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REPORT ON A COLLECTION OF SPIDERS FROM MEXICO. II

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The first paper in this series under the above title was published in 1937 (see American Museum Novitates, No. 961, pp. 1-29). In it were recorded fifty-eight species of spiders from Mexico of which twenty were described as new. Since the appearance of that paper additional material has been secured, chiefly from the states of Nuevo Leon, Tamaulipas and San Luis Potosi. Most of these new collections were made by Mr. and Mrs. L. I. Davis at various times while making short excursions into northern Mexico. We are greatly indebted to Mr. Ottys Sanders of Dallas, Texas, for interesting specimens from San Luis Potosi. It has not been found possible to adhere strictly to a particular family arrangement, which was our intention in the first paper, because of the much greater amount of time necessary to consider satisfactorily some of the families. In the present paper forty-seven species are recorded, chiefly in the Agelenidae, Lycosidae and Zodariidae, of which seventeen are diagnosed as new. The types are deposited in the collection of The American Museum of Natural History.

Micryphantidae

Eperigone coahuilana, new species

Figures 1 and 2

MALE.—Total length, 2.00 mm.

	Length	Width
CARAPACE	0.92 mm.	0.70 mm.
FRONT	0.30	0.50
STERNUM	0.50	0.50
LABIUM	0.11	0.14
MAXILLA	0.30	0.25
ABDOMEN	1.20	0.80

Coloration as usual in the genus. Carapace light yellow, slightly dusky on the margins and on the midline, the eyes ringed with black and enclosing a dark field. Clothing of the carapace

sparse, the midline with four or five erect black bristles. Sternum dusky. Coxae and mouth parts yellowish brown, without contrasting markings, the clothing a few erect black hairs. Legs concolorous with the dorsum of the carapace, clothed evenly with rows of fine black hairs. Abdomen nearly all black above, with very faint traces of pale transverse stripes in the caudal half. Venter of the abdomen dark except over the lung books.

Carapace essentially typical for the genus. First row of eyes straight, the medians separated by one-third their diameter, twice as far from the much larger laterals. Second row of eyes straight, the oval medians separated by one-half the long diameter, as far from the subequal lateral eyes. Median ocular quadrangle as broad as long, narrowed in front (12/20), the anterior eyes much smaller, equal to about half the diameter of the posterior median eyes. Both margins of the chelicera with four stout teeth. Outer face of the chelicera with a stout spur on the inner side of the apical half, and a side row of six small spurs or teeth which decrease in size toward the base. Legs without true spines. Tibia and patella of the first leg, 0.84 mm., of the fourth leg, 0.90 mm. long.

Palpus as illustrated in Figs. 1 and 2.

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

This species is distinct from *Eperigone tepejicana* Gertsch and Davis in the palpus, the tibia of which presents in dorsal view a deep excavation flanked by two stout processes.

Amaurobiidae

Titanoeca americana Emerton

Titanoeca americana EMERTON, 1888, Trans. Connecticut Acad. Arts and Sci., VII, p. 453, Pl. x, Fig. 4.

RECORD.—TAMAULIPAS: San Pedro, July 5, 1936, immature male (Davis).

Agelenidae

Agelenopsis apertus (Gertsch)

Agelena aperta GERTSCH, 1934, American Museum Novitates, No. 726, p. 25, Fig. 10.

RECORDS.—NUEVO LEON: Monterrey, June 10, 1936, female (Davis). DURANGO: Lerdo, July 4, 1936, female (Davis). SAN LUIS POTOSI: five miles south of Valles, April 17, 1938, immature female (Davis).

Agelena coahuilana, new species

Figure 5

FEMALE.—Total length, 8.00 mm.

	Length	Width
CARAPACE	3.65 mm.	2.30 mm.
FRONT	0.60	1.20
STERNUM	1.75	1.40
LABIUM	0.40	0.46
MAXILLA	0.70	0.45
ABDOMEN	4.35	2.55

Integument of the carapace dull yellowish brown, with two dark, longitudinal stripes above which begin on the side of the head at the lateral eyes and pass caudad to the margin, the interval between them forming a pale longitudinal stripe which is gradually narrowed behind. Sides of the carapace with pale bands which are margined by a narrow black seam. Sternum dusky, with black hairs, the coxae yellow, the distal ends with narrow black bands. Chelicerae dull yellowish brown, clothed with black hairs. Integument of the legs yellowish brown, the femora with four dark spots beneath, representing annulae which are only slightly visible or obsolete above. Other joints more or less dusky. Abdomen with a longitudinal pale stripe above which is margined in black. Venter pale, with two longitudinal black lines.

Carapace much longer than broad, the head narrow and gently rounded in front, the cephalic portion strongly convex, the median groove a short linear depression situated back five-sevenths of the total length of the carapace. Clypeus equal in height to the diameter of an anterior lateral eye. First row of eyes strongly procurved, a line along the upper edges of the lateral eyes passing slightly below the lower edges of the medians, the median eyes separated by their radius (8/16), slightly farther from the larger laterals (10/16). Second row of eyes strongly procurved, the medians separated by their diameter (16/16), nearer the larger laterals (16/12). Ratio of the eyes: ALE:AME:PLE:PME = 22:16:20:16. Median ocular quadrangle longer than broad (54/50), narrowed in front (50/40). Chelicera with three teeth on the lower margin of which the median one is somewhat smaller; and three teeth on the upper margin of which the median is larger.

Tibiae and metatarsi with three pairs of ventral spines. First leg: femur, 3.00 mm., patella, 1.15 mm., tibia, 2.50 mm., metatarsus, 2.63 mm., and tarsus, 1.90 mm. long. Fourth leg: femur, 3.30 mm., patella, 1.10 mm., tibia, 2.75 mm., metatarsus, 3.70 mm., and tarsus,

1.65 mm. long. Distal joint of the posterior spinnerets longer than the basal joint (75/50).

Epigynum as illustrated in Fig. 5.

TYPE LOCALITY.—Female holotype and immature paratypes from Diamante Drive, five miles southeast of Saltillo, Coahuila, Mexico, Nov. 26, 1937 (A. M. and L. I. Davis).

This species is distinct from *Agelena annamae* in the epigynum which is as broad as, rather than much broader than long, and lacks the sclerotized cusps on the rim.

Agelena annamae, new species

Figures 3, 7 and 8

FEMALE.—Total length, 9.60 mm.

	Length	Width
CARAPACE	4.45 mm.	2.80 mm.
FRONT	0.60	1.60
STERNUM	2.10	1.65
LABIUM	0.50	0.63
MAXILLA	0.90	0.45
ABDOMEN	5.40	3.15

Coloration and structure in very close agreement with *Agelena coahuilana*. First row of eyes strongly procurved, the medians separated by scarcely their radius (22/10), slightly farther from the much larger laterals (22/14). Second row of eyes very strongly procurved, the medians separated by more than the radius (22/16), farther from the laterals (22/21). Median ocular quadrangle longer than broad (64/60), narrowed in front (64/50). Clypeus equal in height to the diameter of an anterior lateral eye. Ratio of the eyes: ALE:AME:PLE:PME = 30:22:26:22. Chelicerae armed and legs spined as in *coahuilana*.

First leg: femur, 3.25 mm., patella, 1.40 mm., tibia, 2.90 mm., metatarsus, 3.00 mm., and tarsus, 2.05 mm. long. Fourth leg: femur, 4.10 mm., patella, 1.50 mm., tibia, 3.45 mm., metatarsus, 4.65 mm., and tarsus, 2.25 mm. long. Terminal joint of the posterior spinneret equal in length to the basal joint (0.50 mm.).

Epigynum as illustrated in Fig. 7, a shallow, transverse depression filled with a convex plate, the anterior margin of the depression with two cusps.

MALE.—Total length, 7.50 mm.

	Length	Width
CARAPACE	3.80 mm.	2.40 mm.
FRONT	0.70	1.25
STERNUM	1.80	1.43
LABIUM	0.40	0.50
MAXILLA	0.80	0.50
ABDOMEN	4.00	2.00

Coloration in close agreement with the female. Femora very indistinctly banded beneath.

Structure essentially as in the female. Eye arrangement as illustrated in Fig. 8, differing from that of the female only in having the anterior medians proportionately smaller than the posterior medians. Spines on the legs and the armature of the chelicerae as in the female.

Legs proportionately longer than in the female. First leg: femur, 3.20 mm., patella, 1.20 mm., tibia, 2.85 mm., metatarsus, 3.20 mm., and tarsus, 2.30 mm. long. Fourth leg: femur, 3.80 mm., patella, 1.22 mm., tibia, 3.50 mm., metatarsus, 4.85 mm., and tarsus, 2.55 mm. long.

Palpus as illustrated in Fig. 3, distinct from allied species (*A. nova* Cambridge and *A. intermedia* Chamberlin and Gertsch) in having two cusps on the dorsal apophysis of the tibia.

TYPE LOCALITY.—Female holotype and male allotype from Zitacuaro, Michoacan, Mexico, June 27, 1936 (L. I. Davis).

Agelena toluicana, new species

Figures 4 and 6

FEMALE.—Total length, 9.60 mm.

