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REPORT ON A COLLECTION OF SPIDERS FROM MEXICO. III

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In the present paper, which is the third in a series under the above title, forty-nine species of spiders are recorded from Mexico. Twenty-five species diagnosed as new are described, and the types are deposited in the collection of The American Museum of Natural History. As in the previous contributions the material on which this report is based was collected for the most part by Mr. and Mrs. L. I. Davis in various states of Mexico during the past three years. The specimens pertain chiefly to the Thomisidae, Gnaphosidae and Clubionidae. the latter family a new genus, *Phonotimpus*, is proposed for two spiders which are similar in general appearance to Phrurotimpus but differ in characters of the eyes and in the genitalia. Seven species of the related · genus Phrurolithus, a group strongly developed in the United States and apparently not heretofore reported from Mexico, are also described.

Senoculidae

Senoculus prolatus (Cambridge)

Labdacus prolatus O. P. Cambridge, 1896, Biol. Centr. Amer., Araneidea, I, p. 218, Pl. xxvIII. fig. 3.

RECORD.—TAMAULIPAS: twenty-seven miles north of Villa Juarez, April 17, 1938, one immature female presumably this species (A. M. and L. I. Davis).

Ctenidae

Leptoctenus byrrhus (Simon)

Leptoctenus byrrhus Simon, 1888, Ann. Soc. Ent. France, (6) VIII, p. 210.

RECORDS.—NUEVO LEON: twenty-five miles west of Monterrey, July 6, 1936, young female (L. I. Davis). Forty-two miles north of Monterrey, July 7, 1936, male, immature male (L. I. Davis).—

Tamaulipas: San Fernando, March 28, 1937, two young specimens (L. I. Davis).—San Luis Potosi: twenty miles north of Valles, Nov. 26, 1938, young female (A. M. and L. I. Davis).

Cupiennius, sp.

RECORDS.—VERA CRUZ: Vera Cruz, June 22, 1936, immature specimens (L. I. Davis).—SAN LUIS POTOSI: five miles north of Tamazunchale, July 2, 1937, immature specimens (A. M. and L. I. Davis).

Odo limitatus, new species Figure 12

Female.—Total length, 7.50 mm.

	Length	\mathbf{Width}
CARAPACE	$3.25\mathrm{mm}$.	$3.00~\mathrm{mm}$
FRONT	0.60	1.00
STERNUM	1.50	1.50
LABIUM	0.40	0.50
MAXILLA	0.80	0.50
ABDOMEN	4.50	2.60

Carapace light yellowish brown, with an irregular longitudinal black stripe on each side which begins on the side of the head and passes back to the caudal margin, the interval between a pale longitudinal stripe which is as wide as the second eye row in front, is constricted abruptly half way between the eyes and the median groove, immediately expands around the median groove, and is narrowly constricted on the posterior declivity. Sides of the carapace yellowish brown, with four dark spots on each margin. Eye area dark. Clothing of the carapace made up of fine procumbent hairs corresponding in color with the area they cover. Clypeal margin with eight long marginal or submarginal spines and several smaller setae. Underside of the carapace pale yellow, clothed sparsely with erect black hairs. Legs concolorous with the carapace, the femora distinctly marked with two black rings, the tibiae showing only faint traces of darker annulae. Abdomen pale yellow above but almost completely masked with a complicated black pattern, the venter pale, with a few small black spots on the sides.

Carapace slightly longer than broad, sub-

orbicular, the head considerably narrowed, the cephalic grooves only faintly indicated, the median groove a linear depression situated back about five-sevenths the total length of the carapace. Carapace convex, moderately high as seen from the side, about equal in height from the eyes to the posterior declivity which is quite abrupt. Clypeus sloping gently forward, moderately high, equal in height to two diameters of an anterior lateral eye, slightly longer than the diameter of the large median eyes. First row of eyes slightly recurved as seen from in front, the medians separated by one-third their diameter, as far from the laterals which are smaller (27/20). Second row of eyes strongly procurved, a line along the posterior margins of the medians cutting through the anterior third of the lateral eyes. Posterior median eyes separated by onethird their diameter (12/33), very slightly nearer the subequal lateral eyes. Median ocular quadrangle longer than broad (80/70), narrowed in front (70/55), the anterior median eyes much smaller (33/27). Lower margin of the furrow of the chelicera with three teeth of which the one nearest the claw is smallest, the upper margin with six teeth of which the two nearest the claw are mere denticles. Sternum suborbioular, the posterior coxae subcontiguous behind.

All tarsi and metatarsi heavily scopulate beneath and on the sides, the scopular hairs iridescent purple. All tibiae supplied with rows of scopular hairs, particularly on the sides. First and second tibiae with a basal and submedian pair of long ventral spines, the distals lacking. First and second metatarsi with a single ventral pair of spines near the base. Third and fourth tibiae with three pairs of long ventral spines, the last pair apical. Third metatarsus with two pairs, the fourth metatarsus with three pairs of ventral spines, the last pair distal in both cases.

	I	II
FEMUR	$3.50\mathrm{mm}$.	$3.30\mathrm{mm}$.
PATELLA	1.60	1.60
Тівіа	3.25	3.00
METATARSUS	2.70	2.60
TARSUS	1.35	1.25
TOTAL	12.40	11.75
	III	IV
FEMUR	$3.00\mathrm{mm}$.	$4.00 \mathrm{mm}$.
PATELLA	1.40	1.50
Тівіа	2.35	3.40
METATARSUS	2.75	4.20
Tarsus	1.30	1.45

Epigynum as illustrated in Fig. 12.

Type Locality.—Female holotype and immature female paratype from Iguala, Guerrero, June 19, 1936 (A. M. and L. I. Davis).

This curious etenid may be distinguished from *Odo pulcher* Keyserling by reference to the epigynum. In *pulcher* the principal lobes are sharply pointed at the distal end whereas in *limitatus* they are rather evenly rounded.

Zoropsidae

Zorocrates aemulus Gertsch

Zorocrates aemulus Gertsch, 1935, American Mus. Novitates, No. 792, p. 23, Figs. 31 and 32

RECORD.—NUEVO LEON: twenty-eight miles north of Monterrey, July 7, 1936, male, female, and immature specimens (L. I. Davis).

Zorocrates guerrerensis, new species

Figures 9, 10 and 11 MALE.—Total length, 10.10 mm.

	Length	\mathbf{Width}
CARAPACE	$5.80\mathrm{mm}$.	$4.50\mathrm{mm}$.
FRONT	0.70	2.00
STERNUM	2.75	2.40
Labium	0.86	0.80
MAXILLA	1.50	0.70
ABDOMEN	4.50	3.00

Carapace uniform reddish brown, with faint radiating paler streaks, the eyes narrowly ringed with black. Carapace evenly clothed with fine black subprocumbent hairs, the pars cephalica with several erect black bristles particularly in the area just behind the eye group, the clypeus with four long setae. Underside essentially concolorous with the carapace, clothed with fine erect black hairs. Legs reddish brown, unmarked, darker distally, the metatarsi and tarsi dark reddish brown, clothed with rows of black hairs. Abdomen dusky above, with an indistinct pattern of pale spots and transverse markings, the venter pale gray, the clothing black and gray hairs.

Structure essentially typical, in close agreement with Zorocrates fuscus and mistus. Carapace longer than broad, evenly convex, the cephalic sutures practically obsolete, the median groove a deep linear depression situated back seven-elevenths of the total length. Pars cephalica relatively narrow, the width at the second eye row, 2.00 mm. Clypeus rather low, equal in height to scarcely the diameter of an anterior median eye. First row of eyes gently procurved as seen from in front, the medians separated by scarcely one-third their diameter, half as far and almost contiguous with the subequal laterals. Second row of eyes very gently procurved, essentially straight, the medians separated by two-fifths their diameter, almost a full diameter from the subequal lateral eyes. Median ocular quadrangle slightly longer than broad (76/70), equally wide in front and behind. Lower margin of the furrow of the chelicera with three stout teeth, the upper margin with three, of which the median is largest. Sternum slightly longer than broad, oval in outline, bluntly pointed behind, the posterior coxae separated by about one-fourth their width.

All tarsi and the first and second metatarsi thickly scopulate beneath, the posterior metatarsi with a few scopular hairs. First tibia with a weak dorsal, two prolateral, and two retrolateral spines and with 2-2-1-2 ventral spines, the last pair apical. First metatarsus with three prolateral, three retrolateral, and three pairs of ventral spines. Second leg as the first.

	I	II
FEMUR	$5.60\mathrm{mm}$.	$5.00\mathrm{mm}$.
PATELLA	2.65	2.35
TIBIA	5.70	4.60
METATARSUS	5.70	5.00
Tarsus	2.90	2.35
TOTAL	22.55	19.30
	III	IV
Femur	$\begin{array}{c} {\bf III} \\ {\bf 4.70mm.} \end{array}$	IV 6.50 mm.
FEMUR PATELLA		
	4.70 mm.	6.50 mm.
PATELLA	$4.70 \mathrm{mm}.$ 2.15	6.50 mm. 2.50
PATELLA TIBIA	4.70 mm. 2.15 4.20	6.50 mm. 2.50 6.00

Palpus as illustrated in Figs. 9 and 10. Female.—Total length, 15.00 mm.

	Length	$\mathbf{W}\mathbf{idth}$
CARAPACE	6.10 mm.	4.60 mm.
FRONT	1.00	2.60
STERNUM	2.70	2.45
LABIUM	2.15	2.00
MAXILLA	1.80	1.00
ABDOMEN	9.00	5.00

Coloration and general structure in close agreement with the male. Legs relatively shorter.

	I	II
FEMUR	$5.20\mathrm{mm}$.	4.75 mm.
PATELLA	2.65	2.60
Тівіа	5.00	5.00
METATARSUS	4.15	4.20
Tarsus	2.20	2.20
TOTAL	19.20	18.75
	III	IV
Femur	III 4.15 mm.	IV 5.65 mm.
Femur Patella		
	4.15 mm.	5.65 mm.
PATELLA	4.15 mm. 2.10	5.65 mm. 2.35
PATELLA TIBIA	4.15 mm. 2.10 3.40	5.65 mm. 2.35 5.20

Epigynum as illustrated in Fig. 11.

