

AMERICAN MUSEUM NOVITATES

Published by
Number 1163 THE AMERICAN MUSEUM OF NATURAL HISTORY February 13, 1942
New York City

NEW AND LITTLE KNOWN PHALANGIDA FROM MEXICO

BY CLARENCE J. AND MARIE L. GOODNIGHT

Except for some very early work by Duges, Banks was the first man to study seriously the phalangids of Mexico. In a series of papers beginning in 1898, he described a number of Mexican species, giving some indication of the rich arachnid fauna south of the Rio Grande.

In 1905 Cambridge in his great work described a number of new species and genera of Mexican phalangids. Later Roewer published a series of papers rearranging previously described forms, erecting new genera, and describing new species.

In examining the collection of phalangids of The American Museum of Natural History, a series of specimens from Mexico were studied. These collections gave further evidence of the variety of the Mexi-

can fauna by containing a number of new species and several new genera.

The writers are indebted to the kindness of Dr. Gertsch for permission to examine the material and to the numerous collectors who contributed the specimens. The collectors are listed under the species they collected. It is also a pleasure for the writers to acknowledge the kindness of Dr. Nathan Banks in permitting them to examine certain of the types in the Museum of Comparative Zoölogy at Harvard University.

All holotypes are in the collection of The American Museum of Natural History, and unless otherwise noted all paratypes are also in the same collection.

SUBORDER LANIATORES THORELL

PHALANGODIDAE Simon

Phalangodinae Roewer

MEXSCOTOLEMON, NEW GENUS

Dorsal scutes excluding free tergites with five distinct areas arranged parallel to one another. Eye tubercle on the anterior margin of the cephalothorax, projecting forward into a sharp spine which extends anteriorly. Tarsal joints: 3-7-5-5. End group of articulations (Endabschnitt) of second leg, three, of first leg, two. Dorsum including free tergites unarmed: first area without a median line.

GENOTYPE.—*Mexscotolemon acutus*, new species.

This genus is related to *Parascotolemon*, but differs in lacking the spines on the free tergites and in not having the boundaries of the areas on the dorsum strongly curved.

Mexscotolemon acutus, new species

Figures 3, 4, and 5

FEMALE.—Total length, 2.3 mm. Cephalothorax, 0.6 mm.

	I	II
Trochanter	0.2 mm.	0.3 mm.
Femur	0.6	1.2
Patella	0.3	0.4
Tibia	0.6	0.9
Metatarsus	0.9	1.4
Tarsus	0.5	0.9
Total	3.1 mm.	5.1 mm.
	III	IV
Trochanter	0.3 mm.	0.4 mm.
Femur	0.9	1.8
Patella	0.3	0.6
Tibia	0.7	1.3
Metatarsus	1.1	1.9
Tarsus	0.7	0.9
Total	4.0 mm.	6.9 mm.

Dorsum armed only with a few small hairs, body pyriform in shape. Eye tubercle low, eyes distinct at the base, tubercle as described above. Venter and legs armed with a few scattered hairs.

Palpus: trochanter, 0.2 mm. in length; femur, 0.5; patella, 0.2; tibia, 0.4; tarsus, 0.3. Total length, 1.6 mm. Palpi armed with hair, spined ventrally.

Dorsum reddish brown with darker parallel stripes transverse across the abdomen. Eye tubercle concolorous with dorsum. Venter, coxae, and palpi reddish brown; legs concolorous with body, darker distally.

Tarsal joints: 3-7-5-5.

MALE.—Total body length, 2.5 mm. Cephalothorax 0.7 mm.

Identical in appearance with female except for longer legs.

TYPE LOCALITY.—Female holotype from Vera Cruz, Vera Cruz, June 22, 1936 (L. I. Davis). Male paratypes from Palomares, Oaxaca, July 23, 1936 (L. I. Davis) and from La Buena Ventura, Vera Cruz, July, 1909 (Dr. A. Petrunkevitch).

COSMETIDAE Simon Cosmetinae Cambridge

ACROMARES, NEW GENUS

A pair of robust spines on the fourth area of the abdomen, first, second, third, and fifth areas and free tergites unarmed. Third and fourth legs larger than the first and second. Secondary sexual characteristics of the male in the enlarged chelicerae and rows of spines on the patella and tibia of the fourth leg. The spines on the patella in one row, and on the tibia in two rows of large spines and three rows of small spines. Eye tubercle low, wider than long. Tarsal joints: 6-10-7-8. End group of articulations of first and second legs 3-3.

GENOTYPE.—*Acromares banksi*, new species.

This genus differs from other genera of this subfamily in the arrangement of the dorsal spines and in the number of tarsal joints.

Acromares banksi, new species

Figures 9 and 10

MALE.—Total length, 6.7 mm. Cephalothorax, 2.1 mm. Width of abdomen at widest portion, 6.0 mm.

	I	II
Trochanter	0.6 mm.	0.7 mm.
Femur	3.2	6.1
Patella	0.9	0.9
Tibia	1.8	3.6
Metatarsus	3.2	6.2
Tarsus	2.0	4.1

Total	11.7 mm.	21.6 mm.
-------	----------	----------

	III	IV
Trochanter	0.7 mm.	1.1 mm.
Femur	4.3	5.2
Patella	1.3	2.1
Tibia	2.3	3.6
Metatarsus	4.5	6.3
Tarsus	2.2	2.7

Total	15.3 mm.	21.0 mm.
-------	----------	----------

Dorsum smooth, with a pair of heavy spines on the fourth area. Free abdominal tergites unarmed, venter armed with scattered hairs and tubercles. Third and fourth legs as in generic description, legs armed only with a few low hairs.

Palpus: trochanter, 0.2 mm. long; femur, 0.9; patella, 2.2; tibia, 1.3; and tarsus, 1.1. Total length, 5.7 mm. Palpi characteristically flattened.

Dorsum reddish brown mottled with darker and lighter markings. Dorsum handsomely decorated by a series of yellowish markings which assume a lacy pattern on the lateral and posterior margins. The median line and the margin of the areas are lined with a lighter reddish-brown. A series of round circular yellowish spots are scattered about the cephalothorax and on the abdomen, especially on the first three areas. Spines black, eye tubercle concolorous with dorsum, with light spots. Venter, palpi, and chelicerae concolorous with dorsum, legs yellowish brown, lighter than dorsum except for the rows of spines on the fourth leg, which are darker.

FEMALE.—Total length, 7.2 mm. Cephalothorax, 3.1. Width of abdomen at widest portion, 5.4 mm.

Identical in appearance with male, except for the lack of the secondary sexual characteristics.

TYPE LOCALITY.—Male holotype and male and female paratypes from Palomares, Oaxaca, July 23, 1909 (Dr. A. Petrunkevitch). Numerous male and female paratypes from 23 kilometers northeast of Jesus Carranza, Vera Cruz, October 8, 1939 (C. M. Bogert and H. E. Vokes).

BIVONONES, NEW GENUS

Two pair of tubercles on the first and second areas, one pair on the third, a pair of large erect spines on the fourth area. Area five and the free tergites of the abdomen unarmed. Third and fourth legs slightly larger than the first and second legs, with spines on the femur of the fourth leg of the male. Chelicerae of the male enlarged. These last two characters constitute the secondary sexual characteristics of the male. Eye tubercle much wider than long. Tarsal joints 6 on leg I and 8 on leg III. End group of articulations of first leg 3.

