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# FURTHER RECORDS AND DESCRIPTIONS OF NORTH AMERICAN GNAPHOSIDAE

#### By RALPH V. CHAMBERLIN

The present paper is a report upon additional material of the family Gnaphosidae sent to me for study by The American Museum of Natural History. Descriptions of several forms not represented in this collection are also included. Unless otherwise noted, the types are deposited in the collection of the American Museum.

#### HERPYLLUS HENTZ

## Herpyllus cratus Chamberlin

Herpyllus cratus Chamberlin, 1922, Proc. Biol. Soc. Washington, XXXV, p. 150.

RECORD.—Texas: Edinburg. One female taken in April, 1934, by Mr. Stanley Mulaik. Previously known from Punta Gorda, Florida.

## Herpyllus emertoni Bryant

Figure 8

Herpyllus emertoni Bryant, 1935, Psyche, XLII, p. 73, Pl. v, figs. 1, 2.

RECORD.—Florida: Alachua County, one male.

## Herpyllus bryophilus, new species

Figure 9

Female.—Carapace, sternum and chelicerae chestnut, the legs a little higher. Abdomen with integument gray.

Tarsi and metatarsi I and II scopulate throughout length, the distal end of tibia I also with scopular hairs. Tarsi III and IV, but not the corresponding metatarsi, also scopulate. Tibia I with ventral spines 1-1-1, and no anterior spine. Tibia II with ventral spines 0-1-1, a single spine on anterior face. Metatarsi I and II with the usual pair of ventral spines. Tibia III with a median dorsal spine, this lacking on tibia IV.

Anterior median eyes somewhat larger than the laterals, their radius apart and much closer to the laterals. Eyes of posterior row nearly equal in size; median eyes their radius apart and but little farther from the laterals. Area of median eyes a little wider in front than behind (cir. 13:12), and longer than wide in front (cir. 14:13).

Major spinning tubules of anterior spinnerets four. Epigynum as figured.

Length, 6.00 mm. Length of cephalothorax, 2.66 mm.; width, 2.00 mm. Length of tibia + patella I, 2.37 mm.; of tibia + patella IV, 2.90 mm.

LOCALITY.—Louisiana: Tallulah. One female (holotype) taken in Spanish moss (R. V. Chamberlin), and now in the University of Utah collection.

## Herpyllus itamus, new species

#### Figure 10

FEMALE.—Carapace chestnut, the sternum a little lighter. Legs brown. Integument of abdomen gray.

Tarsi and metatarsi I and II scopulate, the posterior tarsi alone scopulate. Ventral spines of tibia I and II alike, 0-1-1, the former unarmed in front, the latter with a single anterior spine toward distal end. Tibia III with the usual median dorsal spine.

Anterior median eyes less than their radius apart, much closer to the laterals. Posterior median eyes somewhat angulate, appearing a little smaller than the laterals, their diameter, or nearly so, apart and nearly the same distance from the laterals. Area of median eyes wider in front than behind, and a little longer than wide. Epigynum as figured.

Tibia + patella I, 2.29 mm.; IV, 2.50 mm. Length of male, 6.00 mm. Length of cephalothorax, 2.83 mm.; width, 1.87 mm. Length of tibia + patella I, 2.00 mm.; IV, 2.50 mm.

Locality.—Florida: Hastings, female holotype, collected March 3, 1927.

## Herpyllus cepeus, new species

#### Figure 13

FEMALE.—Carapace and sternum dilute chestnut, the legs more yellowish brown. Abdomen above dark gray with a lighter mark at base suggesting that of *H. vasifer* followed by several vague light chevron marks; venter lighter gray.

Tarsi and metatarsi I and II scopulate, the tarsi alone of legs III and IV scopulate. Ventral spines of tibiae I and II, 0-1-2, neither with spine on anterior or posterior face. Metatarsi I and II with the usual pair of robust spines at base.

Anterior median eyes obviously larger than the laterals, a little more than their radius apart, much closer to the laterals. Posterior row of eyes longer than the anterior; eyes equidistant, the medians slightly smaller than the laterals. Anterior median eyes larger than the laterals, about their radius apart, closer to the laterals. Area of median eyes longer than wide, wider in front than behind (13:11). Epigynum as figured.

Length, 8.00 mm. Length of cephalothorax, 3.60 mm.; width, 2.50 mm. Length of tibia + patella I, 3.20 mm.; of tibia + patella IV, 3.60 mm.

Locality.—Colorado: Gardner. One female (holotype).

## Herpyllus regnans, new species

#### Figure 14

Female.—Carapace, chelicerae and sternum reddish yellow or pale chestnut, the legs clearer yellow. Abdomen dark gray or brownish gray above; lighter, grayish yellow beneath.

Tarsi and metatarsi I and II and tarsi III and IV scopulate as usual. Ventral spines of tibia I, 1–1–2; of tibia II, 0–1–2 or 0–2–2. Tarsi I and II with a pair of stout spines at base as usual.

Posterior row of eyes distinctly longer than the anterior; median eyes scarcely smaller than the laterals, less than their diameter from each other and much more than their diameter from the laterals. Anterior median eyes decidedly larger than the laterals; about three-fourths their diameter from each other, but very close to the laterals. Area of median eyes clearly longer than wide and wider in front than behind. Epigynum as figured.

Length, 10.00 mm. Length of cephalothorax, 5.00 mm.; width, 3.10 mm. Tibia + patella I, 4.00 mm.; tibia + patella IV, 4.50 mm.

Localities.—Texas: Zapata Co., Arroyo Solado (female holotype), S. Mulaik; Llano Co., Llano (female paratype).

## Herpyllus reservatus, new species

Figure 15

FEMALE.—Carapace, chelicerae and sternum brown, the head region and chelicerae darkest. Legs brown. Abdomen dark gray above, paler in a mid-dorsal stripe, especially anteriorly; the venter light gray.

Tibia I with ventral spines 1-1-1, anterior spine near base. Tibia II with ventral spines as in I, and an anterior spine toward distal end. Tibia III with a middorsal spine at base.

Posterior row of eyes gently procurved, eyes subequal and nearly equidistant, the medians being but slightly nearer each other than to the laterals. Anterior median eyes larger than the laterals (diameters not quite 4:3), their radius or scarcely more apart. Area of median eyes as long as wide in front, and wider in front than behind (cir. 8:7). Epigynum as shown in the figure.

Length, 12.00 mm. Length of cephalothorax, 4.79 mm.; width, 3.13 mm. Tibia + patella I, 4.35; IV, 4.35 mm.

Locality.—Arizona: Tucson. One female taken in August, 1935, by Mr. Peter Steckler.

#### LIODRASSUS CHAMBERLIN

## Liodrassus floridicolens, new species

Figure 16

Female.—Integument of carapace, chelicerae, sternum and legs yellowish. Abdomen above and laterally, dark gray; light gray beneath.