Type Locality.—Male holotype, female allotype, and female and immature paratypes from twelve miles north of Acapulco, Guerrero, June 18, 1936 (L. I. Davis).

This species agrees in general characters with Zorocrates mistus Cambridge. It is distinct in the male palpus which has the median apophysis of the bulb falciform, not bibranchiate. Zorocrates guerrerensis, new species, may be distinguished from fuscus in that the median apophysis lacks a small barb on the inner margin.

Heteropodidae

Heteropoda venatoria (Linnaeus)

Aranea venatoria Linnaeus, 1767, Systema Naturae, 12th Ed., p. 1035.

RECORD.—GUERRERO: Acapulco, June 17, 1936, immature female (L. I. Davis).

Thomisidae

Parasynaema cirripes (Cambridge)

Synaema cirripes Cambridge, 1891, Biol. Centr. Amer., Araneidea, I, p. 79, Pl. x, fig. 11.

RECORD.—Morelos: Cuernavaca, June 20, 1936, female (L. I. Davis).

Misumenops coloradensis Gertsch

Misumenops coloradensis Gertsch, 1933, American Mus. Novitates, No. 636, p. 17, Figs. 15 and 46.

RECORDS.—VERA CRUZ: Potrero, June 24, 1936, female (L. I. Davis).—Coahuila: Saltillo, July 3, 1936, female (L. I. Davis). Five miles west of Saltillo, July 5, 1936, male, immature female (L. I. Davis).

Misumenops dubius (Keyserling)

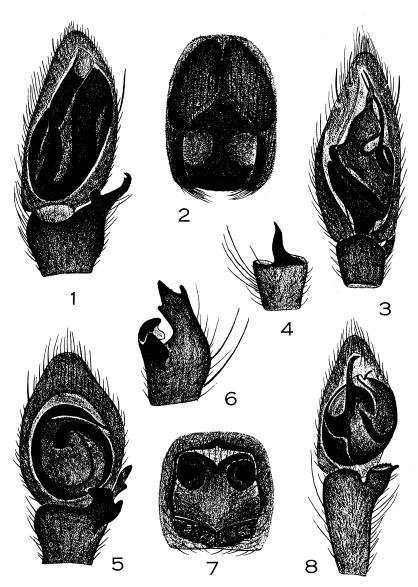
Misumena dubia Keyserling, 1880, Die Spinnen Amerikas, Laterigradae, p. 79, Pl. 11, fig. 41.

RECORDS.—NUEVO LEON: China, Nov. 28, 1937, female (L. I. Davis and B. Brown).—San Luis Potosi: Tamazunchale, Nov. 25, 1938, male (A. M. and L. I. Davis). Four miles north of Valles, Nov. 26, 1938, female (A. M. and L. I. Davis).—Guerrero: Acapulco, June 17, 1936, male (L. I. Davis).

Misumenops obesulus, new species Figures 5 and 6

MALE.—Total length, 3.00 mm.

	Length	\mathbf{Width}
CARAPACE	$1.35\mathrm{mm}$.	$1.50\mathrm{mm}$.
FRONT	0.35	0.70
STERNUM	0.70	0.70
Labium	0.25	0.22
MAXILLA	0.44	0.18
ABDOMEN	1.65	1.40



Herpyllus coahuilanus, new species, left male palpus, ventral view. Idem, epigynum.

Megamyrmecium cambridgei, new species, left male palpus, ventral view. Idem, tibia of left male palpus, retrolateral view.

Misumenops obesulus, new species, left male palpus, ventral view. Idem, tibia of left male palpus, retrolateral view.

Laronia reynosana, new species, epigynum.

Syrisca nebulosa, new species, left male palpus, ventral view.

Fig. 1. Fig. 2. Fig. 3. Fig. 4. Fig. 5. Fig. 6. Fig. 7. Fig. 8.

Carapace dull yellow, the margins with a very narrow black seam, marked above with an indistinct dusky green maculation on each side behind the lateral eyes. Carapace smooth, with six stout erect black spines on the upper margin of the posterior declivity and similar spines over most of the pars cephalica. Clypeal margin with six principal robust spines. Underside of the carapace pale yellow to white, clothed sparsely with black hairs. Integument of the legs pale yellow, marked with red annulae, set with a few black hairs and numerous erect black spines. Abdomen yellow above, armed with erect spines which are barbed at the ends. Venter of the abdomen pale yellow.

Structure essentially typical for the genus. Carapace somewhat broader than long, relatively high and convex, the median groove and cephalic sutures obsolete. First row of eyes recurved, the medians separated by two full diameters, about one and one-half diameters from the larger lateral eyes. Clypeus equal in height to two diameters of an anterior median eye. Second row of eyes recurved, the medians separated by two and one-half times their diameter, three diameters from the larger lateral eyes. Median ocular quadrangle as broad as long, as wide in front as behind, the posterior median eyes smaller.

First femur with six dorsal spines, eleven prolateral spines, and several other small ones on these surfaces. First tibia with three dorsal, three prolateral, three retrolateral, and four pairs of ventral spines, the last pair apical. First metatarsus with two prolateral, two retrolateral, and three pairs of ventral spines. First leg: femur, 1.90 mm., patella, 0.70 mm., tibia, 1.60 mm., metatarsus, 1.70 mm., and tarsus, 0.65 mm. long.

Palpus as illustrated in Figs. 5 and 6.

Type Locality.—Male holotype from Rio Frio at Limon, Tamaulipas, April 18, 1938 (L. I. Davis).

This interesting species is easily distinguished from typical members of the genus by the embolus of the male palpus which is relatively short, stout, and does not form a spiral. The tutaculum is very feebly developed. In *Misumenops oblongus* (Keyserling) and *M. bellulus* (Banks), forms most nearly approaching it, the embolus is very much longer and follows the curve of the tegulum around the retrolateral side to near the base. In *obesulus* the embolus projects transversely across the distal end of the tegulum.

Xysticus facetus Cambridge

Xysticus facetus Cambridge, 1896, Biol. Centr. Amer., Araneidea, I, p. 179, Pl. xxII, fig. 1.

RECORD.—MORELOS: Cuernavaca, June 20, 1936, male (L. I. Davis).

Xysticus funestus Keyserling

Xysticus funestus Keyserling, 1880, Die Spinnen Amerikas, Laterigradae, p. 10, Pl. 1, fig. 2.

RECORD.—NUEVO LEON: Monterrey, Nov. 27, 1937, female (A. M. and L. I. Davis and B. Brown).

Xysticus texanus Banks

Xysticus texanus Banks, 1904, Journ. New York Ent. Soc., XII, p. 112.

RECORDS.—NUEVO LEON: twenty-eight miles north of Monterrey, July 7, 1936, immature male (L. I. Davis). Seventy-six miles north of Monterrey, July 7, 1936, two immature females (L. I. Davis).

Coriarachne versicolor Keyserling

Coriarachne versicolor Keyserling, 1880, Die Spinnen Amerikas, Laterigradae, p. 53, Pl. 1, fig. 27.

RECORD.—VERA CRUZ: fifteen miles west of Jalapa, June 23, 1937, female (A. M. and L. I. Davis).

Gnaphosidae

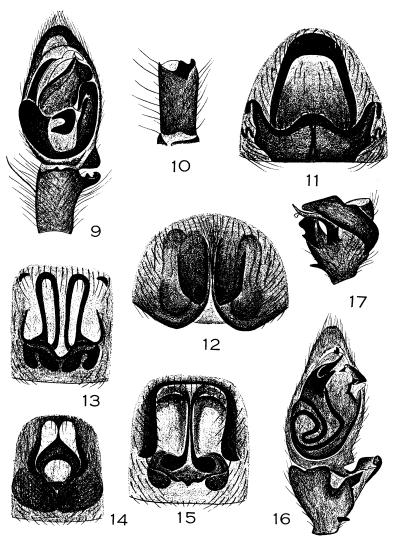
Herpyllus coahuilanus, new species Figures 1 and 2

MALE.—Total length, 7.75 mm.

	Length	\mathbf{Width}
CARAPACE	$3.40\mathrm{mm}$.	2.65 mm.
FRONT	0.40	1.12
STERNUM	2.00	1.40
LABIUM	0.50	0.38
MAXILLA	0.80	0.40
ABDOMEN	4.25	2.80

Integument of the carapace evenly clothed with very fine procumbent white hairs and more sparsely set with suberect black hairs. Carapace yellowish brown to orange, without markings, but the eyes narrowly ringed with black. Underside of the carapace and the legs concolorous with the carapace, clothed with black hairs. Abdomen dusky gray to black, the base of the dorsum with the usual orange sclerite, the dorsum clothed with gray hairs. Base of the venter and the spinnerets light orange, the remainder dusky gray.

Structure in close agreement with *Herpyllus hesperolus* Chamberlin. Eyes of the first row very weakly procurved, the medians separated by their radius, subcontiguous with the slightly



Zorocrates guerrerensis, new species, left male palpus, ventral view. Idem, tibia of left male palpus, retrolateral view. Idem, epigynum.

Odo limitatus, new species, epigynum.

Zelotes acapulcoanus, new species, epigynum.

Gnaphosa sandersi, new species, epigynum.

Drassyllus coahuilanus, new species, epigynum.

Corinna annamae, new species, left male palpus, ventral view.

Idem, tibia of left male palpus, retrolateral view.

- Fig. 9. Fig. 10. Fig. 11. Fig. 12. Fig. 13. Fig. 14. Fig. 15. Fig. 16. Fig. 17.

smaller laterals. Clypeus equal in height to the diameter of an anterior lateral eye. Second row of eyes very weakly procurved, the medians separated by two-thirds their long diameter, a full diameter from the subequal lateral eyes. Median ocular quadrangle slightly longer than broad (63/55), slightly wider in front (55/50), the eyes subequal.

Legs moderately long, the first tibia without dorsal but with three ventral pairs of spines of which the third is distal and a weak prolateral spine near the base. First and second metatarsi with a single pair of ventral spines at the base. Second tibia with a weak distal prolateral spine and three pairs of ventrals. First leg: femur, 2.50 mm., patella, 1.45 mm., tibia, 2.00 mm., metatarsus, 1.52 mm., and tarsus, 1.00 mm. long. Fourth leg: femur, 2.80 mm., patella, 1.50 mm., tibia, 2.30 mm., metatarsus, 2.75 mm., and tarsus, 1.20 mm. long.