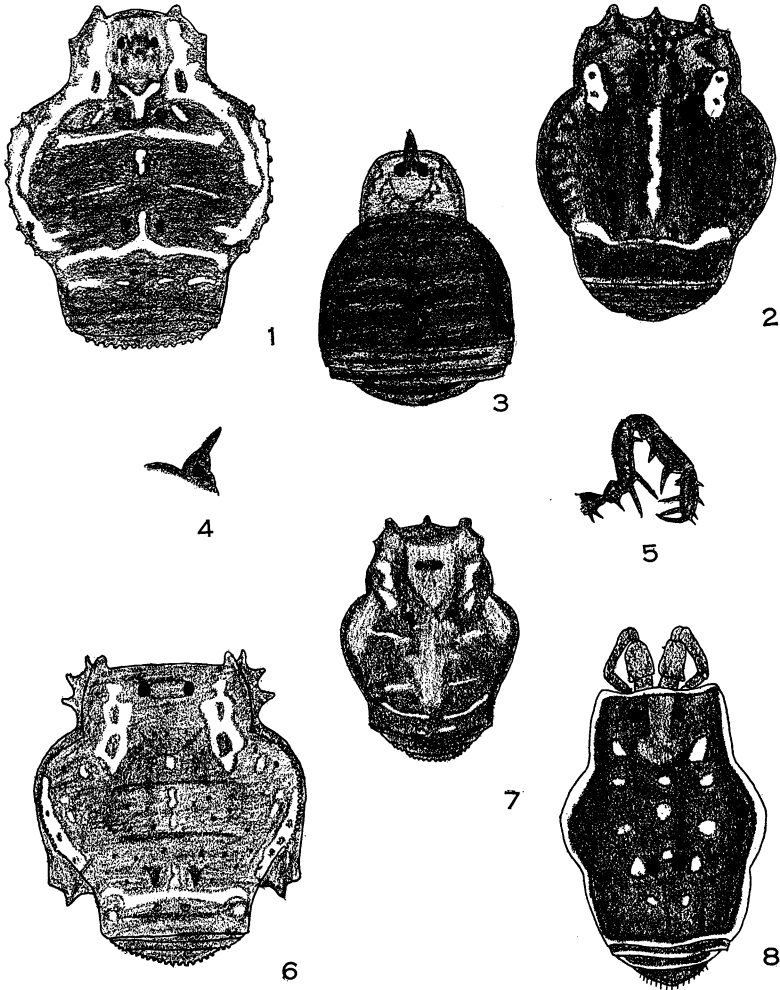
GENOTYPE.—*Bivonones gertschi*, new species.

This genus differs from other genera of this subfamily in having double pairs of tubercles on the first and second area and spines on the fourth area.

Bivonones gertschi, new species

Figures 14 and 15

MALE.—Total length, 6.6 mm. Cephalothorax, 2.7 mm. Width of abdomen at widest portion, 6.3 mm.



- Fig. 1. *Libitiodes petrunkevitchi*, new species, dorsal view of female.
 Fig. 2. *Metacynorta vokesi*, new species, dorsal view of male.
 Fig. 3. *Mezscotolemon acutus*, new species, dorsal view of female.
 Fig. 4. Idem, eye tubercle of female.
 Fig. 5. Idem, palpus of female.
 Fig. 6. *Libitiodes longipes*, new species, dorsal view of male.
 Fig. 7. *Cynorta davisi*, new species, dorsal view of male.
 Fig. 8. *Eucynortula maculosa*, new species, dorsal view of female.

	I	II
Trochanter	0.6 mm.	0.9 mm.
Femur	3.7	7.2
Patella	1.3	1.0
Tibia	2.6	5.9
Metatarsus	4.2	7.2
Tarsus	2.3	—
Total	14.7 mm.	—

	III	IV
Trochanter	1.3 mm.	1.3 mm.
Femur	5.9	5.5
Patella	1.6	1.8
Tibia	3.7	4.8
Metatarsus	5.7	7.8
Tarsus	2.9	—
Total	21.1 mm.	—

Dorsum smooth, dorsal tubercles and spines as in generic description. Free tergites of abdomen unarmed, slightly tuberculate on posterior margins. Venter armed with scattered hair, chelicerae large, palpi flattened characteristically. Trochanter, 0.6 mm. long; femur, 2.1; patella, 1.3; tibia, 2.1; and tarsus 1.1. Total length of palpus, 7.2 mm.

Dorsum reddish brown, with numerous irregular white markings, white around tubercles, spines white. A very irregular central white marking, a lace-like pattern of white marking on the lateral margin of the dorsum, and on the fourth and fifth areas. (Markings best illustrated by Fig. 15.) Venter, coxae, palpi, and chelicerae reddish, concolorous with dorsum. Legs yellowish brown, lighter than dorsum.

TYPE LOCALITY.—Male holotype and immature paratype from Tonala, Chiapas, July, 1909 (Dr. A. Petrunkevitch).

Cynorta davis, new species

Figure 7

MALE.—Total length, 3.6 mm. Cephalothorax, 1.2 mm. Width of abdomen at widest portion, 3.0 mm.

	I	II
Trochanter	0.3 mm.	0.3 mm.
Femur	1.3	2.5
Patella	0.4	0.6
Tibia	0.9	1.8
Metatarsus	1.3	2.3
Tarsus	1.2	2.7

Total 5.4 mm. 10.2 mm.

	III	IV
Trochanter	0.3 mm.	0.4 mm.
Femur	1.7	2.2
Patella	0.4	0.6
Tibia	1.0	1.7
Metatarsus	1.8	2.8
Tarsus	1.3	1.6

Total 6.5 mm. 9.3 mm.

Dorsum finely granulate, a pair of low tubercles on the first abdominal area, and a pair of low spines on the third area. Eye tubercle very low, wider than long, unarmed. Median anterior margin of the cephalothorax is protruded as a blunt spine-like process. The anterior lateral margins of the thorax protruded as blunt processes. The posterior margin of the free abdominal tergites armed with a row of tubercles. Venter, coxae, and genital operculum armed with scattered hair, a few scattered tubercles on the fourth coxae. Legs armed with rows of hair. Tarsal joints: 6–10–7–7. End group of articulations of legs I and II three in number. Penis trident in shape, folded back characteristically. Third and fourth legs not heavier than first and second.

Palpus: trochanter, 0.3 mm. long; femur, 0.9; patella, 0.3; tibia, 0.7; and tarsus, 0.5. Total length, 2.7 mm. Palpus characteristically flattened, with scattered hairs.

Dorsum dark brown with numerous dark brown, almost black mottlings which leave pencillings of lighter brown, forming an indistinct pattern on the lateral margin and a median light line through the first three abdominal areas. The eyes enclosed in a circle of lighter brown. The free tergites almost black. The pattern of light yellow markings as follows: an irregular blotch on the lateral portion of the cephalothorax, extending from the region of the eye slightly on to the first abdominal area. A narrow transverse line across the abdomen just posterior to the pair of spines. A light indistinct penciling on either side of the anterior margins of areas II and III; this line is so narrow that it is not very distinct. On either side another very small line at the posterior margin of area IV. Venter reddish brown, lighter than dorsum, legs, palpi, and chelicerae yellowish brown, lighter than dorsum.

TYPE LOCALITY.—Male holotype from 12 miles east of Ciudad del Maiz, San Luis Potosi, December 1, 1939 (A. M. and L. I. Davis).

This form is related to *Cynorta marginalis* Banks and *Cynorta skwarrae* Roewer, differing mainly by the color pattern on the dorsum.

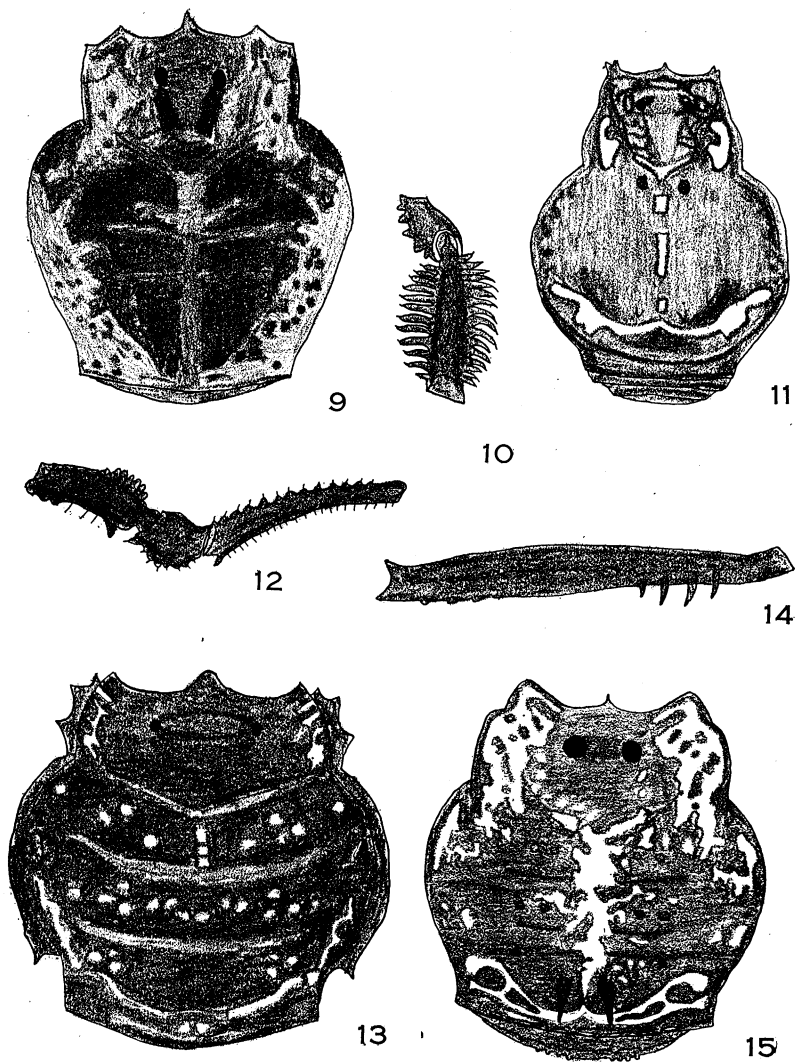
Cynorta triangulata, new species

Figure 11

FEMALE.—Total body length, 4.6 mm. Cephalothorax, 1.6 mm. Width at widest portion of abdomen, 3.6 mm.