Tarsi and metatarsi I and II scopulate, tarsi III and IV more sparsely scopulate. Tibiae I and II with ventral spines 0-1-1, the spines of corresponding metatarsi 2-0-0. Tibiae III and IV with no median dorsal spines.

Posterior row of eyes straight; eyes about equal; median eyes separated by a diameter or somewhat more, closer to the laterals. Anterior, row of eyes equal in length to the posterior row or nearly so; median eyes approximately equal in size to the laterals, about their radius from each other and subcontiguous with the laterals. Area of median eyes slightly longer than wide and wider in front than behind.

Length, 6.00 mm. Length of cephalothorax, 3.00 mm.; width, 2.13 mm. Tibia + patella I, 2.34 mm.; tibia + patella IV, 2.60 mm.

Locality.—Florida: Alachua County, April 15, 1934, female holotype, collected by Mr. H. K. Wallace.

#### SERGIOLUS SIMON

## Sergiolus amphilogus, new species

## Figure 18

Female.—Carapace irregularly dusky over a yellowish-brown background, the sternum a little lighter. Chelicerae chestnut. Legs with femora dusky over yellow, the other joints yellow excepting the tibia and metatarsus of legs IV which are black throughout excepting distal end of tibia. Abdomen brownish black above crossed transversely with a narrow white stripe near anterior end and a broad white stripe over middle, the latter stripe widening down the sides and across venter where it extends from genital furrow nearly halfway to the spinnerets; venter back of white area blackish. Spinnerets broadly encircled with black, being pale only at the two ends.

The carapace marked with a conspicuous dorsal stria; caudal end mesally incurved.

Anterior tarsi and metatarsi and the posterior tarsi scopulate as usual. Tibia I without spines. Tibia II with ventral spines 0-1-1 or 1-1-1, in the latter case, the proximal spine not far from the median. Metatarsus I unarmed. Metatarsus II with a ventral spine at base. Tibia III with a median dorsal spine.

Posterior row of eyes considerably recurved; eyes nearly equal in size, the medians slightly elongate in the oblique direction, their diameter apart and a little closer to the laterals. Epigynum as figured.

Length, 6.52 mm. Length of cephalothorax, 2.39 mm.; width, 1.52 mm. Tibia + patella I, 1.48 mm.; IV, 1.97 mm.

Locality.—Texas: Brownsville. One female (holotype) taken June 1, 1934, by J. N. Knull.

#### Sergiolus bellior, new species

#### Figure 17

Female.—Carapace and sternum brownish yellow. The chelicerae chestnut. Legs clear yellow except the femora of legs I and II, which are black, and legs IV, in which the tarsus and metatarsus are black and the tibia nearly so. Palpi black or nearly so. Abdomen black with a transverse white stripe across dorsum at middle, this stripe preceded by a pair of white spots; also a transverse cross stripe across anterior end, this stripe interrupted at middle and continuous down side, on which partially interrupted, and across venter just behind the genital furrow, the white color produced a short distance caudad in a mid-ventral stripe.

Carapace with dorsal stria absent or obscure; caudal margin convexly rounded. Anterior tarsi and metatarsi scopulate as usual, the posterior tarsi also scopulate but the corresponding metatarsi simple setose. Tibiae I and II with ventral spines

0-0-1. Metatarsus I with no ventral spines and metatarsus II with a single ventral spine at base. Tibia III with a median dorsal spine at base.

Posterior row of eyes recurved; eyes subequal, the medians scarcely the smaller, not quite once and a half their diameter apart and more than once and a half their diameter from the laterals. Anterior row of eyes decidedly shorter than the posterior; eyes nearly equal in size, the medians less than their radius apart and closer to the laterals. Epigynum as shown in the figure.

Length, 6.13 mm. Length of cephalothorax, 2.70 mm.; width, 1.61 mm. Tibia + patella I, 1.74 mm.; IV, 2.10 mm.

Locality.—Texas: Edinburg. One female (holotype) taken September 3, 1934, by S. Mulaik.

## Sergiolus segregatus, new species

#### Figures 11 and 12

Carapace and chelicerae light chestnut. Sternum and coxae of legs beneath yellow. Legs yellow, but with femora of anterior pairs dusky excepting ventrally, the femur of leg IV dusky at distal end, and tibia and metatarsus of leg IV also blackish at distal end. Abdomen with dorsum black crossed with a submedian and an anterior transverse white stripe and with a white T-shaped mark between the two stripes and connected with submedian one; venter white over middle region, laterally black as are also the sides. Spinnerets also blackish.

Anterior tarsi and metatarsi scopulate, the posterior tarsi alone scopulate. Ventral spines of tibia I, 0-0-1; of tibia II, 0-1-1; the corresponding tarsi with the usual pair of subbasal ventral spines.

In the female the posterior row of eyes recurved as usual; eyes subequal, the medians separated from each other by about their radius, twice as far from the laterals. Anterior median eyes much smaller than the laterals, about their radius apart. Area of median eyes scarcely wider behind than in front, and scarcely longer than wide. In the male the posterior median eyes are relatively farther apart, while the anterior median eyes are relatively larger and obviously closer together.

Palpus of male and epigynum of female as figured.

Length of female, 6.46 mm. Length of cephalothorax, 2.90 mm.; width, 2.00 mm. Tibia + patella I, 2.29 mm.; IV, 2.50 mm.

Length of male, 6.00 mm. Length of cephalothorax, 2.83 mm., width, 1.87 mm. Length of tibia + patella I, 2.00 mm.; IV, 2.50 mm.

Locality.—Texas: Edinburg. One male (holotype) and female allotype and paratype taken September 18, 1935, by Mr. Stanley Mulaik. Two female paratypes from northwest of Edinburg, June 15, 1935 (S. Mulaik).

#### NODOCION CHAMBERLIN

## Nodocion moronius, new species

#### Figure 21

Female.—Carapace and sternum shining brownish black. Legs blackish over brown, with the tarsi, and sometimes also metatarsi, paler. Abdomen black over brown as usual, the latter showing more abundantly on venter as usual.

Scopula of tarsus I rather sparse, that of the metatarsus especially so. Spines of leg I uncertain because of rubbed condition of specimen.

Upper margin of furrow of chelicera with three teeth, the lower with none.

Posterior row of eyes nearly straight; median eyes much larger than the laterals, subcircular, nearly contiguous with each other, separated from the laterals by rather less than the radius of the latter. Anterior median eyes much smaller than the laterals, slightly less than their diameter apart. Area of median eyes much wider behind than in front (3:2), about equal in length and width behind. Epigynum figured.

Length, 4.70 mm. Length of cephalothorax, 1.74 mm.; width, 1.30 mm. Tibia + patella I, 1.39 mm.; IV, 1.74 mm.

