

A REVISION OF THE AMERICAN
SPIDERS OF THE GENUS *DRASSYLLUS*
(ARANEAE, GNAPHOSIDAE)

NORMAN I. PLATNICK AND MOHAMMAD U. SHADAB

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(ARANEAE, GNAPHOSIDAE)

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ABSTRACT

The genus *Drassyllus* is redefined to include those gnaphosids with a preening comb on metatarsi III and IV, closely spaced posterior median eyes, and a medially situated, bifid terminal apophysis on the male palp, and is hypothesized to be the sister group of *Camillina*. The 59 known American species, found from southern Canada to southern Mexico, are placed in eight species groups. Keys, diagnoses, descriptions, illustrations, scanning electron micrographs, locality records, and distribution maps are provided. *Zelotes mexicanus* (Banks) is transferred to *Drassyllus*. *Drassyllus novus* (Banks) and *D. dromeus* Chamberlin are removed from the synonymy of *D. frigidus* (Banks) and *D. orgilus* Chamberlin, respectively, and considered valid. Fourteen specific names are newly synonymized: *D. zelotoides* (Worley) and *D. moronius* (Chamberlin), both with *D. lamprus* (Chamberlin); *D. finium* Chamberlin and *D. dentelifer* Chamberlin, both with *D. texamans* Chamberlin; *D. sporadicus* Muma with *D. dixinus* Chamberlin; *D. virginianus* Chamber-

lin with *D. novus* (Banks); *D. ostegae* Chamberlin with *D. aprilinus* (Banks); *D. lutzi* Chamberlin and *D. devexus* Chamberlin, both with *D. dromeus* Chamberlin; *D. monicus* Chamberlin with *D. proclesis* Chamberlin; *D. lasalus* Chamberlin and Gertsch and *D. hubbelli* Chamberlin and Gertsch, both with *D. mexicanus* (Banks); and *D. mephisto* Chamberlin and *D. coahuilanus* Gertsch and Davis, both with *D. lepidus* (Banks). The males of *D. eremitus* Chamberlin, *D. nannellus* Chamberlin and Gertsch, *D. seminolus* Chamberlin and Gertsch, *D. lamprus* (Chamberlin), *D. louisianus* Chamberlin, *D. orgilus* Chamberlin, *D. arizonensis* (Banks), *D. saphes* Chamberlin, and *D. fractus* Chamberlin, and the females of *D. socius* Chamberlin, *D. inanus* Chamberlin and Gertsch, *D. eremophilus* Chamberlin and Gertsch, *D. ellipes* Chamberlin and Gertsch, and *D. prosaphes* Chamberlin are described for the first time. Twenty-three new species are described from the southern United States and Mexico.

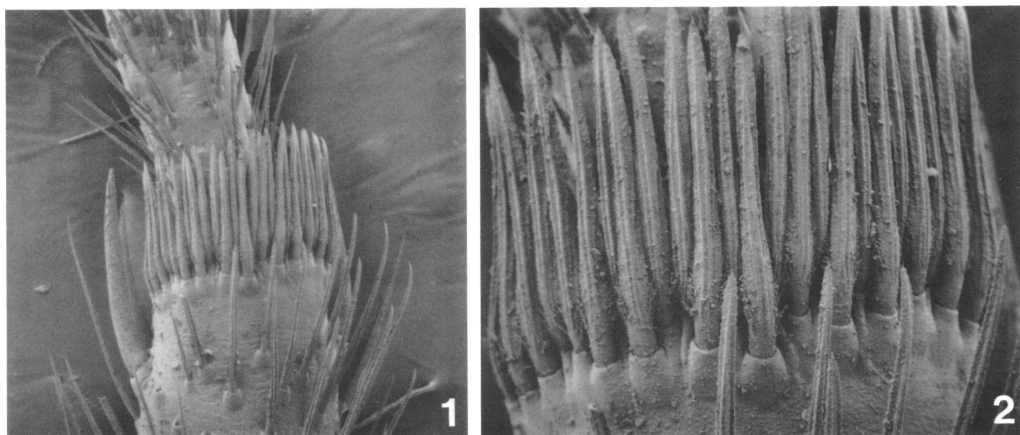
INTRODUCTION

This paper, the fourteenth in a series on the spider family Gnaphosidae, is the first of several that will be devoted to the New World representatives of the *Zelotes* complex, an extremely speciose group that is nearly worldwide in occurrence. Members of the *Zelotes* complex are unique among gnaphosids in having a preening comb on the third and fourth metatarsi (figs. 1, 2). The comb was initially described in the African genus *Camillina* by Tullgren (1910), but it was Berland (1919) who first recognized the wide distribution of the character (including its presence in the numerous species of the abundant Holarctic genus *Zelotes*) and its taxonomic usefulness (demonstrating that several species formerly placed in such unrelated genera as *Drassodes*, *Echemus*, *Lepidodassus*, and *Mulicymnis* actually belong to the *Zelotes* complex).

Although the reality of the *Zelotes* complex has thus been perceived for over 60 years, the generic classification of its members is poorly understood and has been recognized as inadequate for an equally long

time. Berland, for example, concluded his study with a comment on the two genera then recognized: "Je suis d'ailleurs persuadé qu'une étude approfondie modifierait ces deux genres, en morcelant certainement le genre *Zelotes*, et peut-être aussi le genre *Camillina*" (1919, p. 463). Berland's words were echoed by Marinaro (1967), who after a study of Algerian representatives of those two genera and *Pseudodrassus* concluded that "De plus, le choix des critères systématiques est délicat, puisque la réalité même des trois genres concernés ne semble pas tellement fondée" (p. 700).

The situation is also complicated by differences in the classifications generally accepted by New and Old World authors. Europeans have tended to place all the Palearctic members of the complex in the single genus *Zelotes*, the only notable attempts to subdivide the group being Lohmander's (1944) division of the Swedish fauna into five subgenera and Miller's (1967) recognition of six species groups within the Czechoslovakian fauna. Americans, on the



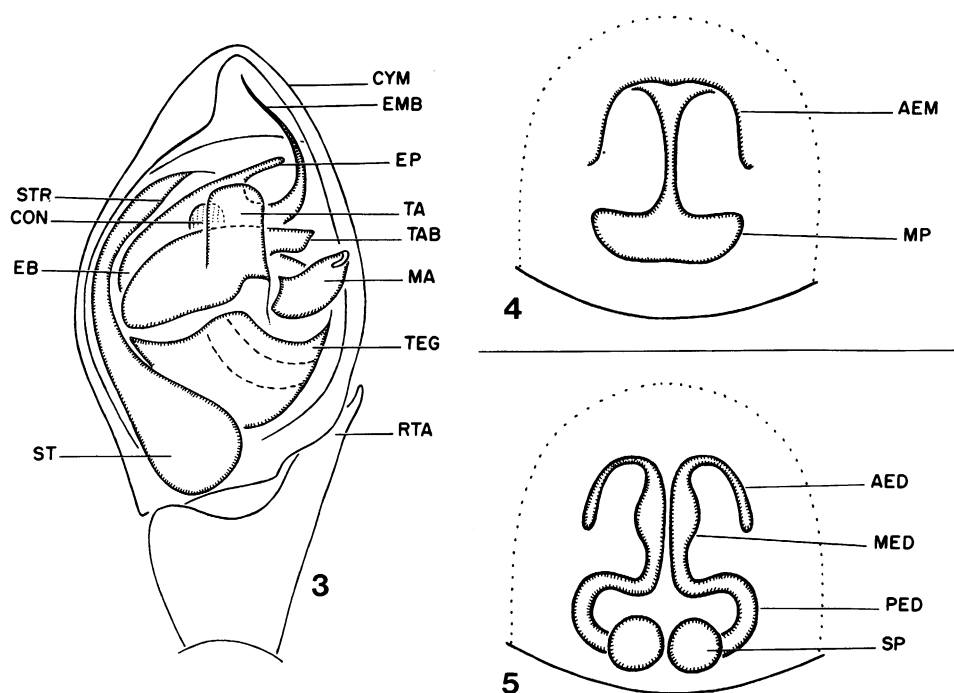
FIGS. 1, 2. *Drassyllus* sp., metatarsal preening comb, ventral views. 1. 20 $\times$. 2. 550 $\times$.

other hand, have generally followed Chamberlin's (1922) division of their fauna into two genera, *Zelotes* and *Drassyllus*, although various workers have had difficulty placing certain species. Based on Dr. Willis Gertsch's unpublished conclusion that the two genera intergrade, Roth and Brown (1973, p. 1) suggested they should be synonymized. That some European *Zelotes* would be placed in *Drassyllus* if they were American was first pointed out by Tullgren (1946). Curiously, Old World workers have retained these species in *Zelotes* even though they are most closely related to the African species generally placed in a separate genus, *Camillina*.

Chamberlin (1922) originally separated *Drassyllus* from *Zelotes* on the basis of both eye arrangement and male palpal structure. Whereas species of *Zelotes* have an ordinary eye arrangement, in *Drassyllus* the posterior median eyes are greatly enlarged and almost touch each other; the enlarged posterior median eyes result in the rear edges of the posterior eyes forming a strongly procurved line. Chamberlin characterized the male palp as having "no median ventral and no ectal apophysis, but . . . one or two distal chitinous ridges or apophyses" in *Zelotes* and "a conspicuous median ventral apophysis and . . . an ectal apophysis as well as a distal one" in *Drassyllus* (1922, p. 148).

Unfortunately, Chamberlin did not apply these characters very consistently, and included in *Drassyllus* two species (and two of their synonyms) that do not conform to his characterization. These species were subsequently excluded from *Drassyllus* by Chamberlin and Gertsch (1940) and Ubick and Roth (1973). The latter pair of authors, however, transferred two additional species from *Nodocion* to *Drassyllus* that also do not conform to Chamberlin's characterization of the genus. In addition, one further species, common in Florida and not yet described (from there, although it may well be introduced) complicates the situation. It was this species that was apparently the source of Gertsch's interpretation of intergradation, for it conforms to Chamberlin's characterization of the eye pattern of *Drassyllus* and of the palpal structure of *Zelotes*!

Examination of a wide range of members of the *Zelotes* complex from both the Old and New World indicates to us that there are several genera involved, and that most of the problematical American species are problematical only because they belong neither to *Zelotes* nor *Drassyllus*; some are actually Old World species likely to have been introduced by humans. The present study is devoted to relimiting *Drassyllus*, and establishing its sister group, on the basis of synapomorphic characters, and to reviewing the



FIGS. 3–5. Generalized genitalic structure of *Drassyllus*. 3. Palp, ventral view. 4. Epigynum, ventral view. 5. Epigynum, dorsal view. Abbreviations: AED, anterior epigynal ducts; AEM, anterior epigynal margin; CON, conductor; CYM, cymbium; EB, embolar base; EMB, embolus; EP, embolar projection; MA, median apophysis; MED, median epigynal ducts; MP, midpiece; PED, posterior epigynal ducts; RTA, retrolateral tibial apophysis; SP, spermathecae; ST, subtegulum; STR, subtegular ridge; TA, terminal apophysis; TAB, terminal apophysis base; TEG, tegulum.

American species that belong to the genus as so delimited.

Outgroup comparison with other zelotines indicates that both of the characters used by Chamberlin to define *Drassyllus* are synapomorphic, but that they do not actually define the same group. The genitalic differences were not well expressed by Chamberlin, as the “distal chitinous ridges or apophyses” of *Zelotes* are homologous, at least in part, to the “median ventral” and “distal” apophyses of *Drassyllus*. However, *Drassyllus* species do have a unique palpal structure (fig. 3), involving a prominent, medially situated terminal apophysis that is divided into an elevated, distally directed projection and a recessed base that often extends behind the projection to the retrolateral side of the palpal bulb. There is also

a characteristic embolic division, including a large and prolaterally situated embolar base (often including a weakly sclerotized area) that leads to a transverse embolar projection and a long embolus that usually coils behind the embolar projection and palpal bulb, reappearing at the retrolateral edge of the bulb (compare figs. 50, 54). A small membranous conductor seems always to be present but is sometimes visible only when the palp is expanded. Finally, a median apophysis is always present, and the subtegulum generally extends along the entire prolateral surface of the bulb and bears a distinct ridge near its distal end (fig. 3).

This type of palpal structure unites the 59 American species discussed below with at least some European ones. For example, three out of the 10 British species of *Zelotes*

recognized by Locket, Millidge, and Merrett (1974) have a *Drassyllus* palp: *Z. lutetianus* (L. Koch), *Z. pusillus* (C. L. Koch), and *Z. praeificus* (L. Koch). At least three additional species of *Drassyllus* occur in continental Europe (Miller, 1967), and we expect that some Asian species will eventually be found as well.

The modifications of the posterior median eyes noted by Chamberlin, although true for all *Drassyllus*, are also true for a large group of species with a different type of palpal structure. The palpi of these species resemble those of *Zelotes* species in having distal ridges, but differ in having a subdistally originating embolus. The earliest available name for this group appears to be *Camillina* Berland (1919, a replacement name for the homonym *Camilla* Tullgren, 1910). On the basis of the modified posterior median eyes, we hypothesize that *Camillina* is the sister group of *Drassyllus*. This hypothesis is strengthened by the fact that the two genera have largely vicariant distributions. *Camillina* seems to replace *Drassyllus* in Africa and from the West Indies and southern Mexico south to Chile. Two species (including the undescribed Florida form mentioned above) of *Camillina* do reach the southeastern United States, and one (probably introduced) is found in Hawaii. *Camillina* species are easily recognizable by their palpal structure and by the presence of a triangular median plate on the female epigynum (for illustrations of the type species, see Platnick, 1981).

There are two major difficulties in dealing with the systematics of *Drassyllus*. One was succinctly expressed by Chamberlin (1936a, p. 21): "This genus is proving to be a very large one. The taxonomic problem presented is unfortunately complicated by the fact that specimens representing the different species largely come to hand singly or as representatives of one sex only, so that the bringing together of the sexes of the same species is often difficult or impossible at this stage of our knowledge." Thanks to the assistance of the numerous curators and collectors listed below, we have been able to examine enough material (approximately 4600 adult speci-

mens) to essentially solve this problem for the species of the United States and Canada. Previously unknown males or females are described below for 14 species, and synonymies are provided for six cases in which conspecific males and females have been described separately. The Mexican species are less well known but because almost all of them are currently represented only by females there is not yet a problem of matching sexes.

The second major difficulty in *Drassyllus* is in understanding the interrelationships of the many species, and we have had only limited success at this. The numerous species are in many senses just variations on a common theme, and the only somatic differences detected among them are in size and color. Genitalic characters (commented on in the species diagnoses) frequently allow the recognition of pairs of sister taxa, or slightly larger groups, but we have found far too few characters uniting larger sets of species to attempt a cladogram. These difficulties cause parallel ones in identification. We initially attempted to construct a single key to species, but (particularly for females) it quickly degenerated into nothing more than a set of instructions indicating which illustrations should be examined next. A compromise arrangement has therefore been adopted in which the species are distributed among eight species groups, a few of which may prove not to be monophyletic. We hope that the diagnoses of these informal groups, combined with a survey of the illustrations and scanning electron micrographs and the keys to the closely similar members of each group, will allow relatively efficient identification of future specimens.

The format of the descriptions and standard abbreviations of morphological terms follow those used in Platnick and Shadab (1975) and in figures 3–5. Whenever sufficient material was available, we supplied scanning electron micrographs of the distal elements of the male palpal bulb (removed from the cymbium, at magnifications of 230 $\times$) and the female epigynum (at magnifications of 180 $\times$). Complete collection data are provided for the less common species,

and only summaries for those species abundant in collections. Unless another depository is indicated, all specimens mentioned below are in the American Museum of Natural History. All measurements given are in millimeters.

We thank Mr. R. J. Koestler of the American Museum of Natural History for assistance with the scanning electron microscope, and Dr. W. A. Shear of Hampden-Sydney College for reviewing a draft of the manuscript.

COLLECTIONS EXAMINED

AJP, Mr. A. J. Penniman
 AMNH, American Museum of Natural History, including the Cornell University Collection and material made available by Dr. W. J. Gertsch
 BJK, Dr. B. J. Kaston
 BRV, Dr. B. R. Vogel
 CAS, California Academy of Sciences, Dr. W. Pulawski
 CDFA, California State Department of Food and Agriculture, Dr. F. Andrews, Mr. S. Kuba, Mr. C. Griswold
 CNC, Canadian National Collection, Dr. C. D. Dondale
 DEB, Mr. D. E. Bixler
 DKH, Ms. D. K. Hoffmaster
 DPC, Mr. D. P. Carroll
 EPC, Exline-Peck Collection, Dr. W. B. Peck
 FMNH, Field Museum of Natural History, Dr. J. Kethley
 FSFA, Florida State Collection of Arthropods, Dr. G. B. Edwards
 JAB, Dr. J. A. Beatty
 JEC, Dr. J. E. Carico
 JSH, Mr. J. S. Heiss
 LSV, Dr. L. S. Vincent
 MCZ, Museum of Comparative Zoology, Dr. H. W. Levi
 MSU, Michigan State University, Dr. R. L. Fischer
 NMB, Naturhistorisches Museum Basel, Dr. E. Sutter
 NVH, Dr. N. V. Horner
 OSU, Ohio State University, Dr. C. A. Triplehorn and Mr. A. J. Penniman
 REL, Dr. R. E. Leech
 SER, Dr. S. E. Riechert
 TDG, Mr. T. D. Gowan
 TMM, Texas Memorial Museum, Dr. W. G. Reeder

TTU, Texas Tech University, Dr. O. F. Francke and Mr. J. C. Cokendolpher
 UCB, University of California at Berkeley, Dr. E. I. Schlinger and Mr. C. Griswold
 UCR, University of California at Riverside, Mr. S. Frommer
 USNM, National Museum of Natural History, Smithsonian Institution, Dr. R. E. Crabill, Jr.
 UVT, University of Vermont, Dr. R. T. Bell
 VDR, Mr. V. D. Roth
 WAS, Dr. W. A. Shear
 WDF, Dr. W. D. Fronk
 WES, Mr. W. E. Sedgwick
 WLT, Dr. W. L. Tietjen
 WRI, Mr. W. R. Icenogle

DRASSYLLUS CHAMBERLIN

Drassyllus Chamberlin, 1922, p. 166 (type species by original designation *Drassyllus fallens* Chamberlin).

Epizelotes Lohmander, 1944, p. 14 [type species by original designation *Zelotes pusillus* (C. L. Koch)]. Described as a subgenus of *Zelotes*; synonymy first suggested by Tullgren, 1946, p. 113.

DIAGNOSIS: Specimens of *Drassyllus* can be distinguished from all other gnaphosids by the combined presence of a preening comb on metatarsi III and IV (figs. 1, 2), large and almost touching posterior median eyes (Kaston, 1978, fig. 528), and a bifid, medially situated terminal apophysis on the male palp (fig. 3).

DESCRIPTION: Total length 1.7–8.0. Carapace oval in dorsal view, widest between coxae II and III, truncate posteriorly, abruptly narrowed at level of palpi, orange to dark brown, frequently with dark reticulations, posterolateral corners with long, erect, dark setae; cephalic area flattened, thoracic groove long, longitudinal. From above, anterior eye row slightly recurved, posterior row slightly procurved; from front, both rows procurved; AME circular, dark, PME irregularly rectangular, light, ALE and PLE oval, light; PME largest, AME smallest; AME separated by roughly their diameter, almost touching ALE; PME almost touching, separated from PLE by half their long diameter or more; lateral eyes of each side separated by their radius or more; MOQ usually slightly longer than wide, wider in

back than in front. Clypeal height slightly greater than AME diameter. Chelicerae usually with four promarginal and three retro-marginal teeth. Endites short, rectangular, obliquely depressed, greatly flattened so that they appear abruptly narrowed beyond insertion of palpi; labium broad, rebordered and rounded distally; sternum oval, with recurved anterior margin, rebordered, with deep setal punctations centrally. Leg formula 4123. Typical leg spination pattern (only surfaces bearing spines listed): femora: I, II d1-1-0, p0-0-1; III d1-1-0, p0-1-1, r0-1-1; IV d1-1-0, p0-0-1, r0-0-1; patella III r0-1-0; tibiae: III p1-1-1, v1p-2-2, r0-1-1; IV p1-1-1, v2-2-2, r1-1-1; metatarsi: I, II v2-0-0; III p1-2-2, v2-0-0, r1-1-2; IV p1-2-2, v2-2-0, r1-2-1. Legs orange to dark brown (if dark, usually with lighter tarsi and metatarsi); tarsi IV lightly scopulate; tarsi with two dentate claws but no claw tufts; trochanters not notched; metatarsi III and IV with preening comb; distal segments with two rows of long trichobothria. Abdomen usually grey, rarely with dark median longitudinal band or chevron pattern; males with brown anterior scutum; six spinnerets, anteriors sclerotized, separated at base by their width. Palp with bifid terminal apophysis, large embolar base (bearing projection and coiled embolus), median apophysis, and membranous conductor. Epigynum with midpiece or median depression; spermathecae situated posteriorly, ducts long.

MISPLACED SPECIES: Three species currently assigned to *Drassyllus* do not fit the diagnosis given above: *D. agilis* (Bryant), *D. peninsulanus* (Banks), and *D. elegans* (Bryant). Their proper placement will be discussed in subsequent papers.

UNCERTAIN NAME: The holotype of *D. ethops* (Chamberlin) is an unidentifiable juvenile specimen and the name is therefore regarded as a *nomen dubium*.

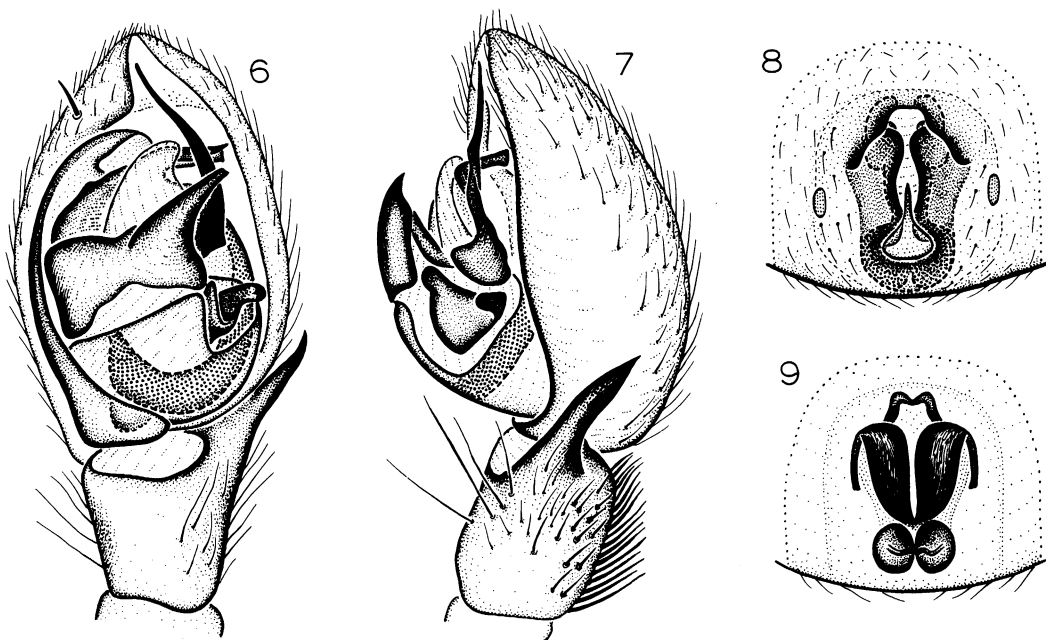
THE *fallens* GROUP

DIAGNOSIS: The *fallens* group contains those species in which the males have a longitudinal row of stiff setae dorsally on the

palpal tibia (as in figs. 7, 39) and a short embolus arising at a sharp angle from a dorso-ventrally flattened posterior portion (as in figs. 6, 10). Females have a small epigynal midpiece (as in figs. 8, 20, 35) and often the median epigynal ducts are conspicuously widened (as in figs. 9, 33).

KEY TO SPECIES

1. Males 2
Females 7
2. EB oriented transversely (figs. 6, 14, 18, 26), with broad saddle-shaped prolateral depression (figs. 12, 22, 24) 3
EB oriented obliquely (figs. 30, 38), with narrow saddle-shaped prolateral depression (figs. 34, 36) 6
3. TA relatively wide (fig. 26), with distal notch at retrolateral corner (fig. 24) *socius*
TA relatively narrow (figs. 6, 14, 18), without distal notch (figs. 10, 12, 22) 4
4. Distal half of RTA bent, transverse (figs. 15, 19) 5
Distal half of RTA straight, oblique (fig. 7) *fallens*
5. Retrolateral edge of TA invaginated (figs. 12, 14) *eremitus*
Retrolateral edge of TA not invaginated (figs. 18, 22) *depressus*
6. Distal edge of TA rounded (figs. 36, 38) *gynosaphes*
Distal edge of TA straight (figs. 30, 34) *nannellus*
7. MP deeply recessed between protuberant paramedian lobes (figs. 8, 11, 13, 16) ... 8
MP not deeply recessed 9
8. AEM relatively broad (figs. 8, 11) .. *fallens*
AEM relatively narrow (figs. 13, 16) *eremitus*
9. AEM relatively long, reaching almost to base of MP (figs. 20, 23, 25, 28) 10
AEM relatively short, reaching only tip of MP (figs. 32, 35, 37, 40) 11
10. AEM conspicuously narrowed anteriorly (figs. 20, 23) *depressus*
AEM not conspicuously narrowed anteriorly (figs. 25, 28) *socius*
11. AEM with two paramedian protuberances (figs. 32, 35) *nannellus*
AEM without paramedian protuberances (figs. 37, 40) *gynosaphes*



FIGS. 6–9. *Drassyllus fallens* Chamberlin. 6. Palp, ventral view. 7. Palp, retrolateral view. 8. Epigynum, ventral view. 9. Epigynum, dorsal view.

Drassyllus fallens Chamberlin

Figures 6–11; Map 1

Prothesima depressa (misidentification): Emerton, 1911, p. 406 (in part; pl. 5, fig. 8 only).

Zelotes depressa (misidentification): Banks, 1911, p. 441, fig. 1.

Drassyllus fallens Chamberlin, 1922, p. 166 (female holotype from Black Mountain, Buncombe County, North Carolina, in MCZ, examined). Kaston, 1948, p. 361, figs. 1223, 1224. Roewer, 1954, p. 415. Bonnet, 1956, p. 1603. Ubick and Roth, 1973, p. 2.

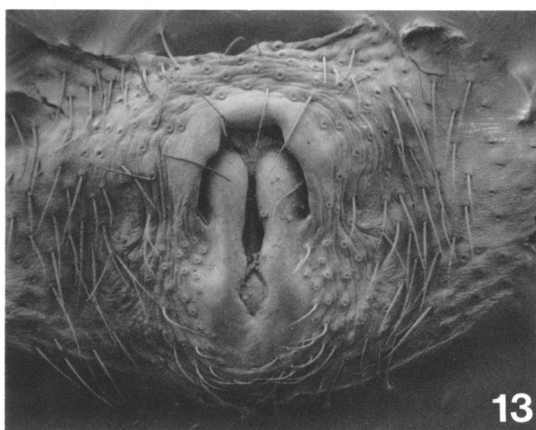
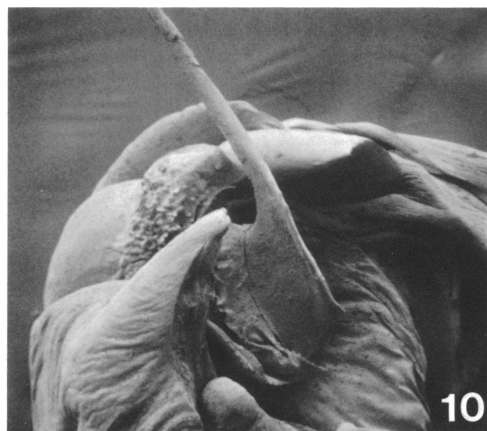
DIAGNOSIS: *Drassyllus fallens* seems closest to *D. eremitus* (in both species the EM is recessed below two paramedian protuberances) but may be distinguished by the longer, narrower TA (figs. 6, 10) of males and the wider AEM (figs. 8, 11) of females.

MALE: Total length 3.94 ± 0.29 . Carapace 1.74 ± 0.11 long, 1.40 ± 0.08 wide. Femur II 1.07 ± 0.07 long. Eye sizes and interdistances: AME 0.06, ALE 0.07, PME 0.10, PLE 0.08; AME–AME 0.07, AME–ALE

0.01, PME–PME 0.00, PME–PLE 0.05, ALE–PLE 0.04. MOQ length 0.22, front width 0.19, back width 0.20. TA long, narrowed toward tip (figs. 6, 10); RTA oblique (fig. 7). Leg spination: femur IV p0-0-0; patella III r0-0-0; tibia IV p1-0-1; metatarsus IV r1-2-2.

FEMALE: Total length 4.30 ± 0.77 . Carapace 1.72 ± 0.13 long, 1.36 ± 0.10 wide. Femur II 1.09 ± 0.10 long. Eye sizes and interdistances: AME 0.05, ALE 0.07, PME 0.10, PLE 0.07; AME–AME 0.06, AME–ALE 0.01, PME–PME 0.01, PME–PLE 0.04, ALE–PLE 0.05. MOQ length 0.23, front width 0.16, back width 0.20. AEM relatively wide (figs. 8, 11); MED very wide (fig. 9). Leg spination: femora II, IV p0-0-0; patella III r0-0-0; tibia IV p1-0-1; metatarsi: II v1r-0-0; IV r1-2-2.