Palpus as illustrated in Fig. 1. Female.—Total length, 10.50 mm.

	Length	Width
CARAPACE	4.50 mm.	3.35 mm.
FRONT	060	1.40
STERNUM	2.30	1.75
LABIUM	0.70	0.55
MAXILLA	1.15	0.70
ABDOMEN	5.75	3.50

Color and general structure in close agreement with the male. Eyes more widely separated, the posterior medians separated by their diameter, slightly farther from the subequal laterals. Anterior median eyes separated by two-thirds their diameter, distinctly larger than the posterior medians. Median ocular quadrangle as broad as long, wider in front.

Legs moderately long, the first tibia with three single ventral spines, the first and second metatarsi with a single ventral pair of spines at the base. First leg: femur, 3.35 mm., patella, 1.95 mm., tibia, 2.45 mm., metatarsus, 2.05 mm., and tarsus, 1.50 mm. long. Fourth leg: femur, 3.90 mm., patella, 2.00 mm., tibia, 2.90 mm., metatarsus, 3.50 mm., and tarsus, 1.55 mm. long.

Epigynum as illustrated in Fig. 2.

Type Locality.—Male holotype and female allotype from Diamante Drive, five miles southeast of Saltillo, Coahuila, Nov. 26, 1937 (A. M. and L. I. Davis).

This species resembles Herpyllus hesperolus Chamberlin in general features but differs in color, being much darker, and in the genitalia. The female epigynum is comparatively larger and has a shallow excavation on each side. The male palpus agrees with hesperolus in having the tip of the tibial apophysis bifid but has in addition a rounded spur near the base.

Cesonia lugubris (Cambridge)

Helvidius lugubris O. P. CAMBRIDGE, 1896, Biol. Centr. Amer., Araneidea, I, p. 221, Pl. xxvii, fig. 1.

RECORD.—PUEBLA: seven miles south of Tlacotepec, June 24, 1936, female, immature male (A. M. and L. I. Davis).

Nodocion iugans Chamberlin

Nodocion iugans Chamberlin, 1922, Proc. Biol. Soc. Washington, XXXV, p. 154.

RECORD.—COAHUILA: Saltillo, July 3, 1936, male (L. I. Davis).

Drassyllus coahuilanus, new species

Figure 15

FEMALE.—Total length, 3.55 mm.

	\mathbf{Length}	$\mathbf{W}\mathbf{idth}$
CARAPACE	$1.45\mathrm{mm}$.	$1.05 \mathrm{mm}$.
FRONT	0.20	0.50
STERNUM	0.90	0.70
Labium	0.25	0.22
MAXILLA	0.35	0.22
ABDOMEN	2.05	1.25

Carapace light yellowish brown, with a faint V-shaped black maculation just in front of the median groove, the margins with a narrow black marginal seam, the eye area mostly black. Carapace clothed very sparsely with short erect black hairs. Underside of the carapace pale yellowish brown, clothed with erect black hairs. Legs concolorous with the carapace, but the patella and tibia of the first pair black and the same joints of the second pair lightly infuscated. Dorsum of the abdomen dusky gray, with a greenish iridescence due to small scales, the venter paler. Abdomen with the usual patch of stout setae overlapping the base but otherwise evenly clothed with black hairs.

Structure typical for the genus. Clypeus low, equal in height to one-half the diameter of an anterior lateral eye. First row of eyes moderately procurved, the medians separated by scarcely their radius, subcontiguous with the larger laterals. Second row of eyes weakly procurved, the large oval medians set obliquely, almost contiguous, slightly separated from the smaller lateral eyes. Median ocular quadrangle longer than broad (30/27), narrowed in front (27/25), the anterior median eyes smaller. Sternum bluntly pointed behind, the posterior coxae separated by about one-half their width. Lower margin of the furrow of the chelicera with two small teeth.

First and second tibiae unspined, the corresponding metatarsi with a pair of ventral spines near the base. Fourth tibia lacking dorsal spines.

	I	II
FEMUR	1.40 mm.	1.15 mm.
PATELLA	0.83	0.75
Tibia	1.06	0.85
METATARSUS	0.90	0.75
Tarsus	0.80	0.68
TOTAL	4.99	4.18
	III	IV
Femur	III 1.00 mm.	IV 1.50 mm.
FEMUR PATELLA		
	1.00 mm.	1.50 mm.
PATELLA	1.00 mm. 0.55	1.50 mm. 0.85
PATELLA TIBIA	1.00 mm. 0.55 0.65	1.50 mm. 0.85 1.20

Epigynum as illustrated in Fig. 15.

Type Locality.—Female holotype from Saltillo, Coahuila, July 18, 1937 (Ottys Sanders).

This species is closely related to *Drassyllus mephisto* Chamberlin from Texas and is best separated by the color pattern of the dorsum of the abdomen. In *mephisto* the basal color is pale yellow or white on which is superimposed a pattern in black, whereas in *coahuilanus* the abdomen is a uniform dusky gray. The epigyna are very similar and the eye relations are essentially the same although the posterior medians in *mephisto* are somewhat larger.

Zelotes acapulcoanus, new species
Figure 13

FEMALE.—Total length, 3.95 mm.

	Length	Width
CARAPACE	$1.50\mathrm{mm}$.	1.14 mm.
FRONT	0.20	0.60
STERNUM	0.92	0.75
LABIUM	0.28	0.22
MAXILLA	0.43	0.25
ABDOMEN	2.40	1.50

Carapace chestnut, shining, with a V-shaped black figure defining the pars cephalica and radiating lines which expand to the margins, the eye region black, clothed sparsely with erect black hairs. Sternum dull orange, the labium and maxillae darker, the coxae paler, all sparsely clothed with black hairs. Legs yellowish brown, lighter than the sternum, set with rows of black hairs. Abdomen nearly black, with a greenish iridescence due to flat green scales which evenly cover the dorsum, otherwise sparsely set with suberect black hairs and with the usual longer hairs at the base which form a dense brush. Venter of the abdomen pale yellow.

Structure essentially typical for the genus, the cephalic sutures obsolete, the median groove a short linear depression. Clypeus narrow, equal

in height to the diameter of the small anterior median eyes. First row of eyes weakly procurved, the medians separated by the radius, subcontiguous with the larger laterals. Second row of eyes straight, the medians separated by their radius, nearer the subequal laterals. Median ocular quadrangle longer than broad (24/22), slightly narrowed in front (20/22), the anterior medians slightly smaller. Lower margin of the furrow of the chelicera with two teeth.

First leg unspined except for two dorsals and a weak prolateral on the femur. Fourth tibia with two prolaterals, two retrolaterals, and three pairs of ventral spines. First leg: femur, 1.00 mm., patella, 0.66, tibia, 0.80 mm., metatarsus, 0.65 mm., and tarsus, 0.47 mm. long. Fourth leg: femur, 1.13 mm., patella, 0.66 mm., tibia, 0.90 mm., metatarsus, 1.10 mm., and tarsus, 0.57 mm. long.

Epigynum as illustrated in Fig. 13.

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

This species agrees in general coloration with such species of *Drassyllus* as depressus, eremitus, and fallens. It is smaller and paler than most species of Zelotes with which genus its structural characters are associated. The principal tube of the epigynum forms a long loop clearly visible through the integument. In Zelotes moestus (Cambridge) the homologous tube is less than half as long.

Gnaphosa sandersi, new species Figure 14

FEMALE.—Total length, 7.00 mm.

	Length	Width
CARAPACE	3.15 mm.	2.25 mm.
FRONT	0.40	1.00
STERNUM	1.55	1.25
LABIUM	0.47	0.44
MAXILLA	0.60	0.44
ABDOMEN	3.80	2.50

Carapace dusky brown, with a V-shaped black figure just in front of the median groove and radiating dark lines and reticulations on the sides, clothed sparsely with erect black hairs, the clypeal margin with nine long spines and several shorter bristles. Sternum dusky brown, the labium brighter brown, the maxillae and coxae yellowish brown, all clothed evenly with short black hairs. Legs dusky brown, paler distally. Abdomen dark gray, thickly clothed with procumbent gray hairs and set with suberect black hairs.

Structure typical for the genus, the carapace relatively low, evenly convex, the cephalic sutures feebly indicated, the median groove a short linear depression. Clypeus equal in height to the diameter of an anterior lateral eye. First row of eyes very much narrower than the second (75/105), weakly procurved, the medians separated by two-thirds their diameter, half as far from the larger laterals. Second row of eyes strongly procurved, the suboval medians separated by two-thirds their diameter, farther from the laterals (15/24). Median ocular quadrangle longer than broad (50/36), as wide in front as behind, the anterior medians smaller.

First leg unspined except for one prolateral and two dorsal spines on the femur, a distal pair beneath the tibia, and a basal pair and single distal beneath the metatarsus. Fourth tibia with three pairs of ventral spines. First leg: femur, 1.80 mm., patella, 1.10 mm., tibia, 1.35 mm., metatarsus, 1.10 mm., and tarsus, 0.97 mm. long. Fourth leg: femur, 2.10 mm., patella, 1.10 mm., tibia, 1.65 mm., metatarsus, 2.10 mm., and tarsus, 1.20 mm. long.

Epigynum as illustrated in Fig. 14.

Type Locality.—Female holotype and paratype from Saltillo, Coahuila, July 18, 1937 (Ottys Sanders).

This spider resembles Gnaphosa californica Banks in general appearance but is distinct in the epigynum. In this organ the elevated, median tubercle or septum is much larger, broader, and almost fills the atrium, whereas in californica the tubercle is about one-third as wide as the atrium.

Gnaphosa sericata (L. Koch)

Pythonissa sericata L. Koch, 1866, Arachn. Fam. der Drassiden, p. 31, Pl. 11, fig. 21.

RECORDS.—PUEBLA: seven miles south of Tlacotepec, June 24, 1936, female (A. M. and L. I. Davis).—Tamaulipas: Mier, Oct. 24, 1937, female (L. I. Davis).

Callilepis munda Chamberlin

Callilepis munda Chamberlin, 1936, American Mus. Novitates, No. 841, p. 16, Figs. 22, 23, and 24.

RECORDS.—NUEVO LEON: fifty-four miles south of Laredo, Texas, July 1, 1936, three females (L. I. Davis). Twenty-eight miles north of Monterrey, July 7, 1936, female (L. I. Davis).—Tamaulipas: Arroyo La Chorera, March 28, 1937, female (A. M. and L. I. Davis).