	Length	Width
CARAPACE	4.50 mm.	3.00 mm.
FRONT	0.82	1.80
STERNUM	2.08	1.80
LABIUM	0.60	0.72
MAXILLA	0.95	0.60
ABDOMEN	5.50	3.35

Integument of the carapace dark reddish brown, the sides of the head dark, the longitudinal dark bands black, slightly wider than the median pale stripe, the sides of the carapace with a pale marginal band and a narrow black seam. Clothing of hairs black on the dark markings and gray on the pale bands. Sternum and chelicerae black, with erect black bristles, the labium and maxillae black but tipped with white, also clothed with black bristles. Coxae dull yellowish brown, faintly marked with dusky. Legs dark reddish brown, all the joints showing traces of darker annulae, clothed with black hairs. Abdomen black on the sides, the dorsum with a paler stripe the whole length which is margined by four or five pairs of indistinct pale spots. Venter reddish brown. Clothing of the abdomen procumbent plumose hairs.

Carapace longer than broad, the head relatively broad for the genus, very gently narrowed in front, strongly convex above. Median groove a linear depression situated back seven-ninths of the total length of the carapace. Clypeus equal in height to the long diameter of the suboval anterior lateral eyes. First row of eyes very strongly procurved, a line along the upper edges of the laterals barely touching the lower edges of the medians, the median eyes separated by one-third their diameter (30/9), farther from the laterals (30/14). Second row of eyes procurved, the medians separated by two-thirds their diameter, slightly farther from

the laterals (30/26). Median ocular quadrangle longer than broad (83/73), narrowed in front (73/62). Ratio of the eyes: ALE:AME:PLE:PME = 35:30:30:30. Chelicera geniculate, the upper margin armed with three teeth of which the middle one is larger, the lower margin with three of which the middle one is smaller.

Tibiae and metatarsi with three pairs of ventral spines. First leg: femur, 2.85 mm., patella, 1.50 mm., tibia, 2.25 mm., metatarsus, 2.55 mm., and tarsus, 1.70 mm. long. Fourth leg: femur, 3.30 mm., patella, 1.65 mm., tibia, 2.70 mm., metatarsus, 3.50 mm., and tarsus, 1.70 mm. long. Distal joint of the posterior spinneret slightly shorter than the basal (0.35 mm./0.45 mm.).

Epigynum as illustrated in Fig. 6.

MALE.—Total length, 9.10 mm.

	Length	Width
CARAPACE	4.70 mm.	3.00 mm.
FRONT	0.80	1.70
STERNUM	2.10	1.80
LABIUM	0.55	0.65
MAXILLA	1.00	0.63
ABDOMEN	4.50	2.80

Coloration and structure in close agreement with the female. Legs proportionately longer than but spined as in the female. First leg: femur, 3.00 mm., patella, 1.50 mm., tibia, 2.60 mm., metatarsus, 3.00 mm., and tarsus, 2.00 mm. long. Fourth leg: femur, 3.65 mm., patella, 1.60 mm., tibia, 3.00 mm., metatarsus, 4.15 mm., and tarsus, 2.20 mm. long.

Palpus as illustrated in Fig. 4, very closely allied to that of *Agelena approximata* Gertsch and Ivie, differing slightly in the structure of the tooth on the bulb. The female is easily separated from *Agelena annamae* by the epigynum. The cusps on the rim are widely separated, nearly lateral in position.

TYPE LOCALITY.—Female holotype, male allotype and female paratype from a spruce forest, Mt. Toluca, Mexico, June 28, 1936 (A. M. and L. I. Davis). One female paratype from the mountain pass east of Mexico City, D. F., June 20, 1936 (A. M. and L. I. Davis).

Lycosidae

Sosippus mexicanus Simon

Sosippus mexicanus SIMON, 1888, Ann. Soc. Ent. France, (6) VIII, p. 206.

RECORD.—SAN LUIS POTOSI: Tamazunchale, Nov. 25, 1938, one immature female presumably this species (A. M. and L. I. Davis).

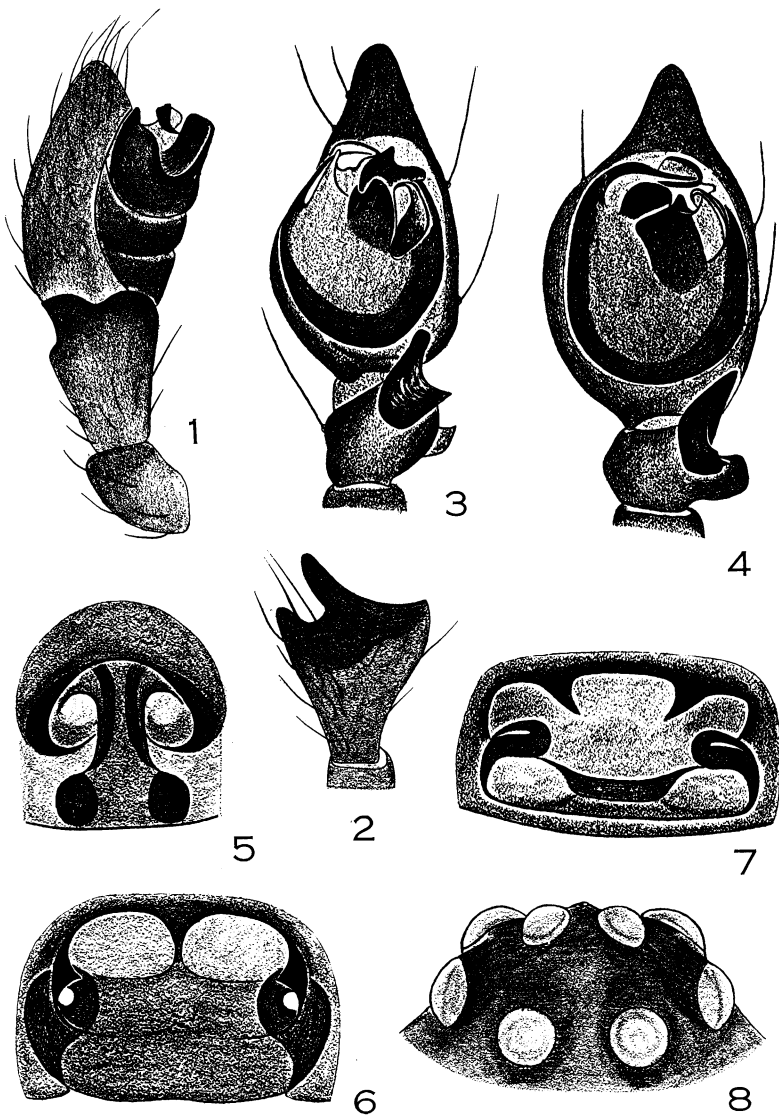


Fig. 1. *Eperigone coahuilana*, new species, left male palpus, subventral view.

Fig. 2. *Idem*, tibia of left male palpus, dorsal view.

Fig. 3. *Agelena annamae*, new species, left male palpus, ventral view.

Fig. 4. *Agelena tolucana*, new species, left male palpus, ventral view.

Fig. 5. *Agelena coahuilana*, new species, epigynum.

Fig. 6. *Agelena tolucana*, new species, epigynum.

Fig. 7. *Agelena annamae*, new species, epigynum.

Fig. 8. *Idem*, eyes of male, dorsal view.

***Pardosa delicatula* Gertsch and Wallace**

Pardosa delicatula GERTSCH AND WALLACE, 1935, American Museum Novitates, No. 794, p. 4, Figs. 13 and 17.

RECORDS.—TAMAULIPAS: San Fernando, March 28, 1937, males and females (Davis). Arroyo La Chorera, March 28, 1937, male, female (A. M. and L. I. Davis). Rio Gualolejo near Forlon, April 6, 1938, females (L. I. Davis and Brice Brown). Rio Frio at Limon, April 18, 1938, female (Davis). One mile southeast of Villa Juarez, April 17, 1938, male, two females (Davis). Thirty-five miles north of Villa Juarez, April 17, 1938, female (Davis). Victoria, June 12, 1936, male, female (Davis). Seven miles south of Hidalgo, July 3, 1936, male, female (Davis). VERA CRUZ: Cerro Gordo, June 22, 1936, males and females (Davis). NUEVO LEON: five miles west of Monterrey, July 6, 1936, three females (Davis). Seventy-six miles north of Monterrey, July 7, 1936, male, female (Davis). Monterrey, June 10, 1936, males and females (Davis). Ten miles west of Cadereyta, July 6, 1936, males and females (Davis).

***Pardosa pauxilla* Montgomery**

Pardosa pauxilla MONTGOMERY, 1904, Proc. Acad. Nat. Sci., Philadelphia, p. 268, Pl. XIX, figs. 22 and 23.

RECORD.—COAHUILA: San Pedro, July 5, 1936, male (Davis).

***Pardosa lineata* Cambridge**

Pardosa lineata F. CAMBRIDGE, 1902, Biol. Centr. Amer., II, p. 320, Pl. XXXI, fig. 7.

RECORDS.—GUERRERO: Iguala, June 19, 1936, female (A. M. and L. I. Davis). VERA CRUZ: Vera Cruz, June 22, 1936, male (Davis). MORELOS: Cuernavaca, June 20, 1936, immature female (Davis).