MATERIAL EXAMINED: CANADA: Nova Scotia: Bridgewater, July 6–Aug. 1, 1966–1968, ground traps in oak (D. G. Embree, CNC), 1♂, 2♀. Quebec: King Mountain, Ga-



FIGS. 10–13. 10, 11. *Drassyllus fallens* Chamberlin. 12, 13. *D. eremitus* Chamberlin. 10, 12. Palp, ventral view. 11, 13. Epigynum, ventral view.

tineau Park, June 4–18, 1974, pitfall, deciduous woods (C. Dondale, J. Redner, CNC), 3♂, 2♀. UNITED STATES: **District of Columbia:** Washington, Apr. (Fox, MCZ), 1♀. **Georgia:** Rabun Co.: Clayton, July 12, 1960 (S. and D. Mulaik), 1♀. **Illinois:** Cook Co.: Marquette Park, June 5, 1943 (C. and M. Goodnight), 1♀. **Massachusetts:** Norfolk Co.: Blue Hill, Milton, June 13, 1892 (J. H. Emerton, MCZ), 1♂. Worcester Co.: Fitchburg, May 30, 1914 (J. H. Emerton, MCZ), 1♀. **Michigan:** Calhoun Co.: Albion, May 18, 1935 (A. M. Chickering, MCZ), 1♂, 1♀ (penultimate); Homer, June 1933 (A. M. Chickering, MCZ), 1♂, 1♀, May 1935 (A. M. Chickering, MCZ), 1♀. Jackson Co.: 14 mi. E Jackson, May 21, 1949 (A. M. Chick-

ering, MCZ), 1♀. **New Jersey:** Hunterdon Co.: Lambertville, May–June 1953 (W. Ivie), 2♂, 2♀. Middlesex Co.: New Brunswick, July 23, 1956 (B. McCormick), 2♀. Morris Co.: Schooleys Mountain, May 23, 1910, 1♂. **New York:** Nassau Co.: Sea Cliff (N. Banks, MCZ), 1♂, 7♀. Rockland Co.: Torne Mountain, Suffern, May 27, 1939 (W. J. Gertsch), 1♂. Ulster Co.: Cherrytown, July 18, 1976 (P. Wygodzinsky), 1♀. Westchester Co.: Lewisboro, June 13, 1976 (M. Favreau), 1♂; Yonkers, May 30, 1940, 1♀. **North Carolina:** Buncombe Co.: Black Mountain, Swannanoa, Mar. 18–30 (N. Banks, MCZ), 3♂, 1♀ (including type). Macon Co.: Highlands, July 4, 1961 (S. and D. Mulaik), 1♀; 5.2 mi. SW Highlands, June 26, 1957 (S. and D. Mu-

laik), 1♀. *Swain Co.*: Andrews Bald, Great Smoky Mountains National Park, June 22, 1936 (OSU), 2♂, 1♀. *Ohio*: *Hocking Co.*: Ash Cave, July 16, 1938 (OSU), 1♂, 2♀; Laurel Run, June 11, 1932 (OSU), 1♂. *Muskingum Co.*: Zanesville, May 22, 1937 (OSU), 1♀. *Pennsylvania*: *Adams Co.*: Gettysburg, June 20, 1960 (R. D. Barnes, MCZ), 3♀. *Berks Co.*: Virginville, June 1965 (P. Vaurie), 1♀. *Bucks Co.*: E Jamison, July 1954 (W. Ivie), 1♀. *Westmoreland Co.*: 3 mi. S Rector, June 15–July 1, 1965–1967, pitfall, *Crategus* litter (B. Vogel), 7♂, 1♀. *Tennessee*: *Sevier Co.*: Elkmont, June 11, 1939 (B. J. Kaston), 1♂, 2♀. *Virginia*: *Amherst Co.*: George Washington National Forest, Aug. 1, 1974 (C. Dondale, J. Redner, CNC), 1♀. *Fairfax Co.*: Great Falls, June 21 (N. Banks, MCZ), 2♀. *West Virginia*: *Summers Co.*: Bluestone Dam, May 14, 1966 (W. Shear, WAS), 1♂. *Wisconsin*: *Grant Co.*: Wyalusing, June 15, 1949 (H. W. Levi, MCZ), 1♂.

DISTRIBUTION: Wisconsin to Nova Scotia, south to Georgia (map 1).

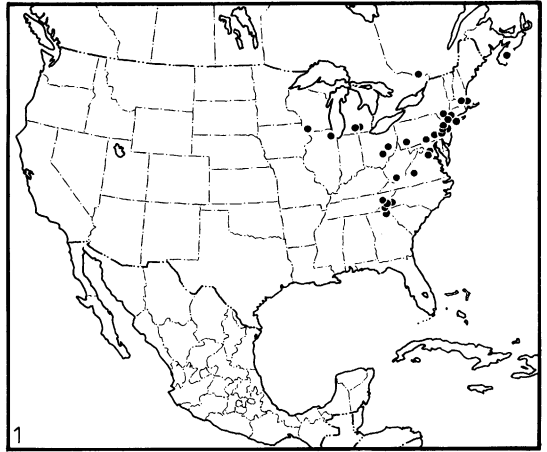
Drassyllus eremitus Chamberlin

Figures 12–17; Map 2

Drassyllus eremitus Chamberlin, 1922, p. 167 (female holotype from Glenraven, Robertson County, Tennessee, in MCZ, examined). Roewer, 1954, p. 414. Bonnet, 1956, p. 1603. Ubick and Roth, 1973, p. 2.

DIAGNOSIS: *Drassyllus eremitus* seems closest to *D. fallens* but may be distinguished by the shorter, wider TA (figs. 12, 14) of males and the narrower AEM (figs. 13, 16) of females.

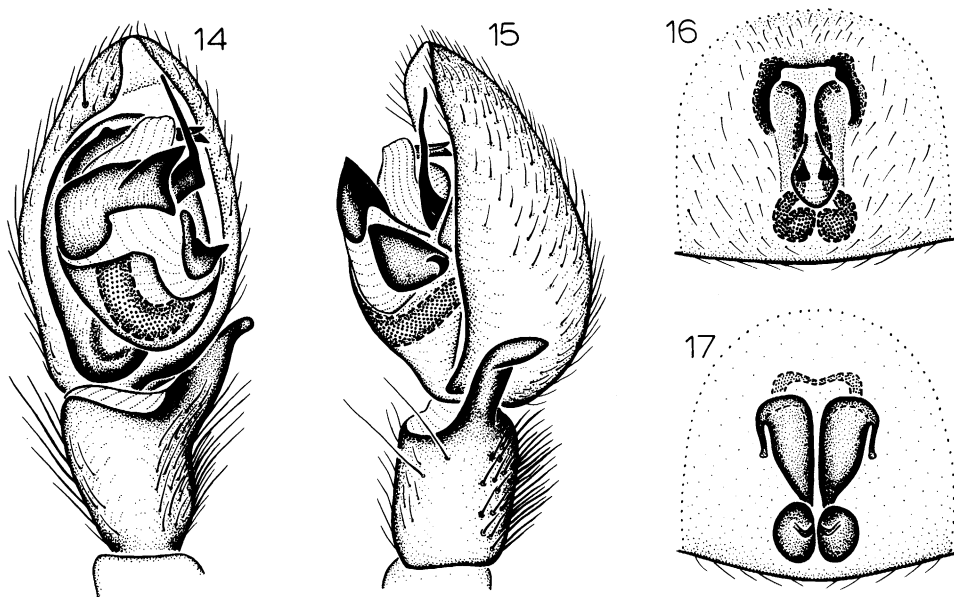
MALE: Total length 3.49 ± 0.32 . Carapace 1.58 ± 0.06 long, 1.24 ± 0.05 wide. Femur II 1.01 ± 0.05 long (69 specimens examined). Eye sizes and interdistances: AME 0.05, ALE 0.08, PME 0.10, PLE 0.09; AME–AME 0.06, AME–ALE 0.02, PME–PME 0.01, PME–PLE 0.05, ALE–PLE 0.04. MOQ length 0.22, front width 0.16, back width 0.21. TA rounded distally, invaginated retrolaterally (figs. 12, 14); RTA acutely bent (fig. 15). Leg spination: femora I, IV p0-0-0; patella III r0-0-0; tibia IV p1-0-1, v1p-2-2; metatarsi: II v1r-0-0; III p0-2-2, r0-1-2.



MAP 1. North America, showing distribution of *Drassyllus fallens*.

FEMALE: Total length 3.75 ± 0.34 . Carapace 1.59 ± 0.13 long, 1.24 ± 0.09 wide. Femur II 1.01 ± 0.09 long (65 specimens examined). Eye sizes and interdistances: AME 0.06, ALE 0.07, PME 0.10, PLE 0.08; AME–AME 0.06, AME–ALE 0.01, PME–PME 0.01, PME–PLE 0.03, ALE–PLE 0.04. MOQ length 0.23, front width 0.18, back width 0.21. AEM narrow, slightly widened behind tip (figs. 13, 16); MED wide, long (fig. 17). Leg spination: femur IV p0-0-0; patella III r0-0-0; tibia IV p1-0-1, v1p-2-2; metatarsi: II v1r-0-0; III p0-2-2, r0-1-2.

RECORDS: **Canada**: *Ontario*: London, Mer Bleue (8 mi. E Ottawa), Rondeau Provincial Park, Upper Rock Lake (30 km. N Kingston). *Quebec*: Poltimore. **United States** (county records only): *Connecticut*: New Haven. *Florida*: Alachua, Bay, Calhoun, Dade, Gulf, Highlands, Jackson, Jefferson, Lake, Lee, Monroe, Okeechobee, Pinellas, Putnam, Saint Johns, Sarasota. *Georgia*: Chatham, Screven, Thomas. *Illinois*: Cook, Jackson, Lake. *Louisiana*: East Baton Rouge. *Massachusetts*: Middlesex. *Michigan*: Berrien, Ingham, Livingston. *Missouri*: Crawford. *New York*: Suffolk, Tompkins, Wayne. *North Carolina*: Durham, Wake. *Ohio*: Franklin, Muskingum. *Tennessee*: Knox, Robertson, Sevier. *Virginia*: Nansemond. *Wisconsin*: Marathon.



FIGS. 14–17. *Drassyllus eremitus* Chamberlin. 14. Palp, ventral view. 15. Palp, retrolateral view. 16. Epigynum, ventral view. 17. Epigynum, dorsal view.

DISTRIBUTION: Wisconsin to Massachusetts, south to Louisiana and Florida (map 2).

NATURAL HISTORY: Mature males have been taken from February through August and in October, mature females from March through August and in December. Specimens have been collected in pitfall traps and Berlese samples, in sphagnum, cattail, and tamarack bogs, in pecan groves, and in bottomland, hardwood, pine, sand-pine, and palm forests.

Drassyllus depressus (Emerton)

Figures 18–23; Map 3

Prothesima depressa Emerton, 1890, p. 9, pl. 3, figs. 8, 8a (female holotype from Medford, Middlesex County, Massachusetts, in MCZ, examined); 1911, p. 406, pl. 5, figs. 8a and 8c only.

Melanophora depressa: Bryant, 1908, p. 7.

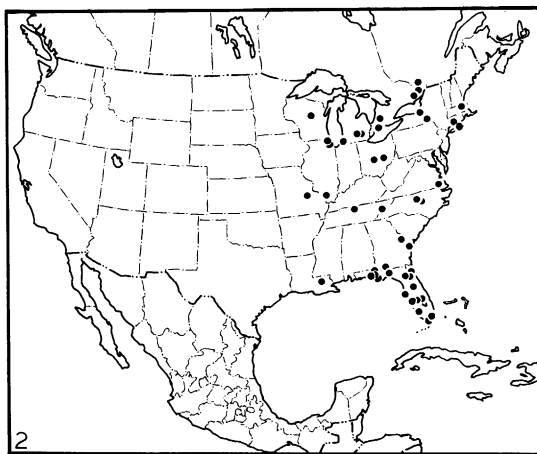
Zelotes depressa: Banks, 1910, p. 8.

Zelotes depressus: Petrunkevitch, 1911, p. 149.

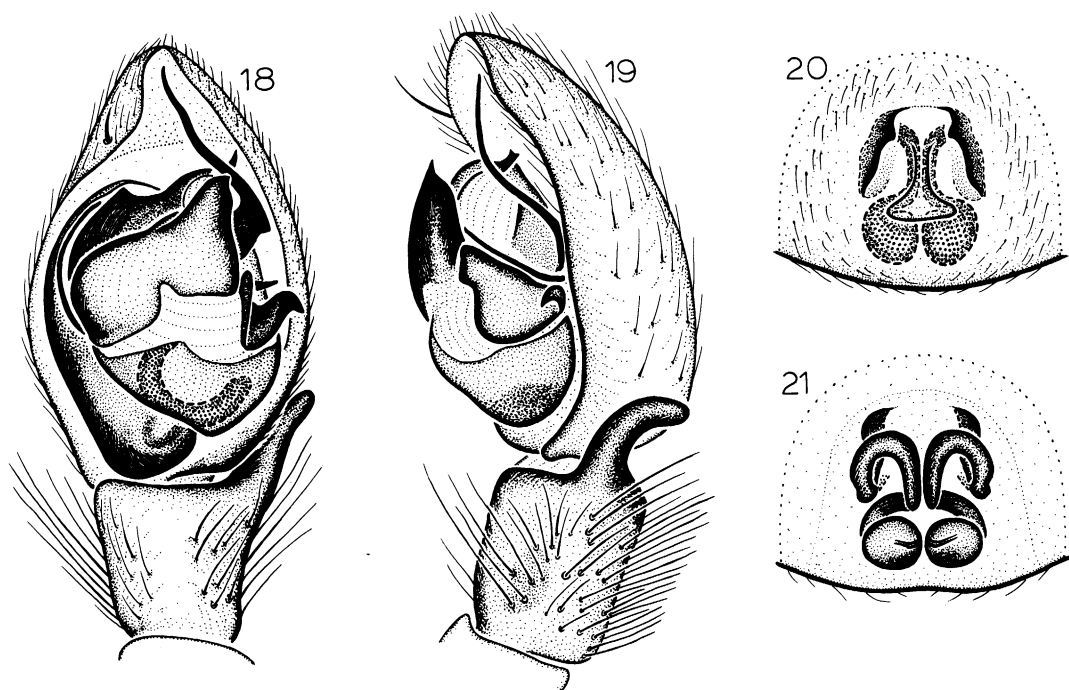
Drassyllus depressus: Chamberlin, 1922, p. 167.

Kaston, 1948, p. 359, figs. 1209, 1210. Roewer, 1954, p. 414. Bonnet, 1956, p. 1603. Ubick and Roth, 1973, p. 2.

DIAGNOSIS: *Drassyllus depressus* seems closest to *D. socius* (in both species the TAR has a conspicuous extension reaching the retrolateral edge of the CYM) but may be distinguished by the narrower TA (figs. 18,



MAP 2. North America, showing distribution of *Drassyllus eremitus*.



FIGS. 18–21. *Drassyllus depressus* (Emerton). 18. Palp, ventral view. 19. Palp, retrolateral view. 20. Epigynum, ventral view. 21. Epigynum, dorsal view.

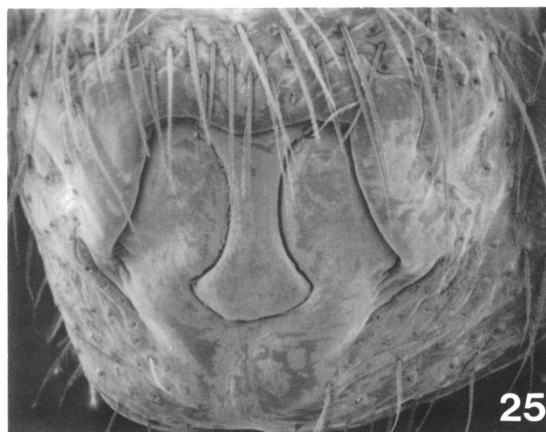
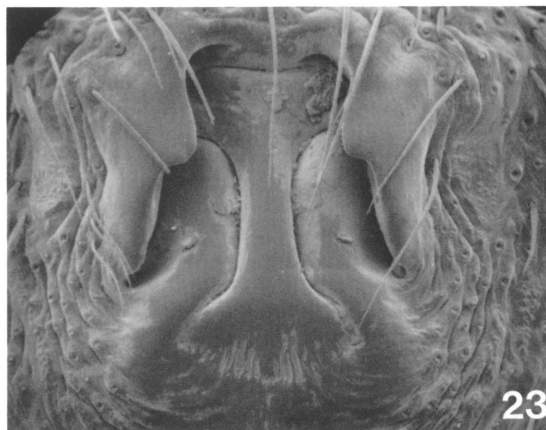
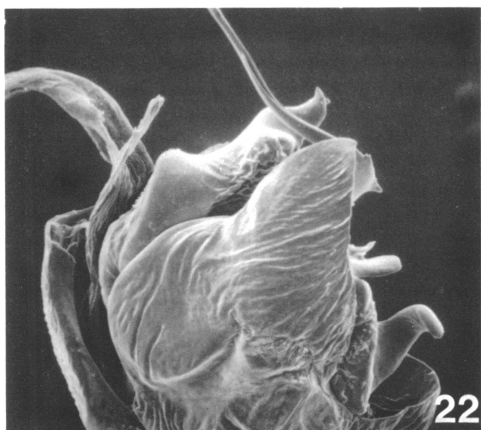
22) of males and the anteriorly narrowed AEM (figs. 20, 23) of females.

MALE: Total length 3.99 ± 0.28 . Carapace 1.78 ± 0.12 long, 1.42 ± 0.12 wide. Femur II 1.16 ± 0.10 long (249 specimens examined). Eye sizes and interdistances: AME 0.05, ALE 0.08, PME 0.09, PLE 0.08; AME–AME 0.05, AME–ALE 0.01, PME–PME 0.02, PME–PLE 0.04, ALE–PLE 0.05. MOQ length 0.21, front width 0.15, back width 0.20. TA roughly triangular (figs. 18, 22); RTA sharply bent (fig. 19). Leg spination: femora II, IV p0-0-0; patella III r0-0-0; tibia IV p1-0-1; metatarsus IV r1-2-2.

FEMALE: Total length 4.59 ± 0.75 . Carapace 1.74 ± 0.13 long, 1.38 ± 0.10 wide. Femur II 1.14 ± 0.06 long (206 specimens examined). Eye sizes and interdistances: AME 0.05, ALE 0.08, PME 0.10, PLE 0.08; AME–AME 0.08, AME–ALE 0.02, PME–PME 0.02, PME–PLE 0.05, ALE–PLE 0.06. MOQ length 0.23, front width 0.18, back width 0.22. AEM distinctly narrowed ante-

riorly (figs. 20, 23); MED and AED forming semicircle (fig. 21). Leg spination: femur IV p0-0-0; patella III r0-0-0; metatarsus III r1-2-2.

RECORDS: **Canada:** *Alberta:* Foremost, Fort McLeod, Seven Persons, Woolford Provincial Park. *British Columbia:* W Burnaby, Canox (Vancouver Island), Kyuquot (Union Island), Mt. Benson (Vancouver Island), Salmon Arm, Wellington (Vancouver Island), Yale. *Manitoba:* Glenlea, Riding Mountain National Park. *Nova Scotia:* Canard, Hall's Harbour, Kentville. *Ontario:* Black Sturgeon Lake, 7 km. S Carleton Place, Chatterton, 30 mi. E Dryden, Fitzroy Township, 18 km. E Gananoque, Jordan, Latta, McDonald's Corners, Odessa, Pelee Island (Lake Erie), Rednersville, Rondeau Provincial Park, Sturgeon Falls, Toronto, Wallacetown, Windsor. *Quebec:* Pike River. **United States** (county records only): *Arizona:* Coconino, Greenlee, Navajo. *Arkansas:* Carroll. *Colorado:* Boulder, Delta, Denver,



FIGS. 22–25. 22, 23. *Drassyllus depressus* (Emerton). 24, 25. *D. socius* Chamberlin. 22, 24. Palp, ventral view. 23, 25. Epigynum, ventral view.

Eagle, El Paso, Fremont, Hinsdale, Larimer, Mesa, Mineral, Montrose, Yuma. *Connecticut*: Fairfield. *Idaho*: Canyon, Lewis, Payette. *Illinois*: Cook, Kendall, Pope. *Indiana*: Parke. *Iowa*: Story. *Kansas*: Bourbon. *Kentucky*: Breathitt. *Maine*: Lincoln. *Maryland*: Garrett, Prince Georges. *Massachusetts*: Barnstable, Essex, Middlesex, Nantucket. *Michigan*: Alpena, Branch, Calhoun, Clinton, Ingham, Kalamazoo, Kent, Keweenaw, Livingston, Menominee, Midland. *Minnesota*: Freeborn, Hennepin, Olmstead, Ramsey. *Missouri*: Boone. *Nebraska*: Dawson, Hall. *New Hampshire*: Cheshire. *New Jersey*: Bergen, Hunterdon. *New Mexico*: Sandoval, Torrance. *New York*: Chautauqua, Greene, Nassau, Suffolk, Tompkins, Wyo-

ming. *North Dakota*: Ward. *Ohio*: Franklin, Hocking, Knox, Licking, Marion. *Oregon*: Benton, Klamath, Lane, Malheur, Umatilla, Union. *Pennsylvania*: Adams, Berks, Bucks. *South Dakota*: Custer. *Utah*: Salt Lake, San Juan, Utah. *Vermont*. *Virginia*: Augusta. *Washington*: Grant, King, San Juan. *Wisconsin*: Crawford, Dane.

DISTRIBUTION: British Columbia to Nova Scotia, south to Arizona, Arkansas, and Virginia (map 3).

NATURAL HISTORY: Mature males have been taken from late April through late September, mature females in January, March, and from May through late August. Specimens have been collected by vacuum and pitfall traps, under boards, rocks, and debris,

in fields, meadows, prairies, cattail marshes, sphagnum bogs, gravel pits, sand blowouts, and oak-hickory, hawthorne, and coniferous forests, on beaches, associated with goldenrod, wheat, and alfalfa, and in houses, at elevations up to 9000 feet.

Drassyllus socius Chamberlin

Figures 24–29; Map 4

Prothesima depressa (misidentification): Emerton, 1911, p. 406 (in part; pl. 5, fig. 8b only).

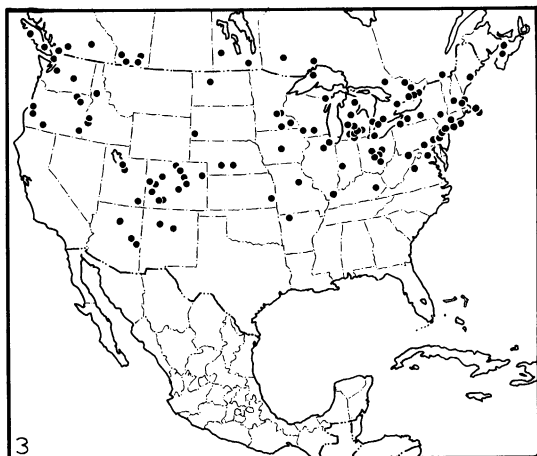
Drassyllus socius Chamberlin, 1922, p. 167 (male holotype from Blue Hill, Norfolk County, Massachusetts, in MCZ, examined). Kaston, 1948, p. 361, figs. 1231, 1232. Roewer, 1954, p. 417. Bonnet, 1956, p. 1606. Ubick and Roth, 1973, p. 3.

DIAGNOSIS: *Drassyllus socius* seems closest to *D. depressus* but may be distinguished by the distally notched TA (figs. 24, 26) of males and the anteriorly broad AEM (figs. 25, 28) of females.

MALE: Total length 3.40 ± 0.31 . Carapace 1.45 ± 0.08 long, 1.18 ± 0.06 wide. Femur II 0.88 ± 0.05 long. Eye sizes and interdistances: AME 0.04, ALE 0.06, PME 0.08, PLE 0.07; AME–AME 0.06, AME–ALE 0.01, PME–PME 0.02, PME–PLE 0.03, ALE–PLE 0.04. MOQ length 0.19, front width 0.14, back width 0.18. TA very wide, with distal notch on retrolateral side (figs. 24, 26); RTA narrowed distally (fig. 25). Leg spination: femora I, II, IV p0-0-0; patella III r0-0-0; tibia IV p1-0-1; metatarsus III p0-2-2, r0-1-2.

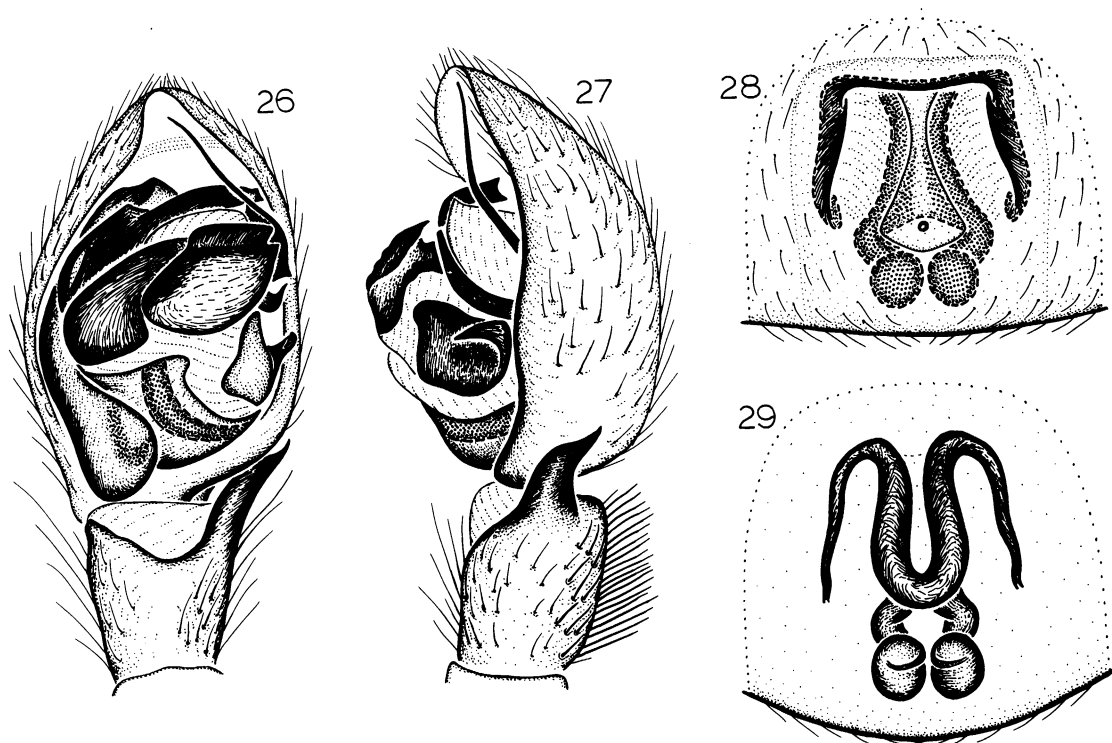
FEMALE: Total length 4.15 ± 0.41 . Carapace 1.48 ± 0.06 long, 1.17 ± 0.05 wide. Femur II 0.93 ± 0.06 long. Eye sizes and interdistances: AME 0.04, ALE 0.07, PME 0.08, PLE 0.08; AME–AME 0.05, AME–ALE 0.01, PME–PME 0.02, PME–PLE 0.05, ALE–PLE 0.04. MOQ length 0.21, front width 0.13, back width 0.17. AEM broad, epigynum almost square (figs. 25, 28); AED very long (fig. 29). Leg spination: femora I, IV p0-0-0; patella III r0-0-0; tibia IV p1-0-1; metatarsus III r0-1-1.

MATERIAL EXAMINED: CANADA: New Brunswick: Kouchibouguac National Park, May 26–June 27, 1977, pitfall, old field,



MAP 3. North America, showing distribution of *Drassyllus depressus*.

woods (J. Redner, S. Miller, G. Calderwood, CNC), 5♂, June 27–Aug. 16, 1977 (G. Calderwood, CNC), 6♀. Nova Scotia: Canard, June 20, 1956 (C. Dondale, CNC), 1♂. Ontario: Blackstone Lake, Parry Sound, July 23, 1973 (W. Sedgwick), 1♀; 4 km. SW Carleton Place, June 10–17, 1980, edge of hardwoods (S. Miller, CNC), 1♂; 7 km. SW Carleton Place, June 20–July 9, 1980, woods edge (S. Miller, CNC), 2♂, 5♀; Chatterton, 13 mi. N Belleville, June 8–13, 1966, pitfall, meadow (C. Dondale, CNC), 1♀; 18 km. E Gananoque, May 12–June 9, 1977, pitfall, old field (C. Dondale, J. Redner, CNC), 1♂; Island 1024, Lake Temagami, Aug. 15–25, 1946 (W. J. Gertsch, W. Ivie, T. Kurata), 1♀; 20 mi. E Kenora, May 10–June 16, 1963, pitfall, woods (A. L. Turnbull, CNC), 1♂; Lake Opeongo, Algonquin Provincial Park, July 10, 1965 (A. and R. Leech, CNC), 3♀; Odessa, May 21–June 30, 1962–1963, old field at wood edge (C. Dondale, J. Redner, CNC), 21♂, 4♀; Ottawa, Aug. 1976 (C. Mousseau, CNC), 1♂; Raymonds Corners, 25 km. N Kingston, June 9–July 15, 1977, rocky pasture (C. Dondale, J. Redner, CNC), 1♂, 4♀; 5 mi. N South Wye, Aug. 2–13, 1973, pitfall, uncultivated field (C. Starr, CNC), 1♀. Quebec: Kazabazua, June 8, 1978, with pink egg sac in rotting tree stump (C. Dondale, W. Maddison, CNC), 1♂, 1♀;



FIGS. 26–29. *Drassyllus socius* Chamberlin. 26. Palp, ventral view. 27. Palp, retrolateral view. 28. Epigynum, ventral view. 29. Epigynum, dorsal view.

2 km. S Lac Mouseau, Gatineau Park, June 9, 1980 (Rickey, Davis, CNC), 3♂. UNITED STATES: **Iowa:** *Hancock Co.*: Pilot Knob, nr. Forest City, June 16, 1961, on ground (H. Levi, MCZ), 1♀. **Massachusetts:** *Middlesex Co.*: Pepperell, May 1966 (H. W. Levi, MCZ), 1♂. *Norfolk Co.*: Blue Hill, Milton, June 18, 1892 (J. H. Emerton, MCZ), 1♂ (type). **New Hampshire:** *Cheshire Co.*: Monadnock, June 22–27, 1924 (J. H. Emerton, MCZ), 2♂. **Pennsylvania:** *Carbon Co.*: Hickory Run State Park, June 18, 1978, mixed hardwoods (H., L., and F. Levi, MCZ), 1♀.

DISTRIBUTION: Ontario and Iowa to Nova Scotia and Massachusetts (map 4).

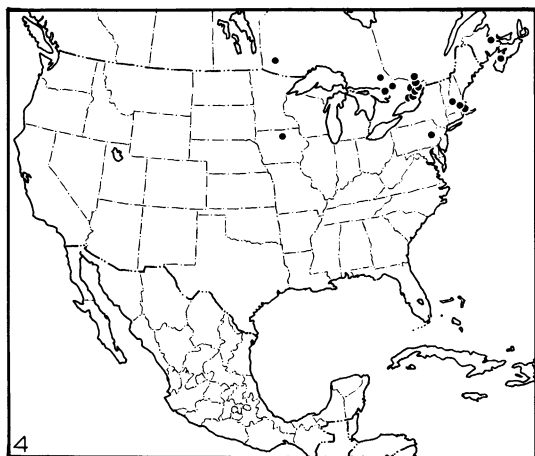
Drassyllus nannellus
Chamberlin and Gertsch
Figures 30–35; Map 5

Drassyllus nannellus Chamberlin and Gertsch, 1940, p. 11, fig. 33 (female holotype from 10

miles west of Tremonton, Box Elder County, Utah, in AMNH, examined). Roewer, 1954, p. 416. Ubick and Roth, 1973, p. 3.

DIAGNOSIS: *Drassyllus nannellus* seems closest to *D. gynosaphes* (in both species the EB and EP are oriented obliquely) but may be distinguished by the straight distal edge of the TA (figs. 30, 34) of males and the paramedian protuberances on the AEM (figs. 32, 35) of females.

MALE: Total length 2.68 ± 0.23 . Carapace 1.15 ± 0.08 long, 0.91 ± 0.07 wide. Femur II 0.70 ± 0.08 long. Eye sizes and interdistances: AME 0.04, ALE 0.05, PME 0.07, PLE 0.06; AME–AME 0.05, AME–ALE 0.02, PME–PME 0.02, PME–PLE 0.03, ALE–PLE 0.03. MOQ length 0.15, front width 0.13, back width 0.16. EB shortened, directed obliquely, with recessed EP; TA sharply pointed with straight distal edge (figs. 30, 34); MA relatively small (fig. 31).