Locality.—Utah: Moroni. One female (holotype) taken June 12, 1927, by R. V. Chamberlin. In University of Utah collection.

## Nodocion zelotoides, new species

#### Figure 20

FEMALE.—Carapace and chelicerae dusky over brown. Sternum clearer brown. Legs brown of a lighter shade. Abdomen dark gray or blackish above, lighter beneath. Spinnerets yellowish, a little dusky.

Lower margin of furrow of chelicera without teeth, the chitinous ridge of the upper margin broken into 5 denticulations more distinct than usual.

Posterior row of eyes a little longer than the anterior row, a little procurved; median eyes smaller than usual, approaching the usual *Zelotes* proportions, not larger than the laterals, oblique, being a little longer in the cephalo-ectal meso-caudal direction, about their longer radius apart and about the same distance from the laterals. Anterior median eyes much smaller than the laterals (cir. 7:9), about five-sevenths their diameter apart, very close to the laterals. Area of median eyes scarcely longer than wide and slightly wider behind than in front (17:16). Epigynum as drawn.

Length, 6.74 mm. Length of cephalothorax, 2.83 mm.; width, 2.10 mm. Tibia + patella I, 2.90 mm.

(Fourth legs missing from holotype.)

Locality.—Texas: Green Island Bird Refuge. One female (holotype) taken by S. Mulaik, May 4, 1935.

This species is atypical in the smaller size of the posterior median eyes and their relatively wider separation, in these respects suggesting Zelotes, although these eyes are of the typical shape and obliquity. The epigynum is distinctly of the Nodocion form as typified in N. barbaranus (see Fig. 19).

#### GNAPHOSA LATREILLE

#### Gnaphosa mulaiki, new species

#### Figure 24

Female.—Carapace, chelicerae and sternum yellowish brown, the legs clearer yellow. Abdomen gray, lighter beneath than above, the spinnerets yellowish.

Tarsi I and II scopulate as also are, more sparsely, the corresponding metatarsi

over their distal portions. Tibiae I and II without spines. Metatarsus I without spines, II with a single subbasal ventral spine.

Posterior row of eyes recurved as usual, much longer than the anterior row; median eyes somewhat triangular in outline but with the angles well rounded and the sides bulging, smaller than the laterals, slightly more than their longer radius apart and about once and a half their diameter from the laterals. Anterior median eyes smaller than the laterals (diameters cir. as 7:9), a little more than their radius (four-sevenths) from each other. Area of median eyes as wide in front as behind and as wide as long. Epigynum as figured.

Length, 5.50 mm. Length of cephalothorax, 2.50 mm.; width, 1.95 mm. Length of tibia + patella I, 2.00 mm.; IV, 2.56 mm.

Locality.—Texas, Green Island Bird Sanctuary. One female (holotype) taken May 11, 1935, by Stanley Mulaik.

#### ORODRASSUS CHAMBERLIN

## Orodrassus coloradensis (Emerton)

#### Figure 23

Drassus coloradensis Emerton, 1877, Bull. U. S. Geol. Survey, III, p. 528.

Teminius continentalis Keyserling, 1887, Verh. Zool.-Bot. Gesell. Wien, p. 423, Fig. 2.

Drassodes melius Chamberlin, 1912, Ann. Ent. Soc. America, XII, p. 246, Pl. xvi, Figs. 4 and 5.

RECORD.—Montana: Ravalli Co., Skalkabo Canyon. Two females taken by William Jellison, October 10, 1934.

#### Orodrassus durranti, new species

#### Figure 22

Female.—Carapace brown with dusky lateral borders and some dark reticulate lines on head region running forward from an obscure, somewhat shield-shaped, area in front of the dorsal stria. Chelicerae, labium and endites chestnut, the sternum of a lighter cast. Legs yellowish proximally, the distal articles more chestnut. Abdomen dark brown above, lighter brown beneath.

All tarsi densely scopulate. Anterior metatarsi also scopulate over entire length, the posterior metatarsi only over more distal portion. Tibia I without spines, II with a single ventral spine distad of middle. Posterior tibiae without median dorsal spines as usual.

Posterior row of eyes scarcely procurved; median eyes circular, about equal in size to the laterals and much smaller than the anterior medians (diameter about as 2:3), about once and a fifth their diameter apart and farther from the laterals. Anterior median eyes as large as the laterals or nearly so, their radius apart. Area of median eyes nearly as long as wide and equal in width anteriorly and posteriorly.

Characterized by the form of the epigynum which is illustrated.

Length, 9.00 mm. Length of cephalothorax, 4.50 mm.; width, 3.20 mm. Tibia + patella I, 4.10 mm.; IV, 4.20 mm.

Locality.—California: Donner's Pass. Female holotype collected August 23, 1932, by S. D. Durrant. In University of Utah collection.

#### DRASSODES WESTRING

#### Drassodes robinsoni Chamberlin

Drassodes robinsoni Chamberlin, 1919, Ann. Ent. Soc. America, XII, p. 245, Pl. xvi, Fig. 2.

Record.—Texas: Mt. Locke Observatory. One female taken July 5, 1934, by Stanley Mulaik.

#### HAPLODRASSUS CHAMBERLIN

## Haplodrassus admes Chamberlin

 $Haplodrassus\ admes\ Chamberlin,\ 1922,\ Proc.\ Biol.\ Soc.\ Washington,\ XXXV,\ p.\ 162.$ 

Record.—New Mexico: fifteen miles northeast of Taos, elevation 7000 feet. One female taken by A. C. Cole. Previously known from Arizona.

#### ZELOTES GISTL

## Zelotes duplex Chamberlin

Zelotes duplex Chamberlin, 1922, Proc. Biol. Soc. Washington, XXXV, p. 164.

RECORD.—North Carolina: Base of Mt. Leconte. One female taken September 9–10, 1929, by Dr. W. M. Barrows.

#### Zelotes anthereus, new species

Figures 37, 38, and 39

Male.—Carapace shining brownish black, the latter color appearing under the lens in the usual reticulations. Sternum dusky chestnut. Legs dusky brown, the tarsi and metatarsi clearer brown. Abdomen dark brownish gray or blackish above, light beneath.

Scopulae of legs typical, being present on tarsi and metatarsi I and II, while posterior tarsi are simply setose. Tibiae I and II without spines. Metatarsus I without spines; metatarsus II with a pair of ventral spines toward base.

Lower margin of furrow of chelicera with two nodular teeth of which the caudal is sometimes obscure; upper margin with four distinct teeth.

Posterior row of eyes essentially straight; eyes subequal, the medians a little nearer to each other than to the laterals. Anterior median eyes greatly exceeded by the laterals (diameter nearly as 5:8), separated from each other by about three-fifths their diameter, nearly touching the laterals. Area of median eyes clearly wider behind than in front (cir. 7:5), and about as wide behind as long. Palpus as figured.