***Pardosa sternalis* (Thorell)**

Lycosa sternalis THORELL, 1877, Bull. U. S. Geol. Survey, III, p. 504.

RECORD.—VERA CRUZ: forty-seven miles west of Jalapa, June 23, 1936, males and females (A. M. and L. I. Davis).

***Pardosa falcifera* Cambridge**

Pardosa falcifera F. CAMBRIDGE, 1902, Biol. Centr. Amer., Araneidea, II, p. 318, Pl. xxx, figs. 23 and 24.

RECORDS.—VERA CRUZ: Jalapa to ten miles west, June 23, 1936, male, female (Davis). NUEVO LEON: five miles west of Monterrey, July 6, 1936, male, female (Davis). MEXICO: Mountain Pass, east of Mexico City, June 20, 1936, males and females (A. M. and L. I. Davis). Upper Pine Forest, Mount Toluca, June 28, 1936, males and females (A. M. and L. I. Davis). COAHUILA: Saltillo, July 3, 1936, male, female (Davis). PUEBLA: Tehuacan, June 24, 1936, female (Davis).

***Pardosa desolatula*, new species**

Figure 22

MALE.—Total length, 4.90 mm.

	Length	Width
CARAPACE	2.70 mm.	1.55 mm.
FRONT	1.00	1.00
STERNUM	1.20	1.04
LABIUM	0.26	0.30
MAXILLA	0.55	0.33
ABDOMEN	2.30	1.40

Coloration in close agreement with *Pardosa delicatula* Gertsch and Wallace. Carapace light yellowish brown, with a pale median longitudinal stripe which begins behind the third eye row, where it is as broad as the interval between these eyes, constricts immediately in front of the median groove, enlarges to less than its previous width and then continues narrowly caudad to the margin. Carapace with a marginal yellow band on each side and a narrow black marginal seam. Intervals between the pale bands and median pale stripe forming two irregular black stripes which go back to the caudal margin and forward around the sides of the head. Ocular area all black. Clypeus yellow but with a black maculation above each chelicera. Clothing of the carapace black hairs on the dark areas, pale hairs on the light bands, the clypeus and ocular region with the usual long bristles. Sternum pale yellow, with a faint black spot at the base of each coxa. Labium dusky, the tip pale. Palpi all black, clothed evenly with black hairs. First femur black except at the distal end, the first leg otherwise pale yellow. Posterior femora with three black annulae. Posterior legs with indistinct black annulae on the tibiae and metatarsi. Dorsum of the abdomen mostly black, the base with a reddish hastate maculation, the venter pale, without maculations.

Eyes as usual in the group, the first row very gently recurved, the larger medians separated by about three-fourths their diameter, one-fourth their diameter from the laterals. Clypeus equal in height to two and one-half diameters of an anterior median eye. Eyes of the second row separated by their diameter. Dorsal eye quadrangle broader than long (55/40), narrowed in

front (55/43), the posterior eyes smaller. Lower margin of the furrow of the chelicera with three subequal teeth, the upper margin with three of which the median is larger.

Spines as usual in the group, the first tibia with three pairs on the ventral surface, the distals small, and two laterals on each side, the position of two opposite laterals nearly ventral. First leg: femur, 2.00 mm., patella, 0.80 mm., tibia, 1.80 mm., metatarsus, 2.00 mm., and tarsus, 1.10 mm. long. Fourth leg: femur, 2.75 mm., patella, 0.80 mm., tibia, 2.30 mm., metatarsus, 3.70 mm., and tarsus, 1.50 mm. long.

Palpus as illustrated in Fig. 22, most closely resembling that of *Pardosa flavipalpus* Cambridge but differing in the details of the median apophysis which has the terminal spur longer, more gradually rounded, and not at all geniculate. The palpus further differs from *flavipalpus* in being all black in color.

Female.—Total length, 5.00 mm.

Coloration essentially as in the male and agreeing in detail with females of *delicatulus*. Legs more distinctly annulate in black on most of the joints, the first femur also annulate, not black. Structure essentially as in the male. Epigynum differing from that of *Pardosa delicatula* in having the sclerotized margins of the median septum more widely separated.

TYPE LOCALITY.—Male holotype and immature female paratype from Victoria, Tamaulipas, Mexico, June 12, 1936 (L. I. Davis). Female allotype from Tamazunchale, San Luis Potosi, Nov. 25, 1938 (A. M. and L. I. Davis). Male paratype from Tamazunchale, June 12, 1936 (L. I. Davis). Male paratype from four miles north of Valles, San Luis Potosi, Nov. 26, 1938 (A. M. and L. I. Davis).

Pardosa mercurialis Montgomery

Pardosa mercurialis MONTGOMERY, 1904, Proc. Acad. Nat. Sci. Philadelphia, p. 270, Pl. xix, figs. 20 and 21.

RECORD.—SAN LUIS POTOSI: Arroyo de los Japones, north of Valles, Nov. 26, 1938, female (A. M. and L. I. Davis).

Arctosa apora Gertsch

Arctosa apora GERTSCH, 1934, American Museum Novitates, No. 693, p. 8.

RECORDS.—NUEVO LEON: Horsetail Falls, Nov. 27, 1937, male (L. I. Davis and Brice Brown). Ten miles west of Cadereyta, July 6, 1936, male (Davis). MEXICO: twenty miles west of Toluca, June 27, 1936, one male (Davis).

Arctosa noctuabunda (Montgomery)

Trochosa noctuabunda MONTGOMERY, 1904, Proc. Acad. Nat. Sci. Philadelphia, p. 301, Pl. xviii, figs. 9 and 10.

RECORDS.—TAMAULIPAS: San Fernando, March 28, 1937, male, female and immature examples (Davis). Arroyo La Chorera, March 28, 1937, male (A. M. and L. I. Davis).

Arctosa floridana (Banks)

Trochosa floridana BANKS, 1893, Trans. American Ent. Soc., XXIII, p. 72.

RECORD.—NUEVO LEON: five miles west of Monterrey, July 6, 1936, male, immature female (Davis).

Arctosa littoralis (Hentz)

Lycosa littoralis HENTZ, 1844, Journ. Boston Soc. Nat. Hist., IV, p. 388, Pl. xvii, fig. 9.

RECORDS.—TAMAULIPAS: San Fernando, March 28, 1937, female (Davis). Arroyo La Chorera, March 28, 1937, female (A. M. and L. I. Davis). NUEVO LEON: China, Nov. 28, 1931, female (L. I. Davis and Brice Brown).

Arctosa veracruzana, new species

Figures 9, 10 and 11

MALE.—Total length, 6.00 mm.

	Length	Width
CARAPACE	3.20 mm.	2.20 mm.
FRONT	0.60	1.10
STERNUM	1.50	1.15
LABIUM	0.41	0.38
MAXILLA	0.75	0.43
ABDOMEN	2.80	1.65

Carapace sparsely provided with short erect black bristles, those in the ocular region and on the clypeus longer. Carapace smooth, black except for an irregular median longitudinal pale stripe and a very narrow submarginal pale stripe. Eye region black, with a few white hairs. Sternum yellowish brown, with a dusky area in the middle and three pairs of small black marginal spots. Coxae and maxillae pale yellow, the labium dusky, all clothed sparsely with black hairs. Chelicerae dark brown to black, set with black bristles. Legs dull yellowish brown, the femora and tibiae with indistinct darker annulae, all the joints evenly clothed with black bristles. Abdomen reddish brown above, with a pale basal marking and black spots, the venter pale yellowish brown, without markings.

Eyes set far forward, occupying about one-fifth of the total length of the carapace. First