MAP 4. North America, showing distribution of *Drassyllus socius*.

Leg spination: femora II, IV p0-0-0; patella III r0-0-0; tibia IV p1-0-1, v1p-2-2; metatarsi: I v1r-0-0; III p0-2-2, r0-1-2; IV v2-1p-0.

FEMALE: Total length 2.94 ± 0.30 . Carapace 1.20 ± 0.09 long, 0.93 ± 0.08 wide. Femur II 0.71 ± 0.09 long. Eye sizes and interdistances: AME 0.04, ALE 0.05, PME 0.06, PLE 0.06; AME-AME 0.04, AME-ALE 0.01, PME-PME 0.03, PME-PLE 0.02, ALE-PLE 0.03. MOQ length 0.17, front width 0.13, back width 0.15. AEM with paired paramedian protuberances (figs. 32, 35); MED sinuous (fig. 33). Leg spination: femur IV p0-0-0; tibia IV p1-0-1, v1p-2-2; metatarsi: I, II v1r-0-0; III p0-2-2, v0-0-0, r0-1-2; IV p0-2-2, v2-1p-0.

MATERIAL EXAMINED: UNITED STATES: **Colorado:** *Denver Co.:* Denver, June 6-7, 1957, under trash (H. and L. Levi, MCZ), 1♀. *Larimer Co.:* Bellvue, June 1970, pitfall (R. T. Bell, UVT), 1♂. **Missouri:** *Johnson Co.:* Knob Noster State Park, June 11-July 24, 1978-1980, pitfall, brushy prairie (W. B. Peck, J. Peaslee, EPC, AMNH), 9♂, 1♀; July 23-Aug. 7, 1980, pitfall, brushy prairie (W. B. Peck, J. Peaslee, EPC), 1♀. **Montana:** *Big Horn Co.:* Push Creek, June 23, 1965 (B. Parks, BRV), 1♂. *Park Co.:* 12 mi. N Gardiner, July 1, 1962 (W. Ivie), 1♀. *Rosebud Co.:* Colstrip, June 23, 1974 (CNC), 1♂. **Nebraska:** *Lancaster Co.:* 9 mi.

NW Lincoln, June 10, 1939, pitfall, prairie (E. Fichter), 1♂, 2♀. **Ohio:** *Adams Co.:* Lynx, May 21, 1931, dry prairie, 1♀, May 24, 1931 (OSU), 1♀. *Hocking Co.:* Cantwell Cliffs, Rockbridge, June 7, 1925 (OSU), 7♀. **Oregon:** *Jefferson Co.:* Grandview, Apr. 19, 1952 (V. Roth), 1♀. **Utah:** *Box Elder Co.:* 10 mi. W Tremonton, June 8, 1931 (W. Ivie), 1♀ (type). *Morgan Co.:* Morgan, Apr. 27, 1977, in manure (G. F. Knowlton, MCZ), 1♀. *Salt Lake Co.:* Fort Douglas, May 26, 1934 (W. Ivie), 1♀. *Tooele Co.:* nr. Benmore, May 13, 1950 (S. Mulaik), 1♀; Tooele, Apr. 24, 1961, elevation 1500 m., under stones, sage (H. Levi, MCZ), 1♀.

DISTRIBUTION: Oregon to Ohio (map 5).

Drassyllus gynosaphes Chamberlin

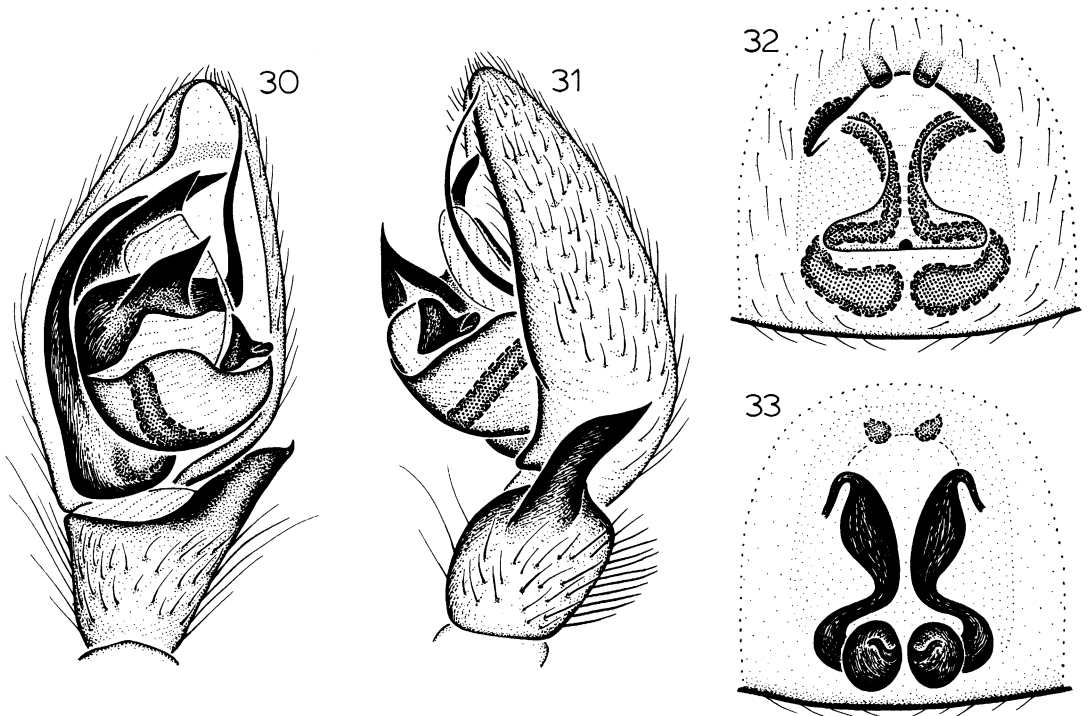
Figures 36-41; Map 6

Drassyllus gynosaphes Chamberlin, 1936b, p. 16, figs. 26-28 (female holotype from Edinburg, Hidalgo County, Texas, in AMNH, examined). Roewer, 1954, p. 415. Bonnet, 1956, p. 1604. Ubick and Roth, 1973, p. 2.

DIAGNOSIS: *Drassyllus gynosaphes* seems closest to *D. nannellus* but may be distinguished by the rounded distal edge of the TA (figs. 36, 38) of males and the continuous AEM (figs. 37, 40) of females.

MALE: Total length 3.64 ± 0.39 . Carapace 1.65 ± 0.15 long, 1.29 ± 0.10 wide. Femur II 1.05 ± 0.12 long. Eye sizes and interdistances: AME 0.06, ALE 0.09, PME 0.10, PLE 0.09; AME-AME 0.06, AME-ALE 0.02, PME-PME 0.02, PME-PLE 0.04, ALE-PLE 0.04. MOQ length 0.22, front width 0.18, back width 0.22. EB shortened, directed obliquely, with long, narrow EP; TA rounded distally (figs. 36, 38); MA relatively large (fig. 39). Leg spination: femora I, IV p0-0-0; tibia IV p1-0-1.

FEMALE: Total length 3.98 ± 0.47 . Carapace 1.53 ± 0.06 long, 1.23 ± 0.06 wide. Femur II 0.96 ± 0.07 long. Eye sizes and interdistances: AME 0.05, ALE 0.09, PME 0.09, PLE 0.09; AME-AME 0.05, AME-ALE 0.01, PME-PME 0.02, PME-PLE 0.04, ALE-PLE 0.04. MOQ length 0.22, front width 0.15, back width 0.20. AEM very wide, without paired protuberances (figs. 37,



FIGS. 30–33. *Drassyllus nannellus* Chamberlin and Gertsch. 30. Palp, ventral view. 31. Palp, retrolateral view. 32. Epigynum, ventral view. 33. Epigynum, dorsal view.

40); MED with straight edges (fig. 41). Leg spination: femur IV p0-0-0; tibia IV p1-0-1, v1p-2-2; metatarsi: III p0-2-2, r0-1-2; IV v2-1p-0.

MATERIAL EXAMINED: UNITED STATES:

Arkansas: *Conway Co.*: no specific locality, June 20–July 8, 1963–1964, pitfall, cotton (J. Traford, EPC), 3♀; *Morrillton*, July 4, 1963 (EPC), 1♀. *Hempstead Co.*: Hope, May 22, 1♂. *Mississippi Co.*: no specific locality, June 16–23, 1966 (EPC), 2♂, June 9–July 8, 1966 (EPC), 8♀. **Kansas:** *Bourbon Co.*: 3 mi. SW Redfield, July 13, 1966 (J. and W. Ivie), 1♀. **Louisiana:** *Avoyelles Par.*: Hamburg, Apr. 29, 1963 (EPC), 1♂. **Missouri:** *Johnson Co.*: Warrensburg, May 5, 1963, ground, open roadway (W. Peck, EPC), 1♂. **Texas:** *Cameron Co.*: no specific locality, Jan.–Mar. 1936 (L. I. Davis), 1♂; *Brownsville*, Dec. 1, 1934 (S. Mulaik), 1♂. *Hidalgo Co.*: Edinburg, Nov. 20–Apr. 1934–1936 (S. Mulaik), 4♂ (including type), 1♀; 5 mi. S San Juan, Feb. 12, 1935 (S. Mulaik), 1♀. *Travis*

Co.: Austin, May 5, 1945 (D. L. Frizzell, EPC), 1♀.

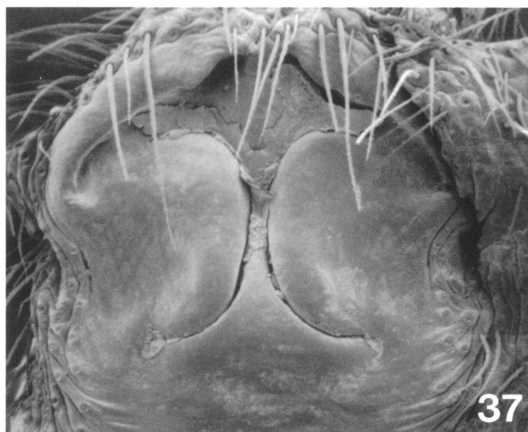
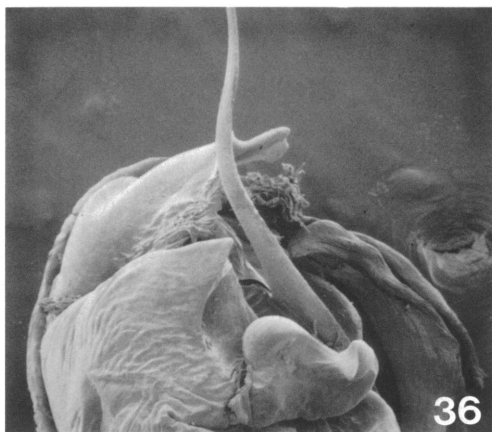
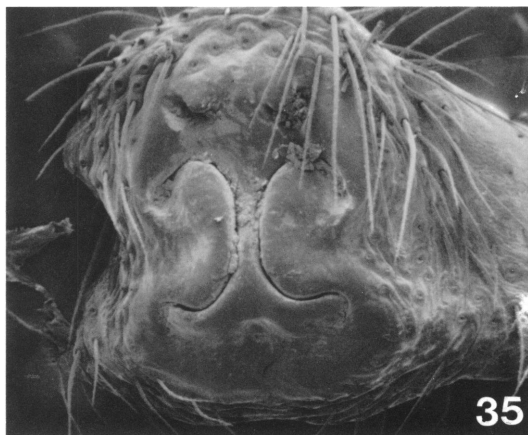
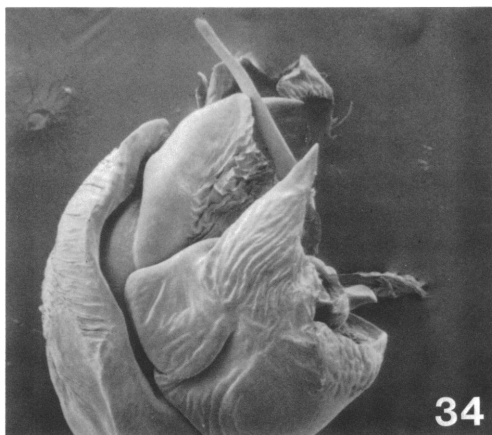
DISTRIBUTION: Kansas and Missouri to southern Texas (map 6).

THE *lamprus* GROUP

DIAGNOSIS: The *lamprus* group contains those species in which the males have a longitudinal row of stiff setae dorsally on the palpal tibia (as in figs. 43, 67), a long embolus emerging at the retrolateral side of the palpal bulb and restricted to that side (as in figs. 42, 66), and a short, narrow embolar projection (as in figs. 46, 60). Females have an epigynum either with an extremely narrow anterior margin (*D. lamprus*, figs. 44, 47) or a translucent flange connecting the median and anterior epigynal ducts (as in figs. 53, 57, 65, 69).

KEY TO SPECIES

1. Males with a short TA, not reaching TAR (figs. 42, 46); females with an extremely narrow



FIGS. 34–37. 34, 35. *Drassyllus nannellus* Chamberlin and Gertsch. 36, 37. *D. gynosaphes* Chamberlin. 34, 36. Palp, ventral view. 35, 37. Epigynum, ventral view.

- AEM, occupying less than one-third the epigynal width *lamprus*
 Males with TA extending to or beyond TAR (as in figs. 50, 54); females with AEM extending the full width of the epigynum .. 2
 2. Males 3
 Females 6
 3. TA relatively narrow (figs. 48, 50)
 *seminolus*
 TA relatively wide (as in figs. 54, 66) 4
 4. EMB greatly thickened (figs. 54, 58)
 *dixinus*
 EMB normal (as in figs. 60, 62) 5
 5. RTA relatively narrow (fig. 63) ... *texamans*
 RTA relatively wide (fig. 67) ... *conformans*
 6. MP massive, triangular (figs. 61, 64)
 *texamans*
 MP wide posteriorly but narrow anteriorly (figs. 52, 56, 68) 7

7. MP fused to AEM, forming continuous line (figs. 68, 71) *conformans*
 MP not fused to AEM (figs. 52, 56) 8
 8. MP very narrow anteriorly, abruptly widened posteriorly (figs. 56, 59) *dixinus*
 MP wider anteriorly, gradually narrowed posteriorly (figs. 49, 52) *seminolus*

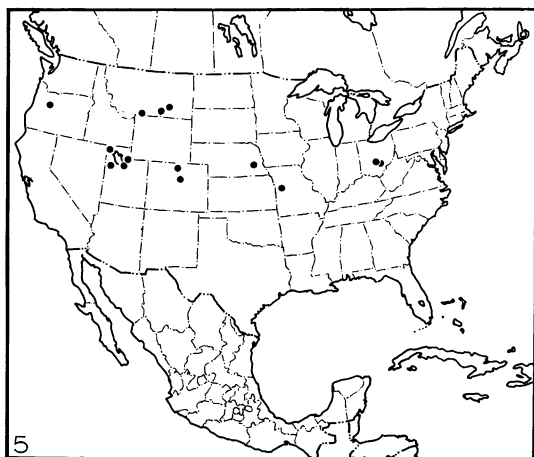
Drassyllus lamprus (Chamberlin)

Figures 42–47; Map 7

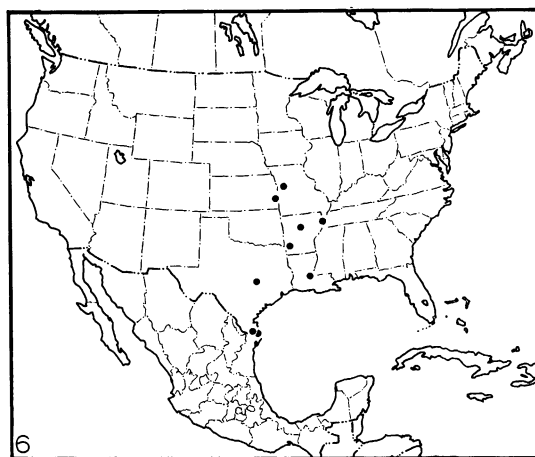
Zelotes lampra Chamberlin, 1920, p. 193, fig. 3 (female holotype from Mill Creek, Salt Lake County, Utah, in MCZ, examined).

Drassyllus lamprus: Chamberlin, 1922, p. 171. Roewer, 1954, p. 416. Bonnet, 1956, p. 1604. Ubick and Roth, 1973, p. 2.

Nodocion zelotoides Worley, 1928, p. 621, fig. 4 (female holotype from Mitchell, Scotts Bluff



MAP 5. North America, showing distribution of *Drassyllus nannellus*.



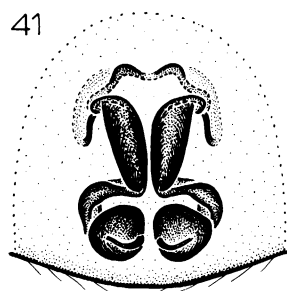
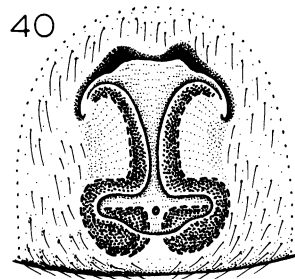
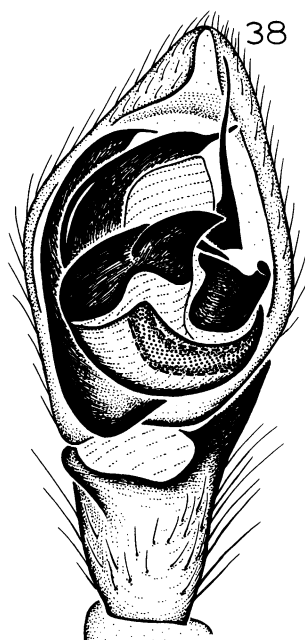
MAP 6. North America, showing distribution of *Drassyllus gynosaphes*.

County, Nebraska, in MCZ, examined). Roewer, 1954, p. 428. Bonnet, 1958, p. 3106. NEW SYNONYMY.

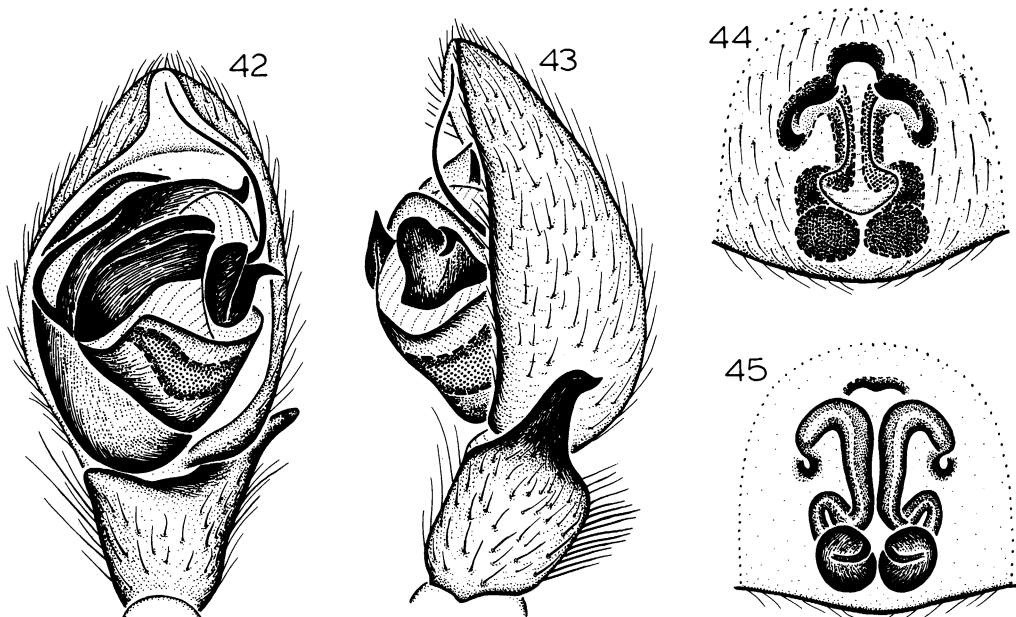
Nodocion moronius Chamberlin, 1936b, p. 5, fig. 21 (female holotype from Moroni, Sanpete

County, Utah, in AMNH, examined). Roewer, 1954, p. 428. Bonnet, 1958, p. 3105. NEW SYNONYMY.

Drassyllus zelotoides: Ubick and Roth, 1973, p. 3.



FIGS. 38-41. *Drassyllus gynosaphes* Chamberlin. 38. Palp, ventral view. 39. Palp, retrolateral view. 40. Epigynum, ventral view. 41. Epigynum, dorsal view.



FIGS. 42–45. *Drassyllus lamprus* (Chamberlin). 42. Palp, ventral view. 43. Palp, retrolateral view. 44. Epigynum, ventral view. 45. Epigynum, dorsal view.

Drassyllus moronius: Ubick and Roth, 1973, p. 3.

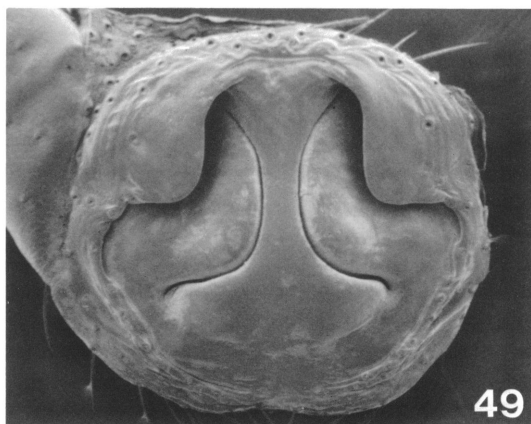
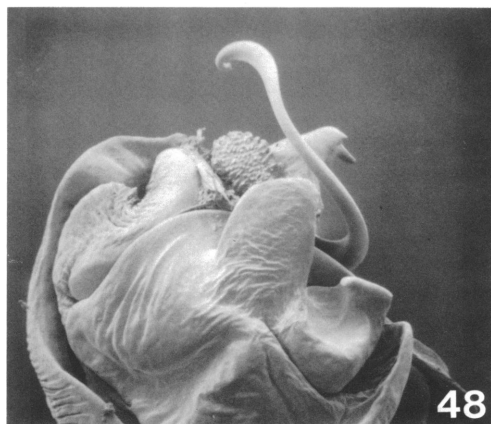
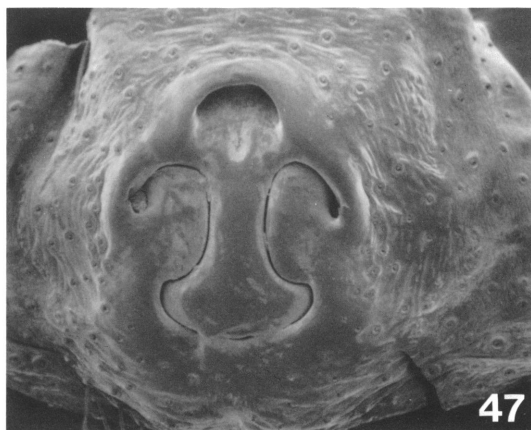
DIAGNOSIS: If the *lamprus* group is monophyletic, *D. lamprus* represents the sister group of the other four species as it shares the diagnostic features of males of the group (but lacks the modifications of the epigynal ducts of the other females) mentioned above. Specimens of *D. lamprus* can be recognized by the features listed in the first couplet of the key.

MALE: Total length 3.26 ± 0.31 . Carapace 1.46 ± 0.10 long, 1.16 ± 0.10 wide. Femur II 0.91 ± 0.05 long (27 specimens examined). Eye sizes and interdistances: AME 0.05, ALE 0.06, PME 0.09, PLE 0.07; AME–AME 0.05, AME–ALE 0.01, PME–PME 0.02, PME–PLE 0.04, ALE–PLE 0.05. MOQ length 0.18, front width 0.15, back width 0.20. TA very short, not reaching TAR (figs. 42, 46); RTA sinuous distally (fig. 43). Leg spination: femur IV p0-0-0; tibia IV p1-0-1.

FEMALE: Total length 3.48 ± 0.61 . Carapace 1.58 ± 0.12 long, 1.20 ± 0.10 wide. Femur II 1.00 ± 0.10 long (66 specimens ex-

amined). Eye sizes and interdistances: AME 0.04, ALE 0.07, PME 0.09, PLE 0.06; AME–AME 0.05, AME–ALE 0.02, PME–PME 0.02, PME–PLE 0.05, ALE–PLE 0.04. MOQ length 0.21, front width 0.13, back width 0.21. AEM very narrow, surrounded by darkened cuticle extending around anterior ends of MP (figs. 44, 47); AED wide, short (fig. 45). Leg spination: femora II, IV p0-0-0.

RECORDS: **Canada:** *Alberta:* Fincastle, Seven Persons. *British Columbia:* Savona, Summerland. *Saskatchewan:* Saskatoon. **United States** (county records only): *Arizona:* Cochise. *California:* Mono, San Diego, Sierra, Siskiyou. *Colorado:* Conejos, El Paso, Montrose, Saguache. *Idaho:* Bonneville, Cassia, Payette. *Montana:* Rosebud. *Nebraska:* Scotts Bluff. *Nevada:* Nye. *New Mexico:* Grant, Lincoln. *North Dakota:* Divide, Ward. *Oregon:* Crook, Jefferson, Lake, Malheur. *Utah:* Grand, Morgan, Salt Lake, Sanpete, Tooele, Utah. *Washington:* Kittitas. *Wyoming:* Carbon, Teton. **Mexico:** *Jalisco:* 8.5 mi. NW Leon. *San Luis Potosí:* 4 mi. W San Luis Potosí.



FIGS. 46–49. 46, 47. *Drassyllus lamprus* (Chamberlin). 48, 49. *D. seminolus* Chamberlin and Gertsch. 46, 48. Palp, ventral view. 47, 49. Epigynum, ventral view.

DISTRIBUTION: Western North America (map 7).

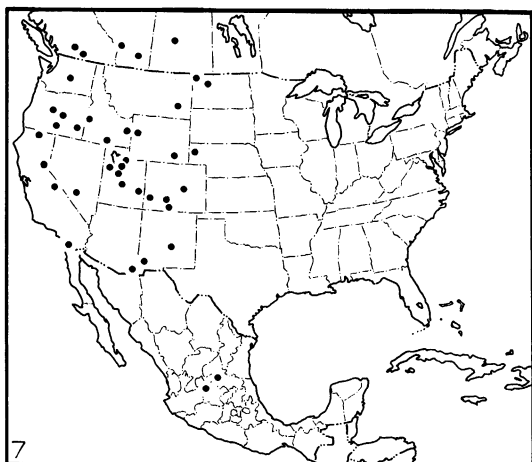
NATURAL HISTORY: Mature males have been taken from May through July and in October, mature females from late March through August. Specimens have been collected in pitfall traps, pools, under rocks, on river banks, in dry fields and prairies, associated with alfalfa, allthorn, juniper, lichens, mesquite, nolina, pinyon pine, sagebrush, and yucca, and under cow pats, at elevations up to 9200 feet.

SYNONYMY: Chamberlin provided no characters to distinguish *moronius* from *zelotoides*, and there appear to be none; the redescription of *D. lamprus* under these names was apparently due to generic misidentifications.

Drassyllus seminolus
Chamberlin and Gertsch
Figures 48–53; Map 8

Drassyllus seminolus Chamberlin and Gertsch, 1940, p. 16, fig. 31 (female holotype from Gainesville, Alachua County, Florida, in AMNH, examined). Roewer, 1954, p. 413. Ubick and Roth, 1973, p. 3.

DIAGNOSIS: *Drassyllus seminolus* seems to represent the sister group of *D. dixinus*, *D. texamans*, and *D. conformans*; all four species have a translucent flange connecting the MED and AED, but males of *D. seminolus* lack the greatly widened TA of the other species (figs. 48, 50). Females of *D. seminolus* have the flange smaller than in the other species (fig. 53).



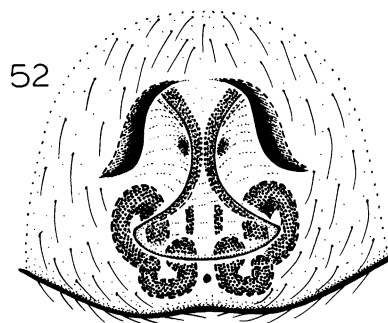
MAP 7. North America, showing distribution of *Drassyllus lamprus*.

MALE: Total length 2.63–3.28. Carapace 1.22–1.44 long, 0.94–1.10 wide. Femur II 0.73–0.84 long. Eye sizes and interdistances: AME 0.05, ALE 0.07, PME 0.09, PLE 0.07; AME–AME 0.04, AME–ALE 0.01, PME–

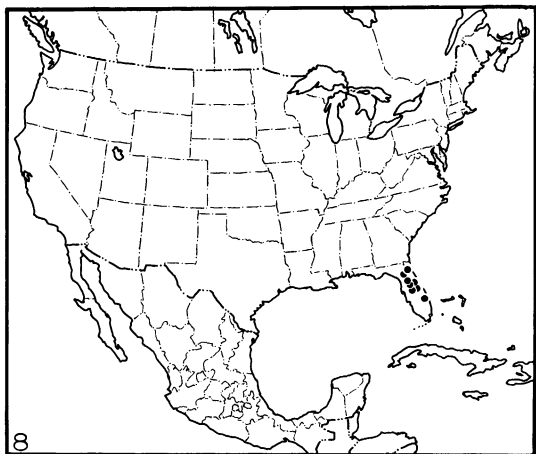
PME 0.01, PME–PLE 0.03, ALE–PLE 0.03. MOQ length 0.20, front width 0.14, back width 0.19. TA relatively narrow, extending beyond TAR (figs. 48, 50); RTA blade-shaped (fig. 51). Leg spination: tibiae: II v1r-1r-0; III v2-2-2, r1-1-1; IV p1-0-1, r2-1-1.

FEMALE: Total length 3.05 ± 0.31 . Carapace 1.26 ± 0.07 long, 0.99 ± 0.07 wide. Femur II 0.77 ± 0.07 long. Eye sizes and interdistances: AME 0.04, ALE 0.07, PME 0.08, PLE 0.06; AME–AME 0.05, AME–ALE 0.02, PME–PME 0.00, PME–PLE 0.04, ALE–PLE 0.03. MOQ length 0.18, front width 0.13, back width 0.16. MP relatively wide anteriorly, gradually widened posteriorly (figs. 49, 52); MED and AED connected by small translucent flange (fig. 53). Leg spination: tibiae: II v0-1r-0; III r1-1-1; IV r2-1-1.

MATERIAL EXAMINED: UNITED STATES:
Florida: *Alachua Co.:* Gainesville, June 1935 (W. J. Gertsch), 1♂, 1♀ (including type). *Clay Co.:* no specific locality, June 16, 1935 (H. K. Wallace), 1♂. *Lake Co.:* nr. Leesburg, July 6, 1959, *Pinus clausa* debris (H.



FIGS. 50–53. *Drassyllus seminolus* Chamberlin and Gertsch. 50. Palp, ventral view. 51. Palp, retrolateral view. 52. Epigynum, ventral view. 53. Epigynum, dorsal view.



MAP 8. North America, showing distribution of *Drassyllus seminolus*.