	I	II
Trochanter	0.4 mm.	0.5 mm.
Femur	2.0	4.0
Patella	0.7	1.0
Tibia	1.3	3.2
Metatarsus	2.1	4.1
Tarsus	1.6	3.6

Total 8.1 mm. 16.4 mm.



- Fig. 9. *Acromares banksi*, new species, dorsal view of male.
 Fig. 10. Idem, patella and tibia of fourth leg of male.
 Fig. 11. *Cynorta triangulata*, new species, dorsal view of female.
 Fig. 12. *Ergimulus pulchrus*, new species, femur, patella, and tibia of male.
 Fig. 13. Idem, dorsal view of male.
 Fig. 14. *Bivonones gertschi*, new species, femur of fourth leg of male.
 Fig. 15. Idem, dorsal view of male.

	III	IV
Trochanter	0.5 mm.	0.7 mm.
Femur	2.8	3.6
Patella	0.8	0.9
Tibia	1.7	2.7
Metatarsus	2.7	4.1
Tarsus	2.1	2.2
Total	10.6 mm.	14.2 mm.

Dorsum finely granulate, a pair of tubercles on the first abdominal area, a pair of acute spines on the third area. Free tergites of the abdomen armed only with hair. Eye tubercle low, much wider than long, unarmed. Two short blunt spines at the anterior lateral margin of the cephalothorax. Venter, coxae, and genital operculum armed with scattered hair. Legs armed with a few short hairs, long and slender, third and fourth legs not enlarged over first and second. Tarsal joints: 6-13-7-8. End group of articulations of first and second legs three in number.

Palpus: trochanter, 0.3 mm. long; femur, 1.1; patella, 0.3; tibia, 1.0; and tarsus, 0.6. Total length, 3.3 mm. Palpi characteristically flattened, armed with a few hairs and some lateral tubercles on the femur.

Color of dorsum reddish brown, some lighter indistinct markings on the lateral margin of the abdomen and over the entire surface. A light strip runs across the eye tubercle. Eyes black, strongly contrasting with the body. A distinct yellowish-white pattern on the dorsum as follows: an irregular white blotch on either side at the junction of the cephalothorax and abdomen, the blotch extending slightly into the abdomen. From either spot a slanting line runs to the median margin forming a rather indefinite V. A heavy transverse line running across the abdomen just posterior to the two spines of the third area. This line widens into two curved blotches near the lateral margins. A broken line runs along the median line of the abdomen and connects the anterior V with posterior transverse line. The anterior free tergites are margined with black. Venter and coxae reddish brown only very slightly lighter than the dorsum. Trochanter and remainder of legs, palpi, and chelicerae yellowish brown, lighter than dorsum or venter.

TYPE LOCALITY.—Female holotype from Valles, San Luis Potosi, July 15, 1937 (Otty Sanders).

This form resembles most closely *Cynorta vestita* Cambridge, differing mainly in color pattern; it also shows some affinities to *Cynorta salycina* Sørensen, but differs in the color pattern, lacking the prominent lateral punctate marks mentioned by Sørensen.

Erginulus pulchrus, new species

Figures 12 and 13

MALE.—Total length, 5.2 mm. Cephalothorax, 1.9 mm. Width of body at widest portion of abdomen, 5.0 mm.

	I	II
Trochanter	0.4 mm.	0.4 mm.
Femur	2.1	3.6
Patella	0.6	0.9
Tibia	1.4	3.2
Metatarsus	2.3	4.3
Tarsus	1.3	3.6
Total	8.1 mm.	16.0 mm.

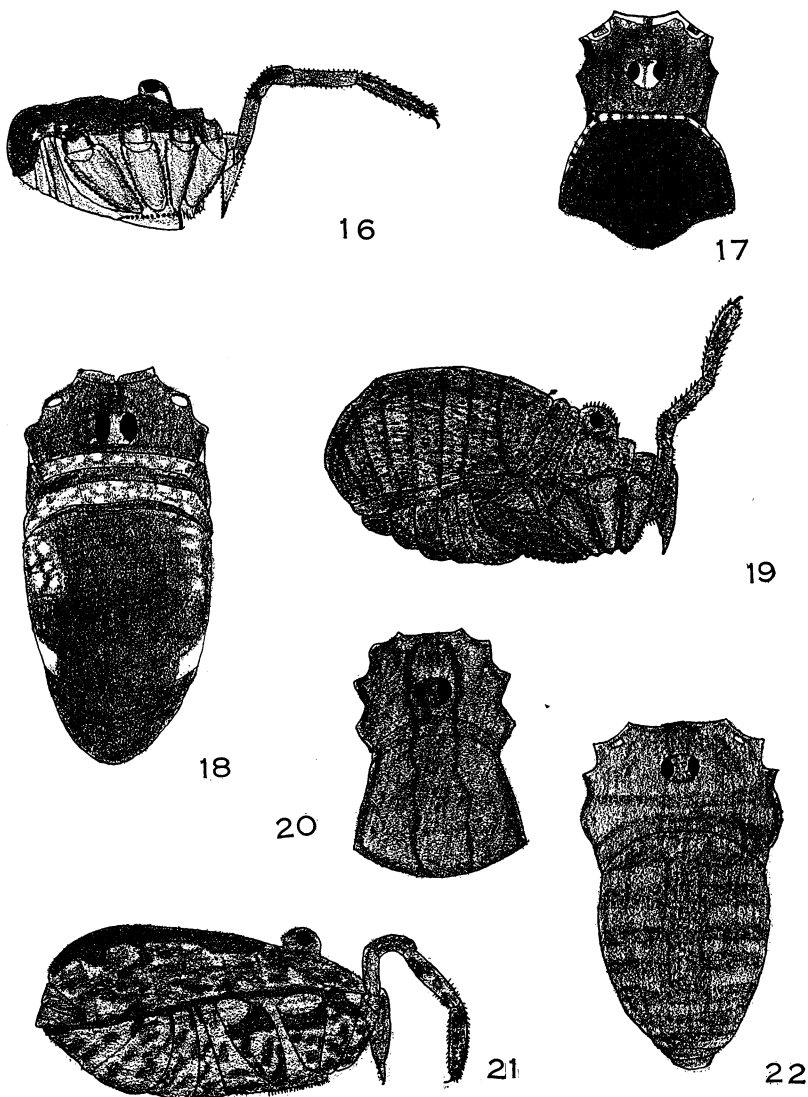
	III	IV
Trochanter	0.5 mm.	0.7 mm.
Femur	2.7	3.6
Patella	0.9	1.2
Tibia	2.0	2.2
Metatarsus	2.9	4.5
Tarsus	1.8	2.1
Total	10.8 mm.	14.3 mm.

Dorsum smooth, with a pair of bluntly rounded spines on the third area. Free tergites unarmed except for some granulations along the margin. Eye tubercle low, wider than long, unarmed. A distinct spur projecting over part of the fourth trochanter as seen from above. Venter armed with scattered hairs, coxae, trochanters, and remainder of legs armed with same type of scattered hairs. Tarsal articulations: 6-9-7-8. End group of articulations of first and second legs three in number. Third and especially the fourth leg larger in size than the first and second legs. The femur of the fourth leg with some robust tubercles and a median apical spine. Tubercles on the patella and tibia enlarged to form rows of spines, these tubercles thickly scattered on the dorsal part of the patella. On the tibia the tubercles are arranged more regularly in one distinct dorsal row and one complete and one incomplete ventral row.

Palpus: trochanter, 0.6 mm. long; femur, 2.1; patella, 0.9; tibia, 1.8; and tarsus, 0.9. Total length, 6.3 mm. Palpus robust, characteristically flattened and armed.