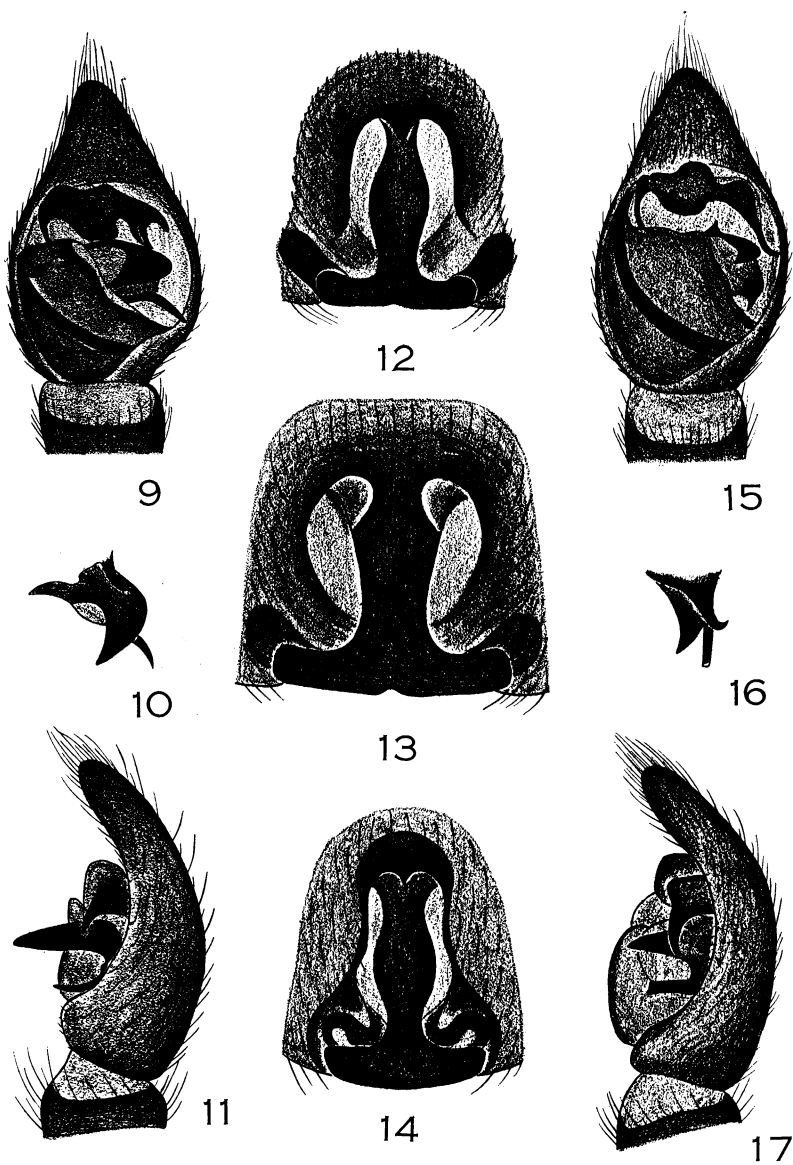


Fig. 9. *Arctosa veracruzana*, new species, left male palpus, ventral view.

Fig. 10. *Idem*, processes of bulb of left male palpus, terminal view.

Fig. 11. *Idem*, left male palpus, retrolateral view.

Fig. 12. *Lycosa tlaxcalana*, new species, epigynum.

Fig. 13. *Lycosa tamae*, new species, epigynum.

Fig. 14. *Lycosa coahuilana*, new species, epigynum.

Fig. 15. *Arctosa morelosiana*, new species, left male palpus, ventral view.

Fig. 16. *Idem*, processes of bulb of left male palpus, terminal view.

Fig. 17. *Idem*, left male palpus, retrolateral view.

row of eyes slightly narrower than the second, very weakly procurved, the medians separated by their radius, half as far from the smaller laterals. Clypeus equal in height to the diameter of an anterior lateral eye. Second row of eyes four-fifths (60/75) as wide as the third row, separated by three-fifths their diameter from each other, slightly more than a diameter from the eyes of the third row. Quadrangle or posterior eyes a little broader than long (36/30). Chelicera with three teeth on the lower margin, the inner one smaller; and three teeth on the upper margin of which the middle one is largest and the outer one is very small.

Legs stout, the first and fourth tibiae with three pairs of ventral spines, the first and second tibiae unarmed above, the third and fourth tibiae with a basal bristle and a submedian spine above. First leg: femur, 1.70 mm., patella, 1.05 mm., tibia, 1.26 mm., metatarsus, 1.31 mm., and tarsus, 0.95 mm. long. Fourth leg: femur, 2.12 mm., patella, 1.18 mm., tibia, 1.55 mm., metatarsus, 2.20 mm., and tarsus, 1.18 mm. long.

Palpus as illustrated in Figs. 9, 10 and 11, related to other species of the *Allocosa* group, the middle process of the bulb very large (Fig. 10), curved broadly ventrad; the distal apophysis a short spine which touches the large middle process.

TYPE LOCALITY.—Male holotype from forty-seven miles west of Jalapa, Vera Cruz, Mexico, June 23, 1936 (A. M. and L. I. Davis).

This species is distinct from the other species of the group known from Mexico (*Arctosa floridana*, *nocuabunda apora* and *morelosiana*) in the greater size of the middle process of the bulb and in the details of the other apophyses.

Arctosa morelosiana, new species

Figures 15, 16 and 17

MALE.—Total length, 3.80 mm.

	Length	Width
CARAPACE	1.95 mm.	1.33 mm.
FRONT	0.40	0.60
STERNUM	0.96	0.80
LABIUM	0.25	0.23
MAXILLA	0.43	0.28
ABDOMEN	1.85	1.20

Size and coloration in close agreement with *Arctosa chamberlini* Gertsch. Carapace dark brown, with a few darker streaks, clothed with erect black bristles, the ocular area black, set with longer black bristles. Sternum dusky over a pale ground, the labium, maxillae and coxae pale yellow, the whole underside covered with a sparse clothing of erect black hairs. Chelicerae reddish brown. Integument of the legs pale yellow, the femora black except for a portion

at the base, the tibiae darkened on the sides, the last tibia with two complete black rings, the terminal joints pale. Abdomen black above, with a basal sagittate paler maculation and rows of pale spots; the venter dull yellow.

Structure in nearly complete agreement with *chamberlini*. Eyes far forward, the group occupying about two-fifths of the total length. First row of eyes slightly narrower than the second, weakly procurved, the medians separated by their radius, less than half as far from the smaller laterals. Eyes of the second row narrower than the third (66/74), separated by about one-half their diameter, a diameter from the smaller eyes of the third row. Dorsal eye quadrangle broader than long (74/64). Clypeus equal in height to the diameter of an anterior median eye. Chelicera with three teeth on upper and lower margins, the middle one in each case largest.

Legs stout, the first and fourth tibiae with three pairs of ventral spines, the first two tibiae unarmed above, the last two with a basal bristle and a submedian spine. First leg: femur, 1.16 mm., patella, 0.63 mm., tibia, 0.90 mm., metatarsus, 0.90 mm., and tarsus, 0.55 mm. long. Fourth leg: femur, 1.30 mm., patella, 0.70 mm., tibia, 1.08 mm., metatarsus, 1.55 mm., and tarsus, 0.77 mm. long.

Palpus as illustrated in Figs. 15, 16 and 17, suggestive of that of *chamberlini* but the principal scopal process (Fig. 16) not as long or as slender as in that species.

TYPE LOCALITY.—Male holotype from Cuernavaca, Morelos, Mexico, June 20, 1936 (L. I. Davis).

Pirata veracruzae, new species

Figure 23

MALE.—Total length, 3.60 mm.

	Length	Width
CARAPACE	1.80 mm.	1.30 mm.
FRONT	0.40	0.63
STERNUM	0.90	0.78
LABIUM	0.28	0.27
MAXILLA	0.50	0.25
ABDOMEN	1.80	1.05

Carapace dark brown, the sides showing very faint traces of submarginal light stripes, the pars cephalica with the usual Y-shaped maculation which encloses a black marking of the same shape, the stem portion continued caudad to the margin. Sternum light yellow, dusky on the sides, divided by a faint pale longitudinal stripe. Labium dusky, the maxillae and coxae pale yellow, somewhat dusky. Legs dusky brown, with very faint dark annulae evident on the femora. Dorsum of abdomen mostly black, with a paler hastate marking at the base and two rows of small white spots. Venter of the abdomen paler but with dark markings in the apical half.

First row of eyes slightly narrower than the

second, essentially straight, the medians separated by their radius, as far from the smaller laterals. Clypeus equal in height to a radius of an anterior median eye. Eyes of the second row narrower than the third row (45/60), separated by about two-thirds their diameter, slightly farther from the smaller eyes of the posterior row. Dorsal eye quadrangle broader than long (60/43). Second row of eyes about five-sevenths of the width of the carapace at that point. Lower margin of the furrow of the chelicera with three teeth, the middle one largest.

Tibiae of the first legs with two ventral pairs and a weak apical spine, and a prolateral which is almost ventral in position. All metatarsi and the tibiae of the third and fourth legs with three pairs of ventral spines. First leg: femur, 1.40 mm., patella, 0.63 mm., tibia, 1.23 mm., metatarsus, 1.34 mm., and tarsus, 0.65 mm. long. Fourth leg: femur, 1.65 mm., patella, 0.60 mm., tibia, 1.55 mm., metatarsus, 1.96 mm., and tarsus, 0.78 mm. long.

Palpus as illustrated in Fig. 23, suggestive of that of *Pirata felix* Cambridge but distinct in the shorter, blunter distal prong and smaller basal process of the median apophysis, more closely related to *Pirata gratus*, new species, but distinct in the details of the median apophysis as illustrated.

TYPE LOCALITY.—Male holotype from Potrero, Vera Cruz, June 24, 1936 (L. I. Davis).

This species is distinct from *Pirata gratus* in color, being much darker and scarcely showing any traces of a submarginal pale stripe on the carapace.

Pirata browni, new species

Figure 18

FEMALE.—Total length, 3.30 mm.

	Length	Width
CARAPACE	1.73 mm.	1.18 mm.
FRONT	0.45	0.65
STERNUM	0.86	0.78
LABIUM	0.22	0.24
MAXILLA	0.40	0.24
ABDOMEN	1.50	1.00

Carapace pale yellow, contrastingly marked in black as follows. Sides with a marginal black band as wide as the pale submarginal band. Dorsal longitudinal dark stripes going from the sides of the head to the posterior margin, the interval between them pale, enclosing the usual Y-shaped dark maculation. Eye region black, the median pale stripe extending between the eyes of the posterior row. General coloration closely resembling females of *P. insularis* Emerton. Under side of the carapace pale yellow, without darker markings. Legs pale yellow, all of them strongly marked with black annulae. Abdomen mostly black above, variegated with pale spots and with a pale sagittate marking at

the base. Sides of the abdomen black, the venter immaculate yellow.