Laronia reynosana, new species Figure 7

FEMALE.—Total length, 7.00 mm.

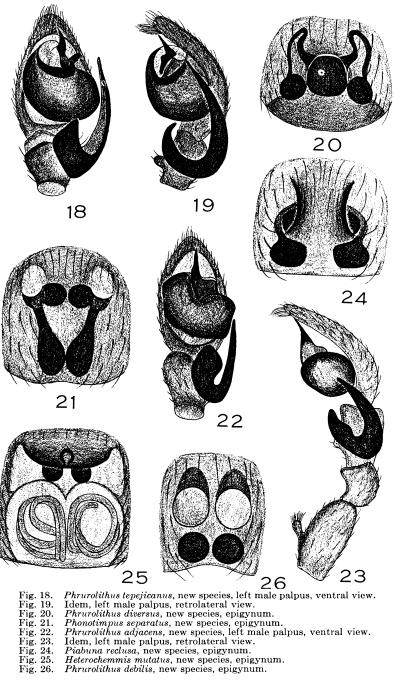
	Length	Width
CARAPACE	$2.80\mathrm{mm}$.	$2.00\mathrm{mm}$.
FRONT	0.26	1.20
STERNUM	1.66	1.25
LABIUM	0.55	0.40
MAXILLA	0.93	0.44
ABDOMEN	4.00	2 . 35

Carapace nearly black, somewhat lighter above and marked with narrow radiating black lines, clothed very sparsely with a few erect black hairs, the clypeal margin with eight long principal bristles and several shorter ones. Sternum paler brown, clothed with erect black hairs of which most are concentrated on the margins. Labium and maxillae somewhat darker brown. clothed with black hairs. Legs concolorous with the carapace, lighter above, set with stout black hairs and strong spines. Chelicerae nearly black, excavated on the inner margin and set with numerous strong spines. Abdomen gray, deeply infuscated, lighter in the middle but showing no distinct pattern, the clothing short black hairs. Venter of the abdomen dark gray, with two pale longitudinal lines.

Structure essentially typical. Carapace relatively high, broadly convex, the pars cephalica broad and truncated in front. Median groove obsolete. Clypeus low, equal in height to the diameter of an anterior median eye. Eye group occupying eight-seventeenths of the width of the carapace at the second eye row. First row of eyes procurved, the medians separated by twothirds their diameter, a little less than half as far from the laterals which are larger (21/15). Second row of eyes moderately recurved, the medians separated by somewhat more than their diameter (21/15), a full diameter from the slightly larger laterals. Median ocular quadrangle broader than long (26/24), narrowed in front (26/22), the eyes subequal. Lateral eyes of each side separated by the diameter of the posterior lateral eye which is smaller. Lower margin of the furrow of the chelicera with the rounded keel characteristic of the genus. Sternum bluntly pointed behind, the posterior coxae separated by five-eighths of their width.

First three tarsi, and presumably the fourth, lightly scopulate beneath, the corresponding metatarsi without scopular hairs. First tibia with two weak prolateral spines and three ventral pairs, the first metatarsus with a submedian pair and a distal pair beneath.

	ľ	II
FEMUR	1.70 mm.	1.60 mm.
PATELLA	0.94	0.94
TIBIA	1.13	1.03
METATARSUS	0.93	0.95
Tarsus	0.60	0.62
TOTAL	5.30	5.14



- Fig. 18. Fig. 19. Fig. 20. Fig. 21. Fig. 22. Fig. 23. Fig. 24. Fig. 25. Fig. 26.

	III	IV
FEMUR	$1.35\mathrm{mm}$.	$1.40\mathrm{mm}$.
PATELLA	0.78	0.75
Tibia	0.95	1.10
METATARSUS	1.06	
Tarsus	0.64	
TOTAL	4.78	

Epigynum as illustrated in Fig. 7.

Type Locality.—Female holotype from Reynosa, Tamaulipas, May 2, 1936 (Stanley Mulaik).

This interesting spider is distinct from Laronia purpusi Roewer in its much greater size (7.00 mm. as compared with 4.50 mm.), in the greater number of ventral spines beneath the first tibia (2–2–2 as compared with 1–1–2), and in the epigynum which is illustrated.

Megamyrmecium cambridgei,

new species
Figures 3 and 4
MALE.—Total length, 4.20 mm.

	Length	Width
CARAPACE	1.80 mm.	1.27 mm.
FRONT	0.25	0.55
STERNUM	1.10	0.85
LABIUM	0.23	0.25
MAXILLA	0.37	0.22
ABDOMEN	2.40	1.20

Carapace pale yellow, without markings except for the narrow black rings around the eyes and the dusky area they enclose. Clothing of the carapace made up of fine procumbent pale hairs and a few longer setae on the sides of the posterior declivity and on the clypeus. Underside of the carapace and the appendages somewhat duller than the carapace, without markings, clothed with pale hairs. Abdomen dull white to pale yellow above, clothed evenly with gray hairs and with an inconspicuous, lightly sclerotized yellow scutum at the base and the usual brush of stouter setae at that point.

Structure typical, in close agreement with M. naturalisticum Chamberlin. Carapace longer than broad, relatively narrowed in front, the cephalic sutures obsolete, the median groove a slight linear depression situated back threefourths of the total length. Clypeus low, equal in height to one-half the diameter of an anterior lateral eye. First row of eyes strongly procurved, a line along the upper surfaces of the laterals touching the lower margins of the medians. Anterior median eyes large, dark in color, separated by one-third their diameter, contiguous with the somewhat smaller lateral eyes. Second row of eyes strongly procurved, the oval medians separated by one-third their short diameter, twice as far from the slightly smaller lateral eyes. Median ocular quadrangle longer than broad (45/40), broader in front (40/35), the eyes subequal. Lower margin of the furrow of the chelicera unarmed. Sternum suboval, bluntly pointed behind, the posterior coxae separated by about one-third their width.

All tarsi scopulate beneath, the first two more thickly clothed; the first and second metatarsi with scopular hairs but those joints of the posterior legs apparently lacking them. First tibia with one prolateral spine and three ventral pairs, the last pair apical; the first metatarsus with a basal pair beneath and a single submedian spine or pair of spines. Fourth tibia with a single basal and a submedian spine above.

	I	II
FEMUR	1.46 mm.	1.30 mm.
PATELLA	0.83	0.80
Тівіа	1.07	0.95
METATARSUS	1.07	1.02
Tarsus	0.80	0.75
TOTAL	5.23	4.82
	III	IV
FEMUR	$1.20\mathrm{mm}$.	1.66 mm.
PATELLA	0.60	0.80
Тівіа	0.85	1.30
METATARSUS	1.07	1.66
Tarsus	0.77	0.95
TOTAL	4.49	6.37

Palpus as illustrated in Figs. 3 and 4.

An immature female agrees closely in structure with the male.

Type Locality.—Male holotype and immature female allotype from one mile west of Lerdo, Durango, July 4, 1936 (I. I. Davis). Two immature females from Iguala, Guerrero, probably belong to this species.

This interesting spider is distinct from Megamyrmecium naturalisticum Chamberlin in the tibial apophysis which is much more slender at the base and more sharply pointed at the distal end as illustrated.

Clubionidae

Meriola decepta Banks

Meriola decepta Banks, 1895, Journ. New York Ent. Soc., III, p. 81.

RECORDS.—NUEVO LEON: Monterrey, June 10, 1936, two males and two females (I. I. Davis). Seventy-six miles north of Monterrey, July 7, 1936, male and female (L. I. Davis).—Coahulla: Saltillo, June 3, 1936, two males (L. I. Davis).

Trachelas transversus Cambridge

Trachelas transversus F. Cambridge, 1899, Biol. Centr. Amer., II, p. 77, Pl. vi, figs. 1 and 2.

RECORD.—VERA CRUZ: Potrero, June 24, 1936, male (L. I. Davis).

Trachelas volutus Gertsch

Trachelas volutus Gertsch, 1935, American Mus. Novitates, No. 805, p. 13, Figs. 27 and 28.

RECORDS.—NUEVO LEON: Monterrey, June 10, 1936, male and female (L. I. Davis). Seventy-six miles north of Monterrey, June 7, 1936, female (L. I. Davis).—HIDALGO: Jacala, June 13, 1936, male and immature female (L. I. Davis).

Corinna annamae, new species

Figures 16 and 17 Male.—Total length, 4.00 mm.

	Length	\mathbf{Width}
CARAPACE	$1.94 \mathrm{mm}$.	1.47 mm.
FRONT	0.35	0.80
STERNUM	1.00	0.92
LABIUM	0.26	0.36
MAXILLA	0.57	0.35
ABDOMEN	1.90	1.20

Integument of the carapace provided with a few erect black hairs, most of them on the pars cephalica, the clypeal margin and the ocular region set with long bristles. Carapace smooth and shining, dark brown, lightest on the pars cephalica, the thoracic portion with radiating darker brown lines and irregular faint side markings. Sternum, labium, and maxillae yellowish brown, with fine black hairs, the chelicerae dark brown. Legs pale yellow, the femora with faint brown rings at the distal end, the other joints unmarked. Abdomen purple to black above, with a pale spot above the white spinnerets, the venter pale.

Carapace longer than broad, convex, broad in front, the width at the second eye row, 0.91 mm., the cephalic sutures obsolete, the median groove a slight linear depression situated back about seven-tenths of the total length of the carapace. Clypeus equal in height to the diameter of an anterior median eye. First eye row five-sixths as wide as the second, procurved, the medians separated by two-thirds their diameter (10/15), half as far from the slightly larger suboval laterals. Second row of eyes weakly procurved, the medians separated by more than the diameter (12/14), slightly farther from the equal laterals (12/15). Median ocular quadrangle as broad as long, slightly narrowed in front (35/ 39). Chelicera with numerous small cusps on the frontal surface from which originate fine long hairs, the lower margin with four stout subequal teeth, the upper margin with three teeth of which the middle one is largest.