Chelicerae distinctly enlarged.

Dorsum reddish brown with a mottling of darker and lighter areas. Yellowish-white markings present as follows: an incomplete broken median line on the first three areas. Scattered white dots on all dorsal areas. An irregular marking on the lateral posterior margins of the cephalothorax. A few faint white markings along the lateral margin of the abdomen and extending transversely as an incomplete stripe posterior to the third area. Lighter reddish-brown stripes marking the posterior margins of the dorsal areas. Venter and appendages reddish brown, lighter than dorsum.



- Fig. 16. *Leiobunum viridorsum*, new species, lateral view of male.
 Fig. 17. Idem, dorsal view of male.
 Fig. 18. *Leiobunum mesopunctatum*, new species, dorsal view of female.
 Fig. 19. *Hadrobunus davisi*, new species, lateral view of female.
 Fig. 20. *Leiobunum hoogstraali*, new species, dorsal view of male.
 Fig. 21. *Glabrurus lutzi*, new species, lateral view of male.
 Fig. 22. *Hadrobunus knighti*, new species, dorsal view of male.

TYPE LOCALITY.—Male holotype from Jesus Carranza, Vera Cruz, October 8, 1939 (C. M. Bogert and H. E. Vokes).

This species is distinct from other described species of this genus due to its characteristic color pattern.

***Eucynortula maculosa*, new species**

Figure 8

FEMALE.—Total length of body, 4.7 mm. Cephalothorax, 1.3 mm. Width at widest portion of abdomen, 3.0 mm.

	I	II
Trochanter	0.4 mm.	0.4 mm.
Femur	1.8	3.0
Patella	0.7	0.6
Tibia	1.5	2.2
Metatarsus	1.8	3.2
Tarsus	1.3	3.0

Total	7.5 mm.	12.4 mm.
-------	---------	----------

	III	IV
Trochanter	0.4 mm.	0.4 mm.
Femur	2.3	2.9
Patella	0.6	1.0
Tibia	1.9	2.2
Metatarsus	2.4	3.5
Tarsus	1.8	2.1

Total	9.4 mm.	12.1 mm.
-------	---------	----------

Dorsum finely granulate, eye tubercle wider than long, low. A pair of low spines present on the median part of the third abdominal area. Venter and coxae slightly granulate with scattered hairs. Legs moderately long and slender, third and fourth leg not heavier than first and second, armed with scattered hair. Tarsal joints: 6-10-7-8. End group of articulations of legs I and II consisting of three joints.

Palpus: trochanter, 0.3 mm. long; femur, 0.9; patella, 0.4; tibia, 1.1; and tarsus, 0.4. Total length, 3.1 mm. Pedipalps characteristically flattened, armed with a few scattered hairs, a few tubercles on the lateral margin of the femur.

Dorsum reddish brown with a characteristic series of paired spots, five arranged symmetrically in an oval on either side of the median line. These lateral spots midway between the median line and the lateral margin. The first pair of spots on the cephalothorax, and one pair on each of the first four abdominal areas, the spots being light yellow in color. The low eye tubercle concolorous with the dorsum, except for the area around the eyes which is black, a lighter indistinct pattern on the median line of the cephalothorax beginning at the anterior margin extending between the eyes, and widening out between the first pair of lateral spots. Venter, palpi, and legs concolorous with dorsum, but slightly lighter.

TYPE LOCALITY.—Female holotype and male paratype from Vera Cruz, Vera Cruz, July, 1909 (Dr. A. Petrunkevitch).

This species is similar to *Eucynortula albipunctata* (Cambridge), but differs in having no white spots on the sides of the abdomen and in this very characteristic color pattern.

***Holovonones compressus* (Cambridge)**

Paravonones compressus CAMBRIDGE, 1904, Biol. Centr. Amer., Arach., II, p. 552, Pl. L, figs. 4 and 4A.

Holovonones compressus, ROEWER, 1912, Arch. Naturg. LXXXVIII, fasc. 10, p. 21; 1923, Die Weberknechte der Erde, p. 301, Figs. 326A, B, and C.

RECORD.—Palomares, Oaxaca, July 23, 1909 (Dr. A. Petrunkevitch).

***Libitiodes longipes*, new species**

Figure 6

MALE.—Total length of body, 5.4 mm. Cephalothorax, 1.3 mm. Width of body at widest portion of abdomen, 4.5 mm.

	I	II
Trochanter	0.3 mm.	0.4 mm.
Femur	2.7	5.9
Patella	0.8	1.2
Tibia	1.8	4.5
Metatarsus	2.7	5.6
Tarsus	1.7	3.6

Total	10.0 mm.	21.2 mm.
-------	----------	----------

	III	IV
Trochanter	0.6 mm.	0.7 mm.
Femur	4.5	7.7
Patella	1.2	1.3
Tibia	2.7	5.4
Metatarsus	4.1	7.5
Tarsus	1.8	2.1

Total	14.9 mm.	24.7 mm.
-------	----------	----------

Dorsum finely granulate, a pair of tubercles on the first and fourth areas, a pair of spines present on the third area. Remaining areas and free tergites unarmed, except for the granulations. Eyes normal. A short spine present anterior to the fourth trochanter. Dorsum armed only with a few small hairs, legs likewise armed, legs long and slender; third and fourth legs not heavier than the first and second. Tarsal articulations: 5-11-7-7. Some specimens examined had eight articulations on the third and fourth tarsi rather than seven. The end group of articulations of the first and second tarsi three in number.

Palpus: trochanter, 0.3 mm. long; femur, 0.9; patella, 0.6; tibia, 1.0; and tarsus, 0.6.

Total length, 3.4 mm. Palpi characteristically flattened.

Chelicerae normal, not enlarged in male.
Dorsum light reddish brown with a broken median white stripe on the first three areas. A transverse white stripe across the abdomen just posterior to the spines of the third area. A white blotch on the lateral margin of the cephalothorax and extending to the first ab-

Libitiodes, since they agree in every other detail.

Libitiodes petrunkevitchi, new species

Figure 1

FEMALE.—Total body length, 5.8 mm. Cephalothorax, 1.4 mm. Width of abdomen at widest point, 4.5 mm.

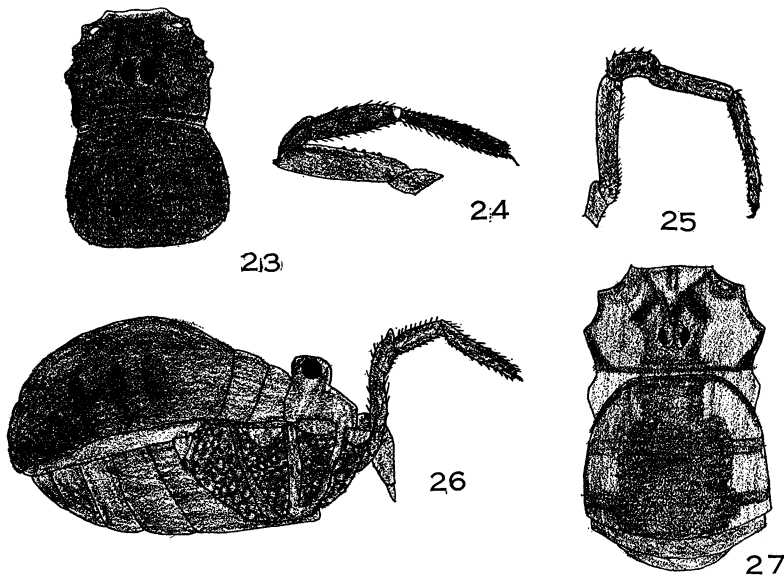


Fig. 23. *Leiobunum nycticorpum*, new species, dorsal view of male.
Fig. 24. Idem, palpus of male.
Fig. 25. *Leiobunum bogerti*, new species, palpus of male.
Fig. 26. *Geaya auruginia*, new species, lateral view of female.
Fig. 27. *Leiobunum bogerti*, new species, dorsal view of male.

dominal area. Small white markings along the lateral margin of the abdomen. Spines white. Venter and appendages concolorous with the dorsum.

FEMALE.—Total length of body, 4.3 mm. Cephalothorax, 1.4 mm. Width of body at widest portion, 4.0 mm.

Identical in appearance with male except for somewhat shorter legs.

TYPE LOCALITY.—Male holotype and female allotype, and male and female paratypes from San Geronimo, Oaxaca, July, 1909 (Dr. A. Petrunkevitch).

