width of body at widest portion, 2.3 mm.

|            | I       | II       |
|------------|---------|----------|
| Trochanter | 0.4 mm. | 0.5 mm.  |
| Femur      | 2.6     | 4.1      |
| Patella    | 0.6     | 1.0      |
| Tibia      | 1.5     | 3.7      |
| Metatarsus | 1.5     | 2.0      |
| Tarsus     | 2.1     | 6.0      |
| Total      | 8.7 mm. | 17.3 mm. |

|            | III     | IV       |
|------------|---------|----------|
| Trochanter | 0.4 mm. | 0.4 mm.  |
| Femur      | 1.8     | 3.1      |
| Patella    | 0.6     | 0.7      |
| Tibia      | 1.5     | 2.0      |
| Metatarsus | 1.8     | 2.6      |
| Tarsus     | 2.7     | 4.1      |
| Total      | 8.8 mm. | 12.9 mm. |

Dorsum roughly granulate. Eye tubercle toward the anterior portion of the cephalothorax, low and rounded, not canalliculate. Three or four small spinules irregularly arranged on the dorsomedian portion. Anterior median elevation of cephalothorax with four to six small spines, median line of elevation unarmed. A transverse row of five to six very small tubercles posterior to the eye. This row in the median third of the cephalothorax. Last segment of cephalothorax with a transverse row of tubercles extending completely across. Large, sharp, paired spines in the median portion of the first five abdominal segments. Median portion of following two segments with smaller median paired spines. Median spines pointing upward, not curved. Laterad to the median spines is a transverse row of several small tubercles which are enlarged into spinules in the posterior segments. Venter smooth except for a few small hairs. Coxae with scattered spine-like hairs, without lateral teeth. A few larger spines at the distal portion, visible from above.

Legs: basal segments of first and third legs somewhat enlarged over the second and fourth. First leg more crassate than the third. Trochanters, femora, patellae, and tibiae with small spines which are more or less arranged in rows. Metatarsi and tarsi armed only with hairs. Distal portion of these segments with a few larger spines. Second tibia with three false articulations; fourth metatarsus with one false articulation.

Palpus: trochanter, 0.3 mm. long; femur, 0.4; patella, 0.3; tibia, 0.4; and tarsus, 0.6. Total length, 2.0 mm. Palpus thickly armed with spine-like hairs. Femur with a ventral row of spinules. Patella without apophyses. Tarsal claw un-toothed.

Chelicera normal, with scattered hairs.

Dorsum brownish. Eye tubercle dark, with a median light stripe. Dark brown mottlings irregularly outlining the margin of the cephalothorax, forming another line parallel to the margin. Other brown mottlings form, roughly, a triangle posterior to the eye, with the eye tubercle as the apex. Last segment of the cephalothorax with a transverse row of brown spots. Scattered light punctations over the cephalothorax. Spines of the anterior elevation light, abdominal spines light, darker brown blotches in the lateral portion of the first three abdominal segments, helping to outline a median lighter stripe which contains the spines. Fourth abdominal segment and posterior segments lighter, somewhat obliterating the median stripe. A few darker brown mottlings on the posterior segments. Venter buff with light spots across the free sternites. Coxae with dark brown mottlings, particularly at the distal portions. Trochanters light, with mottlings on the lateral portions. Legs with much darker brown mottlings. Palpus light, with a dark brown stripe at the distal portion of the femur, dorsal portion of patella, and median portion of tibia. Chelicera pale, with darker spines.

**FEMALE:** Total length of body, 4.1 mm. Cephalothorax, 1.1 mm. Width of body at widest portion, 2.4 mm.

Similar to male, but with median spines much reduced; they are not much larger than the lateral ones.

**TYPE LOCALITY:** Male holotype and paratypes from Urúapan, Michoacan, in a garden, under stones, April 24, 1943 (M. Cárdenas and M. Correa).

This species is related to *M. multispinulatus* Goodnight and Goodnight, differing by having no spines over the eyes and by having the lateral spines smaller on the dorsum.

Some males have smaller spines and are much darker, making the median stripe more distinct.