First tibia with 2-2-2-0, the metatarsus with 2-2-0 ventral spines; second tibia with 1-1-0, the metatarsus with 2-2-0 ventral spines; third and fourth tibiae and metatarsi with 2-2-2 ventral spines. First two pairs of legs lacking dorsal or lateral spines except for a small distal prolateral on the femora. Posterior legs with lateral spines. First leg: femur, 1.53 mm., patella, 0.65 mm., tibia, 1.33 mm., metatarsus, 1.23 mm., and tarsus, 0.98 mm. long. Fourth leg: femur, 1.80 mm., patella, 0.70 mm., tibia, 1.60 mm., metatarsus, 1.86 mm., and tarsus, 0.98 mm. long.

Palpus as illustrated in Figs. 16 and 17.

Type Locality.—Male holotype from sixty-two miles north of Acapulco, Guerrero, June 18, 1936 (A. M. and L. I. Davis).

The species differs from all others from Mexico in size, being very much smaller (4.00 mm., as compared with 7.00 mm. to 20.00 mm.). It is easily separated from the males of the known forms by the details of the palpus, particularly in the form of the tibial apophyses. In side view the tibia presents three principal apophyses of which the median is relatively small and slender and which fits along the inner margin of the dorsal apophysis. Near the base of the tibia on the ventral aspect is a small spur not present in other species.

Mazax spinosa (Cambridge)

Mazax spinosa O. P. CAMBRIDGE, 1898, Biol. Centr. Amer., Araneidea, I, p. 276, Pl. xxxiv, fig. 2.

RECORD.—GUERRERO: Potrero, June 24, 1936, female (L. I. Davis).

Castaneira plorans (Cambridge)

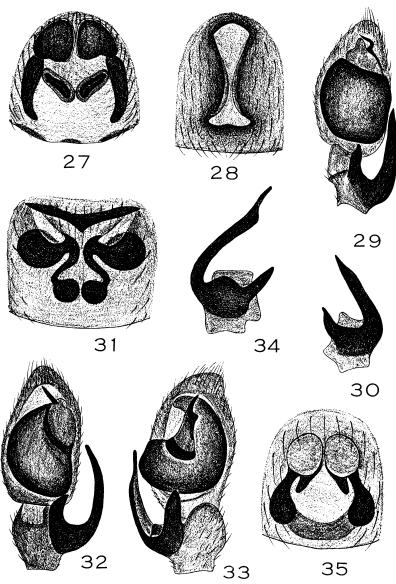
Pedo plorans O. P. Cambridge, 1898, Biol. Centr. Amer., Araneidea, I, p. 274, Pl. xxxiii, figs. 10 and 11.

RECORDS.—PUEBLA: Tehuacan, June 24, 1936, immature male (L. I. Davis).—MEXICO: twenty miles west of Toluca, June 27, 1936, immature female (L. I. Davis).

Castaneira amoena (C. Koch)

Corinna amoena C. Koch, 1842, DIE ARACHNIDEN, IX, p. 21, Pl. ccxciv, p. 705.

RECORD.—NUEVO LEON: seventy-six miles north of Monterrey, July 7, 1936, female (L. I. Davis).



Phonotimpus eutypus, new species, epigynum.
Micaria melanopa, new species, epigynum.
Phrurolithus approximatus, new species, left male palpus, ventral view.
Idem, tibia of left male palpus, retrolateral view.

Fig. 27. Fig. 28. Fig. 29. Fig. 30. Fig. 31. Fig. 32. Fig. 33. Fig. 34. Fig. 35. Clubiona exempta, new species, epigynum.

Phrurolithus tamaulipanus, new species, left male palpus, ventral view.

Phrurolithus tamaulipanus, new species, right male palpus, ventral view.

Idem, tibia of right male palpus, retrolateral view.

Idem, epigynum.

Castaneira peregrina (Gertsch)

Mazax peregrina Gertsch, 1935, American Mus. Novitates, No. 805, p. 15, Fig. 30 (not Fig. 29).

RECORD.—TAMAULIPAS: seven miles south of Hidalgo, July 3, 1936, male (L. I. Davis).

Micaria melanopa, new species

Figure 28

Female.—Total length, 3.50 mm.

	Length	Width
CARAPACE	$1.40\mathrm{mm}$.	$0.80\mathrm{mm}$.
FRONT	0.25	0.50
STERNUM	0.72	0.53
Labium	0.17	0.16
MAXILLA	0.27	0.15
ABDOMEN	2.00	1.10

Carapace dark brown, with numerous radiating black lines which approach the margins on the sides and with a large black figure in front of the obsolete median groove from which a branch continues forward on each side to the side of the head. Clypeus with several weak black setae. Pars thoracica with white scales. Sternum yellow, dusted with black, the labium and endites concolorous, the coxae bright yellow beneath but with a black ring at the distal end. Legs brown to dull yellow, the first femora all brown, the distal joint yellowish. Third and fourth femora brown but with a pale dorsal stripe and a narrower pale stripe on the prolateral and retrolateral surfaces the length of the joint. Patellae and tibiae of the third and fourth legs with brown side stripes continued from those on the femora. Abdomen a long oval, black in color. shining, the sheen due to a covering of iridescent black scales. Abdomen very lightly constricted near the middle, with a circular patch of white scales on each side. Venter of the abdomen gray to black, with white scales on the sides, concentrated in the weak constriction.

Carapace much longer than broad, convex, highest behind the eye group, very gently sloping forward over the eyes and caudally to the margin. Median groove obsolete. Clypeus equal in height to slightly more than the diameter of an anterior median eye. First row of eyes moderately procurved, the medians separated by the radius, subcontiguous with the slightly smaller lateral eyes. Second row of eyes slightly procurved, the medians narrowly oval, separated by their diameter, as far from the subequal lateral eyes. Median ocular quadrangle slightly longer than broad (25/21), as wide behind as in front, the anterior median eyes larger. Lateral eyes of each side separated by one and one-fourth times their diameter. Posterior coxae separated by two-thirds their width at the base. Lower margin of the furrow of the chelicera with a single tooth.

Anterior legs without spines; the posterior legs with weak ventral and lateral spines.

	I	II
FEMUR	$0.75\mathrm{mm}$.	$0.80\mathrm{mm}$
PATELLA	0.37	0.35
Тівіа	0.65	0.60
METATARSUS	0.53	0.53
Tarsus	0.58	0.55
TOTAL	2.88	2.83
	III	IV
FEMUR	$0.70 \mathrm{mm}$.	$1.05\mathrm{mm}$
PATELLA	0.35	0.44
TIBIA	0.55	0.94
METATARSUS	0.60	1.00
TARSUS	0.47	0.66
TOTAL	2.67	4.09

Epigynum as illustrated in Fig. 28.

Type Locality.—Female holotype from San Pedro, Tamaulipas, July 5, 1936 (L. I. Davis).

This species agrees completely in color pattern and closely in structure with *Micaria deserticola* Gertsch. It may be distinguished by the eyes of the posterior row which are slightly recurved, whereas in *deserticola* this row is essentially straight.

Micaria bonita, new species Female.—Total length, 4.30 mm.

	Length	Width
CARAPACE	1.65 mm.	$0.93\mathrm{mm}$.
FRONT	0.25	0.55
STERNUM	0.90	0.55
LABIUM	0.20	0.20
MAXILLA	0.40	0.20
ABDOMEN	2.40	1.15

Carapace dark brown to black, with narrow dark lines and markings, evenly but sparsely clothed with flattened white scales and with a few erect black hairs, particularly in the ocular region, the clypeus with four long setae on the margin. Sternum yellowish brown, lightly infuscated on the margins, the mouth parts and coxae evenly infuscated, the whole underside set sparsely with erect black hairs. Palpi pale yellow, dusky on the sides. First and second femora mostly black, their distal ends and the remaining joints of those legs pale yellow, almost Third and fourth legs light brown, with a pale yellow dorsal and a similar stripe on the prolateral and retrolateral surfaces on all joints but the tarsi which are paler. Abdomen black, evenly clothed with iridescent black scales, variegated with white and orange scales as follows: a large orange patch on each side near the base which has a white spot on the frontal margin; a transverse orange band near the middle of the abdomen which encloses a larger white patch of scales on each side. The orange patches may be reduced in area and in that case the white patches may be practically separate from the orange. The orange patches are continuous around the sides to the venter. Venter uniform gray. Most of the specimens are colored as described above but a few represent a striking variation. In these the dorsum of both carapace and abdomen are orange, the abdomen evenly covered with orange scales, the black areas broken up into seven or eight narrow transverse bands. The four white patches are in essentially the same position as in the darker form. In the golden form the legs are also somewhat paler but show the same pattern as in the other specimens.

Structure essentially typical, much as in Micaria aurata (Hentz) which is subject to considerable variation in color. Carapace much longer than broad, the front moderately narrowed, the cephalic sutures and median groove obsolete. Carapace as seen from the side highest between the first and second coxae, not as strongly elevated as in aurata. First row of eyes procurved, the medians separated by their radius, subcontiguous with the subequal laterals. Clypeus equal in height to the diameter of an anterior lateral eye. Second row of eyes moderately procurved, the medians small, separated by one and one-half times their diameter, a full diameter from the larger lateral eyes. Sternum pointed behind, the posterior coxae separated by their width at the base. Fourth coxae longer than the others. Pedicle visible from above, the carapace and the abdomen separated by the width of the fourth coxa. Abdomen broadest and highest at the middle, evenly tapering forward and caudad.

All tarsi scopulate, the posterior ones more lightly; the first and second metatarsi with scopular hairs but the posterior ones lacking them. First two legs without true spines, the last two legs weakly spinose.

	I	II
FEMUR	$0.70\mathrm{mm}$.	$0.80\mathrm{mm}$.
PATELLA	0.43	0.43
TIBIA	0.60	0.56
METATARSUS	0.55	0.53
Tarsus	0.60	0.57
TOTAL	2.88	2.89
	III	IV
FEMUR	$0.80\mathrm{mm}$.	1.15 mm.
PATELLA	0.40	0.55
Tibia	0.55	1.00
METATARSUS	0.58	1.05
Tarsus	0.60	0.66
TOTAL	2.93	4.41

Type Locality.—Female holotype and paratypes from twenty-eight miles north of Monterrey, Nuevo Leon, July 7, 1936 (L. I. Davis).

This brightly colored species approxi-

mates M. aurata (Hentz) in appearance and general structure. It is easily separated by reference to the posterior eye row, the medians of which are only one diameter from the lateral eyes whereas in aurata the distance equals nearly two diameters.