Structure essentially typical, the front moderately broad. Clypeus equal in height to the diameter of an anterior lateral eye. First row of eyes gently procurved, the larger medians separated by their radius, half as far from the laterals. Eyes of the second row separated by about three-fourths their diameter. Dorsal eye quadrangle broader than long (61/42), narrowed in front (61/46), the posterior eyes smaller. Chelicera with three teeth on the lower margin, the one nearest the base of the claw smallest.

First tibia with two pairs of ventral spines, lacking distals, the prolateral surface with a strong spine which is nearly ventral in position. First metatarsus with 2-2-2 ventral spines, the last pair apical. First leg: femur, 1.25 mm., patella, 0.60 mm., tibia, 0.95 mm., metatarsus, 1.00 mm., and tarsus, 0.55 mm. long. Fourth leg: femur, 1.45 mm., patella, 0.60 mm., tibia, 1.23 mm., metatarsus, 1.62 mm., and tarsus, 0.65 mm. long.

Epigynum as illustrated in Fig. 18, presenting two separated, subtriangular lobes which are brown in color and strongly sclerotized.

TYPE LOCALITY.—Female holotype from Rio Gualolejo, near Forlon, Tamaulipas, April 16, 1938 (L. I. Davis and Brice Brown).

This small species is distinct from *Pirata gratus*, new species, and *P. sedentaria* Montgomery in having a wide marginal black stripe on the carapace. It approximates *P. insularis* closely in general structure and coloration but is distinct in its smaller size and in having the epigynal lobes subtriangular rather than broadly rounded.

Pirata minutus Emerton

Pirata minutus EMERTON, 1885, Trans. Connecticut Acad. Arts and Sci., VI, p. 493, Pl. XLVIII, fig. 10.

RECORD.—GUERRERO: Acapulco, June 16, 1936, immature specimens (L. I. Davis).

The specimens on which this record is based, although immature, agree closely with northern examples of Emerton's species. The lower margin of the furrow of the chelicerae is armed with two teeth. *Pirata minutus* Emerton has not been reported heretofore from south of Texas where the species is very rare.

Pirata felix Cambridge

Pirata felix O. P. CAMBRIDGE, 1898, Biol. Centr. Amer., Araneidea, I, p. 243, Pl. XXXIII, fig. 6.

RECORD.—SAN LUIS POTOSI: five miles north of Tamazunchale, July 2, 1936, three males, two females (A. M. and L. I. Davis).

***Pirata sedentarius* Montgomery**

Pirata sedentarius MONTGOMERY, 1904, Proc. Acad. Nat. Sci. Philadelphia, p. 312, Pl. XIX, figs. 28 and 29.

RECORD.—NUEVA LEON: Horsetail Falls, June 11, 1936, male (A. M. and L. I. Davis).

This is a widely distributed species which occurs commonly in the southeastern United States, in Mexico and in the mountains of Central America. Numerous examples were taken at El Volcan, Chiriqui, Panama, by Gertsch in 1936.

***Pirata gratus*, new species**

Figures 19 and 21

MALE.—Total length, 3.25 mm.

	Length	Width
CARAPACE	1.73 mm.	1.20 mm.
FRONT	0.40	0.60
STERNUM	0.84	0.78
LABIUM	0.22	0.24
MAXILLA	0.42	0.27
ABDOMEN	1.50	1.00

Carapace light yellow, sparsely clothed with pale hairs, the ocular region and clypeus with a few black bristles. Carapace with two longitudinal dusky stripes from the sides of the head to the caudal margin, the interval between forming a pale band which encloses the usual Y-shaped dusky maculation in front of the linear median groove. Sides of the carapace with a broad pale marginal band, the margin with a narrow black seam. Eye region black but the median pale stripe extending forward between the eyes of the third row. Under side of the carapace dull yellow, somewhat dusky, the sternum with very faint black spots at the base of each coxa. Clothing of the under side made up of inconspicuous hairs. Appendages dull yellow, somewhat dusky, with slight traces of darker annulae. Abdomen dark above, with a basal hastate pale maculation and rows of pale spots. Venter pale, without markings.

Structure typical, the front relatively narrow. First row of eyes gently procurved, the larger medians separated by their radius, half as far from the laterals. Clypeus equal in height to the diameter of an anterior lateral eye. Eyes of the second row separated by scarcely their diameter. Dorsal eye quadrangle broader than long (60/40), narrowed in front (60/45), the posterior eyes smaller. Chelicera with three subequal teeth on the lower margin. Labium slightly broader than long.

First tibia with two pairs of ventral spines and a single weak distal, with one weak retrolateral spine and two prolaterals, one of them nearly ventral in position. First metatarsus with three pairs of ventral spines, the last pair distal. First leg: femur, 1.35 mm., patella, 0.60 mm., tibia, 1.10 mm., metatarsus, 1.20 mm., and tarsus, 0.60 mm. long. Fourth leg: femur, 1.60 mm., patella, 0.60 mm., tibia, 1.43 mm., metatarsus, 1.75 mm., and tarsus, 0.73 mm. long.

Palpus as illustrated in Fig. 21, the median apophysis a curved spur with a tooth at the base.

FEMALE.—Total length, 3.40 mm.

Carapace, 1.80 mm. long, 1.25 mm. wide. Coloration and structure in very close agreement with the male. Epigynum as illustrated in Fig. 19 conventional in form, resembling to some extent that of *Pirata sedentarius* Montgomery, a much larger species.

TYPE LOCALITIES.—Male holotype and female paratypes from San Fernando, Tamaulipas, Mexico, March 28, 1937 (L. I. Davis). Female allotype from one mile southeast of Villa Juarez, Tamaulipas, April 17, 1938 (L. I. Davis). Female paratype from Arroyo de los Japones, north of Valles, San Luis Potosi, Nov. 26, 1938 (A. M. and L. I. Davis). Female paratype from south of Valles, San Luis Potosi, near bridge over Rio Axtla, Nov. 25, 1938 (L. I. Davis).

This is a small, rather pale species which is distinct from other forms in the details of the median apophysis. This is of average size and presents a stout, curved spur, semilunar in shape, the retrolateral side deeply excavated and the basal tooth smaller than the distal. Except for size, it closely approximates *sedentarius* but differs in having a narrower head and in the details of the palpus.

***Schizocosa parallela* (Banks)**

Pardosa parallela BANKS, 1898, Proc. California Acad. Sci., I, p. 276, Pl. XVI, fig. 27.

Schizocosa celerior CHAMBERLIN, 1910, Ent. News, Philadelphia, XXI, Pl. I, fig. 1.

RECORD.—COAHUILA: five miles west of Saltillo, July 5, 1936, two females (L. I. Davis).

***Lycosa carolinensis* Walckenaer**

Lycosa carolinensis WALCKENAER, 1837, Insectes Aptères, I, p. 285.

RECORDS.—NUEVO LEON: Los Herrars, Nov. 27, 1938, female (Davis). SAN

LUIS POTOSI: Arroyo Juan Gordo, north of Valles, Nov. 25, 1938, male, two females (L. I. Davis).

Lycosa rabida Walckenaer

Lycosa rabida WALCKENAER, 1837, Insectes Aptères, I, p. 320.

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

Lycosa antelucana Montgomery

Lycosa antelucana MONTGOMERY, 1904, Proc. Acad. Nat. Sci. Philadelphia, p. 282, Pl. XVIII, figs. 5 and 6.

RECORDS.—TAMAULIPAS: fifty miles south of Matamoras, March 27, 1937, female (Davis). NUEVO LEON: Monterrey, June 10, 1936, male (Davis); November 27, 1937, female (L. I. Davis and Brice Brown). Seventy-six miles north of Monterrey, July 7, 1936, male (Davis).

Lycosa tamae, new species

Figure 13

FEMALE.—Total length, 14.80 mm.

	Length	Width
CARAPACE	7.65 mm.	5.60 mm.
FRONT	2.00	3.20
STERNUM	3.00	2.55
LABIUM	1.10	1.10
MAXILLA	2.00	1.00
ABDOMEN	7.00	4.20

Carapace evenly clothed with appressed brown hairs, the ocular region and clypeal margin with a few spines. Carapace dark brown on the sides, with a very faint indication of supra-marginal side bands, the midline with a pale yellowish brown longitudinal band which begins between the eyes of the second row, expands behind to a width equal to the distance between the posterior eyes and gradually diminishes in width to a point behind the linear median groove where it is obliterated. Sternum and coxae light yellowish brown, the labium and maxillae dark brown, the mandibles black, all clothed with erect black hairs or bristles. Legs light to dark brown, nearly concolorous with the sides of the carapace, without darker annulae, clothed with brown hair. Abdomen dark brown above, slightly lightened at the base, the venter yellowish brown.

Carapace very broad in front, the eye group occupying more than half the width at the third

eye row (22/38). First row of eyes scarcely as wide as the second row, weakly procurved, the medians separated by their radius, as far from the smaller laterals. Second row of eyes narrower than the third (22/18), the eyes separated by a little more than their radius, scarcely a diameter from the somewhat smaller eyes of the third row. Dorsal eye quadrangle broader than long (22/16). Clypeus equal in height to the diameter of an anterior median eye. Chelicera with three subequal robust teeth on the lower margin, the upper margin with three of which the middle one is largest.