A. Denmark), 1♀. *Marion Co.*: Juniper Springs, July 17, 1959, *Pinus clausa* debris (H. A. Denmark, FSCA), 1♀. *Martin Co.*: Jonathan Dickenson State Park, Aug. 10, 1966 (W. A. Shear, WAS), 1♀. *Osceola Co.*:

nr. Alligator Lake, July 17, 1959, *Pinus clausa* debris (H. A. Denmark, FSCA), 1♀. *Polk Co.*: Lake Alfred, June 10, 1976, pitfall, citrus (M. H. Muma, FSCA), 1♂; Winterhaven, June 9–Aug. 16, 1968–1970, pitfall, sand-pine dune (M. H. Muma, K. J. Stone, FSCA), 4♂, 5♀. *Seminole Co.*: Forest City, June 4, 1979, pitfall, orange grove (D. Gowan), 1♂.

DISTRIBUTION: Florida (map 8).

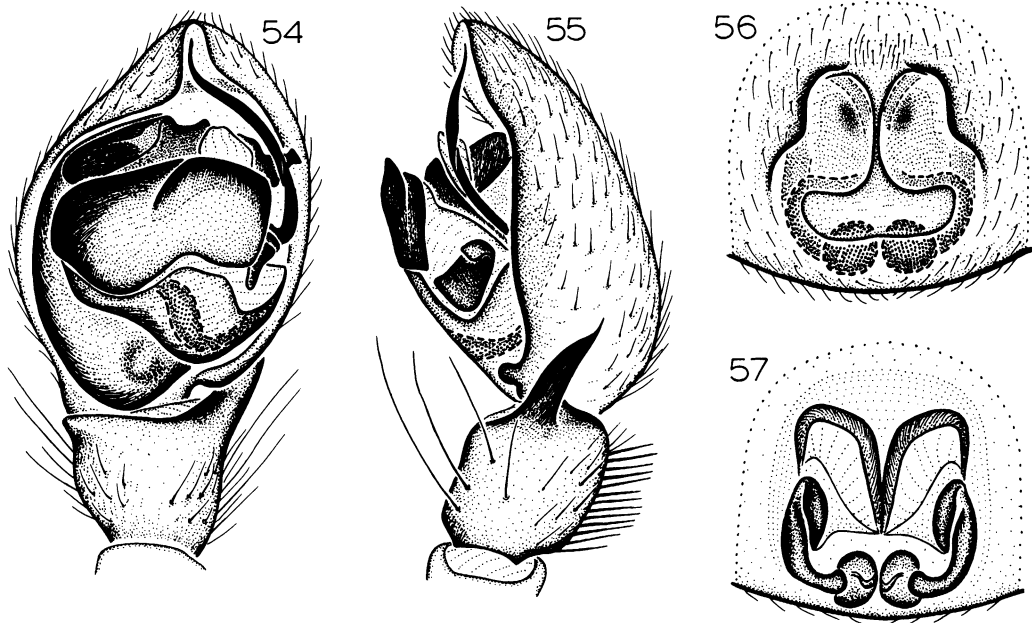
Drassyllus dixinus Chamberlin

Figures 54–59; Map 9

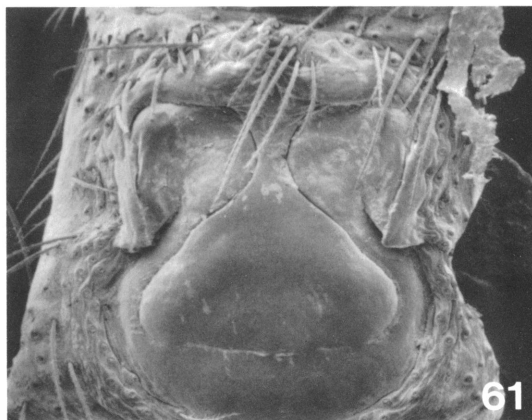
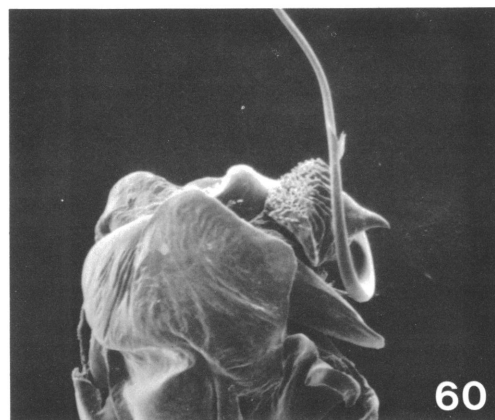
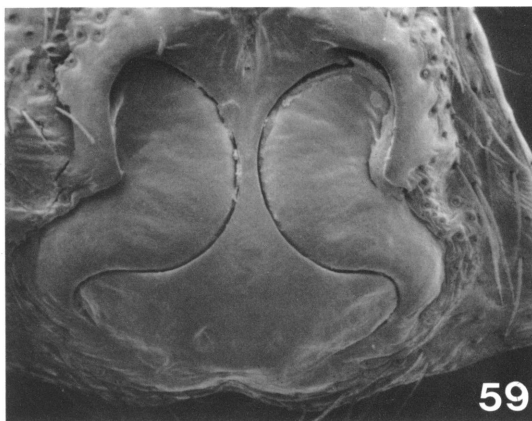
Drassyllus dixinus Chamberlin, 1922, p. 169 (female holotype from Mandeville, Saint Tammany Parish, Louisiana, in MCZ, examined). Bonnet, 1956, p. 1603. Ubick and Roth, 1973, p. 2.

Drassyllus sporadicus Muma, 1944, p. 10, figs. 11, 12 (male holotype from Parole, Anne Arundel County, Maryland, in AMNH, examined). Roewer, 1954, p. 417. Ubick and Roth, 1973, p. 3. NEW SYNONYMY.

Drassyllus diximus: Roewer, 1954, p. 414 (lapsus).



FIGS. 54–57. *Drassyllus dixinus* Chamberlin. 54. Palp, ventral view. 55. Palp, retrolateral view. 56. Epigynum, ventral view. 57. Epigynum, dorsal view.



FIGS. 58–61. 58, 59. *Drassyllus dixinus* Chamberlin. 60, 61. *D. texamans* Chamberlin. 58, 60. Palp, ventral view. 59, 61. Epigynum, ventral view.

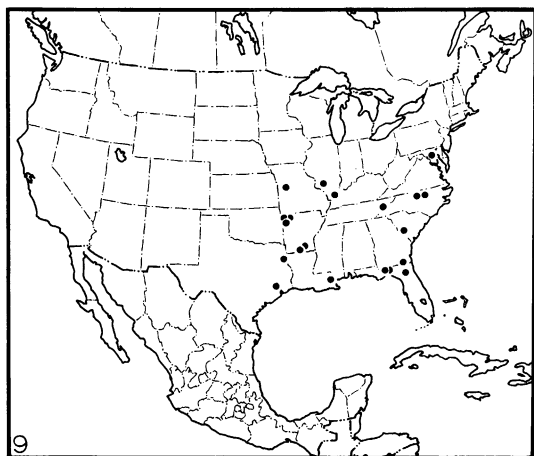
DIAGNOSIS: *Drassyllus dixinus* seems closest to *D. texamans* and *D. conformans* (males of all three have a greatly widened TA) but may be distinguished by the greatly thickened EMB (figs. 54, 58) of males and the large, rectangular posterior expansion of the MP (figs. 56, 59) of females.

MALE: Total length 3.05 ± 0.22 . Carapace 1.35 ± 0.07 long, 1.08 ± 0.07 wide. Femur II 0.87 ± 0.02 long. Eye sizes and interdistances: AME 0.05, ALE 0.08, PME 0.10, PLE 0.07; AME–AME 0.04, AME–ALE 0.02, PME–PME 0.00, PME–PLE 0.04, ALE–PLE 0.03. MOQ length 0.21, front width 0.14, back width 0.20. TA very wide, lobe-shaped; EMB greatly thickened (figs. 54, 58); RTA long, oblique (fig. 55). Leg spi-

nation: tibia IV r2-1-1; metatarsus III p0-2-2, v1p-0-0.

FEMALE: Total length 3.25 ± 0.24 . Carapace 1.36 ± 0.14 long, 1.01 ± 0.08 wide. Femur II 0.82 ± 0.06 long. Eye sizes and interdistances: AME 0.05, ALE 0.07, PME 0.09, PLE 0.07; AME–AME 0.03, AME–ALE 0.01, PME–PME 0.02, PME–PLE 0.03, ALE–PLE 0.03. MOQ length 0.16, front width 0.14, back width 0.20. MP wide, rectangular posteriorly, greatly narrowed anteriorly (figs. 56, 59); translucent flange connecting MED and AED large (fig. 57). Leg spination: metatarsus III p0-2-2, r0-1-2.

MATERIAL EXAMINED: UNITED STATES: Arkansas: Benton Co.: Round Prairie, May 6–21, 1965 (EPC), 1♂. Bradley Co.: no spe-



MAP 9. North America, showing distribution of *Drassyllus dixinus*.

cific locality, June 21, 1964 (EPC), 2♂; Sumpter, June 29, 1963, pitfall, pine-oak woods (Leslie, EPC), 1♂. *Carroll Co.*: Berryville (C. Wilton, MCZ), 1♂, 1♀. *Union Co.*: 0.6 mi. N Lapile, June 10–July 3, 1974, pitfall (J. S. Heiss, JSH), 1♂, 2♀; 4.2 mi. N New London, July 3, 1974, pitfall (J. S. Heiss, JSH), 1♀. *Washington Co.*: Cove Creek, June 9, 1962, pitfall, meadow (O. and M. Hite, EPC), 1♂, June 16, 1962 (O. Hite), 1♂, June 16, 1966, under stone, gravel bank (W. Peck, EPC), 1♂, Aug. 4, 1962 (Hite, EPC), 1♀. *Florida*: *Alachua Co.*: Newnan's Lake, Gainesville, June 13, 1935 (W. J. Gertsch), 3♀; no specific locality, June 5, 1937 (H. K. Wallace), 1♀. *Jefferson Co.*: Big Bend Horticultural Laboratory, June 9, 1969 (FSCA), 1♀. *Leon Co.*: Tall Timbers Research Station, June 1, 1969 (W. W. Baker, G. V. Komarek, FSCA), 2♂, May 18–25, 1970, pitfall, annually burned pine woods (D. L. Harris, FSCA), 1♀. *Georgia*: *Charlton Co.*: Billy's Island, Okefenokee Swamp, June 12, 1♀. *Illinois*: *Macoupin Co.*: Staunton, July 9, 1941, woods (C. and M. Goodnight), 1♀. *Pope Co.*: Lusk Creek, June 3, 1968, sweeping flowers (J. M. Nelson, JAB), 1♂. *Louisiana*: *Saint Tammany Par.*: Mandeville (R. V. Chamberlin, MCZ), 1♀ (type). *Maryland*: *Anne Arundel Co.*: Parole, June 9, 1942, under boards (M. H. Muma),

1♂ (type). *Missouri*: *Johnson Co.*: Knob Noster State Park, May 23–July 24, 1978–1980, pitfall, brushy prairie (W. B. Peck, J. Peaslee, EPC), 39♂, 46♀; Warrensburg, June 1, 1963 (W. B. Peck, EPC) 1♂. *North Carolina*: *Alamance Co.*: Burlington, June 8, 1933 (H. K. Wallace, MCZ), 1♀. *Durham Co.*: Duke Forest, Durham, June 11, 1953 (MCZ), 1♀; Durham, May 29, 1969, grass and litter, old yard (W. Ivie), 1♀; SE corner of county, June 8, 1963, pitfall, mixed broomsedge and young pine (J. W. Berry, JAB), 1♂. *South Carolina*: *Aiken Co.*: Savannah River Plant, May 29, 1959 (W. Tarpley), 1♂, 1♀. *Tennessee*: *Sevier Co.*: Great Smoky Mountain National Park, June 22, 1936, 1♂. *Texas*: *Harris Co.*: Houston, June 11, 1937 (S. and D. Mulaik), 1♀. *Harrison Co.*: Sabino River, nr. Marshall, June 7, 1936 (S. Mulaik), 1♀.

DISTRIBUTION: Southeastern United States (map 9).

SYNONYMY: Several simultaneous collections of both sexes indicate that *sporadicus* is the male of *dixinus*.

Drassyllus texamans Chamberlin

Figures 60–65; Map 10

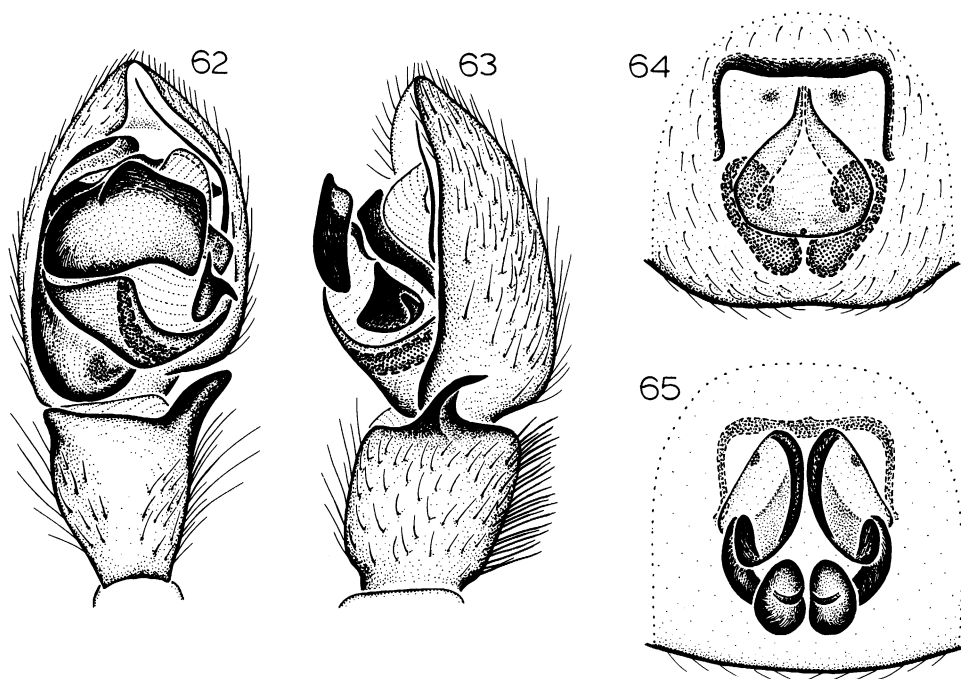
Drassyllus texamans Chamberlin, 1936b, p. 17, fig. 25 (female holotype from Sanderson, Terrell County, Texas, in AMNH, examined). Roewer, 1954, p. 417. Bonnet, 1956, p. 1606. Ubick and Roth, 1973, p. 3.

Drassyllus finium Chamberlin, 1936b, p. 15, figs. 33, 34 (male holotype from Sonora, Sutton County, Texas, in AMNH, examined). Roewer, 1954, p. 415. Bonnet, 1956, p. 1603. NEW SYNONYMY.

Drassyllus dentelifer Chamberlin, 1936b, p. 13, figs. 1, 2 (male holotype from Gainesville, Alachua County, Florida, in AMNH, examined). Roewer, 1954, p. 413. Bonnet, 1956, p. 1603. Ubick and Roth, 1973, p. 2. NEW SYNONYMY.

DIAGNOSIS: *Drassyllus texamans* seems closest to *D. dixinus* and *D. conformans* but may be distinguished by the narrow RTA (fig. 63) of males and the massive, triangular MP (figs. 61, 64) of females.

MALE: Total length 3.30 ± 0.19 . Carapace 1.45 ± 0.11 long, 1.16 ± 0.09 wide. Femur



FIGS. 62–65. *Drassyllus texamans* Chamberlin. 62. Palp, ventral view. 63. Palp, retrolateral view. 64. Epigynum, ventral view. 65. Epigynum, dorsal view.

II 0.90 ± 0.08 long. Eye sizes and interdistances: AME 0.05, ALE 0.07, PME 0.09, PLE 0.07; AME–AME 0.04, AME–ALE 0.02, PME–PME 0.01, PME–PLE 0.03, ALE–PLE 0.04. MOQ length 0.21, front width 0.14, back width 0.19. TA extremely wide (figs. 60, 62); RTA narrow (fig. 63). Leg spination: femur IV p0-0-0; tibiae: II v0-1r-0; IV p1-0-1, r2-1-1.

FEMALE: Total length 3.46 ± 0.34 . Carapace 1.38 ± 0.11 long, 1.06 ± 0.09 wide. Femur II 0.86 ± 0.05 long. Eye sizes and interdistances: AME 0.05, ALE 0.07, PME 0.08, PLE 0.07; AME–AME 0.05, AME–ALE 0.02, PME–PME 0.02, PME–PLE 0.03, ALE–PLE 0.03. MOQ length 0.20, front width 0.15, back width 0.18. MP triangular, occupying most of epigynum (figs. 61, 64); AED fused with translucent flange (fig. 65). Leg spination: femora I, II, IV p0-0-0; tibiae: III v1p-1p-2; IV p1-0-1, v1p-2-2; metatarsi I v1r-0-0; III p0-2-2, v0-0-0, r0-1-2; IV v2-1p-0.

MATERIAL EXAMINED: UNITED STATES:
Arkansas: *Mississippi Co.:* no specific locality, June 9–July 20, 1966 (EPC), 5♂, 7♀.
Florida: *Alachua Co.:* Gainesville, Apr. 17, 1933, 1♂ (type).
Oklahoma: *Comanche Co.:* Wichita Mountains Wildlife Refuge, May 13, 1978, pitfall, bluestem (J. C. Cokendolpher, F. Bryce, NVH), 1♂.
Major Co.: Cleo Spring, June 5, 1937 (Standish-Kaiser), 2♂, 1♀.
Texas: *Cameron Co.:* no specific locality, May 1, 1936 (L. I. Davis), 1♀.
Dallas Co.: no specific locality, July 13, 1940, open field, under barrel (MCZ), 1♀.
Hardeman Co.: Campsey Cave, 5 mi. S Lazare, May 1963, in silt along walls in darkness 100 feet from cave entrance (J. Reddell, B. Russell), 1♀.
Harris Co.: Houston, June 11, 1937 (S. and D. Mulaik), 1♂, 1♀.
Hays Co.: no specific locality, Apr. 15, 1939 (S. and D. Mulaik), 1♂.
Hidalgo Co.: Edinburg, May 1, 1936 (S. Mulaik, AMNH, MCZ), 3♀, Dec. 1939 (S. and D. Mulaik), 1♀; 7 mi. E Edinburg, Apr. 21, 1936 (S. Mu-

laik), 1♀. *Kerr Co.*: Raven Ranch, Aug. 1939 (D. Mulaik), 1♀. *Kleberg Co.*: Kingsville, Apr. 2, 1946 (C. D. Michener), 1♂. *Presidio Co.*: 2.8 mi. W Lajitas, Mar. 28, 1975, grasses (T. C. Kasper, NVH), 1♂; 38 mi. NE Presidio, June 5, 1978 (O. F. Francke, TTU), 1♀. *San Patricio Co.*: 7 mi. N Sinton, May 14, 1980, pitfall (D. K. Hoffmaster, DKH), 2♂; 8 mi. NE Sinton, Apr. 28–May 26, 1960 (H. E. Laughlin), 7♂, 2♀, June 12, 1960 (H. E. Laughlin), 2♀. *Sutton Co.*: Sonora, May 3, 1926 (F. C. Bishopp), 1♂ (type). *Terrell Co.*: Sanderson, July 4, 1934 (S. Mulaik), 2♀ (including type). *Travis Co.*: Austin, May 1946 (D. and H. Frizzell, EPC), 2♀. *Wichita Co.*: no specific locality, Apr. 5, 1975, ground (M. Priddy, NVH), 1♂; Perkins Scout Reservation, June 15, 1979 (N. I. Platnick), 1♂, 2♀. MEXICO: **Tamaulipas**: Reynosa, May 2, 1936 (S. Mulaik), 1♀.

DISTRIBUTION: Oklahoma and Tamaulipas to Florida (map 10).

SYNONYMY: Chamberlin provided no characters to distinguish *dentelifer* from *finium*, and there appear to be none; several simultaneous collections of both sexes indicate that these names refer to the male of *texamans*.

Drassyllus conformans Chamberlin

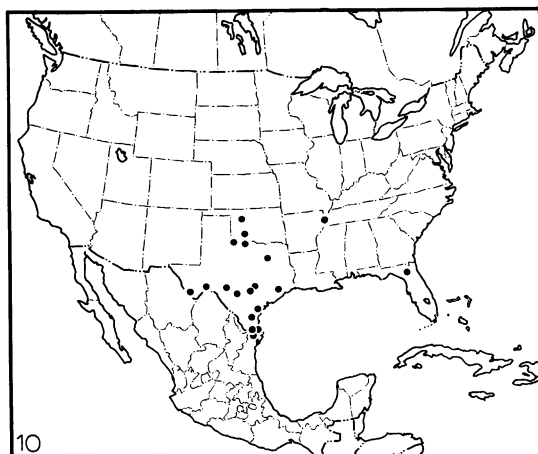
Figures 66–71; Map 11

Drassyllus conformans Chamberlin, 1936a, p. 22 (female holotype from Santa Monica, Los Angeles County, California, in AMNH, examined). Roewer, 1954, p. 414. Bonnet, 1956, p. 1602. Ubick and Roth, 1973, p. 2.

Drassyllus gertschi Chamberlin, 1936a, p. 25 (male and female syntypes from four localities in California and Utah, lost). Roewer, 1954, p. 415. Bonnet, 1956, p. 1604. First synonymized by Ubick and Roth, 1973, p. 2.

DIAGNOSIS: *Drassyllus conformans* seems closest to *D. dixinus* and *D. texamans* but may be distinguished by the prolaterally elongated TA (figs. 66, 70) of males and the fused MP and AEM (figs. 68, 71) of females.

MALE: Total length 3.32 ± 0.34 . Carapace 1.48 ± 0.15 long, 1.16 ± 0.19 wide. Femur II 0.87 ± 0.11 long. Eye sizes and interdis-

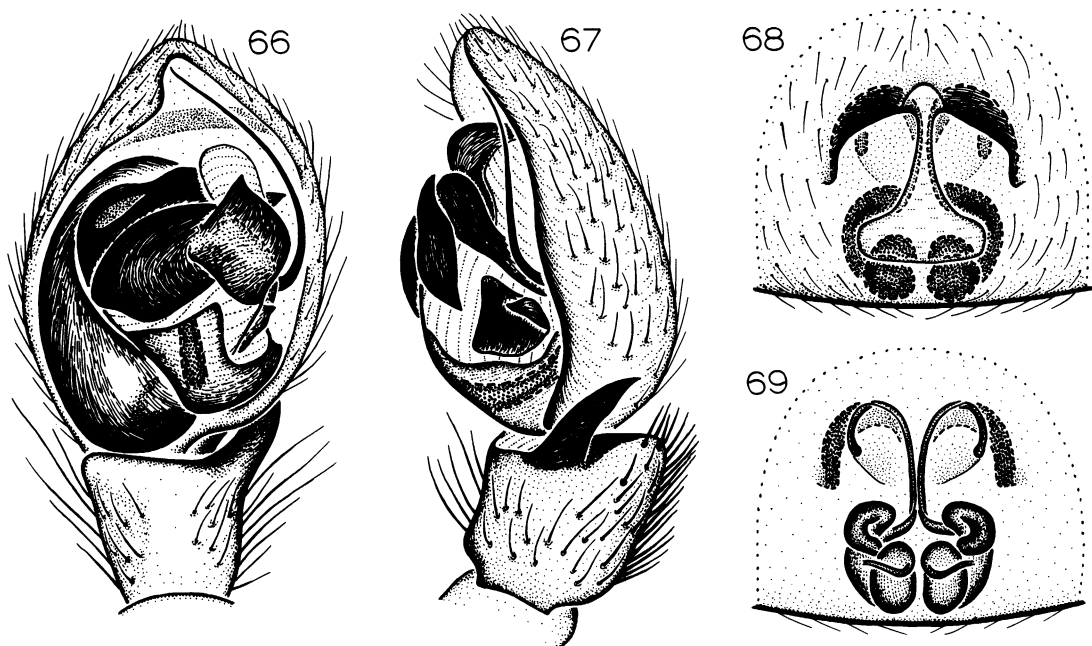


MAP 10. North America, showing distribution of *Drassyllus texamans*.

tances: AME 0.04, ALE 0.07, PME 0.09, PLE 0.06; AME–AME 0.05, AME–ALE 0.01, PME–PME 0.01, PME–PLE 0.03, ALE–PLE 0.04. MOQ length 0.18, front width 0.14, back width 0.20. TA wide, longer prolaterally than retrolaterally (figs. 66, 70); RTA with sinuous dorsal margin (fig. 67). Leg spination: tibiae: II v0-1r-0; IV r2-1-1.

FEMALE: Total length 3.68 ± 0.46 . Carapace 1.43 ± 0.15 long, 1.10 ± 0.13 wide. Femur II 0.88 ± 0.09 long. Eye sizes and interdistances: AME 0.05, ALE 0.07, PME 0.10, PLE 0.07; AME–AME 0.05, AME–ALE 0.01, PME–PME 0.02, PME–PLE 0.04, ALE–PLE 0.04. MOQ length 0.22, front width 0.15, back width 0.22. MP and AEM fused, forming continuous line (figs. 68, 71); translucent flange rounded (fig. 69). Leg spination typical for genus.

MATERIAL EXAMINED: UNITED STATES: **Arizona**: *Cochise Co.*: Guadalupe Canyon, E Douglas, Aug. 1, 1966 (V. Roth), 1♀; Portal, July 8, 1974, in house (W. J. Gertsch), 1♂, July 25, 1971, pitfall (A. Jung, VDR), 1♂, Sept. 8, 1971, pitfall (A. Jung, VDR), 1♀; Price Canyon, Chiricahua Mountains, July 15, 1968, grassland, 1♀. *Pima Co.*: Brown Canyon, Baboquivari Mountains, July 19, 1959 (V. Roth), 1♀; W Greaterville, Sept. 9, 1941 (W. Ivie), 1♀; Madera Canyon,



FIGS. 66–69. *Drassyllus conformans* Chamberlin. 66. Palp, ventral view. 67. Palp, retrolateral view. 68. Epigynum, ventral view. 69. Epigynum, dorsal view.

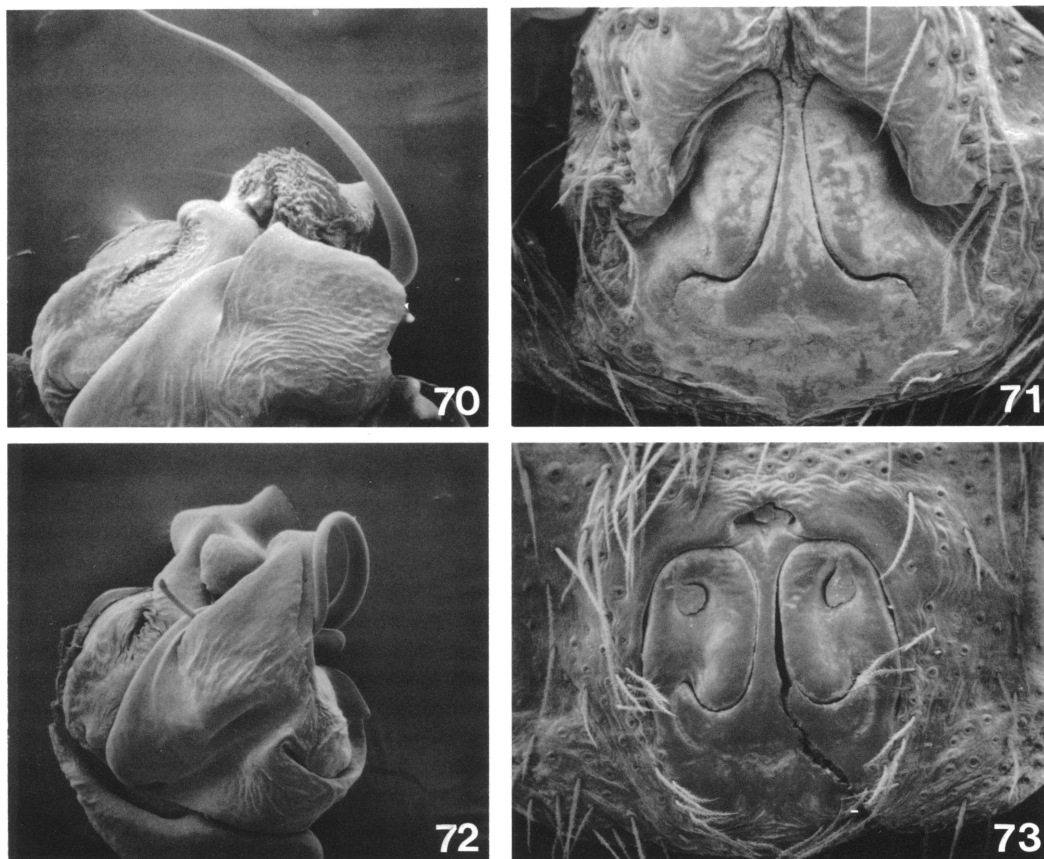
Santa Rita Mountains, July 16, 1940 (W. J. Gertsch, R. Hook), 1♂; Sabino Pond, Santa Catalina Mountains, July 10, 1962, elevation 2700 feet (J. A. Beatty, JAB), 1♂. **California:** *Los Angeles Co.:* Santa Monica, 1♀ (type). *Orange Co.:* Santa Ana Canyon, July 8, 1931 (R. V. Chamberlin), 1♂. *Riverside Co.:* Palm Canyon, Palm Springs, Mar. 27, 1960 (W. J. Gertsch, W. Ivie, R. Schrammel), 12♂, 8♀. *San Diego Co.:* Borrego Springs, Coyote Canyon, May 15, 1960 (V. Roth), 1♀; La Jolla, May 10, 1936 (CNC), 1♂, 1♀; San Diego River, July 12, 1931 (R. V. Chamberlin), 2♀. *Ventura Co.:* Oxnard, June 23, 1952 (W. J. Gertsch), 1♂, 4♀. **New Mexico:** *Sandoval Co.:* W Bernalillo (C. C. Hoff), 4♀. **Utah:** *Washington Co.:* Beaver Dam, Apr. 18, 1932 (W. Ivie), 1♂, 2♀; St. George, July 7, 1931 (W. J. Gertsch, Johnson), 1♂; Zion Canyon, Zion National Park, June 6, 1968, elevation 5000 feet (D. E. Bixler, DEB), 1♂. **MEXICO:** *Baja California Norte:* Meling Ranch, San José, May 1–4, 1961 (W. J. Gertsch, V.

Roth), 7♂, 6♀. **Chihuahua:** Cañón Prieta, nr. Primavera, June 30, 1947 (W. J. Gertsch), 1♂. **Hidalgo:** 5 mi. SW Jacala, Apr. 21, 1963 (W. J. Gertsch, W. Ivie), 1♀. **Jalisco:** S Side, Lago de Chapala, July 28, 1954 (W. J. Gertsch), 1♀. **Oaxaca:** 9 mi. SE Nochistlán, May 1, 1963 (W. J. Gertsch, W. Ivie), 1♀.

DISTRIBUTION: California and New Mexico to Oaxaca (map 11).