### **Metopilio hispidus** Roewer

*Metopilio hispidus* ROEWER, 1915, Arch. Naturgesch., vol. 81, sect. A, no. 3, p. 134; ROEWER, 1923, Die Weberknechte der Erde, p. 860; GOODNIGHT AND GOODNIGHT, 1942, Amer. Mus. Novitates, no. 1211, p. 11, fig. 32.

**RECORD:** El Cedral, Mexico, November 7, 1943 (M. Cárdenas).

### **Metopilio maculatipes** (Cambridge)

*Phalangium maculatipes* CAMBRIDGE, 1904, Biologia Centrali-Americana, Arachnida, vol. 2, p. 581, pl. 54, fig. 15, 15a.

*Metopilio maculatipes* ROEWER, 1923, Die Weberknechte der Erde, p. 860.

**RECORDS:** Paso de Cortes, Pueblo (C. Bolívar); National Park, Hidalgo, D. F. (C. Bolívar).

## **Gagrellinae** Thorell

### **Krusa annulata**, new species

Figure 17

**MALE:** Total length of body, 3.2 mm. Cephalothorax, 1.4 mm. Width of body at widest portion, 2.2 mm. Length of femora: I, 10.6 mm.; II, 17.3 mm.; III, 10.4 mm.; IV, 13.6 mm.

Dorsum roughly granulate, eye tubercle at the posterior portion of the cephalothorax, canaliculate, a row of small tubercles over each carina. Supracheliceral lamella extended into a sharp point. General shape of cephalothorax triangular. Venter and coxae roughly granulate. Lateral rows of three-pronged teeth present on the anterior and posterior margins of all coxae.

Legs long, clothed throughout with hairs. Numerous small dark spines on the femora and trochanters, a few smaller ones on the patellae. Metatarsi with false articulations. Nodules: 0-1-0-0.

Palpus: trochanter, 0.3 mm. long; femur, 0.7; patella, 0.4; tibia, 0.6; and tarsus, 1.0. Total length, 3.0 mm. Palpus clothed throughout with hairs; in addition it is armed with numerous small dark spines on all segments except the tarsus. Spines larger on the ventral portion of the femur, but more numerous on the patella and tibia. Anterior median apophysis of patella reduced to a very small (0.1 mm.) projection.

Chelicera normal.

Penis straight shafted.

Eye tubercle dark brown, yellowish at base. A brown triangular marking encloses the eye tubercle and has its apex at the an-

terior margin of the cephalothorax. Lateral portion of cephalothorax silvery, with brown splotches at the posterior-lateral portion. Silvery portion with a few irregular dull spots. A few brown markings on the last segment of the cephalothorax. Abdomen light brown with darker brown markings along the lateral margin. Dark brown irregular stripe at the posterior margin of the scute and on the first free tergite. A dark brown splotch in the median portion of the remaining free tergites. Venter and coxae yellowish with only a few darker mottlings in the region of the anal operculum. Trochanters with lateral surfaces concolorous with the coxae, but with the remaining portions dark brown. Bases of femora dark brown, remainder of legs lighter brown with a white stripe at the dis-

tal portion of the femora, the distal portion of the tibia, and the proximal portion of the metatarsus; the distal portion of the metatarsus and the proximal portion of the tarsus. These white stripes are quite conspicuous. Palpus yellowish with darker brown markings on the distal portion of the femur and the dorsal portion of the patella. Chelicera yellowish.

FEMALE: Total length of body, 3.8 mm. Cephalothorax, 1.5 mm. Width of body at widest portion, 2.4 mm.

Female identical with male.

TYPE LOCALITY: Male holotype and female paratype from Acapulco, Guerrero, August 20, 1943 (D. Peláez, M. Correa).

This species differs from *K. mexicana* Goodnight and Goodnight by having a distinctive dorsal color pattern.