Length, 4.80 mm. Length of cephalothorax, 2.52 mm.; width, 1.70 mm. Tibia + patella I, 2.26 mm.; IV, 2.40 mm.

 $F_{EMALE}$ .—Epigynum of the typical general form for the genus as shown in Fig. 39.

Length of allotype, 6.00 mm. Length of cephalothorax, 2.70 mm.; width, 1.90 mm. Tibia + patella I, 2.30 mm.; IV, 2.70 mm.

Locality.—California: Berkeley. Two males (holotype and paratype), female (allotype) and several immature specimens taken in December, 1919. Holotype and allotype in University of Utah collection, male paratype in the American Museum.

## Zelotes lymnophilus, new species

## Figure 47

Female.—Carapace black in reticulations over brown. Sternum brown. Chelicerae yellow with some dark markings in front. Coxae of legs also yellow edged distally with black; trochanters and tarsi yellow, the intervening joints mostly blackish. Dorsum of abdomen black, with brown showing in small spots, the venter yellowish gray.

Tarsi I and II scopulate, the corresponding metatarsi with scopular hairs distally. Posterior tarsi setose excepting for a group of scopular hairs at distal end beneath claws.

Tibia I with ventral spines 2-2-0, metatarsi I and II also with ventral spines 2-2-0.

Lower margin of furrow of chelicera with three teeth, the upper with four.

Posterior row of eyes slightly procurved; eyes equidistant, or the medians but little nearer each other than to the laterals; the medians scarcely smaller than the laterals, oblong and oblique. Anterior median eyes very much smaller than the laterals, about their diameter apart. Area of median eyes wider behind than in front. Epigynum figured.

Length, 3.13 mm. Length of cephalothorax, 1.39 mm.; width, 1.09 mm. Tibia + patella I, 1.13 mm.; IV, 1.39 mm.

Locality.—Georgia: Okefenokee Swamp. One female in the University of Utah collection.

## Zelotes monodens, new species

#### Figure 36

Female.—Carapace black over brown, the black denser in a subpentagonal area in front of the median furrow and in reticulations elsewhere over entire surface. Sternum also nearly black. Legs with femora, patellae and tibiae black, the coxae also blackish above, somewhat paler beneath, the tarsi and metatarsi yellowish. Abdomen above and the spinnerets black, the venter light gray.

Anterior tarsi scopulate as usual, the metatarsi with sparse scopular hairs distally. No ventral spines could be detected in holotype either on tibiae I and II or on the corresponding metatarsi.

Posterior row of eyes nearly straight, longer than the anterior row (27:24); eyes nearly equidistant, the medians smaller than the laterals. Anterior median eyes more than their radius apart, close to laterals, than which they are much smaller. Area of median eyes a little longer than wide and a little wider behind than in front (cir. 8:7).

Lower margin of furrow of chelicera with only one tooth, the upper with four. Epigynum as figured.

Length, 3.50 mm. Length of cephalothorax, 1.35 mm.; width, 1.00 mm. Length of tibia + patella I, 1.20 mm.

Locality.—Texas: Edinburg. One female (holotype) taken May 2, 1935, by S. Mulaik.

## Zelotes nannodes, new species

#### Figure 35

Female.—A species lighter in color than usual in the genus. Carapace yellow, dusky along lateral borders and in reticulations as usual, three longitudinal dark marks in front of stria united behind and outlining the typical shield-shaped area. Chelicerae, sternum and legs clear yellow. Abdomen light gray above and paler beneath.

Anterior tarsi and metatarsi scopulate, the scopular hairs not dense, especially sparse on the metatarsi. Posterior tarsi simply setose. Tibiae I and II and also the corresponding metatarsi without spines.

The teeth of the chelicerae difficult to see in the holotype because of small size and pale color. Seemingly there is one tooth or nodule on lower margin of furrow and four on upper margin.

Posterior row of eyes nearly straight; median eyes slightly smaller than the laterals to which they are closer than to each other. Anterior median eyes very much smaller than the laterals, unusual in being decidedly more than their diameter apart. Epigynum as shown in the figure.

Length, 2.60 mm. Length of cephalothorax, 0.95 mm.; width, 0.70 mm. Tibia + patella I, 0.78 mm.; IV, 0.86 mm.

Locality.—Utah: ten miles west of Tremonton. Female holotype taken by W. Ivie, June 8, 1931, under a rock on a dry hillside.

## Zelotes pananus, new species

#### Figure 44

Female.—Carapace with the usual reticulation of black over brown, the sternum similar. Coxae and femora of all legs likewise blackish, the more distal articles yellowish excepting on legs IV in which the tibia and metatarsus are also darkened in the holotype. Abdomen black above and over the sides, the venter paler because of the numerous small light spots in the area behind the genital furrow, in front of which the lighter color is continuous. Spinnerets dusky brown.

Tarsi and metatarsi I and II scopulate as usual. Tibiae I and II with ventral spines 0–1–1, the corresponding metatarsi each with a single ventral spine at base, all spines of these joints toward anterior side. Tibia III with a median dorsal spine at base.

Posterior row of eyes straight or very nearly so, the eyes subequal and equidistant. Anterior row of eyes shorter than posterior nearly as 13:16; median eyes much smaller than the laterals (diameters about as 5:8), about three-fifths their diameter apart, subcontiguous with the laterals. Area of median eyes about equal in length and breadth behind, wider behind than in front, nearly in ratio 8:7.

In the holotype one of the chelicerae is missing and teeth on the other could not be made out, probably having been rubbed off. Epigynum as figured.

Length, 5.43 mm. Length of cephalothorax, 2.50 mm.; width, 1.65 mm. Tibia + patella I, 1.90 mm.; IV, 2.26 mm.

Locality.—Utah: City Creek Canvon. One female taken by W. Gertsch, June 12, 1928, and now in the University of Utah collection.

## Zelotes petrophilus, new species

Figures 45 and 46

MALE.—Color nearly as in Z. antereus. Scapulae and spining of legs also as in Z. anthereus.

Upper margin of furrow of chelicera with three teeth, the lower with one.

Posterior row of eyes straight: median eyes slightly smaller than the laterals. somewhat oblong and obliquely set, two-thirds their long diameter apart and fivesixths that diameter from the laterals. Anterior median eyes relatively larger than in anthereus, (diameter nearly as 3:4), nearly two-thirds their diameter apart. Area of median eyes wider behind than in front (17:15), and about as wide behind as long. Palpus as figured.

Length, 6.75 mm. Length of cephalothorax, 3.26 mm.; width, 1.90 mm. Length of tibia + patella I, 3.70 mm.; IV, 3.70 mm.

Locality.—California: Petrified Forest. One male (holotype) and an immature female taken by W. Ivie, August 27, 1931.