THE *notonus* GROUP

DIAGNOSIS: The *notonus* group contains those species in which the males have a longitudinal row of stiff setae dorsally on the palpal tibia (as in figs. 75, 87; the setae are reduced or absent in *D. antonito*), an extremely long embolus which crosses the distal surface of the palpal bulb and reaches the prolateral half of the cymbium (as in figs. 74, 90), and an enlarged median apophysis that reaches to the tip of the terminal apophysis



FIGS. 70-73. 70, 71. *Drassyllus conformans* Chamberlin. 72, 73. *D. notonus* Chamberlin. 70, 72. Palp, ventral view. 71, 73. Epigynum, ventral view.

(as in figs. 72, 84). Females have an extremely long anterior epigynal margin (as in figs. 76, 92) or coiled posterior epigynal ducts (fig. 89). The group includes the smallest of the known *Drassyllus* species.

KEY TO SPECIES

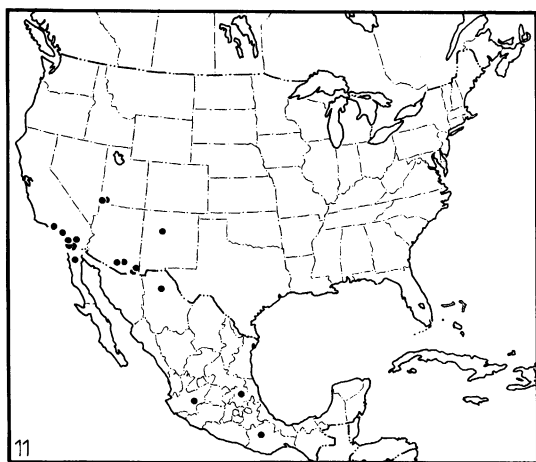
- | | |
|--|-----------------|
| 1. Males | 2 |
| Females | 5 |
| 2. EP blunt (figs. 72, 74, 78, 82) | 3 |
| EP sharply pointed (figs. 83, 84, 86, 90) ... | 4 |
| 3. TA long, relatively narrow at tip (figs. 72, 74) | <i>notonus</i> |
| TA short, relatively wide at tip (figs. 78, 82) | <i>inanus</i> |
| 4. RTA straight (fig. 87) | <i>sinton</i> |
| RTA bent dorsally (fig. 91) | <i>antonito</i> |
| 5. MP fused to AEM (figs. 85, 88) | <i>sinton</i> |
| MP not fused to AEM | 6 |
| 6. Anterior portion of AEM relatively wide (fig. 92) | <i>antonito</i> |
| Anterior portion of AEM relatively narrow (figs. 76, 80) | 7 |
| 7. Posterior portion of MP relatively small (figs. 73, 76) | <i>notonus</i> |
| Posterior portion of MP relatively large (fig. 80) | <i>inanus</i> |

Drassyllus notonus Chamberlin

Figures 72-77; Map 12

Drassyllus notonus Chamberlin, in Chamberlin and Gertsch, 1928, p. 179 (female holotype from Noton, Wayne County, Utah, in AMNH, examined). Roewer, 1954, p. 416. Bonnet, 1956, p. 1605. Ubick and Roth, 1973, p. 3.

Drassyllus apachus (misidentification): Chamberlin and Woodbury, 1929, p. 135, pl. 2, figs. 3, 4.



MAP 11. North America, showing distribution of *Drassyllus conformans*.

Drassyllus fratrellus Chamberlin, 1936a, p. 23, figs. 31, 32 (female holotype from Scottsdale, Maricopa County, Arizona, in AMNH, examined). Roewer, 1954, p. 415. Bonnet, 1956, p. 1604. First synonymized by Ubick and Roth, 1973, p. 3.

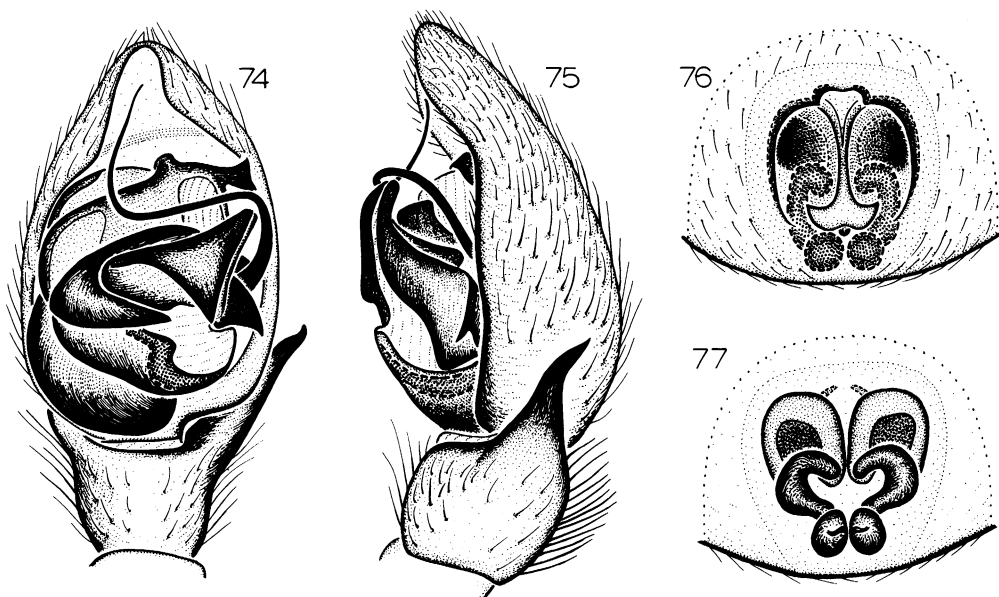
Drassyllus tonaquintus Chamberlin and Gertsch, 1940, p. 17, figs. 20, 21 (male holotype from St.

George, Washington County, Utah, in AMNH, examined). Roewer, 1954, p. 417. First synonymized by Ubick and Roth, 1973, p. 3.

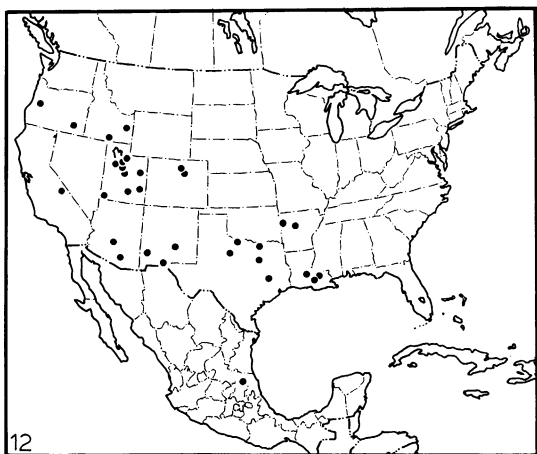
DIAGNOSIS: *Drassyllus notonus* seems closest to *D. inanus* (in both species the EP is straight and blunt and the AEM almost surrounds the epigynum) but may be distinguished by the longer and narrower TA (figs. 72, 74) of males and the longer AEM (figs. 73, 76) of females.

MALE: Total length 2.55 ± 0.32 . Carapace 1.06 ± 0.07 long, 0.84 ± 0.04 wide. Femur II 0.63 ± 0.03 long (45 specimens examined). Eye sizes and interdistances: AME 0.04, ALE 0.05, PME 0.05, PLE 0.06; AME-AME 0.04, AME-ALE 0.01, PME-PME 0.03, PME-PLE 0.03, ALE-PLE 0.03. MOQ length 0.15, front width 0.12, back width 0.14. TA long, narrowed distally, triangular (figs. 72, 74); MA extremely long, closely appressed to TA (fig. 75). Leg spination: femur II p0-0-0; patella III r0-0-0; metatarsi: I v0-0-0; II v1r-0-0; III v1p-0-0, r0-1-2; IV v2-0-0.

FEMALE: Total length 2.90 ± 0.19 . Carapace 1.15 ± 0.07 long, 0.89 ± 0.05 wide. Femur II 0.71 ± 0.08 long (49 specimens ex-



FIGS. 74-77. *Drassyllus notonus* Chamberlin. 74. Palp, ventral view. 75. Palp, retrolateral view. 76. Epigynum, ventral view. 77. Epigynum, dorsal view.



MAP 12. North America, showing distribution of *Drassyllus notonus*.

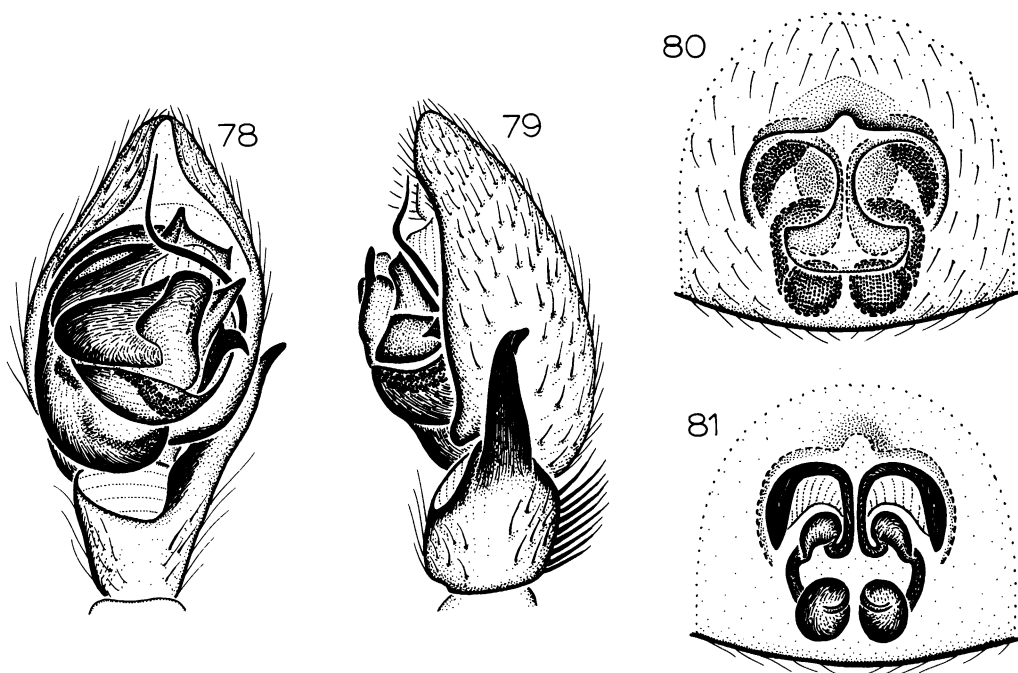
amed). Eye sizes and interdistances: AME 0.04, ALE 0.05, PME 0.05, PLE 0.05; AME-AME 0.04, AME-ALE 0.01, PME-PME 0.04, PME-PLE 0.04, ALE-PLE 0.03.

MOQ length 0.14, front width 0.12, back width 0.14. MP narrow, AEM longer than wide (figs. 73, 76); AED expanded (fig. 77). Leg spination: femora: I, II p0-0-0; III p0-0-1, r0-0-1; IV p0-0-0; patella III r0-0-0; tibiae: III v0-1p-2; IV v1p-2-2; metatarsi: I, II v1r-0-0; III p0-2-2, v0-0-0, r0-1-2; IV v2-1p-0.

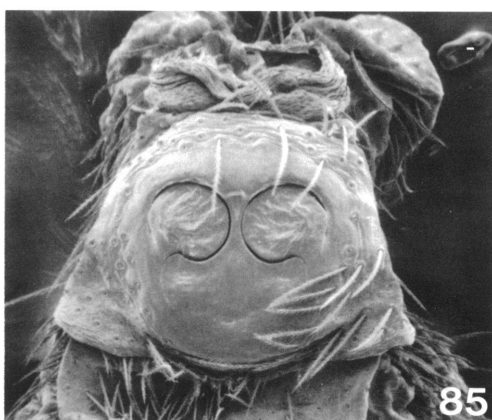
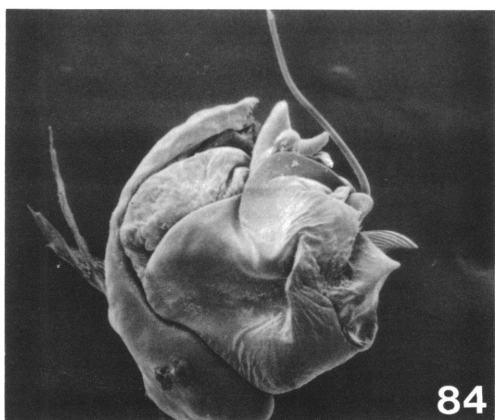
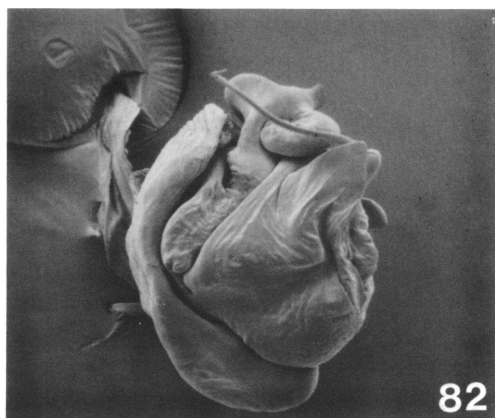
RECORDS: **United States** (county records only): *Arizona*: Maricopa, Pima. *Arkansas*: Conway, Crawford. *California*: Inyo. *Colorado*: Boulder, Denver. *Idaho*: Bonneville, Cassia. *Louisiana*: Avoyelles, East Baton Rouge, Iberville. *New Mexico*: Dona Ana, Grant, Lincoln. *Oregon*: Harney, Lane. *Texas*: Dallas, Grayson, Haskell, Walker, Wichita. *Utah*: Davis, Grand, Salt Lake, Tooele, Uintah, Utah, Washington, Wayne. *Mexico*: *San Luis Potosí*: Tamazunchale.

DISTRIBUTION: Oregon and Arizona to Louisiana and San Luis Potosí (map 12).

NATURAL HISTORY: Mature males have been taken from February through October and in December, mature females from late March through October and in December.



FIGS. 78-81. *Drassyllus inanus* Chamberlin and Gertsch. 78. Palp, ventral view. 79. Palp, retrolateral view. 80. Epigynum, ventral view. 81. Epigynum, dorsal view.



FIGS. 82–85. 82. *Drassyllus inanus* Chamberlin and Gertsch. 83. *D. antonito*, new species. 84, 85. *D. sinton*, new species. 82–84. Palp, ventral view. 85. Epigynum, ventral view.

Specimens have been collected in pitfall and suction traps, under rocks and trash, on sand dunes and ditch banks, and in alfalfa, Bermuda grass, cotton, sorghum, soybean, and sweet potato fields, at elevations up to 3000 feet.

Drassyllus inanus Chamberlin and Gertsch
Figures 78–82; Map 13

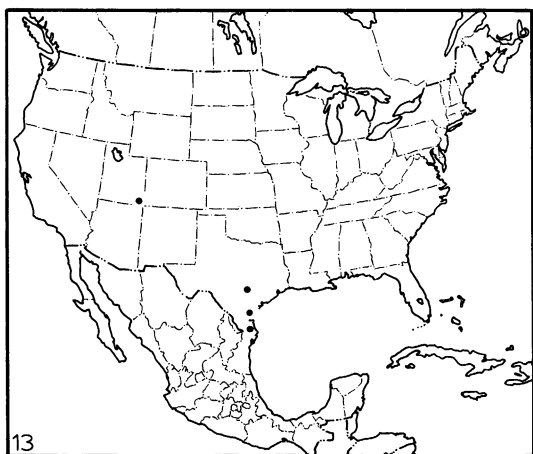
Drassyllus inanus Chamberlin and Gertsch, 1940, p. 17, figs. 24, 25 (male holotype from Bluff, San Juan County, Utah, in AMNH, examined). Roewer, 1954, p. 415. Ubick and Roth, 1973, p. 2.

DIAGNOSIS: *Drassyllus inanus* seems closest to *D. notonus* but may be distinguished by the shorter, wider TA (figs. 78, 82) of

males and the shorter AEM (fig. 80) of females.

MALE: Total length 2.03–2.41. Carapace 0.91–1.06 long, 0.72–0.83 wide. Femur II 0.50–0.58 long. Eye sizes and interdistances: AME 0.03, ALE 0.05, PME 0.06, PLE 0.05; AME–AME 0.03, AME–ALE 0.00, PME–PME 0.02, PME–PLE 0.02, ALE–PLE 0.03. MOQ length 0.12, front width 0.09, back width 0.14. TA short, wide (figs. 78, 82); RTA bent at tip (fig. 79). Leg spination: patella III r0-0-0; tibia IV p1-0-1, v1p-2-2; metatarsus III p0-2-2, r0-1-2.

FEMALE: Total length 2.30, 2.63. Carapace 1.11, 1.13 long, 0.84, 0.85 wide. Femur II 0.58, 0.63 long. Eye sizes and interdistances: AME 0.03, ALE 0.05, PME 0.04, PLE 0.05;



MAP 13. North America, showing distribution of *Drassyllus inanus*.

AME-AME 0.05, AME-ALE 0.01, PME-PME 0.03, PME-PLE 0.03, ALE-PLE 0.03. MOQ length 0.14, front width 0.11, back width 0.12. AEM long, wide (fig. 80); PED widened anteriorly (fig. 81). Leg spination: tibia IV p1-0-1; metatarsus III p0-2-2, r0-1-2.

MATERIAL EXAMINED: UNITED STATES: Texas: Caldwell Co.: 2 mi. Lockhart, Dec.

19, 1971 (B. and C. Durden, BRV), 1♂. Hidalgo Co.: Bentsen State Park, May 19, 1965, ground litter, mesquite woods (W. Peck, AMNH, EPC), 2♀. San Patricio Co.: 8 mi. NE Sinton, Apr. 5, 1960 (H. E. Laughlin), 1♂. Utah: San Juan Co.: Bluff, Apr. 14, 1928 (W. J. Gertsch), 1♂ (type).

DISTRIBUTION: Utah to southern Texas (map 13).

Drassyllus sinton, new species

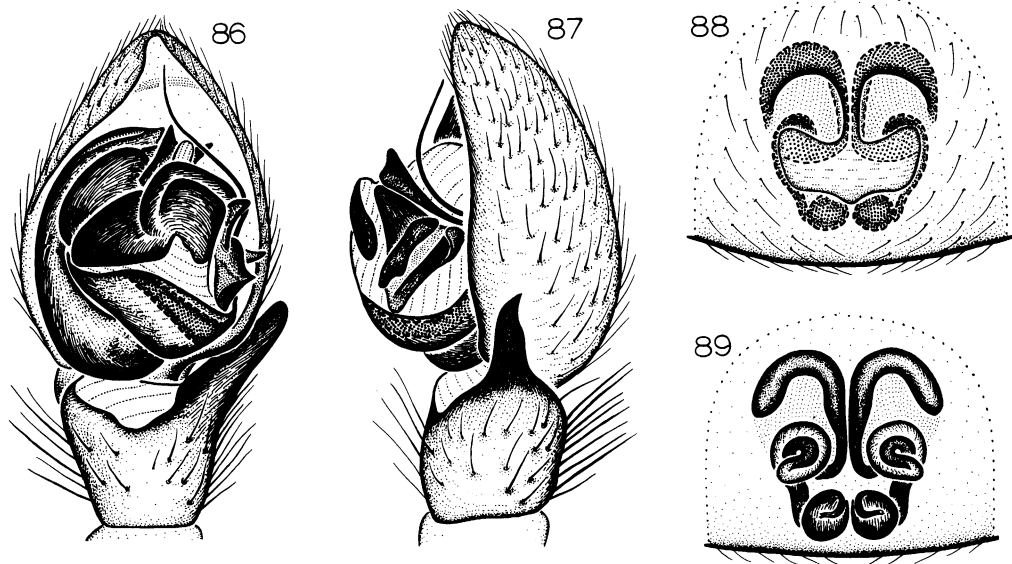
Figures 84-89; Map 14

TYPES: Male holotype and female paratype from 8 miles northeast of Sinton, San Patricio County, Texas (September 4, 1959; H. E. Laughlin), deposited in AMNH.

ETYMOLOGY: The specific name is a noun in apposition taken from the type locality.

DIAGNOSIS: *Drassyllus sinton* seems closest to *D. antonito* (in both species the TA is wide, distally rounded, and medially elevated) but may be distinguished by the straight RTA (fig. 87) of males and the fused MP and AEM (figs. 85, 88) of females.

MALE: Total length 2.30 ± 0.25 . Carapace 1.10 ± 0.07 long, 0.84 ± 0.05 wide. Femur II 0.60 ± 0.04 long. Eye sizes and interdis-



FIGS. 86-89. *Drassyllus sinton*, new species. 86. Palp, ventral view. 87. Palp, retrolateral view. 88. Epigynum, ventral view. 89. Epigynum, dorsal view.

tances: AME 0.03, ALE 0.05, PME 0.05, PLE 0.05; AME-AME 0.04, AME-ALE 0.01, PME-PME 0.03, PME-PLE 0.04, ALE-PLE 0.03. MOQ length 0.14, front width 0.10, back width 0.13. TA large, distally rounded, with submarginal ridge (figs. 84, 86); RTA straight, short (fig. 87). Leg spination: femur I p0-0-0; tibiae: II v0-1r-0; IV p1-0-1; metatarsi: III p0-2-2, r0-1-2; IV v2-0-0.

FEMALE: Total length 2.37 ± 0.37 . Carapace 1.00 ± 0.14 long, 0.71 ± 0.06 wide. Femur II 0.56 ± 0.03 long. Eye sizes and interdistances: AME 0.03, ALE 0.05, PME 0.05, PLE 0.05; AME-AME 0.04, AME-ALE 0.00, PME-PME 0.03, PME-PLE 0.03, ALE-PLE 0.03. MOQ length 0.14, front width 0.10, back width 0.12. MP and AEM fused, forming continuous line (figs. 85, 88); PED coiled anteriorly (fig. 89). Leg spination: femora I, II, IV p0-0-0; tibia IV p1-0-1; metatarsi: I, II v0-0-0; III p0-2-2, v0-0-0, r0-1-2; IV v2-1p-0.

OTHER MATERIAL EXAMINED: UNITED STATES: **New Mexico:** *Socorro Co.:* 36 mi. S Antonito, Mar. 21, 1963 (B. Vogel, BRV), 2♀. **Texas:** *Cameron Co.:* no specific locality, May 1-2, 1936 (L. I. Davis), 3♂; 3 mi. N Boca Chico, Dec. 27, 1941 (D. C. Lowrie), 1♂. *Hays Co.:* no specific locality, Apr. 15, 1939 (S. and D. Mulaik), 1♂. *Hidalgo Co.:* Edinburg, June 8-Jan. 15, 1938-1939 (S. and D. Mulaik), 8♀; 10 mi. NW Edinburg, Dec. 1949, 1♀; 10 mi. SE Edinburg, Oct. 20, 1934 (S. Mulaik), 1♂. *San Patricio Co.:* 8 mi. NE Sinton, May 26-Aug. 19, 1960 (H. E. Laughlin), 3♂, July 6-Aug. 19, 1960 (H. E. Laughlin), 2♀. **MEXICO:** *Tamaulipas:* El Tinieblo, Feb. 23, 1973 (W. Graham), 1♀.

DISTRIBUTION: New Mexico, Texas, and Tamaulipas (map 14).

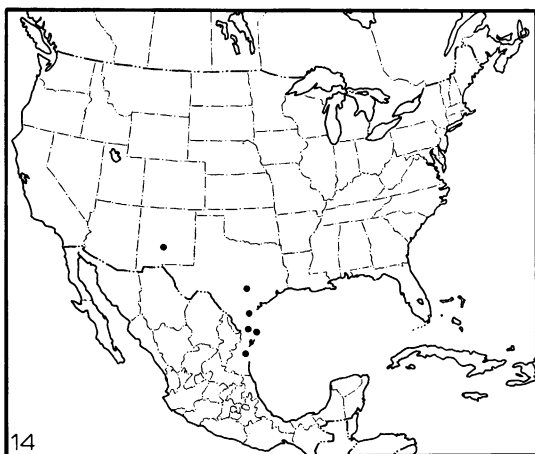
***Drassyllus antonito*, new species**

Figures 83, 90-93; Map 15

TYPE: Male holotype from 36 miles south of Antonito, Socorro County, New Mexico (March 21, 1963; B. R. Vogel), deposited in AMNH courtesy of Dr. Vogel.

ETYMOLOGY: The specific name is a noun in apposition taken from the type locality.

DIAGNOSIS: *Drassyllus antonito* seems



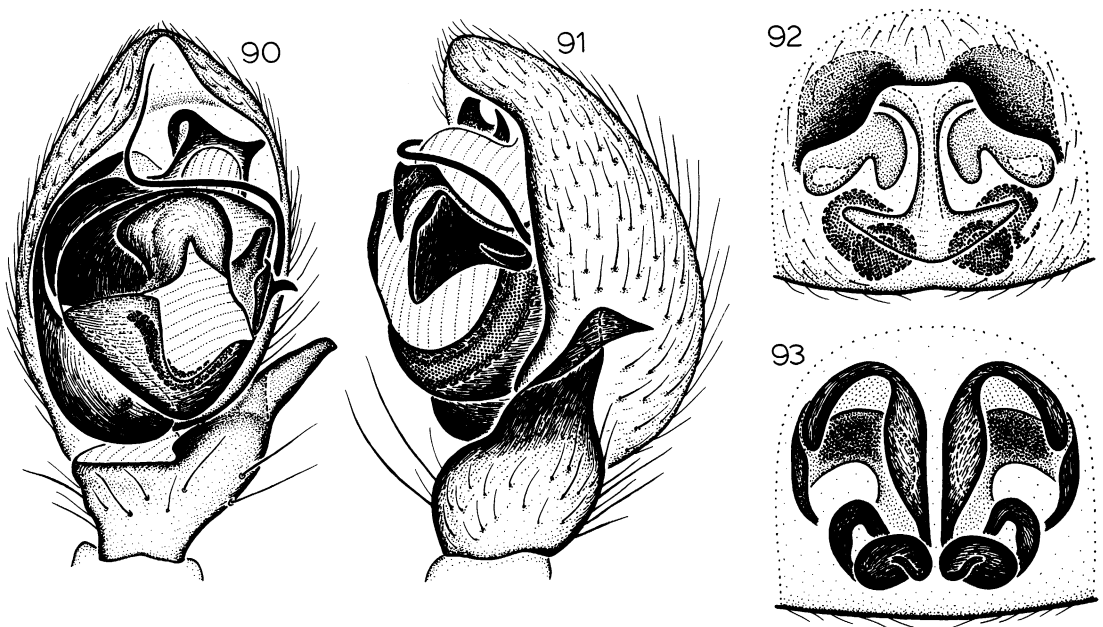
MAP 14. North America, showing distribution of *Drassyllus sinton*.

closest to *D. sinton* but may be distinguished by the bent RTA (fig. 91) of males and the extremely wide AEM (fig. 92) of females.

MALE: Total length 2.23-2.57. Carapace 0.86-1.03 long, 0.67-0.82 wide. Femur II 0.55-0.63 long. Eye sizes and interdistances: AME 0.03, ALE 0.05, PME 0.05, PLE 0.05; AME-AME 0.03, AME-ALE 0.00, PME-PME 0.02, PME-PLE 0.04, ALE-PLE 0.02. MOQ length 0.11, front width 0.09, back width 0.12. TA wide, distally rounded, elevated medially (figs. 83, 90); RTA bent, with dorsally directed tip (fig. 91). Leg spination: femora I, II p0-0-0; tibia IV p1-0-1; metatarsi: II v1r-0-0; III p0-2-2, v1r-0-0, r0-1-2; IV v2-1p-0.

FEMALE: Total length 3.20, 3.49. Carapace 1.30, 1.55 long, 0.98, 1.19 wide. Femur II 0.77, 0.97 long. Eye sizes and interdistances: AME 0.04, ALE 0.07, PME 0.09, PLE 0.07; AME-AME 0.05, AME-ALE 0.00, PME-PME 0.02, PME-PLE 0.03, ALE-PLE 0.03. MOQ length 0.19, front width 0.13, back width 0.20. AEM extremely wide (fig. 92); MED greatly widened (fig. 93). Leg spination: femora I, II p0-0-0; tibia IV p1-0-1; metatarsi III, IV p0-2-2.

OTHER MATERIAL EXAMINED: UNITED STATES: **Texas:** *Brewster Co.:* Cat-tail Canyon, Big Bend National Park, Mar. 20, 1977 (V. Roth, B. Schroepfer), 1♂. *Kimble Co.:* 4 mi. SW Junction, Mar. 24, 1978 (O. F.



FIGS. 90–93. *Drassyllus antonito*, new species. 90. Palp, ventral view. 91. Palp, retrolateral view. 92. Epigynum, ventral view. 93. Epigynum, dorsal view.

Francke, T. B. Hall, J. V. Moody), 1♀. *San Patricio Co.*: 8 mi. NE Sinton, May 26–Aug. 1960 (H. E. Laughlin), 3♂. MEXICO: **Nuevo León**: nr. Monterey, Aug. 20, 1947 (C. and M. Goodnight), 1♀. **Tamaulipas**: 17 mi. NE Victoria, Jan. 8, 1950 (S. and D. Mulaik), 1♂.

DISTRIBUTION: New Mexico, Texas, and northeastern Mexico (map 15).

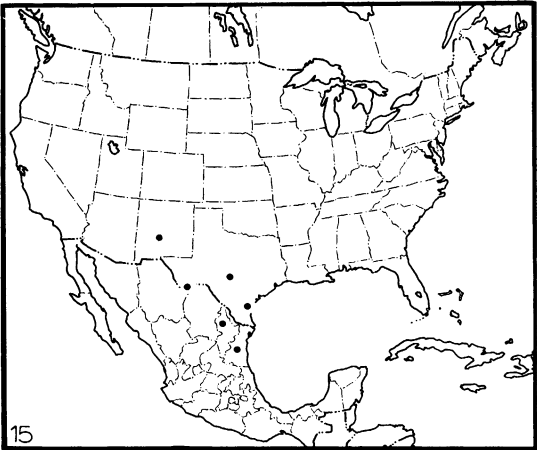
THE *niger* GROUP

DIAGNOSIS: The *niger* group contains those species in which the males lack stiff setae dorsally on the palpal tibia (except for *D. cerrus*, in which a few such setae are present) and have an extremely elongate terminal apophysis (as in figs. 98, 110) and a narrow retrolateral hook on the median apophysis (as in figs. 94, 115). Females have atypical epigyna with conspicuous lateral margins (as in figs. 96, 104, 108).