This species differs from other *Libitiodes* in the color pattern, and in the greater number of articulations in the third and fourth tarsi. Despite this greater number of articulations, it was thought best to include this species and the following one in

	I	II
Trochanter	0.4 mm.	0.4 mm.
Femur	2.1	4.5
Patella	0.6	1.1
Tibia	1.2	3.2
Metatarsus	2.1	3.6
Tarsus	1.2	2.7
Total	7.6 mm.	15.5 mm.
	III	IV
Trochanter	0.4 mm.	0.7 mm.
Femur	3.6	4.5
Patella	0.9	1.1
Tibia	2.2	3.6
Metatarsus	2.7	4.7
Tarsus	1.3	1.3
Total	11.1 mm.	15.9 mm.

Dorsum finely granulate, a pair of low tubercles on the first and fourth areas of the

abdomen, a pair of low spines on the third. Free tergites of the abdomen unarmed. Eye tubercle very low, wider than long. Some conspicuous scattered tubercles along the lateral margin of the abdomen, visible from above. Venter, genital operculum, and coxae armed with scattered hairs. Legs armed with rows of small hairs, long and slender, third and fourth legs not conspicuously enlarged. Tarsal joints: 5-10-7-7. End group of articulations of first and second legs three in number.

Palpus: trochanter, 0.3 mm. long; femur, 0.9; patella, 0.5; tibia, 0.9; and tarsus, 0.6. Total length, 3.2 mm. Palpus normal, characteristically flattened and armed with tubercles on the ventral margin of the femur

Dorsum reddish brown with a small incomplete whitish V on the posterior margin of the cephalothorax; from this V, a broken whitish line runs posteriorly along the median line of the abdomen to the posterior margin of the third area. Here it joins with a complete transverse line which traverses the dorsum just posterior to the spines. An incomplete white transverse line is on the posterior margin of the first and second areas; a line broken into four parts runs transversely on the posterior margin of the fourth area. The lateral margin of the abdomen with a white line which enlarges into an irregular spot on the lateral margin of the cephalothorax and first area. Eye tubercle, venter, and coxae concolorous with the rest of the body. The legs, palpi, and chelicerae yellowish brown, slightly lighter than the dorsum.

MALE.—Length of body, 7.7 mm. Cephalothorax, 1.4 mm. Width of body at widest portion of the abdomen, 4.9 mm.

Identical in appearance with female except for the longer legs, femur of the fourth leg being 8.1 mm. in length.

TYPE LOCALITY.—Female holotype and male paratype from Tonala, Chiapas, July 30, 1909 (Dr. A. Petrunkevitch).

This species resembles the preceding one in having a greater number of tarsal joints; however, it differs in the color pattern.

Metacynorta gracilipes Cambridge

Metacynorta gracilipes CAMBRIDGE, 1904, Biol. Centr. Amer., Arach., II, p. 554, Pl. LII, fig. 8.—Roewer, 1912, Arch. Naturg., LXX-VIII, Pl. x, p. 24; 1923, Die Weberknechte der Erde, p. 305, Fig. 351.

RECORD.—Tonala, Chiapas, August, 1909 (Dr. A. Petrunkevitch).

Metacynorta vokesi, new species

Figure 2

MALE.—Total body length, 6.3 mm. Cephalothorax, 1.8 mm. Width of dorsum at widest point, 5.4 mm.

	I	II
Trochanter	0.5 mm.	0.5 mm.
Femur	2.5	4.5
Patella	0.6	1.3
Tibia	1.4	3.3
Metatarsus	2.2	4.1
Tarsus	1.7	3.2
Total	8.9 mm.	16.9 mm.

	III	IV
Trochanter	0.5 mm.	0.9 mm.
Femur	3.6	5.0
Patella	0.9	1.7
Tibia	2.2	4.1
Metatarsus	3.2	4.5
Tarsus	1.8	1.8
Total	12.2 mm.	18.0 mm.

Dorsum finely granulate, almost smooth. A pair of very low tubercles on the first area of the abdomen; the third area with a pair of median blunt spines. Free tergites of the abdomen smooth. Eye tubercle low, twice as wide as long, smooth except for a few very low granulations on the posterior side. These granulations no higher than those of the dorsum. Chelicerae of male normal, not conspicuously enlarged. Venter smooth, except for a few scattered hairs, genital operculum and coxae also smooth. Penis blunt.

Legs armed with rows of low tubercles and hair. Third and fourth leg not conspicuously heavier than first and second. Tarsal joints: 5-10-7-7. End group of articulations of first and second legs three in number.

Palpus: trochanter, 0.5 mm. long; femur, 1.3; patella, 0.5; tibia, 1.3; and tarsus, 0.7. Total length, 4.3 mm. Palpi characteristically flattened, femur armed with ventral row of teeth, all segments armed with hair.

Dorsum reddish brown, with numerous light markings. These markings are especially numerous on the cephalothorax, in which they coalesce to form a median light line running from the anterior margin across the eye tubercle and posterior. These lighter markings show up by contrast to the darker markings especially numerous on the abdomen, and forming an interesting pattern along the lateral margin. In addition to these mottlings of darker and lighter areas, there is a distinct pattern outlined in strongly contrasting yellow. These yellow markings are as follows: a large patch on the lateral margin of both sides between the cephalothorax and abdomen extending from about the region of the second coxae onto the abdomen; a transverse line of varying width across the abdomen just posterior to the spines of the third area; a median broken line from the posterior margin of the cephalothorax to this transverse line. This broken line is bordered in some portions by black. Venter, coxae, and trochanters concolorous with dorsum, legs lighter brown with some indistinct black mottlings. Palpi and chelicerae brown.

Secondary sexual characteristics of the male present only in a slight enlargement of the patella of the fourth leg.

FEMALE.—Total body length, 6.3 mm. Cephalothorax, 1.8 mm. Width of body at widest portion of abdomen, 5.4 mm.

Identical in appearance with male.

TYPE LOCALITY.—Male holotype, female allotype, and male and female paratypes from Acaponeta, Nayarit, November 20, 1939 (C. M. Bogert and H. E. Vokes).

This form is related to *Metacynorta gracilipes* Cambridge, but differs in having

a larger body, shorter legs, and characteristic color markings. The median line is broken in *vokesi* and complete in *gracilipes*.

Meterginus basalis Cambridge

Meterginus basalis CAMBRIDGE, 1904, Biol. Centr. Amer., Arach., II, p. 568, Pl. LIII, fig. 12. —ROEWER, 1912, Arch. Naturg., LXXVIII, fasc. 10, p. 105, Pl. x; 1923, Die Weberknechte der Erde, p. 380, Figs. 460 and 461.

RECORD.—La Buena, Ventura, Vera Cruz, July, 1909 (Dr. A. Petrunkevitch).

SUBORDER PALPATORES THORELL

PHALANGIDAE Thorell

Leiobuninae Banks

Leiobunum bogerti, new species

Figures 25 and 27

MALE.—Total length of body, 4.1 mm. Cephalothorax, 1.6 mm. Femora of legs: I, 9 mm.; II, 15.0 mm.; III, 10.0 mm.; and IV, 13.0 mm.

Dorsum finely granulate, anterior margin of cephalothorax smooth, eye tubercle high, canaliculate, smooth except for a few small spines on the anterior margin of each carina. Abdomen subtruncate to pointed posteriorly as seen from above. Venter and genital operculum armed only with a few small scattered hairs, coxae armed only with a few very low scattered tubercles. A row of small teeth present on the anterior and posterior margins of coxae I to IV.

Palpus: trochanter, 0.3 mm. long; femur, 1.0; patella, 0.5; tibia, 0.8; and tarsus, 1.5 mm. Total length, 4.1 mm. Femur moderately slender, armed ventrally with a few small hairs, and low spines. Patella curved, armed dorsally with hair and a few small spines, no inner patella spur present. Tibia armed only with scattered hair. Tarsus armed with hair, more numerous at the distal end, the ventral surface armed also with a row of tubercles. Tarsal claw small and toothed.

Penis: 2.0 mm. long. Elate part present; shaft heavy, the point distal to the elate portion only 0.3 mm. long, ending in a short point distal to an expanded bulb-like portion.