Syrisca nebulosa, new species
Figure 8
Male.—Total length, 4.50 mm.

	Length	\mathbf{Width}
CARAPACE	$2.00\mathrm{mm}$.	1.50 mm.
FRONT	0.25	0.70
STERNUM	1.15	0.96
LABIUM	0.30	0.30
MAXILLA	0.60	0.30
ABDOMEN	2.40	1.20

Integument of the carapace clothed evenly but sparsely with fine white procumbent hairs and sparsely set with short erect black bristles, the clypeal margin with weak spines. Carapace dull yellow, the eyes narrowly ringed with black. Chelicerae dull yellowish brown, armed in front with black bristles. Underside of the carapace and the appendages concolorous with the carapace, without markings, the first tibia and metatarsus dusky. Clothing of the appendages black hairs and spines. Abdomen gray above, with faint traces of a darker basal hastate maculation and broken dark chevrons behind, the venter all pale.

Carapace longer than broad, suboval as seen from above, the median groove a slight linear depression placed back about three-fourths of the total length of the carapace. Carapace as seen from the side moderately low, about equal in height from the eyes to the median groove. First row of eyes narrower than the second, very weakly procurved, essentially straight, the medians slightly separated, subcontiguous with the slightly larger laterals. Clypeus equal in height to scarcely the radius of an anterior median eye. Second row of eyes straight, the circular medians separated by four-sevenths their diameter, slightly farther from the subequal laterals (10/14). Median ocular quadrangle slightly longer than broad (18/17), narrowed in front (18/14). Chelicera with three teeth on the upper margin, the middle one largest, and two smaller, well separated teeth on the lower margin. Sternum subcircular, truncated in front, rounded behind, the posterior coxae scarcely separated.

Spines few on first leg, the femur with two distal prolaterals and two dorsals, the tibia with 2-2-0 ventrals, and the metatarsus with a single ventral spine near the base. Last two legs more strongly spinose, with laterals and dorsals and with 2-2-2 ventral spines, the last pair distal, beneath the tibiae. First leg: femur, 1.67 mm., patella, 1.00 mm., tibia, 1.50 mm., metatarsus, 1.20 mm., and tarsus, 0.90 mm. long.

Fourth leg: femur, 2.00 mm., patella, 0.94 mm., tibia, 1.95 mm., metatarsus, 2.20 mm., and tarsus, 1.10 mm. long.

Palpus as illustrated in Fig. 8.

Type Locality.—Male holotype from seventy-six miles north of Monterrey, Nuevo Leon, July 7, 1936 (L. I. Davis).

Syrisca nebulosa is a much smaller species than affinis Banks, the comparable measurements being 4.50 mm. in the former and 10.00 mm. or more in the latter. In affinis the posterior median eyes are separated by a full diameter, whereas in nebulosa they are separated by about half their diameter.

Syrisca affinis (Banks)

Teminius affinis Banks, 1897, Canadian Entomologist, XXIX, p. 193.

RECORDS.—TAMAULIPAS: San Fernando, March 28, 1937, female and immature specimens (L. I. Davis).—Nuevo Leon: Monterrey, Nov. 3, 1937, female and immature specimens (A. M. and L. I. Davis).

Clubiona exempta, new species
Figure 31

Female.—Total length, 4.80 mm.

	Length	Width
CARAPACE	$2.10\mathrm{mm}$.	1.60 mm.
FRONT	0.25	1.05
STERNUM	1.05	0.77
LABIUM	0.36	0.27
MAXILLA	0.57	0.35
ABDOMEN	2.75	1.80

Carapace and chelicerae bright orange-brown, without markings except for the narrow black rings around the eyes, clothed sparsely with inconspicuous pale hairs. Sternum, maxillae, and coxae paler yellowish brown, the labium somewhat darker, clothed evenly with fine pale hairs. Legs light yellowish brown, unmarked, set with rows of hairs and with black spines. Abdomen gray above, with dark chevrons essentially as in pallens Hentz and dorothea Gertsch.

Carapace longer than broad, convex, typical for the group of which Clubiona pallens Hentz is an example, the median groove a slight linear depression situated back seven-tenths of the total length. Head broad in front, the second eye row occupying seven-tenths of the width of the carapace at that point. Clypeus low, equal in height to one-third the diameter of an anterior median eye. First row of eyes weakly procurved, the medians separated by two-thirds their diameter, half as far from the slightly larger lateral eyes. Second row of eyes straight, the medians separated by one and two-thirds their

diameter, slightly more than a diameter from the subequal lateral eyes. Median ocular quadrangle broader than long (43/35), narrowed in front (43/32), the eyes subequal. Lower margin of the furrow of the chelicera with four teeth, the upper margin with four teeth of which one is considerably enlarged.

First and second tarsi and metatarsi with thick ventral scopulae, the posterior tarsi and metatarsi without scopular hairs. First and second tibiae with a basal and a median pair of spines, the metatarsi with a single ventral pair. Posterior legs more strongly spinose but the fourth tibiae lacking dorsal spines.

	1	11
FEMUR	$1.10\mathrm{mm}$.	1.12 mm.
PATELLA	0.65	0.65
Тівіа	0.85	0.95
METATARSUS	0.70	0.80
Tarsus	0.50	0.50
TOTAL	3.70	4.02
	III	IV
Femur	III 1.00 mm.	IV 1.35 mm.
FEMUR PATELLA		
	1.00 mm.	1.35 mm.
PATELLA	1.00 mm. 0.60	1.35 mm. 0.65
PATELLA TIBIA	1.00 mm. 0.60 0.70	1.35 mm. 0.65 1.10

Epigynum as illustrated in Fig. 31.

Type Locality.—Female holotype from La Buena Ventura, Vera Cruz, August, 1909 (Dr. A. Petrunkevitch).

This species is closely related to various species of the pallens group. It is distinct from other known forms in having the frontal border of the atrium of the epigynum only moderately developed into a broadly triangular lobe. In the other known species the lobe is decidedly longer and becomes a free appendage which lies in the atrium.

Phrurolithus coahuilanus, new species

Figures 33, 34 and 35

FEMALE.—Total length, 2.05 mm.

Length

	\mathbf{Length}	\mathbf{Width}
CARAPACE	$0.93 \mathrm{mm}$.	$0.70\mathrm{mm}$.
FRONT	0.17	0.35
STERNUM	0.58	0.50
LABIUM	0.10	0.15
MAXILLA	0.23	0.17
ABDOMEN	1.10	0.65

Integument of the carapace dusky brown to black, nearly glabrous, the ocular region with a few hairs. Carapace without contrasting markings on the dusky base except for a few dark radiating streaks and a very narrow marginal black seam. Sternum, mouth parts and coxae dull yellow, infuscated, sparsely clothed with dark hairs. Legs dull yellow, the front femora darkened, provided with short dark hairs. Abdomen mostly black above, with a pair of white spots at the base and an incomplete annulus at the middle. Venter of the abdomen pale in front, dusky behind, the spinnerets pale yellow.

Carapace longer than broad, rather evenly convex, moderately broad in front, the sutures obsolete. Clypeus equal in height to the diameter of an anterior lateral eye. First row of eyes slightly narrower than the second, procurved, the medians separated by their radius, subcontiguous with the slightly larger laterals. Second row of eyes straight, the oval medians set obliquely, separated by one-third their long diameter, scarcely a radius from the subequal laterals. Median ocular quadrangle slightly longer than broad, as wide in front as behind.

First tibia with five pairs of ventral spines, none of them distal; first metatarsus with 2-2-2-1-(2), the last pair distal but minute. First leg: femur, 0.77 mm., patella, 0.30 mm., tibia, 0.73 mm., metatarsus, 0.65 mm., and tarsus, 0.43 mm. long. Fourth leg: femur, 0.85 mm., patella, 0.35 mm., tibia, 0.76 mm., metatarsus, 0.80 mm., and tarsus, 0.55 mm. long.

Epigynum as illustrated in Fig. 35. MALE.—Total length, 1.90 mm.

	Length	Width
CARAPACE	$0.87 \mathrm{mm}$.	$0.72 \mathrm{mm}$.
FRONT	0.20	0.33
STERNUM	0.52	0.46
LABIUM	0.12	0.15
MAXILLA	0.24	0.20
ABDOMEN	1.05	0.65

Coloration and structure in close agreement with the female. Abdomen more uniform in color, shining, sclerotized above. Eyes of both rows more closely spaced, the subequal eyes of the posterior row separated by one-half their radius. First tibia with five, the metatarsus with four pairs of ventral spines. First leg: femur, 0.70 mm., patella, 0.30 mm., tibia, 0.66 mm., metatarsus, 0.63 mm., and tarsus, 0.40 mm. long. Fourth leg: femur, 0.75 mm., patella, 0.34 mm., tibia, 0.72 mm., metatarsus, 0.75 mm., and tarsus, 0.50 mm. long.

Male palpus as illustrated in Figs. 33 and 34. Femoral spur near the middle of the joint.

Type Locality.—Male holotype, female allotype and paratypes from Saltillo, Coahuila, July 3, 1936 (L. I. Davis).

This interesting spider is easily separated from other known species of the genus by the shape of the retrolateral process of the tibia. In other forms this spur is rather evenly narrowed to the apex, but in coahuilanus the spur is broad until near the end when it is rather abruptly narrowed.

The bulb is deeply excavated on the retrolateral side below the embolus. The female is distinct from *debilis* in the epigynum which has the spermathecae widely separated, not subcontiguous.

Phrurolithus debilis, new species Figure 26

FEMALE.—Total length, 2.00 mm.

Length	\mathbf{Width}
$0.77 \mathrm{mm}$.	$0.65\mathrm{mm}$
0.10	0.33
0.52	0.47
0.10	0.14
0.22	0.16
1.20	0.75
	0.77 mm. 0.10 0.52 0.10 0.22

Coloration in complete agreement with coahullanus. Structure in essential agreement, differing chiefly in details of the eye relations and in the genitalia. Clypeus equal in height to about half the diameter of an anterior lateral eye. First row of eyes slightly narrower than the second, procurved, the medians separated by a radius, subcontiguous with the slightly larger laterals. Second row of eyes very weakly procurved, essentially straight, the oval medians set obliquely, separated by one-fifth their long diameter, as far from the subequal laterals. Median ocular quadrangle longer than broad, as wide behind as in front.