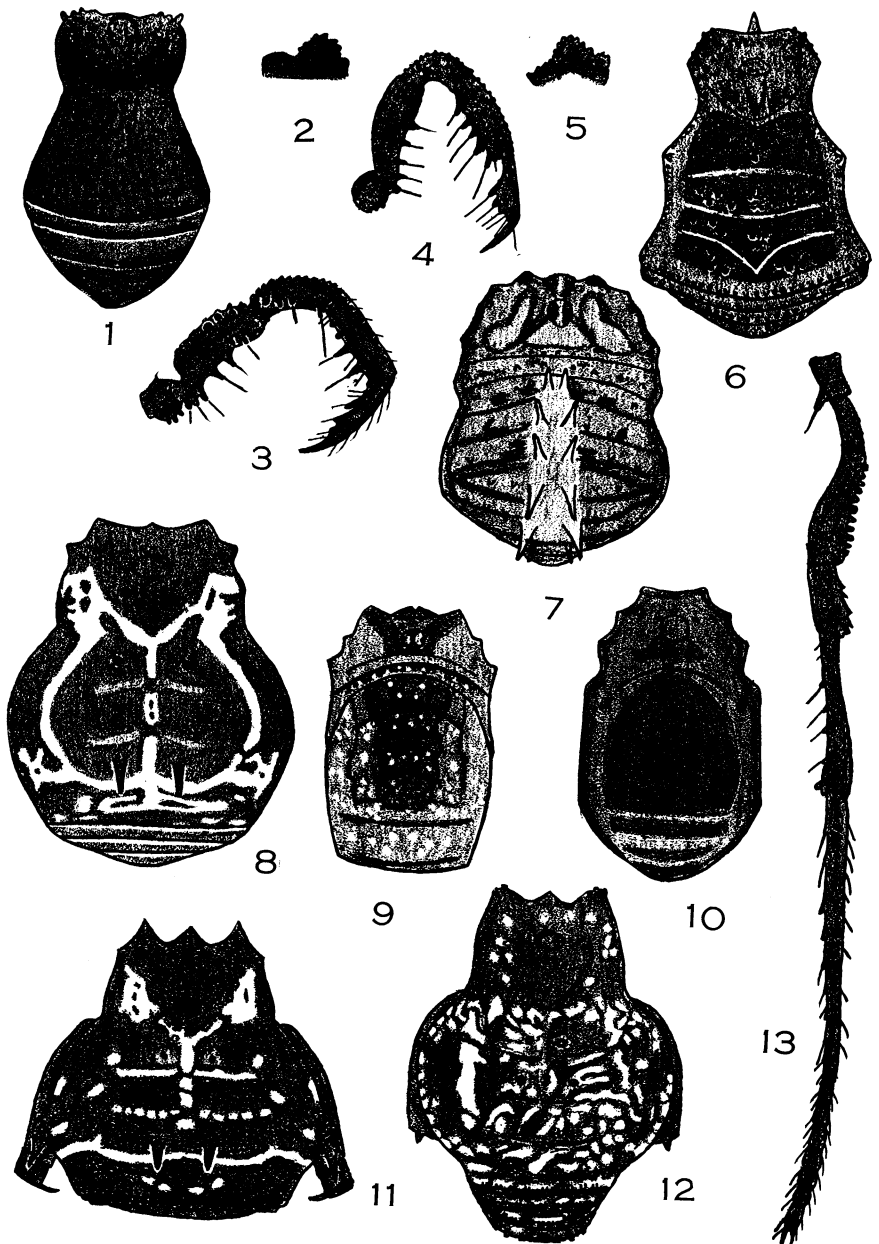
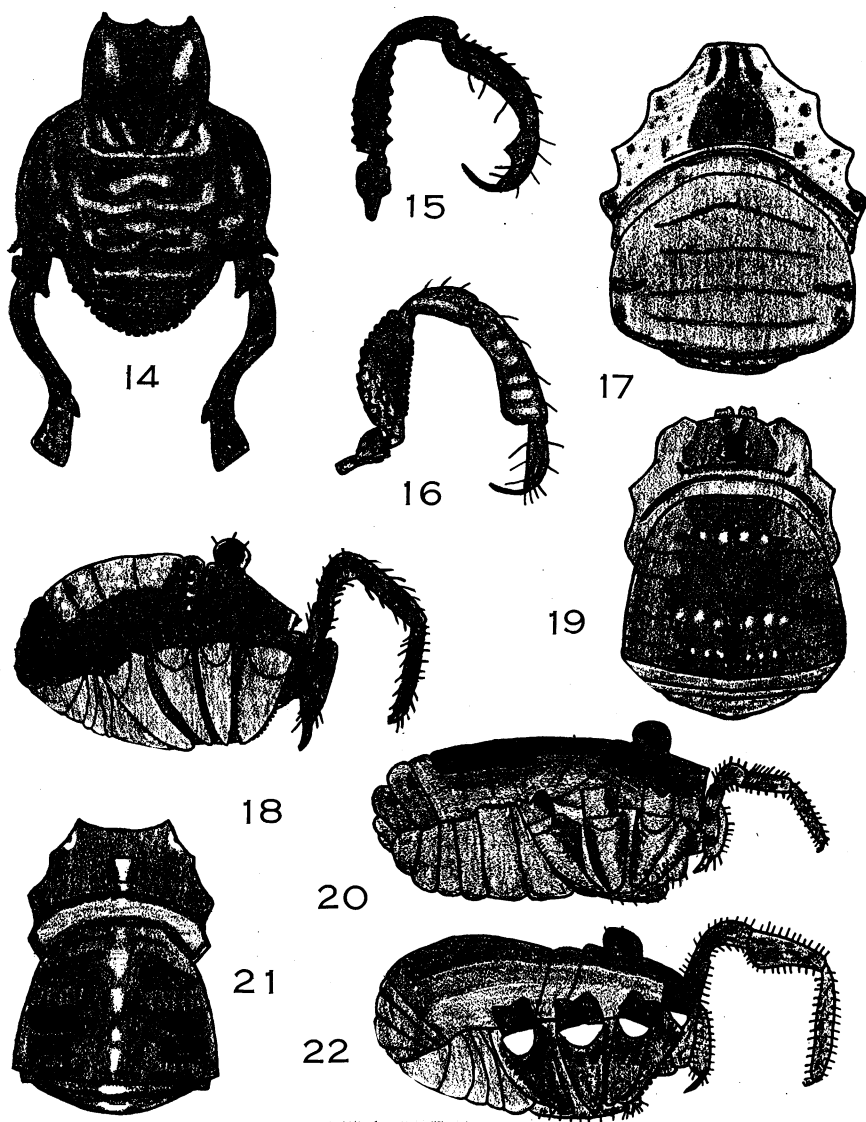