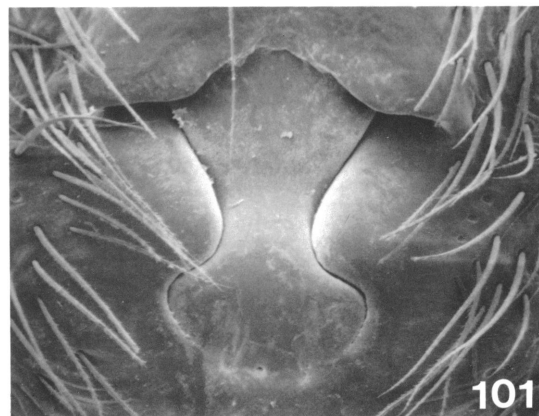
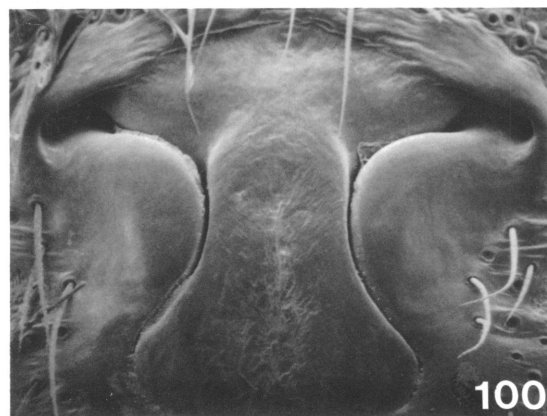
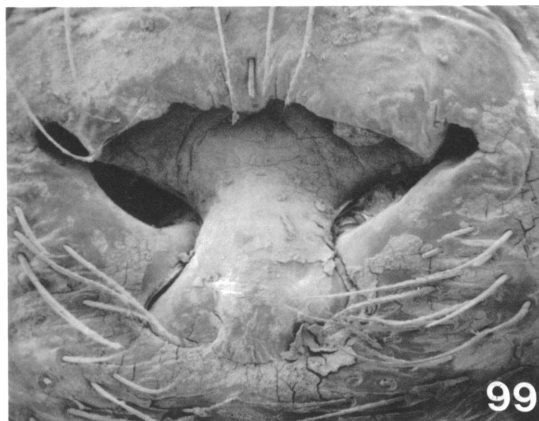
KEY TO SPECIES

1. Males 2
Females (those of *cerrus* unknown) 5
2. TA directed distally (figs. 106, 114) 3
TA directed obliquely (figs. 94, 102) 4

3. RTA relatively wide (fig. 107) *adocetus*
RTA relatively narrow (fig. 115) *cerrus*
4. EP closely appressed to MA (figs. 94, 95, 98) *niger*
EP far from MA (fig. 102) *eremophilus*
5. AEM conspicuous, occupying width of epigynum (figs. 96, 99) *niger*



MAP 15. North America, showing distribution of *Drassyllus antonito*.

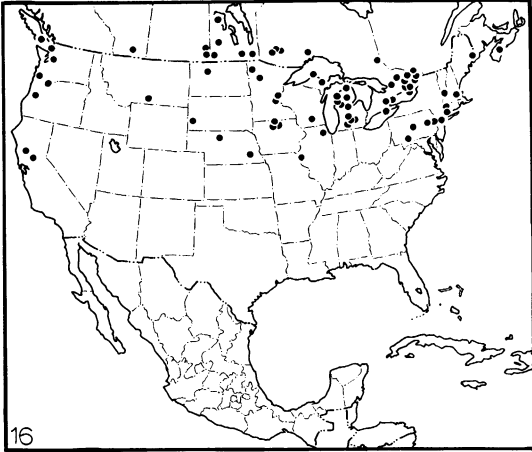


FIGS. 98–101. 98, 99. *Drassyllus niger* (Banks). 100. *D. eremophilus* Chamberlin and Gertsch. 101. *D. louisianus* Chamberlin. 98. Palp, ventral view. 99–101. Epigynum, ventral view.

0.02, PME–PLE 0.05, ALE–PLE 0.06. MOQ length 0.27, front width 0.22, back width 0.27. AEM conspicuous, wide (figs. 96, 99); MED expanded anteriorly (fig. 97). Leg spination: femur I p0-0-0; patella III r0-0-0.

RECORDS: **Canada:** *Alberta:* Calahoo, Writing-on-Stone Provincial Park. *British Columbia:* Departure Bay, 2 mi. W Hope, Wellington (Vancouver Island). *Manitoba:* Cedar Lake, 1 mi. W Elm Creek, McMunn, 1 km. N Onanole, 2 mi. E Pipestone, Riding Mountain National Park, 10 mi. E Winnipeg. *Nova Scotia:* Bridgewater. *Ontario:* 52 mi. S Armstrong, Black Sturgeon Lake, Chatterton, Deer Island (Lake Opeongo), 30 mi. E Dryden, Fitzroy Township, 20 mi. E Kenora, Mazinaw Lake, Mer Bleue, Milton,

Moth Lake, 9 mi. N New Liskeard, Odessa, Port Credit, Port Cunningham, Raymonds Corners, Rednersville, Sproule Bay (Lake Opeongo), S Stirling, Turkey Point, Upper Rock Lake. *Quebec:* Kingsmere (Gatineau Park), 2 km. S Lac Mouseau (Gatineau Park). *Saskatchewan:* nr. Moosomin, 5 mi. W Whitewood. **United States** (county records only): *California:* Lake, Sacramento. *Connecticut:* Fairfield, Litchfield. *Illinois:* Adams, Du Page. *Iowa:* Cerro Gordo, Hancock, Winnebago. *Maine:* Washington. *Massachusetts:* Middlesex, Norfolk. *Michigan:* Calhoun, Cheboygan, Clinton, Grand Traverse, Ingham, Keweenaw, Leelanau, Livingston, Marquette, Midland, Roscommon, Wexford. *Minnesota:* Chisago, Clearwater, Hennepin, Marshall. *Montana:* Car-



MAP 16. North America, showing distribution of *Drassyllus niger*.

bon. *Nebraska*: Lancaster, Thomas. *New Jersey*: Bergen, Warren. *North Dakota*: Bottineau, Divide, Ward. *Oregon*: Columbia, Lane, Multnomah. *Pennsylvania*: Bedford, Carbon, Centre. *South Dakota*: Pennington.

Vermont: Windham. *Washington*: King, San Juan, Thurston. *Wisconsin*: Dane.

DISTRIBUTION: British Columbia and northern California to Nova Scotia and Pennsylvania (map 16).

NATURAL HISTORY: Mature males and females have been taken from April through early September. Specimens have been collected by vacuum and pitfall traps, under stones and boards, in moss, sphagnum bogs, litter, old fields, pastures, and pine and oak-hickory forests.

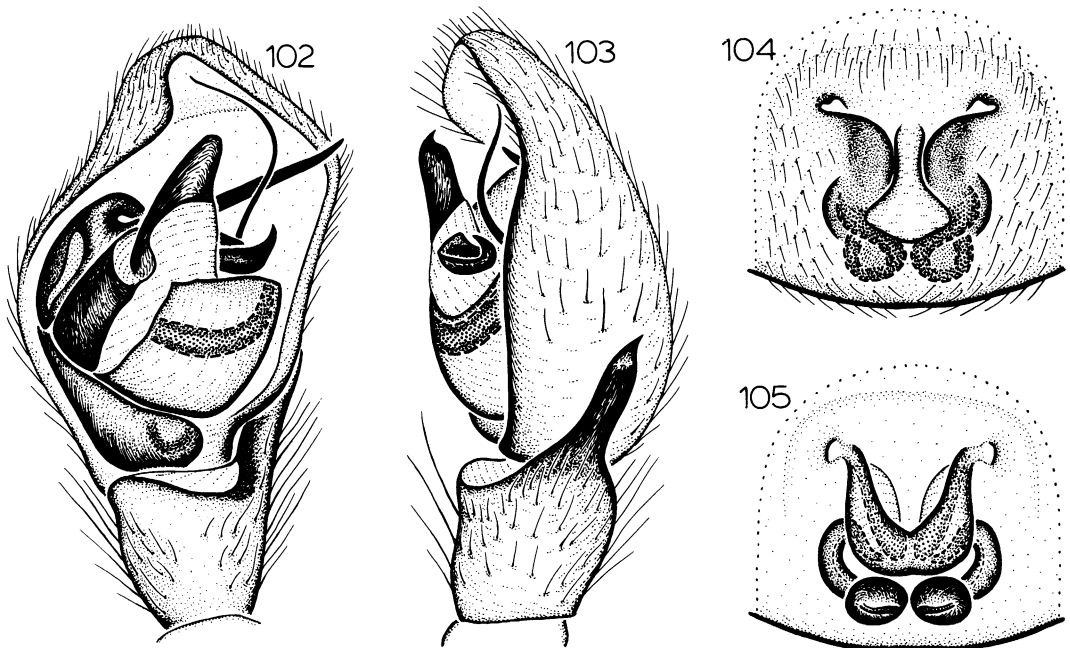
Drassyllus eremophilus

Chamberlin and Gertsch

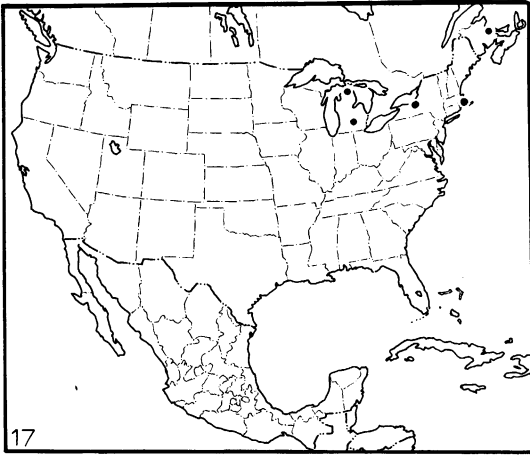
Figures 100, 102–105; Map 17

Drassyllus eremophilus Chamberlin and Gertsch, 1940, p. 15, figs. 18, 19 (male holotype from Douglas Lake, Cheboygan County, Michigan, in AMNH, examined). Roewer, 1954, p. 414. Ubick and Roth, 1973, p. 2.

DIAGNOSIS: *Drassyllus eremophilus* seems closest to *D. niger* but may be distinguished by the straight, retrolaterally projecting EP



FIGS. 102–105. *Drassyllus eremophilus* Chamberlin and Gertsch. 102. Palp, ventral view. 103. Palp, retrolateral view. 104. Epigynum, ventral view. 105. Epigynum, dorsal view.



MAP 17. North America, showing distribution of *Drassyllus eremophilus*.

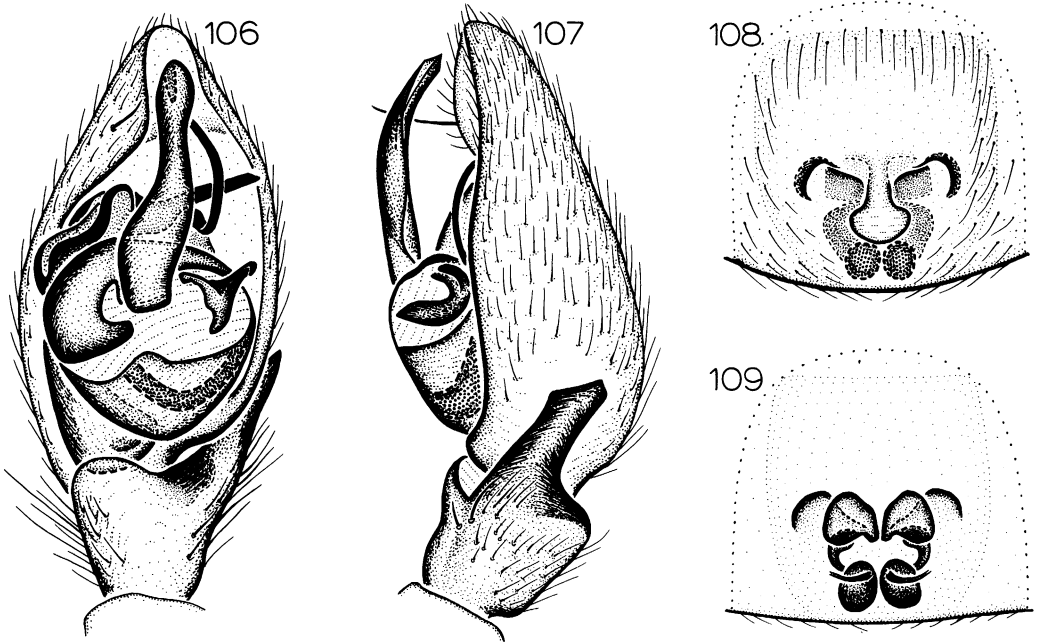
(fig. 102) of males and the large lateral epigynal margins (figs. 100, 104) of females.

MALE: Total length 4.00, 4.64. Carapace 1.81, 2.00 long, 1.39, 1.58 wide. Femur II 1.19, 1.37 long. Eye sizes and interdistances:

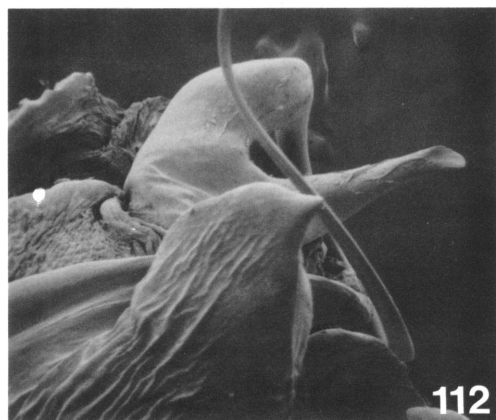
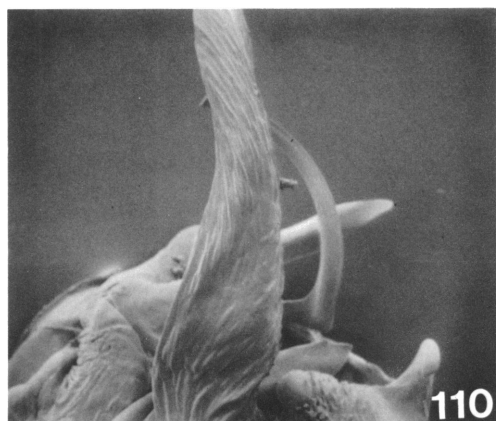
AME 0.07, ALE 0.09, PME 0.09, PLE 0.09; AME-AME 0.08, AME-ALE 0.02, PME-PME 0.01, PME-PLE 0.05, ALE-PLE 0.05. MOQ length 0.28, front width 0.22, back width 0.19. EP greatly elongated, straight, projecting to edge of CYM (fig. 102); RTA long (fig. 103). Leg spination: femur IV p0-0-0; tibiae: II v0-1r-0, IV p1-0-1; metatarsus III r1-2-2.

FEMALE: Total length 4.07-5.70. Carapace 1.87-2.20 long, 1.39-1.69 wide. Femur II 1.31-1.57 long. Eye sizes and interdistances: AME 0.09, ALE 0.11, PME 0.14, PLE 0.10; AME-AME 0.08, AME-ALE 0.03, PME-PME 0.02, PME-PLE 0.05, ALE-PLE 0.06. MOQ length 0.32, front width 0.26, back width 0.30. AEM reduced to lateral hoods, connected to large lateral margins (figs. 100, 104); MED large posteriorly, AED greatly reduced (fig. 105). Leg spination: femur IV p0-0-0; tibiae: II v0-1r-0; IV p1-0-1; metatarsus III p0-2-2.

MATERIAL EXAMINED: CANADA: New Brunswick: Kouchibouguac, June 27-July 12, 1977, bog (G. A. Calderwood, CNC), 1♀,



FIGS. 106-109. *Drassyllus adocetus* Chamberlin. 106. Palp, ventral view. 107. Palp, retrolateral view. 108. Epigynum, ventral view. 109. Epigynum, dorsal view.



FIGS. 110–113. 110, 111. *Drassyllus adocetus* Chamberlin. 112, 113. *D. novus* (Banks). 110, 112. Palp, ventral view. 111, 113. Epigynum, ventral view.

Sept. 15, 1977, bog (S. J. Miller, CNC), 1♀. UNITED STATES: **Massachusetts:** *Plymouth Co.*: Middleboro, Oct. 10, 1909 (J. H. Emerton, MCZ), 1♂. **Michigan:** *Cheboygan Co.*: Douglas Lake, Apr. 14, 1930 (E. L. Miner), 1♂ (type), Aug. 11, 1931 (A. M. Chickering, MCZ), 1♀. *Ingham Co.*: East Lansing, Mar. 29, 1960, leaf litter (R. J. Snider, MSU), 1♀. **New York:** *Wayne Co.*: Zurich, Oct. 29, 1935 (S. C. Bishop), 1♀.

DISTRIBUTION: Michigan to New Brunswick (map 17).

Drassyllus adocetus Chamberlin

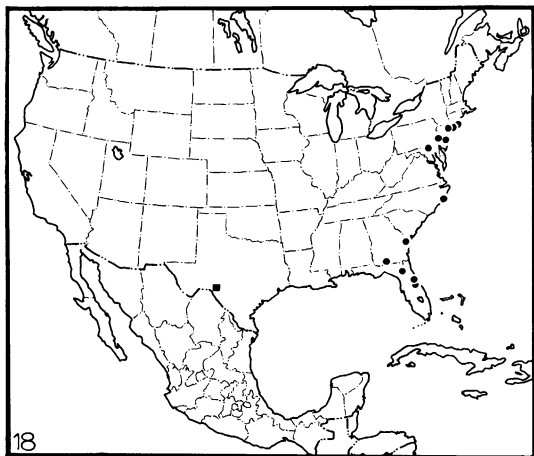
Figures 106–111; Map 18

Drassyllus adocetus Chamberlin, 1936a, p. 21, fig. 27 (female holotype from Rockaway Park, Queens County, New York, in AMNH, ex-

amined). Kaston, 1948, p. 361, figs. 1228–1230. Roewer, 1954, p. 413. Bonnet, 1956, p. 1602. Ubick and Roth, 1973, p. 2.

DIAGNOSIS: *Drassyllus adocetus* seems closest to *D. cerrus* (in both species the TA is half the length of the CYM and distally directed) but may be distinguished by the wider RTA (fig. 107) of males and the short epigynum (fig. 108) of females.

MALE: Total length 3.59–4.43. Carapace 1.53–1.93 long, 1.22–1.56 wide. Femur II 1.06–1.31 long. Eye sizes and interdistances: AME 0.08, ALE 0.09, PME 0.10, PLE 0.08; AME–AME 0.05, AME–ALE 0.02, PME–PME 0.03, PME–PLE 0.04, ALE–PLE 0.04. MOQ length 0.24, front width 0.20, back width 0.23. TA extremely long, sinuous (figs. 106, 110); RTA wide, truncate distally (fig.



MAP 18. North America, showing distribution of *Drassyllus adocetus* (circles) and *D. cerrus* (square).

107). Leg spination: femur IV p0-0-0; tibia IV p1-0-1, v1p-2-2; metatarsus III p0-2-2, r0-1-2.

FEMALE: Total length 4.99 ± 0.39 . Carapace 1.97 ± 0.17 long, 1.55 ± 0.09 wide. Femur II 1.36 ± 0.09 long. Eye sizes and interdistances: AME 0.10, ALE 0.09, PME 0.13, PLE 0.08; AME-AME 0.07, AME-ALE 0.02, PME-PME 0.01, PME-PLE 0.05, ALE-PLE 0.06. MOQ length 0.30, front width 0.27, back width 0.27. AEM reduced to lateral hoods (figs. 108, 111); MED expanded anteriorly (fig. 109). Leg spination: femur IV p0-0-0; tibia IV p1-0-1, v1p-2-2.

MATERIAL EXAMINED: UNITED STATES: **Florida:** *Alachua Co.:* Gainesville, Mar. 3, 1925 (W. M. Barrows), 1♀. *Orange Co.:* Apopka, June 27, 1979, pitfall, orange grove (D. Gowan), 2♂, Apr. 4, 1980, pitfall, orange grove (D. Gowan, TDG), 1♀. *Seminole Co.:* Forest City, Nov. 20, 1979, pitfall, orange grove (D. Gowan, TDG), 1♂. **Georgia:** *Chatham Co.:* 3 mi. N Savannah Beach, Mar. 14, 1954 (W. Ivie), 2♀. *Thomas Co.:* Bar M Ranch, Sept. 11, 1972 (W. Sedgwick, WES), 2♀. **Maryland:** *Baltimore Co.:* Baltimore, Dec. 29, 1918, 1♀. **New Jersey:** *Ocean Co.:* 2 mi. E Manahawkin, Apr. 30, 1976, *Spartina* marsh (CNC), 1♂. **New York:** *Kings Co.:* Bergen Beach, Apr. 12, 1908, 1♂. *Nas-*

sau Co.: Long Beach Peninsula, May 6, 1955 (W. Ivie), 1♀. *Queens Co.:* Rockaway Park, Apr. 4, 1909, 3♀ (including type). *Suffolk Co.:* Orient Beach State Park, Sept. 23, 1962 (W. Ivie), 1♂, 1♀. **North Carolina:** *Carteret Co.:* Beaufort, May 16, 1935, marshes along sound (A. M. Chickering, MCZ), 1♀, July 10, 1951 (R. D. Barnes), 2♀. **Pennsylvania:** *Bucks Co.:* NE Jamison, 1960 (W. Ivie), 2♀.

DISTRIBUTION: Eastern coastal plain (map 18).

***Drassyllus cerrus*, new species**

Figures 114, 115; Map 18

TYPE: Male holotype from Langtry, Val Verde County, Texas (March 19, 1960; W. J. Gertsch, W. Ivie, and R. Schrammel), deposited in AMNH.

ETYMOLOGY: The specific name is an arbitrary combination of letters.

DIAGNOSIS: *Drassyllus cerrus* seems closest to *D. adocetus* but may be distinguished by the narrower RTA (fig. 115) of males.

MALE: Total length 2.99, 3.22. Carapace 1.48, 1.52 long, 1.12, 1.17 wide. Femur II 0.82, 0.95 long. Eye sizes and interdistances: AME 0.07, ALE 0.07, PME 0.09, PLE 0.07; AME-AME 0.06, AME-ALE 0.01, PME-PME 0.02, PME-PLE 0.04, ALE-PLE 0.03. MOQ length 0.29, front width 0.20, back width 0.20. TA long, outwardly curved (fig. 114); RTA narrow (fig. 115). Leg spination: tibiae: I v0-1r-0; II v1r-2-0; III v2-2-2; IV p1-0-1.

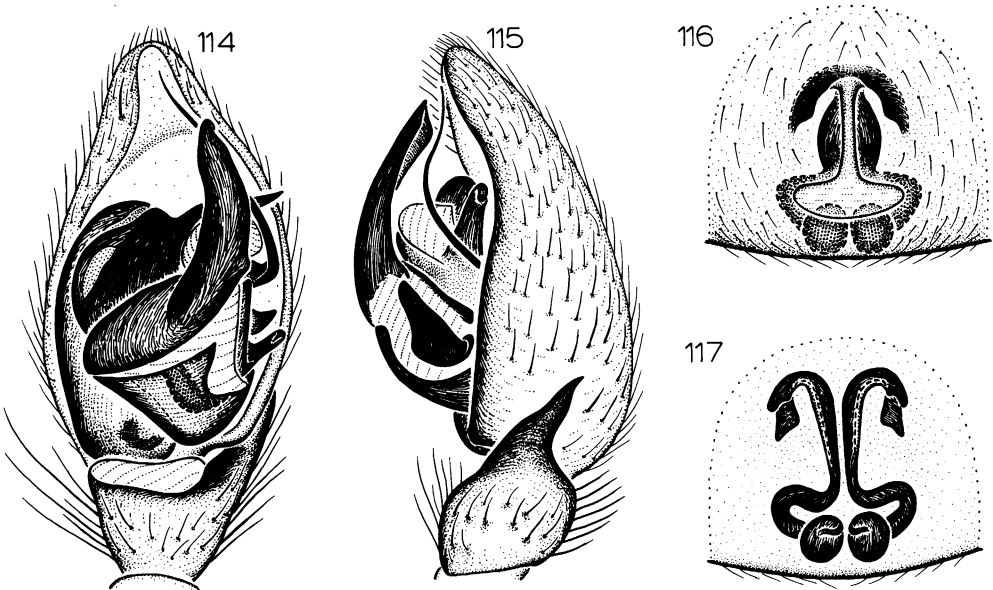
FEMALE: Unknown.

MATERIAL EXAMINED: One male taken with the holotype.

DISTRIBUTION: Known only from Texas (map 18).

THE *novus* GROUP

DIAGNOSIS: The *novus* group contains those species in which the males lack stiff setae dorsally on the palpal tibia, but have a large and almost rectangular terminal apophysis (as in figs. 118, 134) and a distally directed embolar origin leading to a 90-degree turn (as in figs. 112, 126). Females have a broad, undivided anterior epigynal margin (as in figs. 120, 136) and median epigynal



FIGS. 114–117. 114, 115. *Drassyllus cerrus*, new species. 116, 117. *D. zimus*, new species. 114. Palp, ventral view. 115. Palp, retrolateral view. 116. Epigynum, ventral view. 117. Epigynum, dorsal view.

ducts that are either posteriorly coiled (as in figs. 121, 133) or greatly expanded anteriorly (fig. 137).

KEY TO SPECIES

- 1. TA with pointed extension at middle of distal edge (figs. 128, 130); MP indistinct (fig. 132), restricted to anterior quarter of epigynum (fig. 129) *aprilinus*
TA without such an extension; MP distinct .. 2
- 2. EP long, sharp (figs. 118, 122); MP relatively wide (figs. 120, 124) 3
EP short, blunt (figs. 134, 138); MP relatively narrow (figs. 136, 139) *covensis*
- 3. TA pointed retrolaterally (figs. 112, 118); AEM farthest anteriorly at middle (figs. 113, 120) *novus*
TA rounded prolaterally (figs. 122, 126); AEM farthest anteriorly at sides (figs. 124, 127) *rufulus*

Drassyllus novus (Banks)

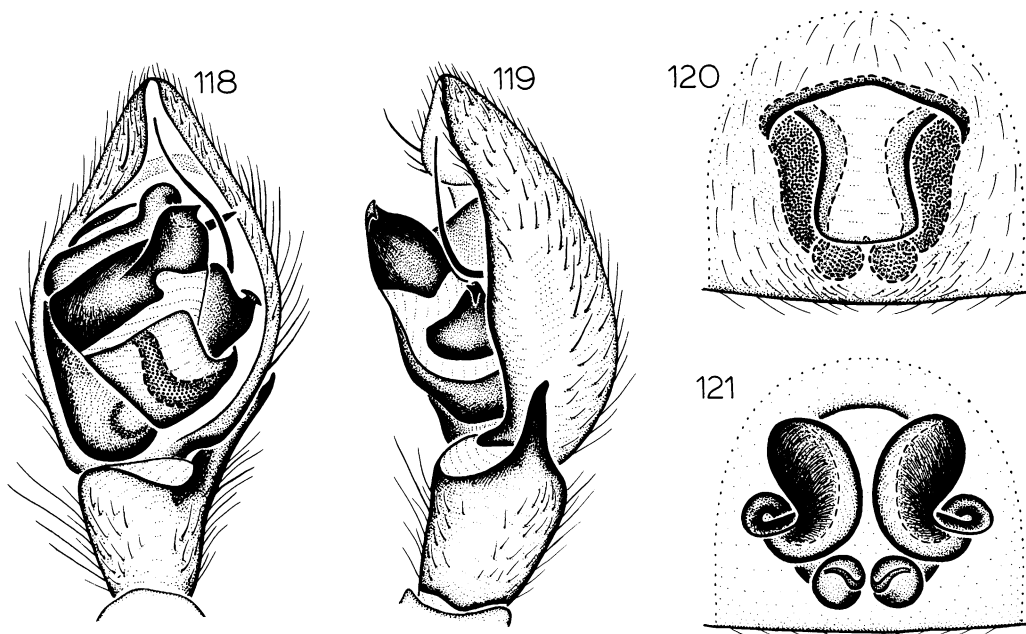
Figures 112, 113, 118–121; Map 19

Prothesima nova Banks, 1895, p. 78 (male holotype from Sea Cliff, Nassau County, New York, in MCZ, examined).
Melanophora nova: Comstock, 1903, p. 18.

Prothesima rufula (misidentification): Emerton, 1909, p. 217 (in part, fig. 6 only).
Zelotes nova: Banks, 1910, p. 8.
Drassyllus frigidus (misidentification): Chamberlin, 1922, p. 168 (in part); 1936a, p. 24, figs. 40, 41 (male only).
Drassyllus virginianus Chamberlin, 1922, p. 168 (female holotype from Falls Church, Fairfax County, Virginia, in MCZ, examined). Kaston, 1948, p. 360, figs. 1225–1227. Roewer, 1954, p. 417. Bonnet, 1956, p. 1606. Ubick and Roth, 1973, p. 3. NEW SYNONYMY.

DIAGNOSIS: *Drassyllus novus* seems closest to *D. rufulus* (in both species the embolar origin is twisted) but may be distinguished by the retrolaterally pointed TA (figs. 112, 118) of males and the almost straight AEM (figs. 113, 120) of females.

MALE: Total length 5.25 ± 0.29 . Carapace 2.37 ± 0.12 long, 1.88 ± 0.09 wide. Femur II 1.54 ± 0.07 long (54 specimens examined). Eye sizes and interdistances: AME 0.08, ALE 0.09, PME 0.11, PLE 0.09; AME–AME 0.06, AME–ALE 0.02, PME–PME 0.02, PME–PLE 0.05, ALE–PLE 0.07. MOQ length 0.28, front width 0.23, back width 0.24. TA with distal point on retrolat-



FIGS. 118–121. *Drassyllus novus* (Banks). 118. Palp, ventral view. 119. Palp, retrolateral view. 120. Epigynum, ventral view. 121. Epigynum, dorsal view.

eral side (figs. 112, 118); RTA narrow (fig. 119). Leg spination: tibiae: II v0-1r-0; III v2-2-2.

FEMALE: Total length 7.08 ± 0.55 . Carapace 2.75 ± 0.14 long, 2.13 ± 0.12 wide. Femur II 1.88 ± 0.07 long (63 specimens examined). Eye sizes and interdistances: AME 0.08, ALE 0.11, PME 0.13, PLE 0.10; AME–AME 0.07, AME–ALE 0.03, PME–PME 0.03, PME–PLE 0.06, ALE–PLE 0.07. MOQ length 0.31, front width 0.23, back width 0.29. AEM without median posterior extension (figs. 113, 120); MED expanded (fig. 121). Leg spination: tibiae: II v1r-1r-0; III v2-2-2.

RECORDS: **Canada:** *Ontario:* Rondeau Provincial Park. **United States** (county records only): *Alabama:* Lawrence. *Arkansas:* Newton, Union, Washington. *Connecticut:* Fairfield, New London. *Georgia:* Rabun, White. *Illinois:* Pope. *Kentucky:* Powell, Wolfe. *Maryland:* Washington. *Michigan:* Calhoun, Clinton. *Missouri:* Phelps. *New Jersey:* Hunterdon. *New York:* Nassau, Saratoga, Suffolk. *North Carolina:* Buncombe,

Durham, Transylvania. *Ohio:* Fairfield, Franklin, Hocking. *Pennsylvania:* Delaware. *Tennessee:* Cumberland, Sevier. *Virginia:* Campbell, Fairfax, Rockingham. *West Virginia:* Mercer, Wayne. *Wisconsin:* Walworth.

DISTRIBUTION: The eastern deciduous forest (map 19).