Dorsum golden brown with a shadowy hour glass marking of darker brown in the median portion of the abdomen. This darker stripe is very distinct in some specimens, but shades to subobsolete in others. Cephalothorax golden brown with a darker brown marking surrounding the eye tubercle and preceding anterior in a V-shape. Lateral margin of the cephalothorax

outlined in brown with a marking of dark brown at the lateral posterior margin. Several slight shadowy markings on the median portion of the abdomen, other shadowy markings leading from the median stripe to the lateral margin. Venter and coxae light yellowish-brown, trochanters and base of femora dark brown, contrasting with coxae. Legs nearly uniform brown, long and slender, armed with rows of small hairs and tubercles. Palpi light yellowish brown, concolorous with venter. Eye tubercle concolorous with dorsum with a white ring around each eye.

FEMALE.—Total body length, 5.3 mm. Cephalothorax, 1.5 mm.

Similar to male, except more robust and more strongly rounded behind. Center marking on dorsum usually more distinct.

TYPE LOCALITY.—Male holotype and male and female paratypes from 5 miles southwest of Culiacan, Sinaloa, November 26, 1939 (C. M. Bogert and H. E. Vokes). Male and female paratypes from Acaponeta, Nayarit, November 20, 1939 (C. M. Bogert and H. E. Vokes).

This form shows affinities to *Leiobunum mexicana* Banks; however, it lacks the scattered pale dots on the basal joints of the legs, is not pale on the extreme tips of the tibia, and is generally lighter in color.

Leiobunum flavum Banks

Leiobunum flavum BANKS, 1894, Canad. Ent., XXVI, p. 164; 1900, Proc. Acad. Phila., p. 541; 1901, Amer. Natural., XXXV, p. 676. —ROEWER, 1910, Abh. Ver. Hamburg, fasc. 49, XIX, p. 227, Pl. v, fig. 15; 1923, Die Weberknechte der Erde, p. 904. —Davis, 1934, Amer. Midl. Nat., XV, p. 676, Figs. 20 and 28.

RECORD.—San Fernando, Tamaulipas, March 28, 1932 (L. I. Davis).

***Leiobunum hoogstraali*, new species**

Figure 20

MALE.—Total length of body, 3.4 mm. Cephalothorax, 1.2 mm. Femora: I, 7.5 mm.; II, 10.9 mm.; III, 7.3 mm.; IV, 9.9 mm.

Dorsum finely granulate, anterior margin of cephalothorax smooth, eye tubercle high, shallowly canaliculate, unarmed except for a few very minute spines on the anterior margin of each carina. Venter and genital operculum finely granulate, the genital operculum being also armed with a few scattered hairs. Coxae sparsely covered with low tubercles. Lateral rows of teeth present on anterior margins of coxae I to IV. A few very much reduced lateral teeth on posterior margins of coxae. Legs long and slender, armed with scattered hairs. Penis elate.

Palpus: trochanter, 0.3 mm. long; femur, 1.0; patella, 0.3; tibia, 0.7; and tarsus, 1.1. Total length, 3.4 mm. Femur slender, normal, armed ventrally with hair and a few low tubercles. Patella armed with hair, tibia slightly expanded proximally, contracted to normal diameter distally, armed with hair. Tarsus slender, armed with scattered hair, palpal claw smooth, toothed, lacking patella spur.

Dorsum golden yellow, a faint median stripe outlined on the cephalothorax and abdomen, beginning at the anterior margin of the cephalothorax, continuing posteriorly, enclosing the eye tubercle, and proceeding onto the abdomen where it is expanded in the median portion. Eye tubercle slightly darker than dorsum. Venter and coxae concolorous with dorsum. Trochanters concolorous with coxae. Legs dark brown, shading to black distally. Palpi yellowish, lighter than body.

TYPE LOCALITY.—Male holotype and male paratype from Tancitaro, Michoacan, July 30, 1940 (H. Hoogstraal).

This form is related to *Leiobunum creatum* Crosby and Bishop found in the southern part of the United States. It differs in having longer and more robust legs, and in not having black-tipped tubercles over the eye tubercle. It differs from *Leiobunum consimile* Banks in having thread-like black legs; while *consimile* has light legs, moderately robust.

***Leiobunum mesopunctatum*, new species**

Figure 18

FEMALE.—Total length, 4.8 mm., Cephalothorax, 1.8 mm. Femora of legs: I, 7.7 mm.; II, 10.8 mm.; III, 6.3 mm.; IV, 8.6 mm.

Dorsum finely granulate, anterior margin of cephalothorax smooth, a distinct supra-chelicer lamella present. Eye tubercle high, very shallowly canaliculate armed with a few small hairs above each carina. Dorsum armed with a

few short scattered hairs. Abdomen pointed caudad as seen from above. Venter armed with scattered short hair, genital operculum armed with hair and lateral rows of teeth. Coxae armed with scattered hair and a few scattered tubercles. Rows of small teeth present on anterior and posterior margins of coxae I to IV. Legs long, slender, armed with scattered spine-like hairs.

Palpus: trochanter, 0.3 mm. long; femur, 0.8; patella, 0.3; tibia, 0.5; and tarsus, 1.2. Total length, 3.1 mm. Palpi small, armed throughout with scattered hair and a few small tubercles on the ventral side of the femur. Patella with a very short inner spur at the distal portion. Tarsal claw small, toothed.

Dorsum dark brown almost black, the posterior third of the cephalothorax behind the eye tubercle with many scattered small yellowish dots, giving a punctate appearance. These small dots extend posteriorly along the sides of the abdomen, becoming progressively larger and whiter until they form a regular white blotch on either side. At the lateral margins of the fourth and fifth segments of the abdomen, this white irregular spot extends slightly onto the venter. Eye tubercle concolorous with dorsum, a lighter streak extending from the anterior margin of the eye tubercle to the anterior margin of the cephalothorax. Venter grayish brown, a little lighter than the dorsum. Coxae very dark brown, trochanters concolorous with coxae, legs brown, much lighter than the trochanters. Base of femora as dark as the trochanters. Palpi dark brown.

TYPE LOCALITY.—Female holotype from 12 miles east of Ciudad del Maiz, San Luis Potosi, December 1, 1939 (A. M. and L. I. Davis).

This species resembles *Leiobunum ischionotatum ischionotatum* Duges, but differs in the arrangement of the white markings. It is possible that this is only a subspecies of *ischionotatum*.

***Leiobunum nycticorpus*, new species**

Figures 23 and 24

MALE.—Total length of body, 3.0 mm. Cephalothorax, 1.2 mm. Femora of legs: I, 8.5 mm.; II, 13.7 mm.; III, 9.3 mm.; IV, 11.7 mm.

Dorsum evenly granulate, anterior margin of cephalothorax smooth. Eye tubercle high, very slightly canaliculate, unarmed except for a few small hairs. Abdomen truncate posteriorly as seen from above. Venter, genital operculum, and coxae slightly tuberculate, few hairs present. Teeth present and well developed on anterior margins of all coxae, none present on posterior margins.

Palpus: trochanter, 0.2 mm.; femur, 0.8; patella, 0.4; tibia, 0.7; tarsus, 1.0. Total

length, 3.1 mm. Palpi slender, femur armed ventrally with a few low tubercles and hairs. Patella curved, armed throughout with scattered hairs, no patella spur. Tibia armed with short scattered hairs. Tarsus armed with scattered hairs and a few small tubercles ventrally. Tarsal claw small, toothed.

Legs long, slender, armed with scattered hair.

Penis 2.0 mm. long. Elate, shaft heavy, a short point distal to the expanded elate portion.

Dorsum uniformly dark glossy black. Fine granulations giving a shiny appearance. Somewhat lighter at the junction of the abdomen and cephalothorax due to the absence of granulations. Eye tubercle lighter, brownish, a black ring surrounding each eye. Stink pores at the anterior lateral margin of the cephalothorax show up as white dots by comparison with the rest of the body. The margin of the cephalothorax gives the appearance of being bounded by white due to the contrast of the membranes below. Venter and coxae black, concolorous with dorsum, trochanters and base of femora concolorous with coxae, the expanded membrane of the trochanters appearing gleaming white by contrast to the body. Legs dark brown, darker distally. Palpi black.

TYPE LOCALITY.—Male holotype from 2 miles east of Nueva Morelos, Tamaulipas, December 2, 1939 (L. I. Davis). Male paratype from Jacala, Hidalgo, April, 1929 (R. Haag) (in Museum of Comparative Zoölogy).

This species shows closest affinities to *Leiobunum mesopunctatum*, new species; but is distinctly different in lacking the white markings on the abdomen, and in being a deeper black.

Leiobunum viridorsum, new species

Figures 16 and 17

MALE.—Total length of body, 3.2 mm. Cephalothorax, 0.9 mm. Femora of legs: I, 9.3 mm.; II, 14.6 mm.; III, 10.3 mm.; IV, 11.3 mm.