## Zelotes shoshoneus, new species

Figures 42 and 43

MALE.—Carapace blackish in obscure reticulations over a brown ground. Sternum brown of a reddish cast. Legs brown with especially the femora and less strongly the patellae and tibiae blackish or dusky. Abdomen dusky brown above; venter lighter, gray in color. Spinnerets dusky or blackish.

Tarsi and distal portion of metatarsi of legs I and II scopulate, the posterior tarsi setose. Tibiae and metatarsi I and II without spines. Posterior tibiae not dorsally armed.

Posterior row of eyes only very slightly procurved; eyes subequal, the medians about four-fifths their diameter apart, somewhat closer to the laterals. Anterior median eyes with diameter about five-sixths that of the laterals, about four-fifths their diameter apart, and nearly contiguous with the laterals. Posterior row longer than the anterior in about the ratio 13:11.

Chelicerae with lower margin of furrow armed with one small tooth; the upper margin with two larger teeth proximad of which is a low chitinous ridge not broken into denticles. In one specimen only one tooth is present on upper margin, the proximal one apparently may have been broken off. Palpus as figure d.

Length, 4.43 mm. Length of cephalothorax, 1.82 mm.; width, 1.40 mm. Tibia + patella I, 1.20 mm.; IV, 1.82 mm.

Localities.—Idaho: Burley, one male (holotype) taken June 4, 1931, by Wilton Ivie.—Washington: Friday Harbor, one male (paratype) taken in the summer of 1924.—Colorado: Valmont, one male (paratype) taken April 27, 1923, by H. G. Rodeck.

The holotype and first paratype are in the collection of the University of Utah, the second paratype in the American Museum.

## Zelotes cymbiolus, new species

## Figures 40 and 41

Male.—Carapace blackish over brown, the black being more solid over the lateral borders. Chelicerae dusky. Sternum yellow. Palpi with proximal joints yellow, the tibia and tarsus dusky. Legs blackish except coxae and tarsi, which show more yellow though also more or less irregularly dusky over the lighter background. Abdomen black above, dusky over a light background beneath, the spinnerets black.

Anterior tarsi scopulate, the posterior ones setose. Tibia I with ventral spines 2-2-0; tibia II with ventral spines 1-1-0, the spines being toward the caudal edge. Metatarsi I and II with 2-2-0 ventral spines.

Lower margin of furrow of chelicera with 2 teeth; the upper with 4.

Posterior row of eyes slightly procurved; the medians a little smaller than the laterals, a little oblong, oblique, nearly their radius apart, a little farther from the laterals. Anterior median eyes nearly three-fifths the diameter of the laterals, a little less than their diameter apart, much closer to the laterals. Area of median eyes slightly longer than wide, slightly wider behind than in front. Palpus as figured.

Length, 3.00 mm. Length of cephalothorax, 1.43 mm.; width, 1.20 mm. Tibia + patella I, 1.65 mm.; IV, 1.90 mm.

Locality.—Florida: Alachua County. One male (holotype) taken April 14, 1934, by Mr. H. K. Wallace.

#### DRASSYLLUS CHAMBERLIN

#### Drassyllus eremitus Chamberlin

Drassyllus eremitus Chamberlin, 1922, Proc. Biol. Soc. Washington, XXXV, p. 167.

RECORD.—Florida: Jackson County. One female taken April 12 1935.

#### Drassyllus femoralis (Banks)

Zelotes femoralis Banks, 1904, Proc. California Acad. Sci. (3), III, p. 336, Pl. xxxvIII, fig. 1.

Drassyllus femoralis Chamberlin, 1922, Proc. Biol. Soc. Washington, XXXV, p. 170.

Record.—Arizona: Tucson. One female taken in August, 1935, by Mr. Peter Steckler.

## Drassyllus niger (Banks)

Prosthesima niger Banks, 1896, Trans. Amer. Ent. Soc., p. 62; 1900, Proc. Washington Acad., II, p. 478.

Drassyllus niger Chamberlin, 1922, Proc. Biol. Soc. Washington, XXXV, p. 170.

Record.—New Jersey: Ramsey. One female taken June 2, 1934, by W. J. Gertsch.

## Drassyllus orgilus Chamberlin

Drassyllus orgilus Chamberlin, 1922, Proc. Biol. Soc. Washington, XXXV, p. 169.

Records.—Texas: Brazos County, one female taken by J. H. Robinson, Jan. 28, 1935; Laredo, one female taken Feb. 9, 1935, by S. Mulaik; thirty miles west of Edinburg, a female taken Nov. 24, 1934. by S. Mulaik.

Previously known from Austin, Texas.

## Drassyllus dentelifer, new species

#### Figures 1 and 2

Male.—Carapace and chelicerae dusky brown. Legs lighter excepting I and II in which the femur, patella and tibia are black. Sternum and coxae of legs yellow. Abdomen black above; a basal scutellar area detectable; venter paler, yellowish, slightly dusky. Spinnerets vellow.

Upper margin of furrow of chelicera with four (4) teeth, (or a minute fifth one also present), the lower margin with two (2) teeth.

In the type no scopular hairs are present on any of the tarsi, and if present in life have been lost. Tibiae I and II without spines, the corresponding metatarsi with a pair of subbasal ventral spines. Posterior tibiae with a median dorsal spine.

Posterior row of eyes procurved; median eyes very large, much exceeding the laterals, somewhat angular, contiguous with each other, their contiguous edges flattened or straight, also very close to the laterals. Anterior row of eyes conspicuously procurved; medians much smaller than the laterals (diameter about as 5:8). Lateral eyes on each side with posterior eye decidedly smaller than the anterior one, scarcely the radius of the former apart. Area of median eyes equal in width behind and in front, longer than wide (ad. 17:14).

Major spinning tubules of anterior spinnerets four in number. Palpus as shown in the figures.

Length, 4.37 mm. Length of cephalothorax, 2.08 mm., width, 1.54 mm. Length of tibia + patella I, 1.87 mm.; of tibia + patella IV, 2.08 mm.

Locality.—Florida: Gainesville. One male (holotype) taken April 17, 1933, by H. K. Wallace.

## Drassyllus devexus, new species

## Figure 7

Female.—Carapace, chelicerae, sternum and legs yellow, without markings.

Scopulae of anterior tarsi sparse, none on posterior tarsi. Tibiae I and II with ventral spines 1-1-0, the distal one replaced by a long seta. Metatarsus I with a pair of subbasal ventral spines, II with the same and in addition a single spine toward distal end. Posterior tibiae without a median dorsal spine.

Upper margin of furrow of chelicera with five (5) teeth, the lower with two (2).