First tibiae with five pairs, the metatarsi with four pairs of ventral spines. First leg: femur, 0.66 mm., patella, 0.28 mm., tibia, 0.66 mm., metatarsus, 0.57 mm., and ṭarsus, 0.36 mm. long. Fourth leg: femur, 0.66 mm., patella, 0.28 mm., tibia, 0.61 mm., metatarsus, 0.66 mm., and tarsus, 0.45 mm. long.

Epigynum as illustrated in Fig. 26.

Type Locality.—Female holotype and two female paratypes from Monterrey, Nuevo Leon, June 10, 1936 (L. I. Davis).

This species is distinct from *Phrurolithus* coahuilanus in having the eyes of the second row nearer together, the medians being separated by one-fifth their long diameter, and in having the seminal receptacles of the epigynum subcontiguous.

Phrurolithus approximatus, new species Figures 29 and 30

Male.—Total length, 2.00 mm.

	Length	Width
CARAPACE	0.84 mm.	$0.70\mathrm{mm}$.
FRONT	0.15	0.32
STERNUM	0.51	0.49
Labium	0.13	0.15
MAXILLA	0.23	0.15
ABDOMEN	1.06	0.66

Coloration in complete agreement with coahuilanus except that the venter of the abdomen is entirely pale yellow. Structure essentially as in that species, the chief differences being in the eyes and the palpus. Clypeus equal in height to the diameter of an anterior lateral eye. First row of eyes procurved, the medians separated by about their radius, subcontiguous with the slightly larger laterals. Second row of eyes straight, the oval medians set obliquely, separated by one-third their long diameter, as far from the subequal laterals. Median ocular quadrangle slightly longer than broad (22/20), very slightly narrower behind than in front.

First tibia with five pairs, the metatarsus with four pairs of ventral spines. First leg: femur, 0.72 mm., patella, 0.30 mm., tibia, 0.64 mm., metatarsus, 0.63 mm., and tarsus, 0.36 mm. long. Fourth leg: femur, 0.76 mm., patella, 0.32 mm., tibia, 0.65 mm., metatarsus, 0.75 mm., and tarsus, 0.50 mm. long.

Palpus as illustrated in Figs. 29 and 30. Femoral apophysis slightly nearer the base of the joint. Embolus curved at a right angle.

Type Locality.—Male holotype from a few miles north of Mexico, D. F., July 1, 1936 (L. I. Davis).

This species resembles coahuilanus in general coloration but is distinct in the palpus. The tibial apophyses are less widely separated and the much shorter retrolateral apophysis ends in an acute point.

Phrurolithus adjacens, new species Figures 22 and 23

MALE.—Total length, 1.83 mm.

	Length	Width
CARAPACE	$0.82\mathrm{mm}$.	$0.64 \mathrm{mm}$.
FRONT	0.15	0.30
STERNUM	0.52	0.45
LABIUM	0.10	0.13
MAXILLA	0.23	0.17
ABDOMEN	1.00	0.57

Color pattern in close agreement with the male of coahuilanus but the dark markings sharper and blacker. Abdomen sclerotized above, shining black, showing two pale side bars at the middle, a pale spot in front of the bars on the mid-line and a round white marking just above the spinnerets. Venter paler, with a pale marking just behind the genital opening and with the spinnerets white. Femora of legs more strongly marked with black on the sides, the first femur almost all black, the distal joints yellowish brown.

Structure in essential agreement with coahuidanus. Clypeus equal in height to scarcely a diameter of an anterior lateral eye. First row of eyes procurved, the medians separated by their radius, subcontiguous with the slightly larger lateral eyes. Second row of eyes very weakly procurved, the suborbicular medians separated by three-eighths their diameter, as far from the slightly smaller lateral eyes. Median ocular quadrangle slightly longer than broad, as wide in front as behind.

First tibia with five pairs, the metatarsus with four pairs of ventral spines. First leg: femur, 0.65 mm., patella, 0.26 mm., tibia, 0.57 mm., metatarsus, 0.55 mm., and tarsus, 0.30 mm. long. Fourth leg: femur, 0.70 mm., patella, 0.27 mm., tibia, 0.60 mm., metatarsus, 0.67 mm., and tarsus, 0.43 mm. long.

Palpus as illustrated in Figs. 22 and 23. Femoral spur near the middle of the joint.

Type Locality.—Male holotype and paratype and immature allotype from Diamante Drive, five miles southeast of Saltillo, Coahuila, Nov. 26, 1937 (A. M. and L. I. Davis).

This species closely resembles *Phrurolithus coahuilanus* in general appearance but is distinct in the palpus which has the embolus straighter and the tibial apophyses less widely separated.

Phrurolithus tepejicanus, new species Figures 18 and 19

MALE.—Total length, 2.23 mm.

	Length	Width
CARAPACE	1.00 mm.	$0.80\mathrm{mm}$.
FRONT	0.17	0.40
STERNUM	0.59	0.54
Labium	0.13	0.16
MAXILLA	0.29	0.20
ABDOMEN	1.20	0.70

General coloration as in the preceding species. Carapace dark brown, with a narrow marginal black seam and the eye region black. Abdomen sclerotized above, shining black, with pale transverse side bars at the middle which meet on the mid-line, a pair of pale spots at the base and a small white spot just above the spinnerets. Base of the venter pale yellowish brown, the remainder black, the spinnerets white. Underside and legs light yellowish brown, the femora with darker bands on the sides but not so well marked as in adjacens.

Spider in general a little larger and stouter than the preceding species, approximating Phrurolithus similis Banks. Clypeus equal in height to the diameter of an anterior lateral eye. First row of eyes slightly narrower than the second, the medians separated by about one-third their diameter, subcontiguous with the clearly larger laterals. Second row of eyes straight, the suborbicular medians separated by one-third their diameter, as far from the subequal laterals. Median ocular quadrangle almost square, very slightly longer than broad (24/23), and narrowed

in front in about the same ratio, the eyes sub-equal.

Tibia of the first leg with five pairs, the metatarsus with four pairs of ventral spines. First leg: femur, 0.78 mm., patella, 0.34 mm., tibia, 0.75 mm., metatarsus, 0.57 mm., and tarsus, 0.40 mm. long. Fourth leg: femur, 0.88 mm., patella, 0.36 mm., tibia, 0.76 mm., metatarsus, 0.86 mm., and tarsus, 0.52 mm. long.

Palpus as illustrated in Figs. 18 and 19. Femoral spur somewhat nearer the basal end of the joint.

Type Locality.—Male holotype from Tepeji, Hidalgo, June 15, 1936 (A. M. and L. I. Davis).

This species is closely allied to *Phrurolithus similis* Banks from the United States. The chief points of difference are in the palpus which has the outer branch (retrolateral) of the tibial apophysis longer and the ventral branch sharper, not rounded and bifid at the end. The embolus is stouter than in *similis*.

Phrurolithus diversus, new species Figure 20

FEMALE.—Total length, 1.95 mm.

	Length	Width
CARAPACE	$0.76\mathrm{mm}$.	0.66 mm.
FRONT	0.12	0.35
STERNUM	0.50	0.47
LABIUM	0.10	0.14
MAXILLA	0.20	0.14
ABDOMEN	1.28	0.80

Carapace bright yellowish brown, with a faint dark marginal seam and faint dusky reticulations above, the eyes ringed with black. Underside and appendages bright yellowish brown, without markings. Abdomen gray above, with a faint white spot above the spinnerets, the venter pale yellowish.

Carapace longer than broad, evenly convex, the head moderately broad, the sutures obsolete. Clypeus equal in height to the radius of an anterior lateral eye. First row of eyes procurved, the medians separated by scarcely their radius, subcontiguous with the slightly larger laterals. Second row of eyes weakly procurved, the oval medians set obliquely and separated by one-half their short diameter, as far from the slightly smaller lateral eyes. Median ocular quadrangle longer than broad (24/20), as wide behind as in front.

First tibia with five pairs, the first metatarsus with four pairs of ventral spines. First leg: femur, 0.70 mm., patella, 0.27 mm., tibia, 0.67 mm., metatarsus, 0.63 mm., and tarsus, 0.38 mm. long. Fourth leg: femur, 0.73 mm., patella, 0.29 mm., tibia, 0.65 mm., metatarsus, 0.73 mm., and tarsus, 0.52 mm. long.

Epigynum as illustrated in Fig. 20.

Type Locality.—Female holotype from Cerro Gordo, Vera Cruz, June 22, 1936 (L. I. Davis).

This is a paler form than coahuilanus. The atriobursal orifices are close together beneath a suborbicular plate and the seminal receptacles are near the orifices. In the other species the receptacles and orifices are widely separated.

Phrurolithus tamaulipanus, new species Figure 32

MALE.—Total length, 1.50 mm.

	Length	Width
CARAPACE	$0.67 \mathrm{mm}$.	0.58 mm.
FRONT	0.13	0.30
STERNUM	0.46	0.38
LABIUM	0.08	0.12
MAXILLA	0.19	0.15
ABDOMEN	0.76	0.50

Carapace dull yellowish brown, without a marginal dark seam and with only a few faint radiating darker markings above, the eyes ringed with black. Ocular area with a very few erect black hairs, the rest of the carapace glabrous. Underside and appendages pale yellowish brown, lighter than the carapace, the clothing inconspicuous pale hairs, the legs showing no contrasting markings. Abdomen with the usual sclerotized plate above, dusky at the base and in the distal half but showing a transverse pale yellow area at the middle. Venter pale yellow to white.

Structure most nearly approaching Phrurolithus callidus Gertsch, known only from the
female and to which species this male may belong. Carapace relatively broad, convex, narrowed in the head region, the sutures obsolete.
First row of eyes very slightly narrower than the
second, procurved, the medians separated by the
radius, subcontiguous with the somewhat larger
lateral eyes. Second row of eyes weakly procurved, the suboval medians separated by onethird the diameter from the obviously smaller
laterals. Median ocular quadrangle as broad as
long, very slightly narrowed in front, the posterior eyes larger. Clypeus equal in height to
three-fourths the diameter of an anterior lateral
eve.