Legs moderately long, the tibiae and metatarsi with 2–2 ventral spines, the first and second tibiae without dorsal spines, the third and fourth tibiae with a basal and submedian dorsal spine. First leg: femur, 5.80 mm., patella, 2.75 mm., tibia, 4.65 mm., metatarsus, 4.75 mm., and tarsus, 2.80 mm. long. Fourth leg: femur, 6.40 mm., patella, 2.80 mm., tibia, 5.50 mm., metatarsus, 8.00 mm., and tarsus, 3.50 mm. long.

Epigynum as illustrated in Fig. 13.

TYPE LOCALITY.—Female holotype from Tamazunchale, San Luis Potosi, Mexico, July 10, 1937 (Ottys Sanders). Female paratype from Valles, San Luis Potosi, July 15, 1937 (Ottys Sanders). Immature female paratype from five miles north of Tamazunchale, July 2, 1936 (A. M. and L. I. Davis).

This species is distinct from *Lycosa longitarsis* F. Cambridge in lacking a dorsal apical spine on the first and second tibiae, in the slight dilatation of the median septum of the epigynum, and in having the fourth metatarsus only slightly exceeding the carapace in length.

Lycosa coahuilana, new species

Figure 14

FEMALE.—Total length, 11.00 mm.

	Length	Width
CARAPACE	5.15 mm.	3.60 mm.
FRONT	1.30	2.20
STERNUM	2.15	1.75
LABIUM	0.73	0.70
MAXILLA	1.20	0.70
ABDOMEN	6.00	3.40

Cephalothorax with a few long spines in the ocular region and on the clypeus. Carapace with a median longitudinal light brown stripe which begins between the eyes of the second row as a narrow line, expands abruptly at the posterior eyes to a width equal to the interval between them and continues caudad to the margin with a gradual decrease in width, the sides

essentially subparallel, the stripe clothed thickly with procumbent white hairs. Most of the ocular region and the sides of the carapace dark brown clothed with black hairs but the sides with a narrow white band above the margin clothed with white hairs. Sternum light yellowish brown, dusky in the middle, the coxae pale yellow, clothed with erect black hairs and procumbent white hairs. Labium black, the maxillae light brown, the chelicerae black, clothed with black hairs and bristles. First two legs light yellowish brown, the sides with dark maculations, clothed with black and white hairs. Last two legs with black annulae at the distal ends of the tibiae and metatarsi. Abdomen dark brown on the sides, the dorsum with a median paler longitudinal stripe its whole length in which is a dark hastate maculation which is crossed by indistinct transverse bars in the caudal half. Venter of the abdomen pale yellowish brown, without markings.

Structure in close agreement with *L. avida* Walckenaer. Carapace moderately broad in front, the eyes occupying about three-fifths of the width of the head at the third eye row (14/22). First row of eyes slightly narrower than the second, slightly procurved, the medians separated by their radius, as far from the subequal laterals. Eyes of the second row narrower than the third (11/14), separated by about three-fourths their diameter, a full diameter from the slightly smaller posterior eyes. Dorsal eye quadrangle broader than long (14/11), narrowed in front in the same ratio. Clypeus equal in height to the diameter of an anterior median eye. Chelicera with three subequal teeth on the lower margin, with three on the upper of which the middle one is largest.

Legs moderately long, the tibiae and metatarsi with 2-2-2 ventral spines, the first and second tibiae unarmed above, the third and fourth tibiae with a basal and a submedian dorsal spine. First leg: femur, 3.80 mm., patella, 2.10 mm., tibia, 2.85 mm., metatarsus, 2.75 mm., and tarsus, 1.80 mm. long. Fourth leg: femur, 4.60 mm., patella, 2.00 mm., tibia, 3.65 mm., metatarsus, 5.00 mm., and tarsus, 2.50 mm. long.

Epigynum as illustrated in Fig. 14.

TYPE LOCALITY.—Female holotype from Saltillo, Coahuila, Mexico, July 18, 1937 (Ottys Sanders).

This strongly marked species belongs in the *avida* group. It is somewhat smaller than *Lycosa avida*, lacks the markings on the venter of the abdomen usually present in that species, and differs slightly in the details of the epigynum.

Lycosa tlaxcalana, new species

Figure 12

FEMALE.—Total length, 18.50 mm.

	Length	Width
CARAPACE	9.50 mm.	7.00 mm.
FRONT	2.00	4.15
STERNUM	4.10	3.15
LABIUM	1.70	1.25
MAXILLA	2.70	1.20
ABDOMEN	9.00	6.50

Carapace reddish brown, with a narrow median longitudinal pale stripe which begins between the dorsal eye group as a narrow line and expands behind to a width less than the interval between the posterior eyes, the caudal portion of the stripe evenly narrowed to the margin. Sides of the carapace with a narrow pale band its width above the margin. Clothing of the carapace black hairs for the most part but the pale bands, the margins and the sides of the heads with white hairs. Sternum, mouth parts and coxae light brown, suffused with black, the clothing erect black hairs. Chelicerae black, set with black hairs and bristles. Legs light yellowish brown, without black annulae, clothed with black hairs. Abdomen mostly black above, with a darker basal maculation outlined by pale hairs. Venter of the abdomen black.

Structure typical, closely approximating *Lycosa antelucana* Montgomery in general details. Front relatively broad, the posterior eyes about half as wide as the carapace at that point. First row of eyes gently procurved, the somewhat larger medians separated by their radius, as far from the laterals. Clypeus equal in height to a diameter of an anterior lateral eye. Eyes of the second row separated by two-thirds their diameter. Dorsal eye quadrangle broader than long (112/75), narrowed in front in the same ratio, the posterior eyes larger. Chelicera with three teeth on the lower margin.

First tibia armed with 2-2-2 ventral spines, all of them short, equal in length to about half the breadth of the joint. First metatarsus with 2-2-2 short ventral spines. Posterior tibiae armed as the first but the spines beneath the last two tibiae as long as the width of the joint. First tibiae without dorsal or lateral spines, the second tibiae without dorsals or retrolaterals but with two prolateral spines. Third and fourth tibiae with two prolaterals, two retrolaterals and two dorsal spines of which one is near the base and one is submedian in position. First leg: femur, 6.20 mm., patella, 3.50 mm., tibia, 4.75 mm., metatarsus, 4.65 mm., and tarsus, 3.00 mm. long. Fourth leg: femur, 7.00 mm., patella, 3.35 mm., tibia, 5.50 mm., metatarsus, 7.35 mm., and tarsus, 3.20 mm. long.

Epigynum as illustrated in Fig. 12.

TYPE LOCALITY.—Female holotype from Tlaxcala, Tlaxcala, Mexico, June 26, 1936 (L. I. Davis).

This species is distinct from *Lycosa antelucana* in completely lacking dark annulae on any of the legs. It differs from *Lycosa brunnea* in not having the stem of

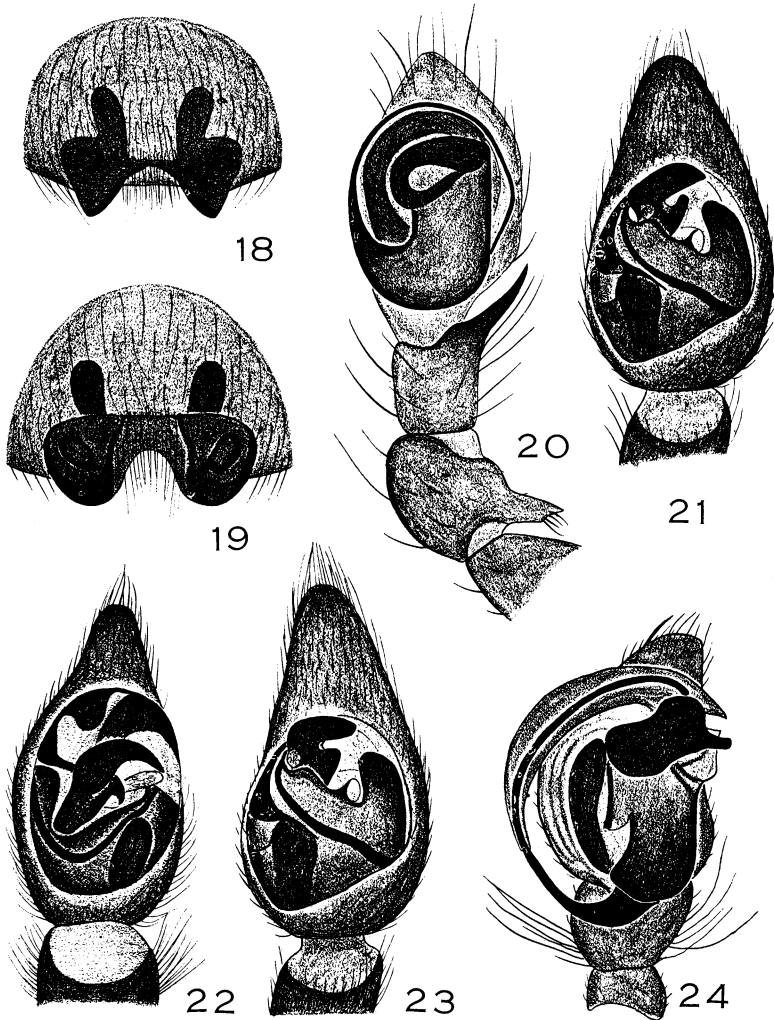


Fig. 18. *Pirata browni*, new species, epigynum.