Posterior row of eyes procurved; median eyes oblique and slightly angled, larger than the laterals, separated from each other by considerably less than a radius and closer to the laterals. Anterior median eyes smaller than the laterals, separated by their radius or more, much closer to the laterals. Area of median eyes of same width in front and behind, decidedly longer than wide (cir. 5:4). Epigynum as figured.

Length, 7.00 mm. Length of cephalothorax, 2.37 mm.; width, 1.90 mm. Length of tibia + patella I, 2.50 mm., of tibia + patella IV, 2.58 mm.

Locality.—Utah: Pinecrest, Salt Lake County, female holotype collected by R. V. Chamberlin, August 26, 1931; Dry Canyon, female paratype collected by W. Ivie, October 15, 1932. University of Utah Collection.

# Drassyllus fractus, new species Figure 6

FEMALE.—Carapace brown, without any definite dark markings, the sternum and legs somewhat lighter. Abdomen brownish gray above, paler beneath, the spinnerets yellow.

Tarsi I and II, and the distal end of metatarsus I scopulate about as usual, the posterior legs without true scopulae. Tibiae I and II without spines. Metatarsus II with a pair of small, subbasal ventral spines but neither spines present nor indications that such have been present on metatarsus I of the type. Tibia III with no median dorsal spine, but tibia IV with a submedian dorsal spine toward base.

Posterior row of eyes procurved; median eyes obliquely elongate, larger than the laterals, less than their longer radius apart and nearly contiguous with the laterals. Anterior row of eyes procurved as usual; the median decidedly smaller than the laterals, decidedly less than their radius apart, closer to the laterals. Area of median eyes much wider behind than in front (7:5), about equal in length to the width behind. Readily distinguished by the epigynum.

Length, 3.40 mm. Length of cephalothorax, 1.75 mm.; width, 1.16 mm. Length of tibia + patella I, 1.66; of tibia + patella IV, 1.75 mm.

Locality.—California: Friant. One female (holotype) taken in March, 1913 (R. V. Chamberlin).

## Drassyllus mephisto, new species

## Figures 3, 4, and 5

Male.—A very conspicuously colored species. Carapace yellow of a chestnut cast, the posterior lateral margins lined with black. Sternum yellow, with blackish margin. Legs yellow except that the anterior pairs have the tibia and patella and the distal portion of the femur, especially above, solid black. Abdomen black above, the black area on the yellowish scutellate area in front narrowed to a median band and crossed at middle by a now light transverse band which is interrupted at the middle; sides whitish; venter black excepting a light area just back of the furrow and at sides in front. Spinnerets yellow.

None of the tarsi or metatarsi truly scopulate. Tibia I without spines; II with

ventral spines 1–1–0. The anterior metatarsi with the usual pair of ventral spines toward base. Posterior tibiae without median dorsal spine.

Posterior row of eyes procurved, medians unusually large, greatly exceeding the laterals, obliquely elongate, elliptical, in contact mesocaudally, a little removed from the laterals. Anterior median eyes much smaller than the laterals (diameters cir. 7:9), nearly their radius apart.

Upper margin of furrow of chelicera with five (5) teeth of which the two most distal are much reduced, the lower margin with four (4) teeth or nodules.

Length, 4.00 mm. Length of cephalothorax, 1.83 mm.; width, 1.46 mm. Tibia + patella I, 1.84 mm.; tibia + patella IV, 2.00 mm.

Female.—The female allotype has the cephalothorax, etc., lighter in color, yellow, but the striking color markings are identical and the eyes are also as in the male. Epigynum as figured.

Localities: Texas: Edinburg. One adult male (holotype) and five immature females taken January 8, 1934.—Utah: Washington County, Pine Valley Mountains, one female (allotype) taken in July, 1935, by Rex Snow. The holotype in American Museum, allotype in University of Utah collection.

## Drassyllus abdalbus, new species

Figures 31 and 32

Male.—Carapace, chelicerae, palpi and sternum light chestnut. Anterior legs missing from holotype, the posterior pairs yellow in color. Abdomen entirely white except for a triangular area at base above which is light chestnut.

Posterior tibiae without median dorsal spines; tarsi not scopulate but clothed with setae.

Posterior row of eyes longer than the anterior, procurved; median eyes greatly exceeding the laterals in size (diameter about as 4:3), subcircular, somewhat angled, a little narrowed mesocaudally where they are contiguous, separated from the laterals by less than the radius of the latter. Anterior median eyes smaller than the laterals (cir. 3:4), not fully their radius apart, closer to the laterals as usual. Area of median eyes equal in length and breadth behind, and wider behind than in front (10:9). Palpus as illustrated.

Length, 6.50 mm. Length of cephalothorax, 3.00 mm., width, 2.40 mm. Tibia + patella IV, 3.20 mm.

LOCALITY.—Arizona: Tucson. One male (holotype) taken in Aug., 1935, by P. Steckler.

## Drassyllus finium, new species

Figures 33 and 34

Male.—Carapace dusky yellow, darker along margins, the sternum clearer yellow. Legs yellow with first pair having femur, patella and tibia darkened. Abdomen dark gray or blackish above, paler beneath.

Tibiae I and II without spines, the corresponding metatarsi armed at base in the usual way. Posterior tibiae without median dorsal spine.

Lower margin of furrow of chelicera with 3 teeth, the upper with a series of about 8 denticles.

Posterior row of eyes conspicuously procurved; median eyes oblique, subovate, with narrower end mesocaudad in position, contiguous at one point, being tangent to the median line, narrowly separated from the lateral eyes. Anterior median eyes much smaller than the laterals (cir. 5:7), a little more than their radius apart. Area of median eyes much longer than wide (cir. 4:3), and wider behind than in front (6:5). Palpus as figured.

Length, 3.48 mm. Length of cephalothorax, 1.43 mm.; width, 1.09 mm. Tibia + patella I, 1.43 mm.; IV, 1.52 mm.

LOCALITY.—Texas, Sonora. One male (holotype) taken May 3, 1926, by F. C. Bishopp.

## Drassyllus gynosaphes, new species

Figures 26, 27, and 28

Female.—Carapace yellow, dusky along the lateral borders and in obscure reticulations elsewhere. Sternum and legs yellow, the anterior pairs of the latter dusky over femora, patella and tibia. Abdomen black dorsally, lighter beneath, especially in front of genital furrow.

Tibiae I and II without spines, the corresponding metatarsi with a pair of sub-basal ventral spines. Posterior tibiae with no middorsal spine. Anterior tarsi sparsely scopulate, the posterior tarsi simply setose.

Lower margin of furrow of chelicera with three denticles, the upper margin with four teeth of which the next to the most caudal is much the largest.

Posterior row of eyes slightly procurved; median eyes broadly suboblong, the corners rounded, oblique, in contact with each other at their mesocaudal corners, their long diameter not or scarcely exceeding the diameter of the laterals. Anterior median eyes much smaller than the laterals, nearly their diameter apart. Area of median eyes longer than wide (cir. 5:4), equal in width behind and in front. Epigynum as figured.