Dorsum roughly granulate, anterior margin of cephalothorax smooth. Eye tubercle high, canaliculate, and unarmed. Venter smooth, genital operculum armed with lateral rows of a few small teeth. Coxae roughly tuberculate with lateral rows of teeth on the anterior and posterior margins of coxae I to IV. Legs long and slender, armed with rows of minute spines on femora. Distal parts of legs smooth. Penis elate; body truncate caudad.

Palpus: trochanter, 0.3 mm. long; femur, 1.0; patella, 0.4; tibia, 0.6; and tarsus, 1.3. Total length, 3.6 mm. Palpi normal, femur not elevated above the cephalothorax; armed ventrally with a few low tubercles and scattered hairs. Remainder armed with hair, more nu-

merous distally. Tarsal claw smooth and toothed, no patella spur.

Granulations of dorsum green and golden, giving a shimmering golden cast to the dorsum of the animal. Some specimens show more green than others. In some specimens the gold is the more conspicuous color, with a green cast, while in others the animal appears green with a golden cast. Eye tubercle white with a median light brown stripe which widens slightly and extends to the margin of the cephalothorax. The abdomen is outlined laterally and anteriorly with a row of white spots. Venter, genital operculum, and coxae white, even the lateral teeth of the coxae being white. Trochanters and base of femora dark brown, contrasting strongly with the coxae. Legs light brown, palpi and chelicerae white. On the distal dorsal portion of the femur and the dorsal part of the patella of the palpus there is a small golden-brown blotch which contrasts strongly with the rest of the palpus.

FEMALE.—Total length, 7 mm. Cephalothorax, 1.0 mm.

Resembles male except that the body is more strongly arched and when distended with eggs, brownish membranes are visible between the scutes.

TYPE LOCALITY.—Male holotype and male and female paratypes from Hacienda Vista Hermosa (Horsetail Falls), Villa de Santiago, Nuevo Leon, June 16, 1940 (H. Hoogstraal), June 11, 1936 (A. M. and L. I. Davis), and November 27, 1937 (L. I. Davis and B. Brown).

In its shining appearance, this species resembles *Leiobunum metallicum* Roewer; however, the trochanters in *Leiobunum viridorsum* contrast with the coxae, and in *metallicum* are concolorous. This new species is evidently lighter ventrally than is *metallicum*.

GLABRURUS, NEW GENUS

Tarsal claw toothed, femora lacking nodules, eye tubercle smooth, anterior margin of cephalothorax without spines or elevations, no lateral rows of teeth on the coxae. Chelicerae of male normal. Numerous false articulations in the metatarsi of all legs.

GENOTYPE.—*Glabrurus lutzii*, new species.

This genus is close to *Thrasychirus* Simon, but differs in lacking the enlarged chelicerae of the male.

Glabrurus lutzii, new species

Figure 21

MALE.—Total body length, 4.0 mm. Cephalothorax, 1.3 mm.

	I	II
Trochanter	0.3 mm.	0.4 mm.
Femur	4.0	5.5
Patella	0.9	1.2
Tibia	3.4	5.4
Metatarsus	3.6	4.8
Tarsus	6.3	10.8
Total	18.5 mm.	28.1 mm.

	III	IV
Trochanter	0.4 mm.	0.4 mm.
Femur	3.6	5.2
Patella	0.9	1.1
Tibia	3.2	4.5
Metatarsus	4.1	5.8
Tarsus	6.3	9.0
Total	18.5 mm.	26.0 mm.

	I	II
Trochanter	0.3 mm.	0.3 mm.
Femur	2.1	5.2
Patella	0.6	0.8
Tibia	2.4	5.0
Metatarsus	3.0	4.1
Tarsus	3.6	10.0
Total	12.0 mm.	25.4 mm.

	III	IV
Trochanter	0.3 mm.	0.3 mm.
Femur	3.2	4.5
Patella	0.7	0.8
Tibia	2.4	3.2
Metatarsus	3.2	5.4
Tarsus	4.5	4.5
Total	14.3 mm.	18.7 mm.

Dorsum smooth, eye tubercle scarcely canaliculate, smooth, eyes set very high on the tubercle. Venter smooth, genital operculum armed with a few hairs. Coxae armed with a very few hairs and extremely low tubercles. Legs armed with rows of small hairs. Penis elate.

Palpus: trochanter, 0.2 mm. long; femur, 0.9; patella, 0.4; tibia, 0.8; and tarsus, 1.3. Total length, 3.6 mm. Palpi armed with scattered hairs, inner margin of patella rounded and thickened, but not projected into a spur.

Dorsum mottled dark brown and light yellowish-brown. A distinct dark brown stripe is present extending from behind the eye tubercle onto the posterior part of the abdomen. The stripe is wide, just posterior to the eye tubercle, narrowing for a short distance, then expanding only to narrow down and disappear on the posterior free tergites. Both cephalothorax and abdomen are mottled with a predominance of the darker markings. Eye tubercle likewise mottled with a median light stripe. Venter and coxae mottled but with a predominance of the lighter markings. A dark brown blotch present at the distal end of each coxa. Legs likewise mottled with dark and light portions about equal in area. Palpi mottled with proximal portions darker, shading to light yellowish-brown on the tarsi. The chelicerae mottled, but in general, light in appearance.

TYPE LOCALITY.—Male holotype from Crater of Mt. Toluca, Mexico. June 28, 1936 (A. M. and L. I. Davis).

Hadrobunus davis, new species

Figure 19

FEMALE.—Total length of body, 3.9 mm. Cephalothorax, 1.3 mm.

Dorsum thickly covered with acute black spines, eye tubercle shallowly canaliculate with a row of black-tipped spines over each carina. Anterior margin of the cephalothorax together with the rest of the cephalothorax covered with these spines. Venter armed with scattered hairs, coxae with lateral rows of teeth on the anterior and posterior margins of coxae I to IV. Legs armed with rows of small hairs.

Palpus: trochanter, 0.3 mm. long; femur, 0.8; patella, 0.3; tibia, 0.5; and tarsus, 0.9. Total length, 2.8 mm. Palpi armed throughout with hair, femur with some small spines on the ventral margin. Tarsal claw small and toothed.

Dorsum yellowish brown with a subobsolete marking down the middle of the abdomen. Eye tubercle concolorous with dorsum except for a lighter stripe across the middle. Venter and coxae yellowish brown, trochanters concolorous with coxae, base of femora of legs dark brown, remainder of legs yellowish brown with bands of darker brown. These bands apparent at the distal tips of the femora and the patella, and the distal tip of the tibia. Palpi yellowish brown, darker brown on the dorsal part of the femur, patella, and tibia; tarsi much lighter. Chelicerae light yellowish-brown. Spines covering entire body are black.

TYPE LOCALITY.—Female holotype from Acapulco, Guerrero, June 17, 1936. (L. I. Davis).

This form differs from *Hadrobunus spinulatus* (Banks) in its lighter color, spinier eye tubercle, and dark instead of light bases of the femora.

Hadrobunus knighti, new species

Figure 22

MALE.—Total length of body, 8.3 mm. Cephalothorax, 2.6 mm.

	I	II
Trochanter	0.5 mm.	0.5 mm.
Femur	8.1	11.7
Patella	1.8	1.8
Tibia	6.3	10.7
Metatarsus	8.1	13.8
Tarsus	10.8	15.3
Total	35.6 mm.	53.8 mm.
	III	IV
Trochanter	0.5 mm.	0.5 mm.
Femur	7.7	10.4
Patella	1.5	1.8
Tibia	5.8	8.1
Metatarsus	7.7	12.6
Tarsus	10.1	14.7
Total	33.3 mm.	48.1 mm.

Dorsum covered with numerous scattered black-tipped minute spines. A few spines scattered on the anterior part of the cephalothorax. Some of these spines scattered on the anterior margin of the cephalothorax. These black-tipped spines are especially numerous in the median stripe of the abdomen and on the darker transverse rows. Two rows on the posterior part of the cephalothorax behind the eye tubercle. Venter armed with low tubercles, genital operculum armed with tubercles and lateral rows of teeth. Coxae tuberculate, heavy rows of lateral teeth present on the anterior margin of coxae I to IV, and on the posterior margin of coxa IV. A small inconspicuous row of teeth present on the posterior margin of I and II, lacking entirely on the posterior margin of coxa III. Eye tubercle non-canaliculate, armed with a number of small black-tipped spines.