Tibia of the first leg with five pairs, the metatarsus with four pairs of ventral spines. First leg: femur, 0.56 mm., patella, 0.23 mm., tibia, 0.53 mm., metatarsus, 0.46 mm., and tarsus, 0.32 mm. long. Fourth leg: femur, 0.57 mm., patella, 0.24 mm., tibia, 0.52 mm., metatarsus, 0.57 mm., and tarsus, 0.40 mm. long.

Palpus as illustrated in Fig. 32. Femoral spur placed at about the middle of the joint, closely fused to the joint, not free as in other known species.

Type Locality.—Male holotype from San Fernando, Tamaulipas, March 28, 1937 (L. I. Davis).

This interesting species is distinct from the others described in this paper in having a very short embolus, in the unusual femoral spur, and in its distinctive color pattern.

Piabuna reclusa, new species
Figure 24
Female.—Total length, 1.75 mm.

	Length	\mathbf{Width}
CARAPACE	$0.70\mathrm{mm}$.	$0.54 \mathrm{mm}$.
FRONT	0.10	0.30
STERNUM	0.46	0.42
LABIUM	0.07	0.14
MAXILLA	0.20	0.14
ABDOMEN	1.05	0.65

Coloration as in the other known species of the genus. Carapace and appendages pale yellow to white, the eyes ringed with black. Abdomen white to gray, duller than the carapace, clothed with pale hairs.

Carapace smooth, shining, clothed with a few inconspicuous pale hairs, evenly convex, rather low, the sutures obsolete. Clypeus equal in height to the radius of an anterior lateral eye. First row of eyes procurved, the medians large, dark, separated by their radius from the slightly smaller light lateral eyes. Second row of eyes moderately procurved, the oval medians set obliquely, separated by one-half their short diameter, as far from the smaller lateral eyes. Median ocular quadrangle slightly broader than long (19/18), slightly narrowed behind (19/17), the eyes subequal. Sternum slightly longer than broad, bluntly rounded between the posterior coxae which are separated by scarcely their length. Lower margin of the furrow of the chelicera with two teeth.

First legs missing. Second tibia and metatarsus with four pairs of ventral spines. Fourth leg: femur, 0.70 mm., patella, 0.25 mm., tibia, 0.60 mm., metatarsus, 0.62 mm., and tarsus, 0.33 mm. long.

Epigynum as illustrated in Fig. 24.

Type Locality.—Female holotype from five miles west of Saltillo, Coahuila, July 5, 1936 (L. I. Davis).

This species is closely related to *Piabuna brevispina* Chamberlin and Ivie but is distinct in the smaller size and in having the seminal receptacles much nearer together, separated by their diameter.

PHONOTIMPUS, NEW GENUS

A genus of the subfamily Liocraninae. Related to such genera as Phrurotimpus, Phruro-

lithus and Piabuna, the general structure and appearance most nearly resembling Phrurotimpus.

Carapace longer than broad, moderately convex, the clypeus low, equal in height to the radius of an anterior lateral eye. First eye row weakly procurved, the eyes subequidistantly spaced but subcontiguous, the medians smaller. Second row of eyes gently recurved, the medians very small, much nearer the large laterals. Median ocular quadrangle as broad as long, narrowed in front, the eyes subequal. First tibia with five pairs, the metatarsus with four pairs of ventral spines.

GENOTYPE.—Phonotimpus separatus, new species.

This genus or subgenus is distinct from *Phrurotimpus* only in the eye relations and in the type of epigynum. The eyes of the second row are gently recurved and the medians are very much smaller than the lateral eyes. In *Phonotimpus separatus* the median eyes are much nearer the laterals but in *P. eutypus* the four posterior eyes are subequidistantly spaced.

Phonotimpus separatus, new species Figure 21

FEMALE.—Total length, 1.55 mm.

	Length	\mathbf{Width}
CARAPACE	0.66 mm.	$0.56\mathrm{mm}$
FRONT	0.07	0.27
STERNUM	0.41	0.40
Labium	0.07	0.13
MAXILLA	0.18	0.14
ABDOMEN	0.85	0.57

Integument of the carapace very sparsely clothed with pale, inconspicuous hairs. Carapace dull yellow, unmarked except for the eyes which are narrowly ringed with black. Underside and the appendages concolorous with the carapace, dull yellow, without contrasting markings. Abdomen light gray above, the base with a small, slightly sclerotized yellow plate, the venter somewhat paler.

Carapace somewhat longer than broad, rather low, evenly convex, the head broad, the clypeal margin vertical. As seen from the side the carapace is essentially equal in height back to the slight linear median groove, and the posterior declivity declines rapidly to the posterior margin. First row of eyes narrower than the second (22/ 25), weakly procurved, straight as viewed from above, the medians separated by one-half their radius, as far from the larger laterals, the eyes essentially subcontiguous. Second row of eyes weakly recurved, the medians small, separated by one and one-fourth times their diameter, onehalf their diameter from the much larger laterals. Median ocular quadrangle as broad as long, slightly narrowed in front (12/9.5), the eyes subequal. Clypeus equal in height to the radius of an anterior lateral eye.

First tibia with five pairs, the metatarsus with four pairs of long ventral spines. First leg: femur, 0.53 mm., patella, 0.23 mm., tibia, 0.54 mm., metatarsus, 0.46 mm., and tarsus, 0.26 mm. long. Fourth leg: femur, 0.56 mm., patella, 0.24 mm., tibia, 0.51 mm., metatarsus, 0.61 mm., and tarsus, 0.47 mm. long.

Epigynum as illustrated in Fig. 21.

Type Locality.—Female holotype from five miles north of Tamazunchale, San Luis Potosi, July 2, 1936 (A. M. and L. I. Davis).

This is a somewhat smaller, paler species than *Phonotimpus eutypus*. The atriobursal orifices are widely separated whereas in *eutypus* they are closely approximated.

Phonotimpus eutypus, new species

Figure 27
Female.—Total length, 1.90 mm.

	Length	$\mathbf{W}\mathbf{idth}$
CARAPACE	$0.76\mathrm{mm}$.	$0.66\mathrm{mm}$.
FRONT	0.12	0.31
STERNUM	0.47	0.47
LABIUM	0.09	0.13
MAXILLA	0.22	0.16
ABDOMEN	1.10	0.70

Carapace light yellowish brown, with an irregular dusky band on each side, the interval between paler, the margins with a narrow black seam. Eye region black. Sternum and legs light yellowish brown, the legs lightly infuscated, clothed with pale hairs. Abdomen with a slightly sclerotized basal scutum light yellow in color, the remainder of the dorsum dark gray except for a conspicuous white spot above the spinnersts. Venter of the abdomen white.

Carapace longer than broad, low, evenly convex, the front broad. First row of eyes narrower than the second, the medians separated by their radius, subcontiguous with the much larger laterals. Second row of eyes weakly recurved, the circular medians separated by two-thirds their diameter, as far from the much larger laterals. Median ocular quadrangle slightly broader than long (16/15), narrowed in front in the same ratio, the eyes subequal. Clypeus equal in height to two-thirds the diameter of an anterior median eye.

First tibia with six pairs, the metatarsus with four pairs of ventral spines. First leg: femur, 0.63 mm., patella, 0.26 mm., tibia, 0.58 mm., metatarsus, 0.55 mm., and tarsus, 0.27 mm. long. Fourth leg: femur, 0.65 mm., patella, 0.25 mm., tibia, 0.56 mm., metatarsus, 0.64 mm., and tarsus, 0.38 mm. long.

Epigynum as illustrated in Fig. 27.

Type Locality.—Female holotype from six miles north of Linares, Nuevo Leon, July 3,1936 (L. I. Davis).

Heterochemmis mutatus, new species Figure 25

Female.—Total length, 3.50 mm.

	Length	$\mathbf{W}_{\mathbf{idth}}$
CARAPACE	1.50 mm.	1.13 mm.
FRONT	0.25	0.60
STERNUM	0.80	0.65
Labium	0.24	0.24
MAXILLA	0.43	0.23
ABDOMEN	2.00	1.30

Carapace pale yellow, lightly infuscated on the margins, the eyes narrowly ringed with black and enclosing a dusky area, the covering of pale hairs very sparse. Sternum very pale yellow, the mouth parts somewhat darker, sparsely clothed with pale hairs. Legs pale yellow, without markings, clothed with rows of inconspicuous pale hairs. Abdomen gray above, with a pattern of faint black chevrons, the venter pale yellow.

Carapace longer than broad, the cephalic sutures obsolete, the median groove a slight linear depression situated back three-fifths of the total length. Carapace as seen from the side almost equal in height from the eyes to the median groove, the posterior declivity declining rapidly to the posterior margin. Clypeus low, equal in height to about one-third the diameter of an anterior median eye. First row of eyes straight, the dark medians separated by their radius, half as far from the laterals which are clearly larger (17/12). Second row of eyes very gently procurved, essentially straight, the medians separated by their full diameter, as far from the subequal lateral eyes. Median ocular quadrangle broader than long (40/32), narrowed in front (40/32), the anterior median eyes much smaller. Lower margin of the furrow of the chelicerae with five teeth on the right chelicera, six on the left. Sternum bluntly pointed behind, the posterior coxae separated by two-thirds their width.

First and second tarsi and metatarsi scopulate beneath; those joints of the posterior legs apparently simply setose. First tibia with four pairs of long robust ventral spines, without distal spines. First metatarsus with a single pair of ventral spines which are almost as long as the joint. Second tibia with only four pairs of ventral spines.

iai spines.		
	I	II
FEMUR	$1.00\mathrm{mm}$.	$1.03 \mathrm{mm}$.
PATELLA	0.50	0.53
Tibia	0.87	0.95
METATARSUS	0.63	0.70
Tarsus	0.40	0.45
TOTAL	3.40	3.66
	III	IV
FEMUR	$0.95\mathrm{mm}$.	$1.40 \mathrm{mm}$.
PATELLA	0.45	0.55
Tibia	0.60	1.10
METATARSUS	0.70	1.44
TARSUS	0.45	0.50
TOTAL	3.15	4.99

Epigynum as illustrated in Fig. 25.

Type Locality.—Female holotype from Palomares, Oaxaca, July, 1909 (A. Petrunkevitch).

This species is closely related to Hetero-

chemmis mirabilis (Cambridge). It is distinct from that species in the relations of the eyes of the second row, the medians of which are clearly smaller than the laterals, whereas in mirabilis these eyes are subequal.