Length, 3.90 mm. Length of cephalothorax, 1.74 mm.; width, 1.30 mm. Tibia and patella I, 1.74 mm.; IV, 1.96 mm.

Male.—Coloration as in the female, chelicerae the same and eyes also nearly the same. Tibia I with a submedian ventral spine. Epigynum as figured.

Length, 3.90 mm. Length of cephalothorax, 1.70 mm.; width, 1.26 mm. Tibia + patella I, 1.87 mm.; IV, 1.90 mm.

Locality.—Texas: Edinburg. One female (holotype) and two males (allotype and paratype) collected in April, 1934, by S. Mulaik.

#### Drassyllus prosaphes, new species

## Figures 29 and 30

Male.—Lower margin of furrow of chelicerae with 2 teeth, the upper with four. Carapace dusky yellow, the lateral margins bordered with black, and a black area in region of median stria extended along caudal margins of pars cephalica. Sternum yellow. Legs yellow, with distal end of femur and all of patella and tibia of

legs I and II blackish or dusky. Abdomen dark gray or blackish above, somewhat lighter below, yellowish in front of genital furrow.

Tarsi setose beneath, none truly scopulate. Tibia I with no spines, II with a submedian ventral spine. Metatarsi spined at base as usual. Leg III missing from holotype, IV without median dorsal spine.

Posterior row of eyes with usual procurvature, a little longer than the anterior row: median eves much larger than the laterals, diameters rather more than 6:5. oblique, the mesocaudal end moderately narrowed, touching each other, narrowly separated from the laterals. Anterior median eyes much smaller than the laterals (diameters nearly as 2:3). Area of median eyes longer than wide (about as 13:11), wider behind than in front (11:10). Palpus as figured.

Length, 7.83 mm. Length of cephalothorax, 3.70 mm.; width, 2.83 mm. Tibia + patella I, 3.26 mm.; IV, 3.47 mm.

Locality.—Texas: Edinburg. One male (holotype) taken by S. Mulaik, May 2, 1935.

## Drassyllus texamans, new species

## Figure 25

FEMALE.—Carapace, sternum and legs yellow, the carapace and anterior legs dusky. Abdomen dark gray or blackish above, light gray below.

Tarsi rather sparsely scopulate, the metatarsi not scopulate. No spines detectable on anterior tibiae, the metatarsi each with a pair of small spines at base. Tibiae III and IV without any median dorsal spine. Lower margin of furrow of chelicerae with 3 teeth, the upper with 4.

Posterior row of eyes procurved as usual, median eyes oblique, moderately narrowed mesocaudad, their long axes meeting at nearly a right angle, contiguous with each other and also very close to the laterals which are smaller (long diameter of medians to diameter of laterals about as 5:4). Anterior row of eyes shorter than the posterior; median eyes much smaller than the laterals (diameters nearly as 3:5), about two-thirds their diameter apart and subcontiguous with the laterals. Area of median eyes wider behind than in front (cir. 6:5).

Characterized especially by form of epigynum, which is figured.

Length, 3.10 mm. Length of cephalothorax, 1.30 mm.; width, 1.00 mm. Tibia + patella IV, 1.35 mm.

Locality.—Texas: Sanderson. One female (holotype) taken July 4, 1934, by S. Mulaik.

## Drassyllus depressus (Emerton)

Prosthesima depressa Emerton, 1909, Trans. Connecticut Acad., VIII, p. 173, Pl. III, Fig. 8.

Prosthesima depressa Emerton (in part), 1911, idem, XVI, p. 406, Pl. v, Fig. 8a, but not figures 8, 8b and 8c.

Drassyllus depressus Chamberlin, 1922, Proc. Biol. Soc. Washington, XXXV, p. 167.

Record.—Michigan: Pine Lake, northeast of Lansing. One female taken June 20, 1921, by Dr. W. M. Barrows.

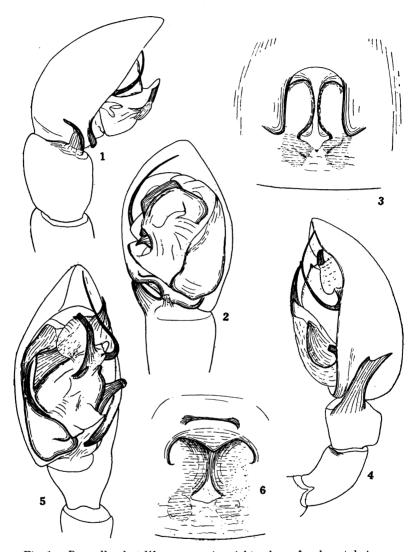


Fig. 1. Drassyllus dentelifer, new species, right palpus of male, ectal view.

- Fig. 2. Idem, ventral view.
- Fig. 3. Drassyllus mephisto, new species, epigynum.
- Fig. 4. Idem, left palpus of male, ectal view.
- Fig. 5. Idem, ventral view.
- Fig. 6. Drassyllus fractus, new species, epigynum.

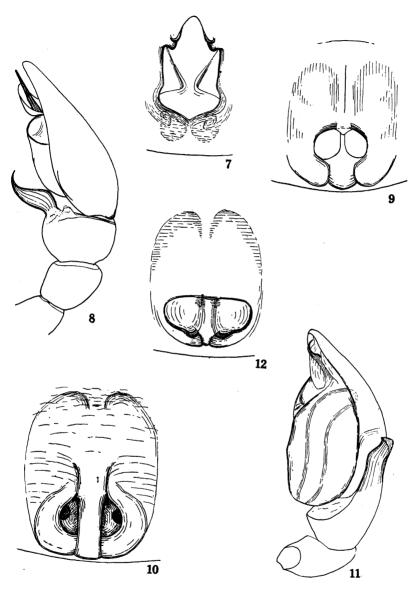
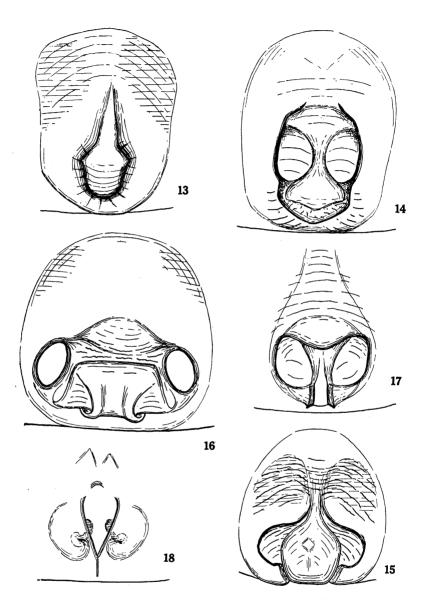


Fig. 7. Drassyllus devexus, new species, epigynum.