Fig. 19. *Pirata gratus*, new species, epigynum.

Fig. 20. *Hahn timeracruza*, new species, left male palpus, ventral view.

Fig. 21. *Pirata gratus*, new species, left male palpus, ventral view.

Fig. 22. *Pardosa desolatula*, new species, left male palpus, ventral view.

Fig. 23. *Pirata veracruzae*, new species, left male palpus, ventral view.

Fig. 24. *Storena absolutula*, new species, left male palpus, ventral view.

the epigynum expanded in front; and from *Lycosa subfusca* in having the stem of the median septum broader and the basal cross-piece narrower.

***Lycosa transversa* Cambridge**

Lycosa transversa F. CAMBRIDGE, 1902, Biol. Centr. Amer., Araneidea, II, p. 325, Pl. xxxi, fig. 13.

RECORD.—VERA CRUZ: Cerro Gordo, June 22, 1936, female (Davis).

Pisauridae

***Thaumasia peregrinus* Bishop**

Thaumasia peregrinus BISHOP, 1924, Bull. New York State Mus., No. 252, p. 62, Pl. xxxvi, fig. 1, Pl. xxxvii, figs. 1-4.

RECORDS.—TAMAULIPAS: thirty-five miles north of Villa Juarez, April 17, 1938, immature specimens (Davis). Five miles east of San Pedro, July 5, 1936, two immature females (Davis). SAN LUIS POTOSI: five miles north of Tamazunchale, July 2, 1936, immature specimens (A. M. and L. I. Davis).

***Dolomedes urinator* Hentz**

Dolomedes urinator HENTZ, 1845, Journ. Boston Soc. Nat. Hist., V, p. 190, Pl. xvi, fig. 3.

RECORD.—NUEVO LEON: Horsetail Falls, Nov. 27, 1937, one female (L. I. Davis and Brice Brown).

Oxyopidae

***Oxyopes salticus* Hentz**

Oxyopes salticus HENTZ, 1845, Journ. Boston Soc. Nat. Hist., V, p. 196, Pl. xvi, fig. 10.

RECORDS.—TAMAULIPAS: twenty-seven miles north of Villa Juarez, April 17, 1938, female (A. M. and L. I. Davis). SAN LUIS POTOSI: Arroyo Juan Gordo, north of Valles, Nov. 25, 1938 (L. I. Davis and Brice Brown).

***Oxyopes lingulifer* Cambridge**

Oxyopes lingulifer F. CAMBRIDGE, 1902, Biol. Centr. Amer., Araneidea, II, p. 345, Pl. xxxii, fig. 25.

RECORDS.—TAMAULIPAS: fifteen miles south of Victoria, July 2, 1936, male (A. M. and L. I. Davis). CHIAPAS:

Tonalá, August, 1909, male, three females (A. Petrunkevitch).

***Oxyopes bifidus* Cambridge**

Oxyopes bifidus F. CAMBRIDGE, 1902, Biol. Centr. Amer., Araneidea, II, p. 344, Pl. xxxii, fig. 20.

RECORD.—CHIAPAS: Tonalá, August, 1909, male, four females (A. Petrunkevitch).

***Oxyopeidon laetum* Cambridge**

Oxyopeidon laetum CAMBRIDGE, 1894, Biol. Centr. Amer., I, p. 142, Pl. xvi, fig. 10.

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

***Peucetia viridans* (Hentz)**

Oxyopes viridans HENTZ, 1845, Journ. Boston Soc. Nat. Hist., V, p. 195, Pl. xvii, fig. 2.

RECORDS.—GUERRERO: Iguala, June 19, 1936, young female (A. M. and L. I. Davis). HIDALGO: Jacala, June 13, 1936, young female (Davis).

Hahniidae

***Hahnia veracruzana*, new species**

Figure 20

MALE.—Total length, 1.05 mm.

	Length	Width
CARAPACE	0.54 mm.	0.43 mm.
FRONT	0.15	0.25
STERNUM	0.34	0.32
LABIUM	0.05	0.10
MAXILLA	0.14	0.15
ABDOMEN	0.60	0.47

Carapace pale yellow, faintly marked with darker radiating streaks on the pars thoracica and with an inconspicuous narrow dusky marginal seam, the eyes enclosing a black field. Sternum lightly infuscated on the margins. Appendages slightly darker than the carapace, without contrasting markings. Abdomen gray to white, lightly infuscated above.

Carapace rather smooth, with a few weak hairs on the mid-line and on the clypeal margin. Carapace slightly longer than broad, relatively short and stout, the pars cephalica gently rounded in front, convex, the median groove an inconspicuous linear depression. First row of eyes narrower than the second (22/26), moderately procurved, the small medians subcontiguous with each other and the very much larger lateral eyes. Clypeus sloping forward, equal in height to two-thirds the diameter of an

anterior lateral eye. Second row of eyes moderately procurved, a line along the front edges of the medians cutting the centers of the laterals, the oval medians set obliquely, separated by four-sevenths the long diameter, slightly nearer the subequal laterals. Median ocular quadrangle broader than long (16/14), half as wide in front, the anterior median eyes much smaller. Sternum slightly longer than broad, truncated in front and behind, the posterior coxae separated by their length. Abdomen oval, the spiracle seemingly located much nearer the spinnerets than the genital furrow. Spinnerets as usual in the genus, the terminal joint of the lateral spinneret shorter than the basal.

Palpus as illustrated in Fig. 20.

TYPE LOCALITY.—Male holotype from fifteen miles west of Jalapa, Vera Cruz, June 23, 1936 (A. M. and L. I. Davis).

This tiny species is most closely related to *Hahnia okefenokensis* Chamberlin and Ivie with which it agrees in general structure. It is distinct in having the eyes of the posterior row more strongly recurved and in the longer, more slender tibial apophysis of the palpus.

Zodariidae

Storena absoluta, new species

Figures 24, 28 and 29

MALE.—Total length, 4.00 mm.

	Length	Width
CARAPACE	2.15 mm.	1.55 mm.
FRONT	0.65	0.88
STERNUM	0.90	0.84
LABIUM	0.28	0.30
MAXILLA	0.35	0.35
ABDOMEN	1.75	1.30

Carapace bright reddish brown except for a black marginal band and the black rings around the eyes. Clypeus dusky. Carapace smooth and shining, glabrous, with a very few short erect black hairs, in the ocular region. Sternum bright yellow, the margins slightly darker, thinly clothed with black hairs. Labium slightly darker, the endites concolorous with the sternum, the clothing a few black hairs. Coxae greenish yellow. Legs bright yellow to orange, the femora dusky on the sides, all the segments thinly clothed with black hairs. Abdomen purplish brown above, with a pair of white spots at the base and a pair of white bars and a round white spot behind, the latter just above the spinnerets. Venter gray, with a U-shaped purplish maculation in the center, the base and a portion in front of the spinnerets sclerotized, light brown in color.

Carapace oval in outline, narrower in front, strongly and evenly convex, the median groove

a short linear depression situated back seven-tenths of the total length. Pars cephalica intimately fused to the pars thoracica, the striae obsolete. Eyes in a close set group at the front, protruding, the high clypeus retreating. Clypeus, 0.45 mm. in height, equal to twice the height of the median ocular quadrangle. First row of eyes much narrower than the second (35/55), weakly procurved, the small medians separated by about their radius, as far from the laterals. Posterior row of eyes weakly recurved, the medians separated by scarcely their radius (5/13), farther from the subequal lateral eyes (14/13). Median ocular quadrangle slightly longer than broad (30/28), narrowed in front (28/20), the anterior median eyes much smaller. Chelicera retreating, rather stout, the claw short, the margins unarmed, the upper one with a row of stout black bristles. Labium subtriangular. Endites as broad as long, convergent, the tips supplied with a small band of fine black hairs.

Legs moderately stout, the first tibia with one basal prolateral and 1–1–2 ventral; spines; the first metatarsus with a distal prolateral and 2–2–2 ventral spines. Posterior legs strongly spinose above and beneath, the fourth tibiae with 2–2–2 ventral spines. First leg: femur, 1.30 mm., patella, 0.50 mm., tibia, 1.10 mm., metatarsus, 1.17 mm., and tarsus, 0.80 mm. long. Fourth leg: femur, 1.35 mm., patella, 0.56 mm., tibia, 1.07 mm., metatarsus, 1.60 mm., and tarsus, 0.65 mm. long.