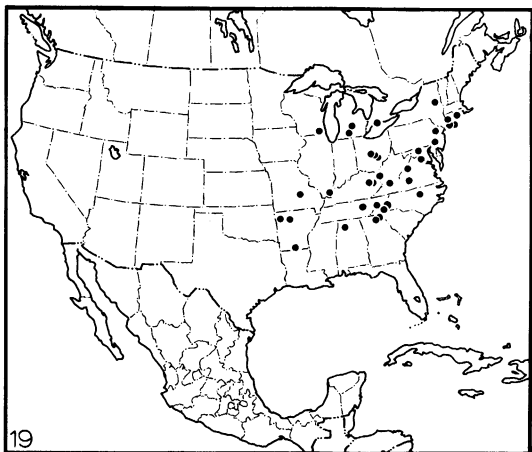
NATURAL HISTORY: Mature males have been taken from April through June and in November, mature females from May through September. Specimens have been collected in pitfall traps and leaf litter in pine and oak-hickory forests, and under stones, at elevations up to 2350 feet.

SYNONYMY: Chamberlin's description of the female as *virginianus* was evidently caused by his consistent misidentification of males as those of *frigidus*.

Drassyllus rufulus (Banks)

Figures 122–127; Map 20

Prosthesima rufula Banks, 1892, p. 17, pl. 1, figs. 55–55a (two female syntypes from Ithaca,



MAP 19. North America, showing distribution of *Drassyllus novus*.

Tompkins County, New York, in MCZ, examined). Emerton, 1909, p. 217, pl. 9, figs. 6b–6h (in part, not figs. 6, 6a); 1911, p. 406, pl. 5, fig. 7.

Prothesima immaculata Banks, 1892, p. 18, pl. 1, figs. 58, 58a (female holotype from Ithaca, Tompkins County, New York, in MCZ, examined). First synonymized by Banks, 1910, p. 8.

Zelotes rufulus: Scheffer, 1906, p. 123.

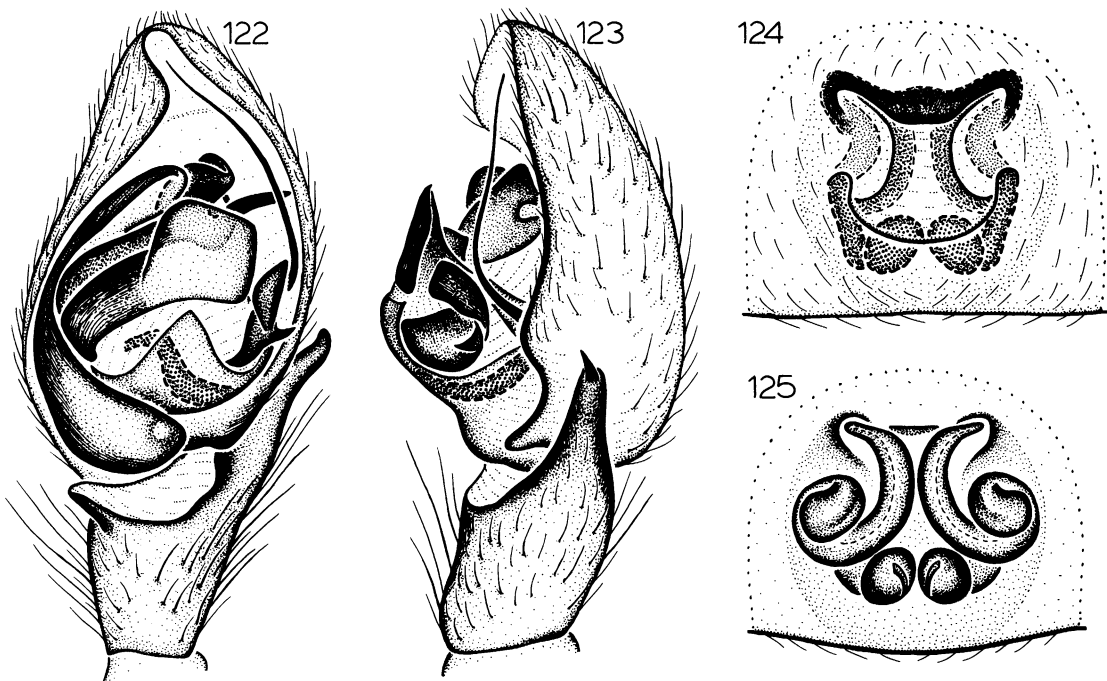
Zelotes rufula: Banks, 1910, p. 8. Comstock, 1912, p. 316, figs. 305, 306.

Melanophora rufula: Bryant, 1908, p. 8. Petrunkevitch, 1910, p. 207, fig. 4.

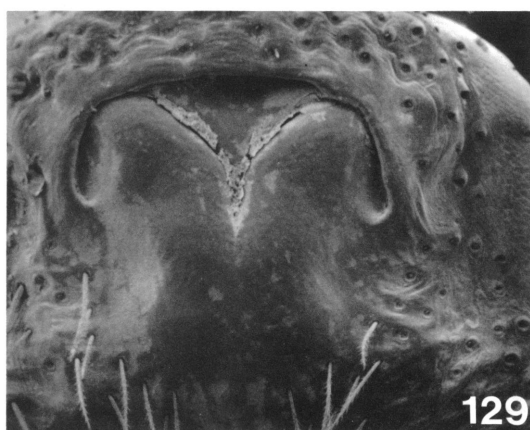
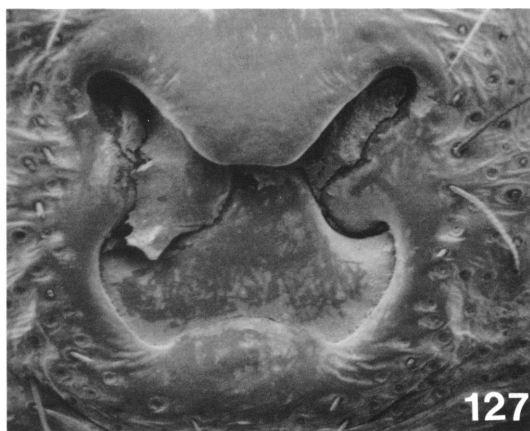
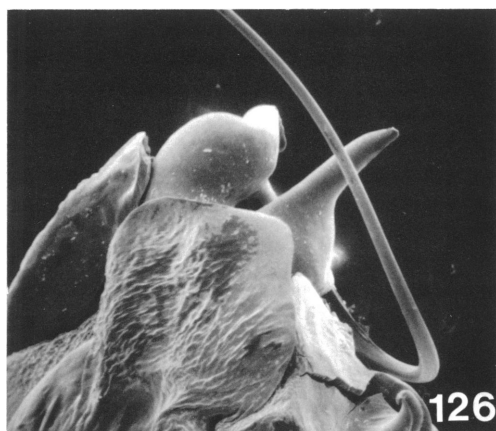
Drassyllus rufulus: Chamberlin, 1922, p. 167. Kaston, 1948, p. 358, figs. 1203–1205. Roewer, 1954, p. 417. Bonnet, 1956, p. 1605. Ubick and Roth, 1973, p. 3.

DIAGNOSIS: *Drassyllus rufulus* seems closest to *D. novus* but may be distinguished by the retrolaterally rounded TA (figs. 122, 126) of males and the AEM having a posterior projection at its middle (figs. 124, 127) in females.

MALE: Total length 4.66 ± 0.47 . Carapace 2.08 ± 0.23 long, 1.70 ± 0.20 wide. Femur II 1.53 ± 0.20 long. Eye sizes and interdistances: AME 0.09, ALE 0.10, PME 0.14,



FIGS. 122–125. *Drassyllus rufulus* (Banks). 122. Palp, ventral view. 123. Palp, retrolateral view. 124. Epigynum, ventral view. 125. Epigynum, dorsal view.



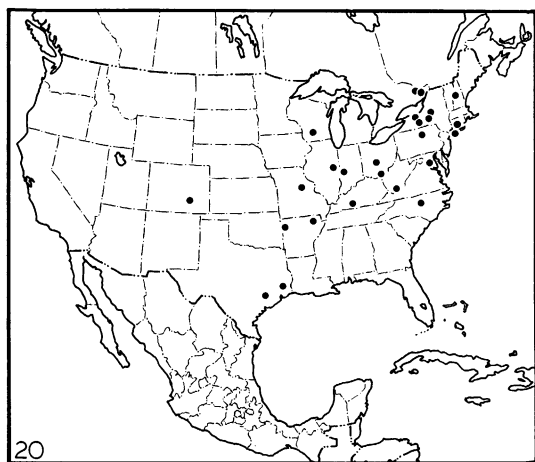
FIGS. 126–129. 126, 127. *Drassyllus rufulus* (Banks). 128, 129. *D. aprilius* (Banks). 126, 128. Palp, ventral view. 127, 129. Epigynum, ventral view.

PLE 0.11; AME–AME 0.05, AME–ALE 0.03, PME–PME 0.02, PME–PLE 0.05, ALE–PLE 0.06. MOQ length 0.32, front width 0.23, back width 0.30. TA broad, rounded (figs. 122, 126); RTA wide except at tip (fig. 123). Leg spination: femora: III r0-1-0; IV r0-1-1; patella III r0-0-0; tibiae: II v0-1r-1r; III v2-2-2, r1-1-1; metatarsi: II v2-1p-0; III v2-2-0.

FEMALE: Total length 5.84 ± 1.11 . Carapace 2.22 ± 0.26 long, 1.78 ± 0.21 wide. Femur II 1.64 ± 0.22 long. Eye sizes and interdistances: AME 0.09, ALE 0.09, PME 0.14, PLE 0.11; AME–AME 0.07, AME–ALE 0.02, PME–PME 0.02, PME–PLE 0.05, ALE–PLE 0.05. MOQ length 0.30, front width 0.25, back width 0.30. AEM pro-

jecting posteriorly at middle (figs. 124, 127); MED coiled posteriorly (fig. 125). Leg spination: tibia III v2-2-2.

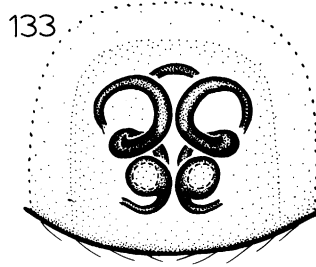
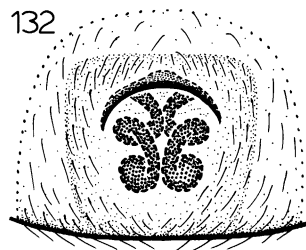
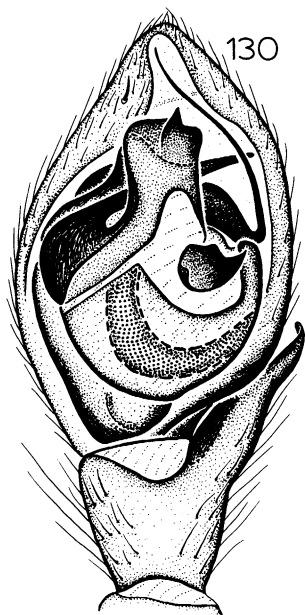
MATERIAL EXAMINED: CANADA: **Ontario:** Fitzroy Township, Sept. 13, 1978, under stones in woods (C. Dondale, J. Redner, CNC), 1♂, 1♀; Ottawa, Aug. 25–Sept. 8, 1978, pitfall, grass field (L. Masner, CNC), 1♂; Raymonds Corners, Aug. 24–Oct. 22, 1977, pitfall, abandoned pasture (C. Dondale, J. Redner, CNC), 1♂; Woodlawn, Sept. 5, 1973 (C. J. E. Anderka, CNC), 1♂. UNITED STATES: **Arkansas:** *Lawrence Co.:* Imboden, 1935 (B. C. Marshall), 2♀. *Washington Co.:* Cove Creek Valley, Sept.–Nov. 1955–1956, elevation 1000 feet (M. Hite, MCZ), 3♀, Sept. 15, 1962, pitfall, old



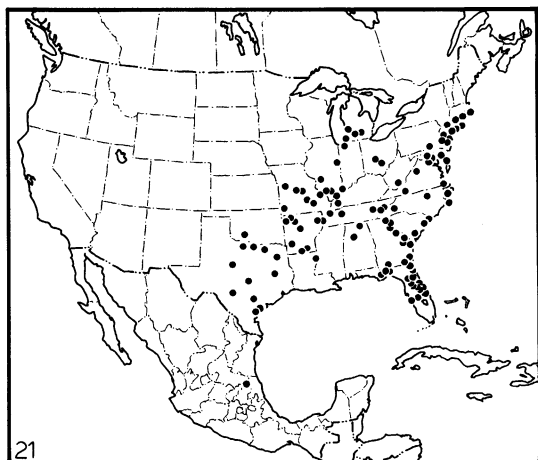
MAP 20. North America, showing distribution of *Drassyllus rufulus*.

field (O. and M. Hite, EPC), 1♂. **Colorado:** *Pueblo Co.*: Beulah Highway, Sept. 4–15, 1963, 4♂. **Connecticut:** *New Haven Co.*: Bethany, Sept. 14, 1937 (D. S. Riggs, BJK), 1♂. **Illinois:** *Champaign Co.*: Bondville, Oct. 29, 1944 (J. and W. Rapp), 1♀. **Indiana:** *Parke*

Co.: Turkey Run, Oct. 27, 1935, 1♀. **Kentucky:** *Warren Co.*: Bowling Green, Sept. 4, 1928, 1♂, 1♀. **Maryland:** *Prince Georges Co.*: College Park, Sept. 22, 1944, under stone (M. H. Muma, FSCA), 1♀. **Missouri:** *Boone Co.*: Columbia, Oct. 30, 1904, 2♀. **New Hampshire:** *Grafton Co.*: Hanover (C. M. Weed, MCZ), 1♀. **New York:** *Nassau Co.*: Sea Cliff (N. Banks, MCZ), 1♀. *Onondaga Co.*: Apulian Hill, Oct. 1900 (H. W. Britcher), 3♀; Dorwin Springs, Sept. 17–Oct. 1900 (H. W. Britcher), 6♀; Pompey, Sept. 28, 1900 (H. W. Britcher), 2♀. *Tompkins Co.*: Ithaca (N. Banks, MCZ), 3♀ (including types); Aug.–Nov. 1902, 1♀ (penultimate), Aug. 1953, 1♀. *Wayne Co.*: Lake Bluff, Sept. 7, 1920 (O. and S. Booth), 1♀, (S. C. Bishop, MCZ), 1♀. *Yates Co.*: Penn Yan, Sept. 19, 1936 (C. R. Crosby), 1♂. **North Carolina:** *Wake Co.*: Raleigh, 1♀. **Ohio:** *Franklin Co.*: 8 mi. S Columbus, Sept. 17, 1924, under stones (OSU), 3♀. *Jackson Co.*: Jackson, Sept. 6, 1932 (OSU), 3♀. **Pennsylvania:** *Lycoming Co.*: North Mountain, Sept. 1909, 1♀. **Texas:** *Colorado Co.*: Columbus, 1♀. *Hardin Co.*: Saratoga, Nov.



FIGS. 130–133. *Drassyllus aprilius* (Banks). 130. Palp, ventral view. 131. Palp, retrolateral view. 132. Epigynum, ventral view. 133. Epigynum, dorsal view.



MAP 21. North America, showing distribution of *Drassyllus aprilius*.

22, 1958, wooded area (A. Brady, MCZ), 1 ♀. **West Virginia:** Mercer Co.: Athens, Oct. 5, 1967 (W. Shear, WAS), 1 ♂. **Wisconsin:** Sauk Co.: Junction, Highways 12 and 60, Oct. 9, 1962 (Dixon, TMM), 1 ♀.

DISTRIBUTION: Colorado and Texas to New Hampshire and North Carolina (map 20).

Drassyllus aprilius (Banks)

Figures 128–133; Map 21

Zelotes aprilius Banks, 1904, p. 110, fig. 7 (one male and two female syntypes from Chevy Chase, Montgomery County, Maryland, in MCZ, examined).

Drassyllus aprilius: Chamberlin, 1922, p. 170. Kaston, 1948, p. 360, figs. 1217–1219. Roewer, 1954, p. 413. Bonnet, 1956, p. 1602. Ubick and Roth, 1973, p. 2.

Drassyllus ostegae Chamberlin, 1936a, p. 29, figs. 42, 43 (male holotype from Ostega, Duval County, Florida, in AMNH, examined). Roewer, 1954, p. 413. **NEW SYNONYMY.**

Drassyllus osteganus (emendation): Bonnet, 1956, p. 1605. Ubick and Roth, 1973, p. 3.

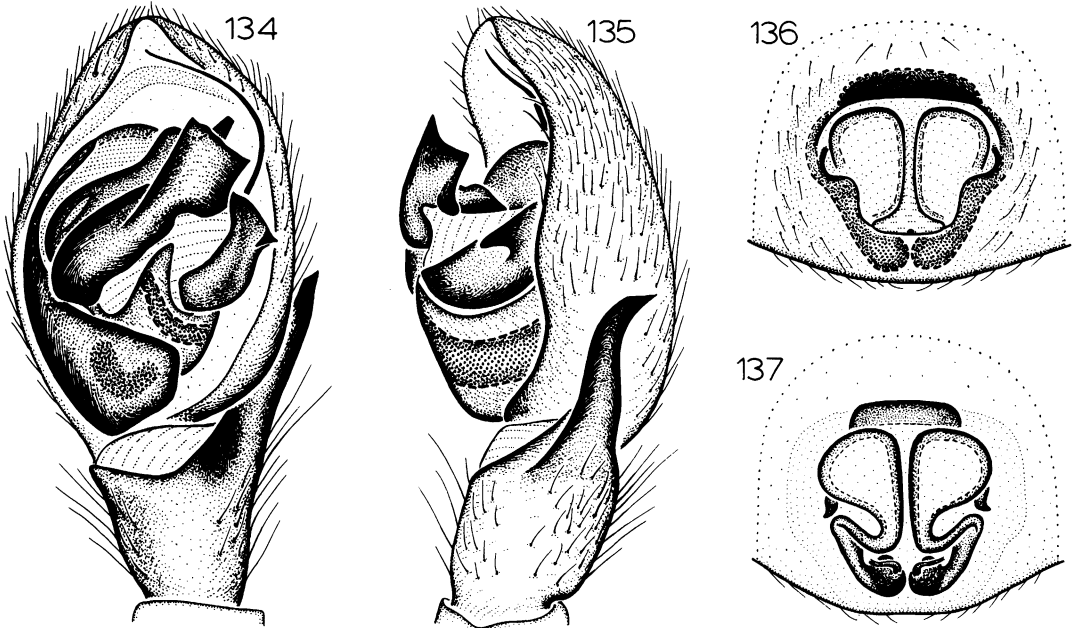
DIAGNOSIS: *Drassyllus aprilius* is a distinctive species easily recognized by the median projection at the tip of the TA (figs. 128, 130) of males and the almost invisible MP (figs. 129, 132) of females.

MALE: Total length 3.86 ± 0.22 . Carapace

1.75 ± 0.10 long, 1.36 ± 0.09 wide. Femur II 1.09 ± 0.10 long (170 specimens examined). Eye sizes and interdistances: AME 0.05, ALE 0.07, PME 0.09, PLE 0.07; AME–AME 0.05, AME–ALE 0.01, PME–PME 0.01, PME–PLE 0.03, ALE–PLE 0.04. MOQ length 0.22, front width 0.14, back width 0.20. TA with elevated projection at middle of distal edge (figs. 128, 130); RTA greatly narrowed distally (fig. 131). Leg spination: femur IV p0-1-1; tibia II v0-1r-0.

FEMALE: Total length 4.50 ± 0.51 . Carapace 1.87 ± 0.17 long, 1.40 ± 0.08 wide. Femur II 1.15 ± 0.07 long (247 specimens examined). Eye sizes and interdistances: AME 0.07, ALE 0.09, PME 0.11, PLE 0.08; AME–AME 0.06, AME–ALE 0.02, PME–PME 0.02, PME–PLE 0.05, ALE–PLE 0.05. MOQ length 0.24, front width 0.20, back width 0.23. AEM broadly rounded, MP scarcely detectable (figs. 129, 132); MED coiled over PED (fig. 133). Leg spination: tibia III v2-2-2.

RECORDS: United States (county records only): *Alabama:* Madison, Winston. *Arkansas:* Bradley, Carroll, Conway, Craighead, Hempstead, Mississippi, Newton, Union, Washington. *Connecticut:* New Haven, New London. *Florida:* Alachua, Brevard, Duval, Highlands, Indian River, Jefferson, Lake, Leon, Liberty, Marion, Nassau, Orange, Osceola, Polk, Putnam, Sarasota, Volusia. *Georgia:* Charlton, Chatham, Columbia, Emanuel, Franklin, Glynn, Rabun, Screven, Stephens, Thomas. *Illinois:* Jackson, Johnson, Macoupin, Pope, Vermilion, Williamson. *Indiana:* La Porte, Posey. *Kentucky:* Marshall. *Louisiana:* Madison. *Maryland:* Caroline, Montgomery, Prince Georges, Queen Annes, Worcester. *Massachusetts:* Bristol, Plymouth. *Michigan:* Allegan, Berrien, Calhoun, Jackson. *Missouri:* Cole, Johnson, Miller, Newton, Phelps, Reynolds, Saint Louis. *New Jersey:* Burlington, Hunterdon, Ocean. *New York:* Nassau, Queens, Richmond, Rockland, Suffolk. *North Carolina:* Buncombe, Carteret, Durham, Hyde. *Ohio:* Franklin, Hocking. *Oklahoma:* Comanche. *Pennsylvania:* Adams, Bucks. *South Carolina:* Colleton, Georgetown, Horry. *Tennessee:* Benton, Blount, Lake,



FIGS. 134–137. *Drassyllus covensis* Exline. 134. Palp, ventral view. 135. Palp, retrolateral view. 136. Epigynum, ventral view. 137. Epigynum, dorsal view.

Roane, Sevier. *Texas*: Gonzales, Grayson, Leon, Llano, Montague, Real, Refugio, San Patricio, Taylor, Wichita, Wood. *Virginia*: Carroll, Fairfax, Norfolk, Page, Prince Anne. *West Virginia*: Summers. *Mexico*: *San Luis Potosí*: Tamazunchale.

DISTRIBUTION: Michigan and Massachusetts to San Luis Potosí and Florida (map 21).

NATURAL HISTORY: Mature males and females have been taken year-round. Specimens have been collected in pitfall, Berlese, and malt traps, from leaf litter, under stones and boards, on beaches, in pecan and citrus groves, and from oak-hickory, pine, sand-pine, and beech-magnolia forests, at elevations up to 3100 feet.

SYNONYMY: Chamberlin provided no characters to distinguish *ostegae* from *aprilinus*, and there appear to be none.

Drassyllus covensis Exline
Figures 134–139; Map 22

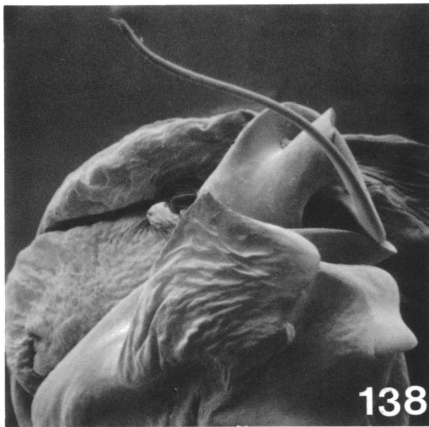
Drassyllus covensis Exline, 1962, p. 83, figs. 1–6 (male holotype from Cove Creek, Washington

County, Arkansas, in CAS, examined). Ubick and Roth, 1973, p. 2.

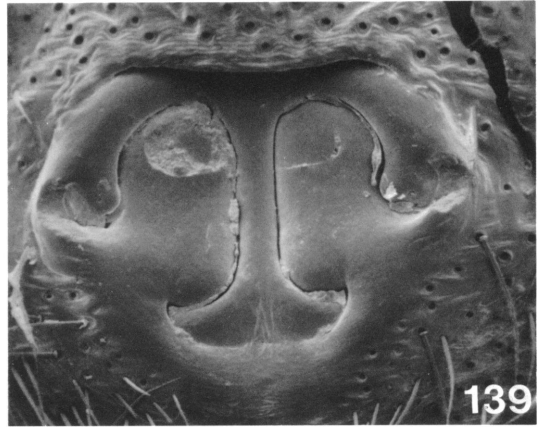
DIAGNOSIS: *Drassyllus covensis* is a distinctive species easily recognized by the oblique, rectangular TA and blunt EP (figs. 134, 138) of males and the anteriorly expanded MP (figs. 136, 139) of females.

MALE: Total length 3.79 ± 0.27 . Carapace 1.71 ± 0.10 long, 1.33 ± 0.08 wide. Femur II 1.04 ± 0.05 long. Eye sizes and interdistances: AME 0.05, ALE 0.08, PME 0.09, PLE 0.08; AME–AME 0.05, AME–ALE 0.01, PME–PME 0.03, PME–PLE 0.05, ALE–PLE 0.04. MOQ length 0.21, front width 0.15, back width 0.21. TA oblique, rectangular, EP short, blunt (figs. 134, 138); MA very large (fig. 135). Leg spination: tibiae: II v1r-1r-0; III v2-2-2; metatarsus IV v1r-2-0.

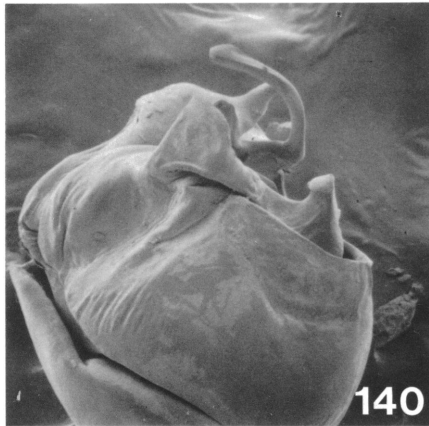
FEMALE: Total length 3.79 ± 0.47 . Carapace 1.54 ± 0.10 long, 1.20 ± 0.10 wide. Femur II 0.95 ± 0.08 long. Eye sizes and interdistances: AME 0.04, ALE 0.06, PME 0.08, PLE 0.06; AME–AME 0.05, AME–ALE 0.01, PME–PME 0.03, PME–PLE



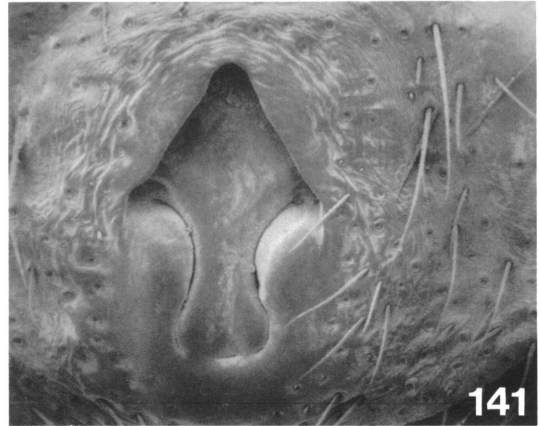
138



139



140



141

FIGS. 138–141. 138, 139. *Drassyllus covensis* Exline. 140, 141, *D. frigidus* (Banks). 138, 140, Palp, ventral view. 139, 141. Epigynum, ventral view.

0.04, ALE–PLE 0.03. MOQ length 0.18, front width 0.13, back width 0.19. MP expanded anteriorly into lateral flanges (figs. 136, 139); MED greatly expanded anteriorly (fig. 137). Leg spination: patella III r0-0-0; tibia IV p1-0-1; metatarsus III r0-1-1.

MATERIAL EXAMINED: UNITED STATES: **Arkansas:** *Benton Co.:* Siloam Springs, Apr. 27, 1966, litter, stream bank, open woods (W. Peck, EPC), 1♂, 1♀. *Bradley Co.:* no specific locality, Apr. 6, 1963 (EPC), 2♂, July 28, 1963, pine-oak (Leslie, EPC), 1♀, Apr. 1964, pine-oak forest (FSCA), 1♂; Sumpter, Apr. 11, 1964 (EPC), 2♂, Apr. 26, 1964, pine-oak woods (Leslie, EPC), 1♀. *Newton Co.:* 7.6 mi. S Boxley, Aug. 8, 1974,

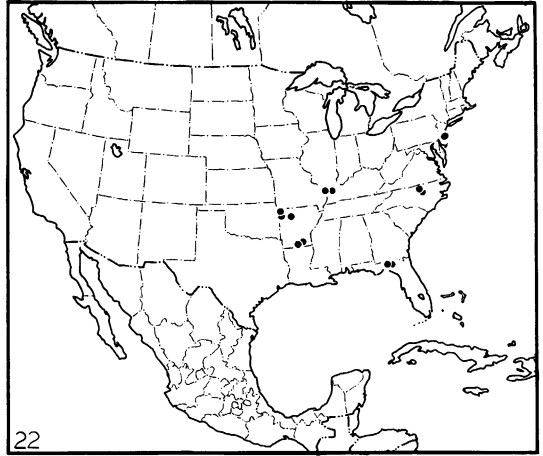
pitfall, elevation 2200 feet (R. Chenowith, J. Heiss, JSH), 1♀; 8.5 mi. S Boxley, June 6–27, 1974, pitfalls, elevation 2200 feet (R. Chenowith, J. Heiss, JSH), 3♀; 4.7 mi. S Mt. Judea, June 6–27, 1974, pitfall, elevation 2000 feet (R. Chenowith, J. Heiss, JSH), 2♀, July 11, 1974, pitfall (J. Heiss, JSH), 1♀; 9.9 mi. S Mt. Judea, July 11–Aug. 22, 1974, pitfall, elevation 1950 feet (R. Chenowith, J. Heiss, JSH), 3♀; 11.2 mi. S Mt. Judea, June 20–July 11, 1974, pitfall, elevation 2050 feet (R. Chenowith, J. Heiss, JSH), 2♀. *Union Co.:* 4.7 mi. S Cairo, July 3, 1974, pitfall, elevation 250 feet (R. Chenowith, J. Heiss, JSH), 1♀; 0.7 mi. S Lisbon, June 4, 1974, pitfall, elevation 80 feet (R. Chenowith, J.

Heiss, JSH), 1♀; 2.8 mi. S Lisbon, July 3, 1974, pitfall, elevation 200 feet (R. Chenoweth, J. Heiss, JSH), 2♀. *Washington Co.*: no specific locality, Apr. 25, 1961, pitfall, leaf litter, woods (EPC), 1♂; Cove Creek, May 1956, elevation 1000 feet (M. Hite, MCZ), 1♂, May 4, 1962, pitfall, leaf litter (O. and M. Hite, MCZ), 1♂, May 6, 1961, pitfall, leaf litter, 1♂, 3♀, May 13, 1961, pitfall, leaf litter, woods (O. Hite, CAS), 1♂, 1♀ (types), May 22, 1961, pitfall, leaf litter, woods (EPC), 1♂. **Florida:** *Jefferson Co.*: Monticello, Apr. 10, 1968 (A. M. Chickering, MCZ), 1♀. *Leon Co.*: 20 mi. N Tallahassee, Mar. 21, 1971, leaf litter (L. Herman), 1♂; Tall Timbers Research Station, June 1, 1969 (W. W. Baker, FSCA), 2♀. **Illinois:** *Pope Co.*: Lusk Creek, May 19–26, 1971, pitfall, upland woods (T. N. Trudeau, N. Magnuson, JAB), 12♂, June 10–23, 1968, pitfall, lowland woods (J. C. Downey, JAB), 1♀. *Union Co.*: 5 mi. N Alto Pass, May 2, 1968 (P. E. Heinz, JAB), 1♀. **New Jersey:** *Ocean Co.*: Lakehurst, May 13, 1949, 1♂. **North Carolina:** *Durham Co.*: Duke Forest, Apr. 11–28, 1932–1935 (A. M. Chickering, MCZ), 6♂, 3♀, June 13–18, 1933 (A. M. Chickering, MCZ), 2♀, Apr. 14, 1945 (Pearse, MCZ), 1♀, May 5, 1964, pitfall, oak-hardwood forest (J. W. Berry, JAB), 1♂, June 5, 1964, litter, pine-hardwood (J. W. Berry, JAB), 1♀, June 11, 1963, litter, pine with young hardwood (J. W. Berry, MCZ), 1♀. *Wake Co.*: Raleigh, Mar. 6–June 26, 1949, leaf mold (D. L. Wray), 1♂, 1♀.