Fig. 1. *Guerrobunus minutus*, new species, dorsal view of female.  
 Fig. 2. Idem, lateral view of eye tubercle of female.  
 Fig. 3. Idem, retrolateral view of palpus of female.  
 Fig. 4. *Montabunus foliorum*, new species, retrolateral view of palpus of male.  
 Fig. 5. Idem, lateral view of eye tubercle of male.  
 Fig. 6. Idem, dorsal view of male.  
 Fig. 7. *Metopilio diazi*, new species, dorsal view of male.  
 Fig. 8. *Cynorta fortina*, new species, dorsal view of male.  
 Fig. 9. *Leiobunum tascum*, new species, dorsal view of female.  
 Fig. 10. *Leiobunum colimae*, new species, dorsal view of male.  
 Fig. 11. *Cynorta cardenasi*, new species, dorsal view of male.  
 Fig. 12. *Colima multimaculata*, new species, dorsal view of male.  
 Fig. 13. Idem, ventral view of fourth leg of male.





- Fig. 14. *Prosontes phalattes*, new species, dorsal view of male.  
 Fig. 15. Idem, lateral view of palpus of male.  
 Fig. 16. Idem, lateral view of palpus of female.  
 Fig. 17. *Krusa annulata*, new species, dorsal view of male.  
 Fig. 18. *Leiobunum bolivari*, new species, lateral view of male.  
 Fig. 19. *Leiobunum alvarezzi*, new species, dorsal view of male.  
 Fig. 20. *Paranelima correa*, new species, lateral view of male.  
 Fig. 21. *Leiobunum bruchi* Mello-Leitao, dorsal view of male.  
 Fig. 22. *Leiobunum nigrigenum*, new species, lateral view of male.