Penis 7.2 mm. long, elate, ending in an acute point.

Legs armed with rows of spines, trochanters spined. Body extremely robust, pointed posteriorly, arched.

Palpi: trochanter, 0.7 mm. long; femur, 1.8; patella, 0.7; tibia, 1.1; and tarsus, 1.8. Total length, 6.1 mm. Femur straight, armed with hair and spines ventrally. Patella curved, armed with hair, and dorsally and laterally with black-tipped tubercles. Tibia armed with hair, more numerous ventrally. Tarsus covered with numerous hairs, and a row of small black spines ventrally. Tarsal claw toothed.

Dorsum golden brown with a darker median marking on the abdomen, and darker transverse markings across each abdominal segment, and on the two last segments of the cephalothorax. Venter, coxae, trochanters concolorous with dorsum; legs also concolorous with dorsum. Palpi yellowish, lighter than dorsum.

FEMALE.—Total length of body, 8.3 mm. Cephalothorax, 2.7. Femora of legs: I, 6.7 mm.; II, 11.7 mm.; III, 7.2 mm.; and IV, 9.9 mm.

Identical in appearance with male.

TYPE LOCALITY.—Male holotype and female paratypes from vegetation above Horsetail Falls, Hacienda Vista Hermosa, Villa de Santiago, Nuevo Leon, 2500 feet, June 16, 1940 (K. Knight).

This species differs from *Hadrobunus grandis* (Say) and *H. maculosus* (Wood) in the spiny body, concolorous trochanters, lighter dorsum, and spiny eye tubercle. *H. knighti* differs from *H. spinulatus* (Banks) in being lighter in color and having the first femora relatively longer; also the eye tubercle is spinier, the coxae are lighter, and the whitish bases of the femora are lacking. This species differs from *Hadrobunus davisii* in being much larger, and not so spiny.

Leptobuninae Banks

Trachyrhinus marmoratus Banks

Trachyrhinus marmoratus BANKS, 1894, J. New York Ent. Soc., II, p. 145; 1901, Amer. Nat., XXXV, p. 675; 1903, Proc. Acad. Phila., LIII, p. 593.—ROEWER, 1910, Abh. Ver. Hamburg, XIX, fasc. 4, p. 268, Pl. v, figs. 40, 41, and Pl. vi, figs. 20 and 21; 1923, Die Weberknechte der Erde, p. 875, Figs. 1038A and B.

RECORD.—Algodones, Baja California, March 6, 1938 (Prof. T. D. A. Cockerell).

Oligolophinae Banks

Eurybunus spinosus Banks

Eurybunus spinosus BANKS, 1893, Canad. Ent., XXV, p. 209; 1901, Amer. Nat. XXXV, p. 675; 1904, Proc. Calif. Acad., (3) III, p. 362; 1911, Pomona J. Ent., III, p. 419.—ROEWER, 1912, Abh. Ver. Hamburg, XX, p. 261; 1923, Die Weberknechte der Erde, p. 857, Figs. 1027A and B.

RECORD.—Las Cruces, Chihuahua, June 28, 1936 (L. I. Davis).

Diguettinus raptator Roewer

Diguettinus raptator ROEWER, 1912, Abh. Ver. Hamburg, XX, fasc. 1, p. 272, Pl. i, fig. 25; 1923, Die Weberknechte der Erde, p. 863, Fig. 1035.

RECORD.—North Shore of Lake Patzco, 3 miles west of Quiroga, Mexico, November 12, 1939 (C. M. Bogert and H. E. Vokes).

Gagrellinae Thorell

Geaya auruginia, new species

Figure 26

FEMALE.—Total length of body, 5.4 mm. Cephalothorax, 1.6 mm. Femora of legs: I,

9.9 mm.; II, 15.7 mm.; III, 10.0 mm.; and IV, 13.5 mm.

Dorsum finely granulate, distinctly arched abdomen. Eye tubercle scarcely canaliculate, smooth except for small hairs and granulations. Venter granulate, armed with a few hairs, coxae strongly granulate, almost tuberculate. Legs armed with a few hairs, moderately slender, the nodules arranged as characteristic of the genus (three on femur two).

Palpus: trochanter, 0.3 mm. long; femur, 1.1; patella, 0.4; tibia, 0.7; and tarsus, 1.1. Total length, 3.6 mm.

Dorsum golden yellow, some darker brown spots along the median posterior part of the abdomen. Eye tubercle concolorous with dorsum at base, darker on dorsal surface. Venter and coxae concolorous with dorsum. Trochanters and base of femora dark brown, contrasting strongly with the coxae. Legs concolorous with dorsum, slightly darker distally. Palpi and chelicerae concolorous with dorsum.

TYPE LOCALITY.—Female holotype and female paratype from La Buena Ventura,

Vera Cruz, July 17, 1909 (Dr. A. Petrunkevitch). Female paratype from San Gerónimo, Oaxaca, July 28, 1909 (Dr. A. Petrunkevitch).

This new species differs from other species of *Geaya* known to the writers in having a smooth concolorous eye tubercle and lighter body coloration.

Prionostemma coriaceum (Cambridge)

Leiobunum coriaceum CAMBRIDGE, 1904, Biol. Centr. Amer., Arach., II, p. 582.—BANKS, 1909, Proc. Acad. Phila., LXI, p. 232.

Prionostemma coriaceum ROEWER, 1910, Abh. Ver. Hamburg, XIX, fasc. 4, p. 177; 1923, Die Weberknechte der Erde, p. 1078.

RECORDS.—Tonala, Chiapas, August, 1909 (Dr. A. Petrunkevitch). La Buena Ventura, Vera Cruz, July, 1909 (Dr. A. Petrunkevitch). Palomares, Oaxaca, July, 1909 (Dr. A. Petrunkevitch).

BIBLIOGRAPHY

BANKS, N.

- 1898. Some Mexican Phalangida. Journal New York Ent. Soc. VI, pp. 181-185.
- 1900. New Genera and Species of American Phalangida. Journal New York Ent. Soc., VIII, pp. 200-203.
- 1905. Arachnids from Cocos Islands. Proc. Ent. Soc. Washington, VII, pp. 21-23.
- 1908. Three New Species of Tropical Phalangida. Proc. Ent. Soc. Washington, IX, pp. 37-39.

CAMBRIDGE, F. O. P.

- 1897-1905. Arachnida, Araneidea and Opiliones. II, 61 pp., 54 partly colored plates. Biologia Centrali-Americana, Dulau & Company, London.

CHAMBERLIN, R. V.

- 1925. Expedition of the California Academy of Sciences to The Gulf of California in 1921: The Phalangida. Proc. California Acad. Sci., (Ser. 4) XIV, pp. 171-173.

COCKERELL, T. D. A.

- 1916. A New Phalangid from Coronados, Islands. Ent. News, Philadelphia, XXVII, pp. 158-159.

MELLO-LEITAO, CANDIDE DE

- 1933. Quatro Novos Palpatores Neotropicos. Annae. Acad. Brasil Sci., V, pp. 99-103.

ROEWER, C. FR.

- 1910. Revision der Opiliones Plagiostethi (= Opiliones Palpatores) I Teil, Familie der Phalangiidae. Abh. Ver. Hamburg. XIX (heft 4), pp. 1-294.
- 1911. Übersicht der Genera der Subfamilie der Phalanginni der Opiliones Palpatores nebst Beschreibung einiger neuer Gattungen und Arten. Arch. f. Naturg., LXXVII, Bd. I, Suppl. (heft 2), pp. 1-106, 3 Taf.
- 1912. Die Famidien der Assamiden und Phalangodides der Opiliones Laniatorum. Archiv. für Naturg., LXXXVIII (heft 3), pp. 1-244, 157 Figs.
- 1912. Revision der Opiliones Palpatores (= Opiliones Palpatores) II Teil, Familie der Phalangiidae. Abh. Ver. Hamburg, XXX, pp. 1-291, 236 Figs.
- 1923. Die Weberknechte der Erde. 1116 pp., 1212 Figs., Gustav Fischer, Jena.
- 1931. Drei Neue Cosmetiden (Opilioneden) aus Mexico. Zoologischer Anzeiger, XCV, pp. 247-250, 3 Figs.
- 1932. Einige Opilioniden aus Mexico. Gesellschaft Nat. Freunde zu Berlin, pp. 270-272, 5 Figs.

SØRENSEN, WILLIAM

- 1932. Descriptiones Laniatorum. Det. Kongelige Danske Videns. Selskabs Skrift., IX, pp. 199-422.