- Fig. 8. Herpyllus emertoni Bryant, left palpus of male, ectal view.
- Fig. 9. Herpyllus bryophilus, new species, epigynum.
- Fig. 10. Herpyllus itamus, new species, epigynum.
- Fig. 11. Sergiolus segregatus, new species, left palpus of male, ectal view.

Fig. 12. Idem, epigynum.



- Fig. 13. Herpyllus cepeus, new species, epigynum.
- Fig. 14. Herpyllus regnans, new species, epigynum.
- Fig. 15. Herpyllus reservatus, new species, epigynum.
- Fig. 16. Liodrassus floridicolens, new species, epigynum.
- Fig. 17. Sergiolus bellior, new species, epigynum.
- Fig. 18. Sergiolus amphilogus, new species, epigynum.

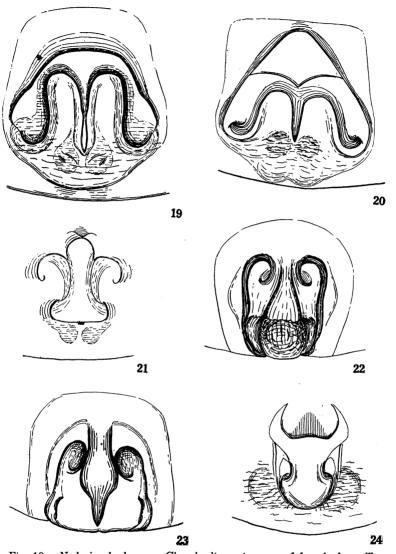


Fig. 19.  $Nodocion\ barbaranus$  Chamberlin, epigynum of female from Tucson, Arizona.

- Fig. 20. Nodocion zelotoides, new species, epigynum.
- Fig. 21. Nodocion moronius, new species, epigynum.
- Fig. 22. Orodrassus durranti, new species, epigynum (distal portion of septum broken off).
- Fig. 23. Orodrassus coloradensis (Emerton), (variant), epigynum of a female from Washington State.
  - Fig. 24. Gnaphosa mulaiki, new species, epigynum.

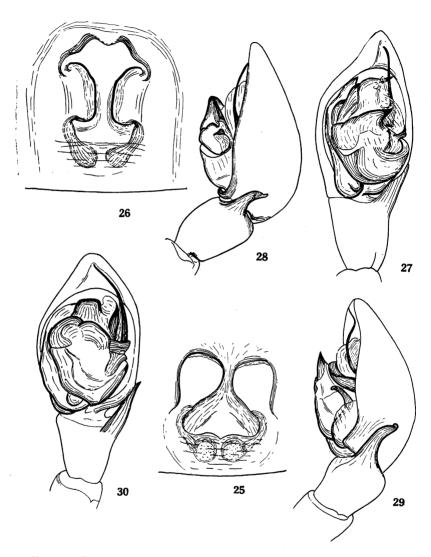


Fig. 25. Drassyllus texamans, new species, epigynum.

- Fig. 26. Drassyllus gynosaphes, new species, epigynum.
- Fig. 27. Idem, left palpus of male, ventral view.
- Fig. 28. Idem, ectal view.
- Fig. 29. Drassyllus prosaphes, new species, left palpus of male, ectal view.
- Fig. 30. Idem, ventral view.

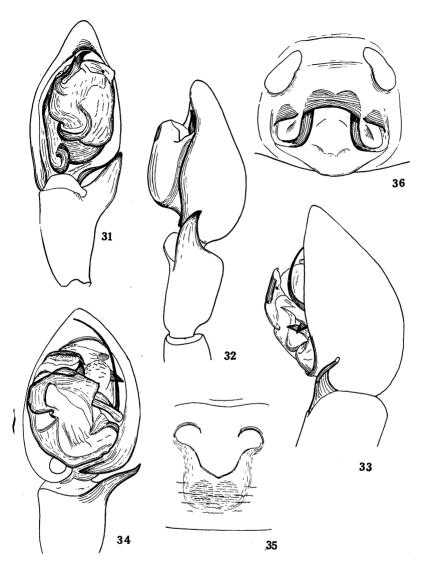


Fig. 31. Drassyllus abdalbus, new species, left palpus of male, ventral view.

- Fig. 32. Idem, ectal view.
- Fig. 33. Drassyllus finium, new species, left palpus of male, ectal view.
- Fig. 34. Idem, ventral view.
- Fig. 35. Zelotes nannodes, new species, epigynum.
- Fig. 36. Zelotes monodens, new species, epigynum.

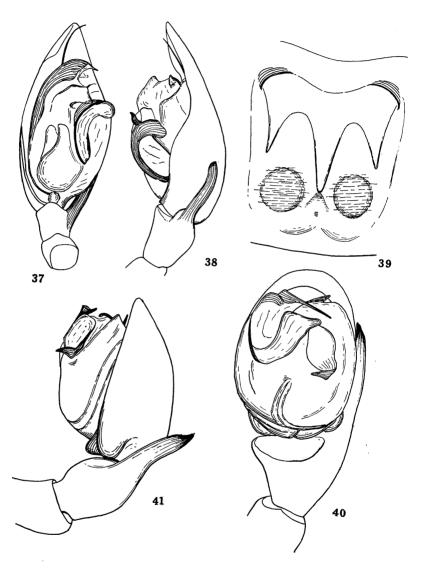


Fig. 37. Zelotes anthereus, new species, left palpus of male, ectal view.

- Fig. 38. Idem, ventral view.
- Fig. 39. Idem, epigynum.
- Fig. 40. Zelotes cymbiolus, new species, left palpus of male, ventral view.

Fig. 41. Idem, ectal view.

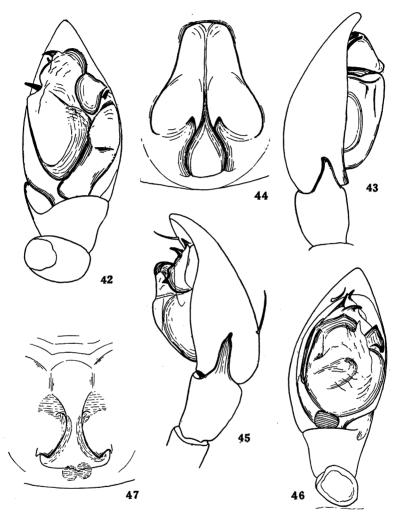


Fig. 42. Zelotes shoshoneus, new species, right palpus of male, ventral view.

- Fig. 43. Idem, ectal view.
- Fig. 44. Zelotes pananus, new species, epigynum.
- Fig. 45. Zelotes petrophilus, new species, left palpus of male, ectal view.
- Fig. 46. Idem, ventral view.
- Fig. 47. Zelotes lymnophilus, new species, epigynum.