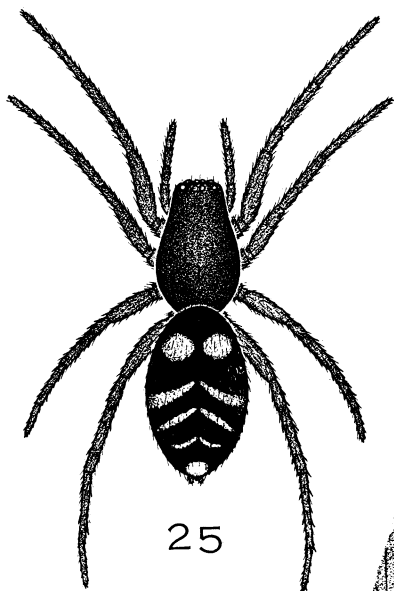
Palpus as illustrated in Fig. 24.

FEMALE.—Total length, 4.60 mm.

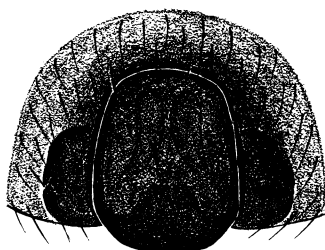
	Length	Width
CARAPACE	2.25 mm.	1.35 mm.
FRONT	0.70	1.00
STERNUM	0.80	0.83
LABIUM	0.30	0.33
MAXILLA	0.43	0.39
ABDOMEN	2.10	1.40

Color pattern as illustrated in Fig. 29, essentially as in *Storena veracruzana*, new species, the principle difference being the presence of two dark spots on the venter of the abdomen.

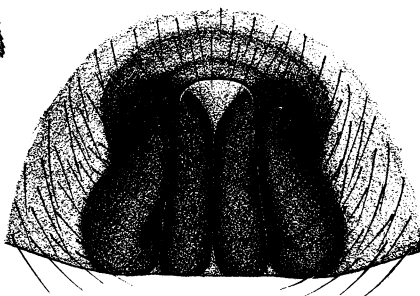
Structure as in *veracruzana* but the pars cephalica relatively broader. Carapace strongly convex, highest between the second coxae, declining forward and caudad from that point, the median groove a slight linear depression situated back four-fifths of the total length. Eyes set far forward as usual, the first row narrower than the second (20/30), moderately procurved, the small medians separated by their radius, as far from the larger laterals. Clypeus high, 0.44 mm., equal in height to fully four times the diameter of an anterior lateral eye, scarcely twice as high as the length of the median ocular quadrangle. Second row of eyes very gently recurved, essentially straight, the medians separated by scarcely one-third their diameter, slightly more than a diameter from the subequal laterals. Median ocular quadrangle slightly



25



28



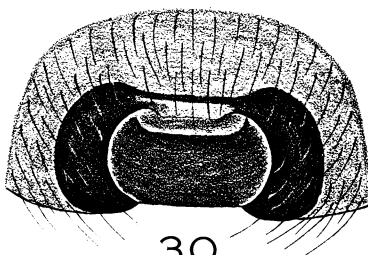
26



29



27



30

Fig. 25. *Storena veracruzana*, new species, dorsal view of female.

Fig. 26. Idem, epigynum.

Fig. 27. Idem, ventral view of cephalothorax and abdomen of female.

Fig. 28. *Storena absoluta*, new species, epigynum.

Fig. 29. Idem, dorsal view of cephalothorax and abdomen of female.

Fig. 30. *Storena mundella*, new species, epigynum.

(Figs. 25, 26, and 27 were prepared by Mr. Wilton Ivie.)

longer than broad (33/31), narrowed in front (33/22), the anterior median eyes much smaller, about two-thirds the diameter of the posterior median eyes.

First tibia with a prolateral spine at the base and a single distal ventral spine; first metatarsus with a single basal ventral spine, a distal ventral pair and a distal spine on the prolateral surface. First femur with two dorsal spines. Posterior tibiae and metatarsi strongly spinose on all surfaces, the posterior patellae with four stout dorsal, or subdorsal, spines. First leg: femur, 1.25 mm., patella, 0.52 mm., tibia, 1.00 mm., metatarsus, 1.00 mm., and tarsus, 0.76 mm. long. Fourth leg: femur, 1.28 mm., patella, 0.58 mm., tibia, 1.04 mm., metatarsus, 1.48 mm., and tarsus, 0.76 mm. long.

Epigynum as illustrated in Fig. 28, distinct from the other species in being a plate somewhat longer than broad which is round in front and behind.

TYPE LOCALITY.—Male holotype from thirteen miles south of Villa Juarez, Tamaulipas, April 17, 1938 (A. M. and L. I. Davis). Female allotype from Tamazunchale, San Luis Potosi, Nov. 25, 1938 (A. M. and L. I. Davis).

The male of this fine species is distinct from *Storena hessei* Chamberlin and Ivie in having a black margin on the bright red carapace, in having the posterior median eyes much nearer together, and in the less strongly developed superior apophysis on the tibia of the palpus. The female is distinct in the epigynum.

Storena veracruzana, new species

Figures 25, 26 and 27

FEMALE.—Total length, 3.75 mm.

	Length	Width
CARAPACE	1.60 mm.	0.97 mm.
FRONT	0.50	0.65
STERNUM	0.70	0.65
LABIUM	0.21	0.24
MAXILLA	0.30	0.30
ABDOMEN	1.85	1.40

Integument of the carapace nearly glabrous set very sparsely with short erect black hairs and several longer black bristles in the ocular region. Carapace as illustrated in Fig. 25, smooth and shining, reddish brown except for a paler spot just in front of the median groove, the eyes ringed with black. Under side bright yellowish brown, sparsely clothed with erect black hairs. Chelicerae dark brown, set with short stiff black bristles. Legs pale yellow, with a greenish tinge, without markings, clothed with rows of black hairs. Color pattern and general structure as illustrated in Figs. 25 and 27.

Carapace much longer than broad, as seen from above a long oval, narrowed in front, strongly convex; as seen from the side rather high, highest between the second coxae, evenly declining forward and behind to the median groove, the descent of the posterior declivity more abrupt. Clypeus high, 0.30 mm., subvertical, the height equal to one and one-half times the height of the median ocular quadrangle. First row of eyes much narrower than the second (44/62), moderately procurved, the small medians separated by their radius, as far from the laterals. Second row of eyes straight, the medians separated by four-elevenths their diameter, their diameter from the slightly larger lateral eyes. Median ocular quadrangle longer than broad (28/25), the anterior eyes very much smaller, about one-half the diameter of the posterior eyes. Cheliceral margins unarmed.

First leg unarmed except for a single basal spine and a distal pair beneath the metatarsus. Fourth tibia with 1-1-2 ventral spines. Third and fourth patellae with four stout subdorsal spines. Third and fourth legs with dorsal and lateral spines. First leg: femur, 0.85 mm., patella, 0.40 mm., tibia, 0.70 mm., metatarsus, 0.72 mm., and tarsus, 0.55 mm. long. Fourth leg: femur, 0.91 mm., patella, 0.43 mm., tibia, 0.74 mm., metatarsus, 1.05 mm., and tarsus, 0.52 mm. long.

Epigynum as illustrated in Fig. 26, suggestive of that organ in *Storena hessei* but distinct in details.

TYPE LOCALITY.—Female holotype and immature paratype from Vera Cruz, Vera Cruz, June 22, 1936 (L. I. Davis).

This species, which has been compared with the types of *Storena hessei* Chamberlin and Ivie, by Mr. Wilton Ivie, is distinct in the details of the epigynum as illustrated, in having the anterior median eyes much smaller than the laterals, and having the posterior median eyes much closer together.

Storena mundella, new species

Figure 30

FEMALE.—Total length, 4.15 mm.

	Length	Width
CARAPACE	1.73 mm.	1.08 mm.
FRONT	0.55	0.73
STERNUM	0.74	0.70
LABIUM	0.20	0.26
MAXILLA	0.30	0.30
ABDOMEN	2.10	1.45

Coloration and general structure in close agreement with *Storena veracruzana*, new species. Abdomen with a basal pair of white bars, a submedian pair and a single white spot above the spinnerets. Carapace much longer than broad,

rather narrow in front, strongly convex. Clypeus, 0.32 mm., equal in height to four diameters of an anterior lateral eye. Carapace as seen from the side highest between the second coxae, evenly declining forward and caudad from that point. First row of eyes much narrower than the second (46/65), moderately procurved, the small medians separated by about their radius, as far from the much larger lateral eyes. Second row of eyes straight, the medians separated by one-third their diameter, a full diameter from the slightly larger laterals. Median ocular quadrangle longer than broad (27/24), narrowed in front (27/16), the anterior eyes much smaller. Chelicerae unarmed on the margins. Posterior coxae slightly separated.

First tibia with a basal pair and a median ventral spine, the first metatarsus with a basal and a distal ventral pair. Third and fourth legs strongly spined, the patellae with four stout

spines which are dorsal in position or nearly so. First leg: femur, 1.05 mm., patella, 0.44 mm., tibia, 0.84 mm., metatarsus, 0.90 mm., and tarsus, 0.65 mm. long. Fourth leg: femur, 1.05 mm., patella, 0.44 mm., tibia, 0.86 mm., metatarsus, 1.30 mm., and tarsus, 0.65 mm. long.

Epigynum as illustrated in Fig. 30.

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

This species differs from *Storena veracruzana* in lacking the small caudal pale chevrons on the dorsum of the abdomen. It is readily distinguished by the shape of the epigynum which presents a plate which is much broader than long.