DISTRIBUTION: Southeastern United States (map 22).

THE *frigidus* GROUP

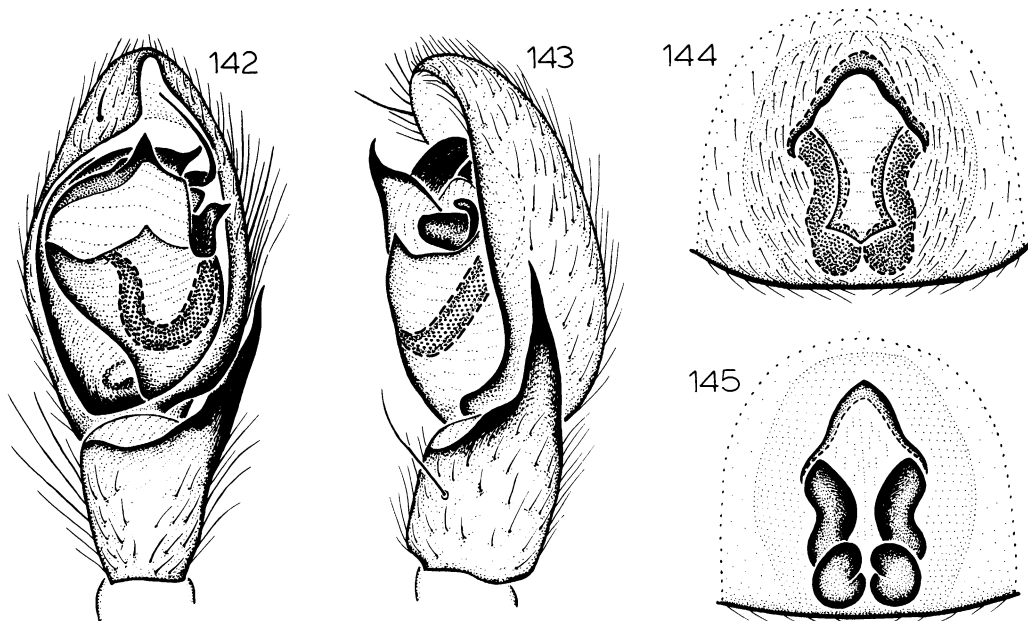
DIAGNOSIS: The *frigidus* group contains those species in which the males lack stiff setae dorsally on the palpal tibia, but have a narrow terminal apophysis (as in figs. 142, 200) and a relatively narrow embolar base with a long embolar projection (as in figs. 146, 196). Females have a broad anterior epigynal margin that is either bent at its middle (fig. 144) or has distinctly darkened and thickened hoodlike areas on each side (as in figs. 156, 198).



MAP 22. North America, showing distribution of *Drassyllus covensis*.

KEY TO SPECIES

1. Males (those of *puebla*, *durango*, and *huachuca* unknown) 2
Females 12
2. TA relatively short (figs. 142, 146, 154, 168, 184) 3
TA relatively long (figs. 158, 172, 180, 192, 196, 200) 7
3. TAB restricted to distal edge of palpal bulb (figs. 140, 142) *frigidus*
TAB covering at least distal one-third of palpal bulb (as in figs. 146, 154) 4
4. RTA very long, extending almost one-half of CYM length (fig. 169) *alachua*
RTA normal, extending no more than one-quarter of CYM length (as in figs. 147, 155) 5
5. TA with two distal points (fig. 154)
..... *louisianus*
TA with one distal point (figs. 146, 184) .. 6
6. TA relatively narrow basally (figs. 146, 150)
..... *ellipes*
TA relatively wide basally (figs. 184, 188)
..... *mormon*
7. Distal edges of TA and TAB forming continuous diagonal line (figs. 158, 196) 8
Distal edges of TA and TAB not forming continuous diagonal line 9
8. RTA pointed distally (fig. 159) *creolus*
RTA rounded distally (fig. 197)
..... *mexicanus*
9. TA distally hooked (figs. 190, 192)
..... *proclesis*
TA not distally hooked 10



FIGS. 142-145. *Drassyllus frigidus* (Banks). 142. Palp, ventral view. 143. Palp, retrolateral view. 144. Epigynum, ventral view. 145. Epigynum, dorsal view.

- | | |
|--|---|
| 10. TA distally expanded (fig. 200) | 19. MP with lateral extensions extending beyond sides of AEM (figs. 202, 205) |
| <i>arizonensis</i> | <i>arizonensis</i> |
| TA not distally expanded | MP without such extensions |
| 11. TA relatively long (fig. 172); origin of EMB gently rounded (fig. 176) | 20. MED at least as wide as long (figs. 149, 167) |
| <i>orgilus</i> | 21 |
| TA relatively short (fig. 180); origin of EMB abrupt (fig. 178) | MED much longer than wide (figs. 145, 157, 187, 195) |
| <i>dromeus</i> | 22 |
| 12. MED with anteromedian projection (figs. 161, 163, 165, 171, 199) | 21. AEM truncate distally (figs. 148, 151) |
| 13 | <i>ellipes</i> |
| MED without anteromedian projection .. | AEM rounded distally (fig. 166) |
| 13. MP almost rectangular (fig. 170) .. | <i>huachuca</i> |
| MP rounded | 22 |
| 14. AEM laterally transverse (figs. 164, 198) | MED extending almost full length of epigynum (figs. 157, 187, 195) |
| 15 | 23 |
| AEM laterally oblique (figs. 160, 162) ... | MED restricted to posterior two-thirds of epigynum (fig. 145) |
| 15. AEM rounded medially (fig. 164) | <i>frigidus</i> |
| <i>durango</i> | 23. MED rectangular (fig. 187) |
| AEM triangular medially (figs. 198, 204) ... | MED ovoid (figs. 157, 195) |
| <i>mexicanus</i> | 24 |
| 16. MED sinuous (fig. 161) | 24. AEM almost straight (figs. 101, 156) |
| MED almost straight (fig. 163) | <i>louisianus</i> |
| 17. AEM with distinct finger-like projections (figs. 174, 182) | AEM oblique (figs. 191, 194) |
| 18 | <i>proclesis</i> |
| AEM without distinct finger-like projections | |
| 19 | |
| 18. AEM projections relatively small (figs. 179, 182) | |
| <i>dromeus</i> | |
| AEM projections relatively large (figs. 174, 177) | |
| <i>orgilus</i> | |

Drassyllus frigidus (Banks)

Figures 140-145; Map 23

Prothesima frigida Banks, 1892, p. 17, pl. 1, figs. 56, 56a (male and female syntypes from Ithaca, Tompkins County, New York, in MCZ, examined).

Zelotes frigidus: Banks, 1910, p. 8.

Zelotes frigidus: Petrunkevitch, 1911, p. 149.

Drassyllus frigidus: Chamberlin, 1922, p. 168.

Kaston, 1948, p. 359, figs. 1211–1213. Roewer, 1954, p. 415. Bonnet, 1956, p. 1604. Ubick and Roth, 1973, p. 2.

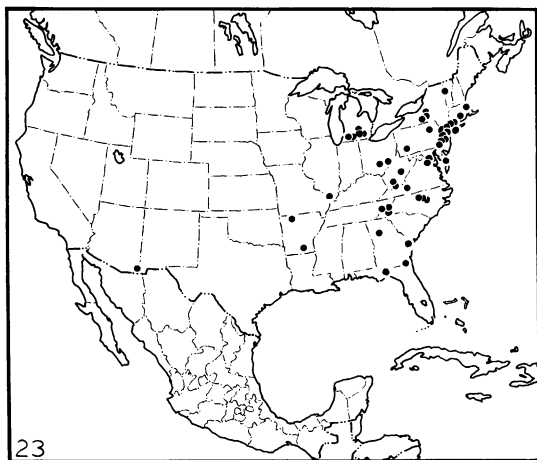
Drassyllus amissus Chamberlin, 1936a, p. 22, figs. 28, 29 (male holotype from Arizona, in AMNH, examined). Bonnet, 1956, p. 1602. First synonymized by Kaston, 1948, p. 359.

DIAGNOSIS: *Drassyllus frigidus* seems closest to *D. ellipes* and *D. louisianus* (in all three species the TA is short, situated medially, and sharply pointed) but may be distinguished by the tiny TAB (figs. 140, 142) of males and the short PED (fig. 145) of females.

MALE: Total length 3.69 ± 0.28 . Carapace 1.67 ± 0.08 long, 1.26 ± 0.06 wide. Femur II 1.10 ± 0.07 long (94 specimens examined). Eye sizes and interdistances: AME 0.06, ALE 0.08, PME 0.11, PLE 0.08; AME–AME 0.06, AME–ALE 0.01, PME–PME 0.02, PME–PLE 0.05, ALE–PLE 0.04. MOQ length 0.24, front width 0.18, back width 0.23. TAB restricted to distal edge of palpal bulb (figs. 140, 142); RTA long, gradually narrowed distally (fig. 141). Leg spination: tibia II v0-1r-0; metatarsi: III p0-2-2, r0-1-2; IV p0-2-2.

FEMALE: Total length 4.46 ± 0.34 . Carapace 1.79 ± 0.09 long, 1.35 ± 0.08 wide. Femur II 1.20 ± 0.04 long (143 specimens examined). Eye sizes and interdistances: AME 0.07, ALE 0.09, PME 0.12, PLE 0.08; AME–AME 0.07, AME–ALE 0.02, PME–PME 0.02, PME–PLE 0.04, ALE–PLE 0.04. MOQ length 0.25, front width 0.21, back width 0.26. AEM abruptly bent at middle (figs. 141, 144); PED reaching only two-thirds of epigynal length (fig. 145). Leg spination: tibia II v0-1r-0; metatarsus I v1r-0-0.

RECORDS: **United States** (county records only): *Arizona*: Cochise. *Arkansas*: Bradley, Carroll. *Connecticut*: Fairfield, Tolland. *District of Columbia*: Leon. *Georgia*: Charlton, Chatham, Fulton. *Illinois*: Union. *Maryland*: Prince Georges, Worcester. *Massachusetts*: Suffolk. *Michigan*: Calhoun, Clinton, Ingham, Kalamazoo, Livingston. *New Jersey*: Bergen, Hunterdon, Mercer, Morris. *New York*: Cortland, Nas-



MAP 23. North America, showing distribution of *Drassyllus frigidus*.

sau, Onondaga, Rockland, Tompkins, Westchester. *North Carolina*: Buncombe, Durham, Madison, Orange, Wake. *Ohio*: Hocking, Washington. *Pennsylvania*: Bucks, Luzerne, Philadelphia, Westmoreland. *Tennessee*: Sevier. *Vermont*: Chittenden. *Virginia*: Fairfax, Montgomery. *West Virginia*: Mercer, Raleigh, Upshur.

DISTRIBUTION: Arizona east to New England and Florida (map 23).

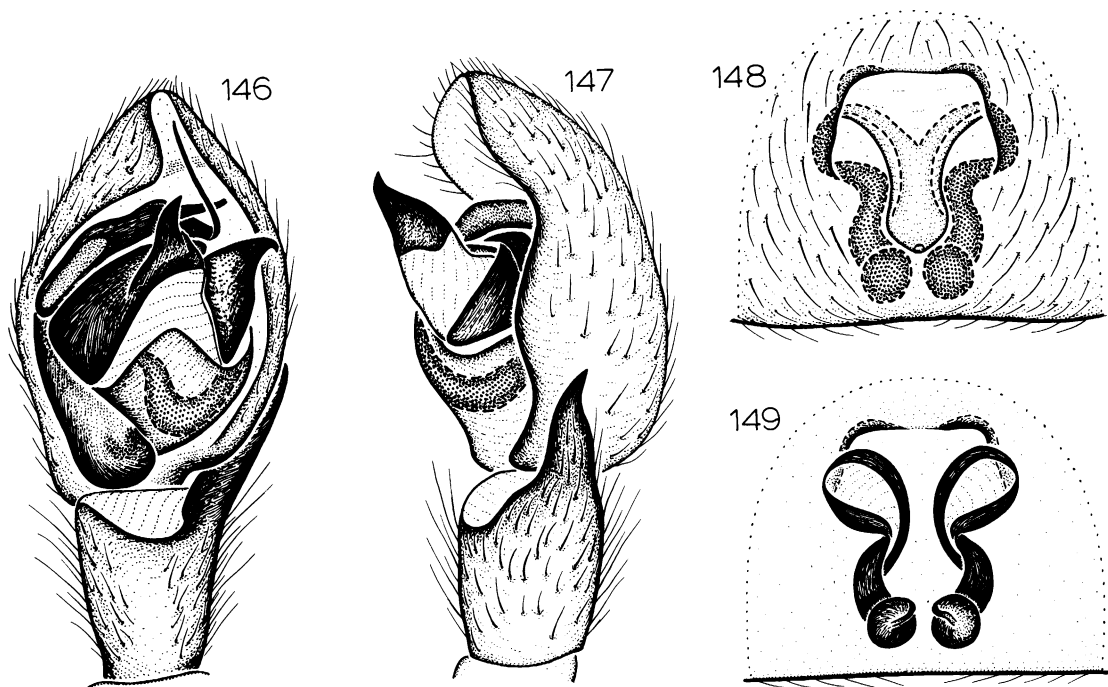
NATURAL HISTORY: Mature males and females have been taken year-round. Specimens have been collected in pitfall traps, leaf litter, fields, sand blowouts, gravel pits, houses, and clover, and under rocks, logs, and boards, at elevations up to 5400 feet.

Drassyllus ellipes Chamberlin and Gertsch
Figures 146–151; Map 24

Drassyllus ellipes Chamberlin and Gertsch, 1940, p. 14, fig. 34 (male holotype from Duncanville, Tuscaloosa County, Alabama, in AMNH, examined). Roewer, 1954, p. 414. Ubick and Roth, 1973, p. 2.

DIAGNOSIS: *Drassyllus ellipes* seems closest to *D. frigidus* and *D. louisianus* but may be distinguished by the hook-shaped TA (figs. 146, 150) of males and the squared epigynum (figs. 148, 151) of females.

MALE: Total length 4.70 ± 0.36 . Carapace 2.19 ± 0.17 long, 1.73 ± 0.13 wide. Femur II 1.50 ± 0.10 long. Eye sizes and interdis-



FIGS. 146-149. *Drassyllus ellipes* Chamberlin and Gertsch. 146. Palp, ventral view. 147. Palp, retrolateral view. 148. Epigynum, ventral view. 149. Epigynum, dorsal view.

tances: AME 0.09, ALE 0.10, PME 0.13, PLE 0.11; AME-AME 0.06, AME-ALE 0.02, PME-PME 0.01, PME-PLE 0.05, ALE-PLE 0.05. MOQ length 0.28, front width 0.24, back width 0.27. TAB normal, TA short, hook-shaped (figs. 146, 150); RTA short (fig. 147). Leg spination: patella III r0-0-0; tibiae: II v0-1r-0; III v2-2-2, r0-0-1; IV p1-0-1; metatarsus III p0-1-2, r1-1-1.

FEMALE: Total length 4.43-5.80. Carapace 1.73-2.47 long, 1.44-1.92 wide. Femur II 1.22-1.69 long. Eye sizes and interdistances: AME 0.07, ALE 0.11, PME 0.13, PLE 0.10; AME-AME 0.12, AME-ALE 0.02, PME-PME 0.04, PME-PLE 0.06, ALE-PLE 0.06. MOQ length 0.29, front width 0.27, back width 0.30. AEM enclosing square area (figs. 148, 151); MED widened (fig. 149). Leg spination: tibiae: II v1r-1r-0; IV p1-0-1.

MATERIAL EXAMINED: UNITED STATES: **Alabama:** *Tuscaloosa Co.*: Duncanville, Apr. 6, 1912 (H. H. Smith), 1♂ (type). **Arkansas:** *Bradley Co.*: no specific locality, Apr. 26, 1964 (EPC), 1♂; Sumpter, Apr.-

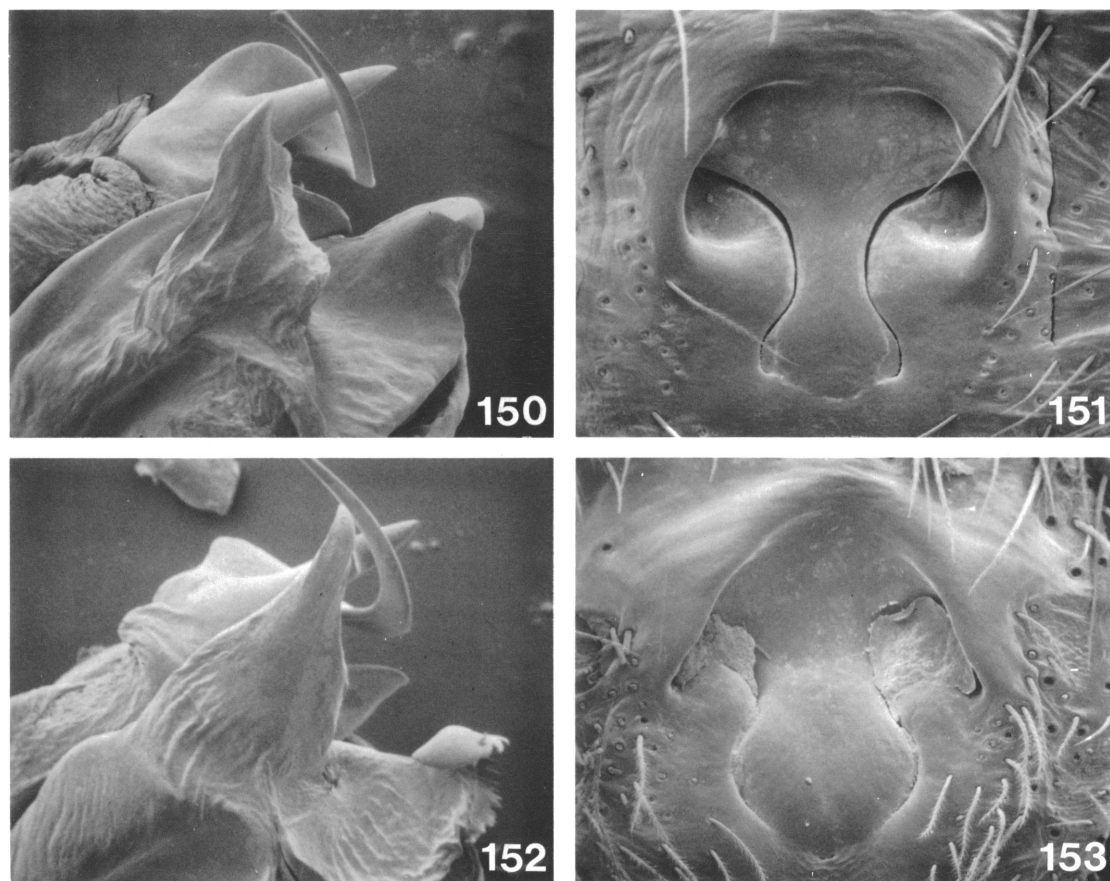
May 1964 (Leslie, EPC), 1♂. **Florida:** *Jackson Co.*: Florida Caverns State Park, Mar. 20, 1969 (J. A. Beatty, JAB), 1♀. **Georgia:** *Chatham Co.*: 8 mi. W Savannah, Apr. 5, 1943 (W. Ivie), 1♂. **North Carolina:** *Durham Co.*: Duke Forest, Durham, Apr. 1932 (A. M. Chickering, MCZ), 1♂, Apr. 11-28, 1935 (A. M. Chickering, MCZ), 6♂, 6♀; Mud Creek, Apr. 10, 1964, litter, bottomland pine and hardwood with honeysuckle (J. W. Berry, JAB), 1♂.

DISTRIBUTION: Southeastern United States (map 24).

Drassyllus louisianus Chamberlin
Figures 101, 154-157; Map 25

Drassyllus louisianus Chamberlin, 1922, p. 168 (female holotype from Baton Rouge, East Baton Rouge Parish, Louisiana, in MCZ, examined). Roewer, 1954, p. 416. Bonnet, 1956, p. 1604. Ubick and Roth, 1973, p. 2.

DIAGNOSIS: *Drassyllus louisianus* seems closest to *D. frigidus* and *D. ellipes* but may be distinguished by the bifid tip of the TA



FIGS. 150–153. 150, 151. *Drassyllus ellipes* Chamberlin and Gertsch. 152, 153. *D. creolus* Chamberlin and Gertsch. 150, 152. Palp, ventral view. 151, 153. Epigynum, ventral view.

(fig. 154) of males and the recurved PED (fig. 157) of females.

MALE: Total length 4.72. Carapace 2.25 long, 1.74 wide. Femur II 1.55 long. Eye sizes and interdistances: AME 0.11, ALE 0.11, PME 0.15, PLE 0.12; AME–AME 0.06, AME–ALE 0.03, PME–PME 0.02, PME–PLE 0.04, ALE–PLE 0.07. MOQ length 0.31, front width 0.28, back width 0.32. TAB normal, TA short, with two points at tip (fig. 154); RTA short, stubby (fig. 155). Leg spination: tibiae: II v0-1r-0; III v2-2-2; IV v1p-2-2; metatarsi: III p0-2-2, r0-1-2; IV r1-2-2.

FEMALE: Total length 5.03–7.13. Carapace 2.21–2.61 long, 1.67–2.02 wide. Femur II 1.53–1.87 long. Eye sizes and interdistances: AME 0.11, ALE 0.12, PME 0.15, PLE 0.12;

AME–AME 0.09, AME–ALE 0.03, PME–PME 0.02, PME–PLE 0.05, ALE–PLE 0.07. MOQ length 0.35, front width 0.31, back width 0.32. AEM very wide, almost straight (figs. 101, 156); PED recurved (fig. 157). Leg spination: tibiae: II v0-1r-0; III v2-2-2; IV p1-0-1.

MATERIAL EXAMINED: UNITED STATES: **Louisiana:** *East Baton Rouge Par.:* Baton Rouge (R. V. Chamberlin, MCZ), 1♀ (type). **Mississippi:** *George Co.:* Lucedale, Dec. 4–Feb. 1930–1932 (Dietrich), 1♂, 3♀. **North Carolina:** *Carteret Co.:* 8.9 mi. NW Beaufort, Oct. 24, 1964, litter, hardwood forest (J. W. Berry, JAB), 1♀. **South Carolina:** *Georgetown Co.:* Georgetown, Dec. 14, 1967 (W. Ivie), 1♀.

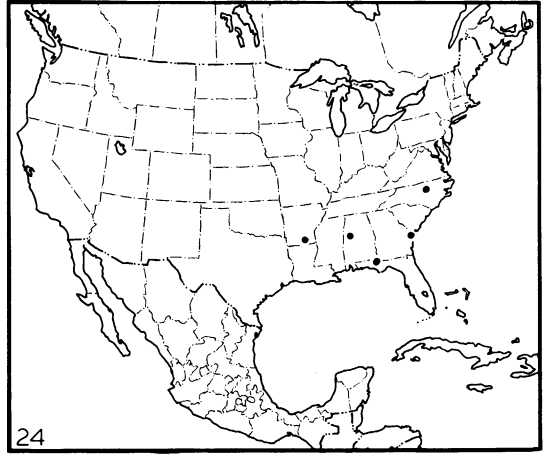
DISTRIBUTION: Southeastern United States (map 25).

Drassyllus creolus Chamberlin and Gertsch
Figures 152, 153, 158–161; Map 26

Drassyllus creolus Chamberlin and Gertsch, 1940, p. 13, figs. 26, 27 (male holotype from Baton Rouge, East Baton Rouge Parish, Louisiana, in AMNH, examined). Kaston, 1948, p. 360, figs. 1214–1216. Roewer, 1954, p. 414. Ubick and Roth, 1973, p. 2.

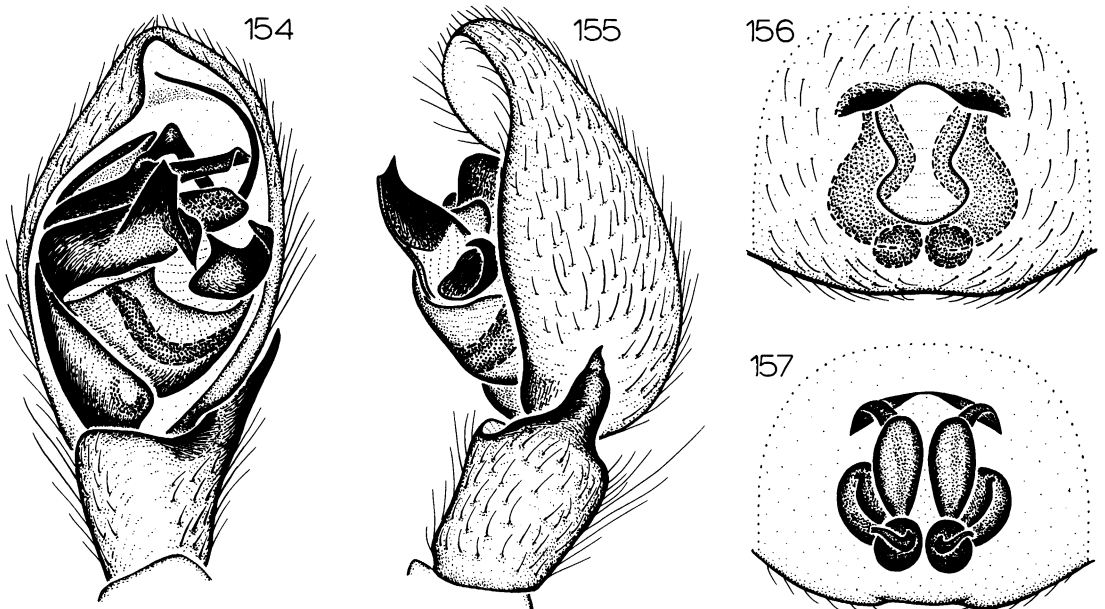
DIAGNOSIS: *Drassyllus creolus* seems closest to *D. puebla* (in both species the AEM is almost semicircular and the MP is posteriorly depressed). Males of *D. puebla* are unknown; the only known males likely to be confused with *D. creolus* are those of *D. mexicanus*, which have a shorter, broader RTA (compare figs. 159, 197). Females of *D. creolus* have the PED more sinuous than in *D. puebla* (fig. 161).

MALE: Total length 4.65 ± 0.48 . Carapace 2.03 ± 0.19 long, 1.60 ± 0.14 wide. Femur II 1.46 ± 0.15 long (49 specimens examined). Eye sizes and interdistances: AME 0.09,

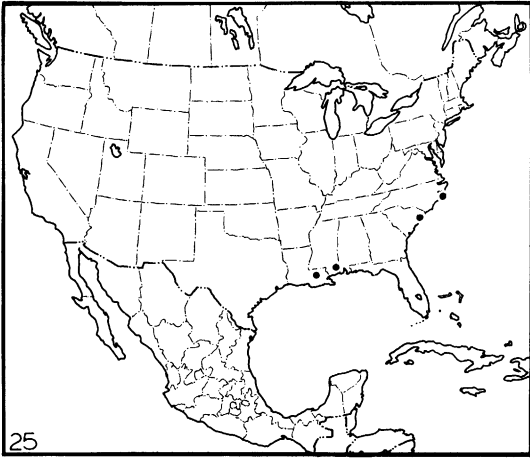


MAP 24. North America, showing distribution of *Drassyllus ellipes*.

ALE 0.09, PME 0.14, PLE 0.09; AME–AME 0.05, AME–ALE 0.02, PME–PME 0.02, PME–PLE 0.04, ALE–PLE 0.03. MOQ length 0.24, front width 0.23, back width 0.30. TA and TAB forming continuous diagonal line (figs. 152, 158); RTA an elon-



FIGS. 154–157. *Drassyllus louisianus* Chamberlin. 154. Palp, ventral view. 155. Palp, retrolateral view. 156. Epigynum, ventral view. 157. Epigynum, dorsal view.



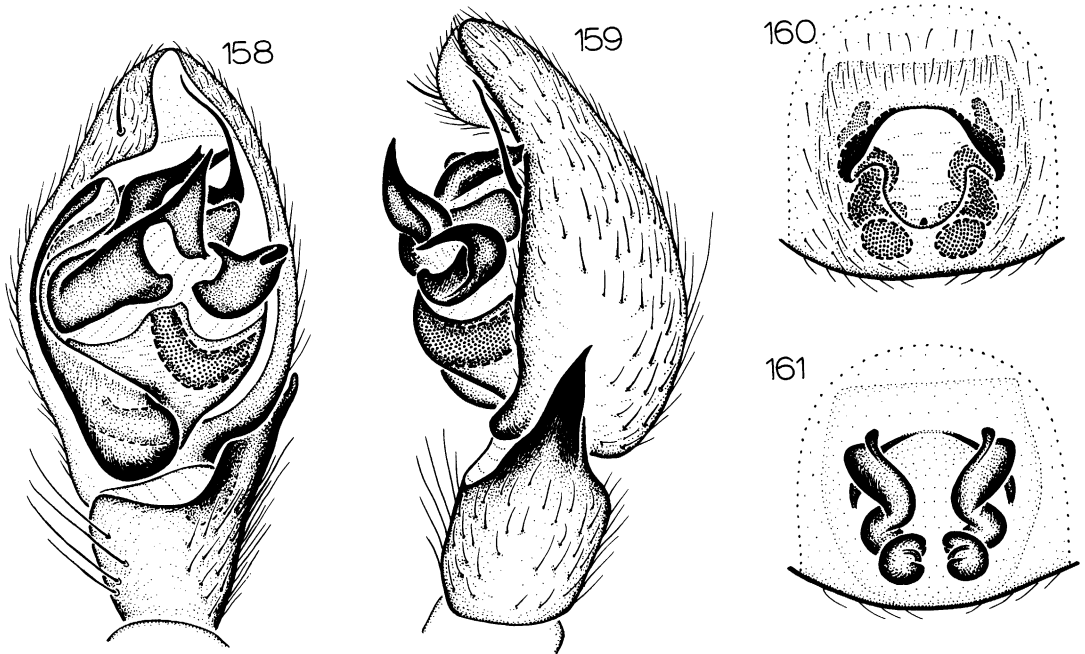
MAP 25. North America, showing distribution of *Drassyllus louisianus*.

gate triangle (fig. 159). Leg spination: femora: II, IV p0-0-0; patella III r0-0-0; tibia IV p1-0-1; metatarsus III p0-2-2, r0-1-2.

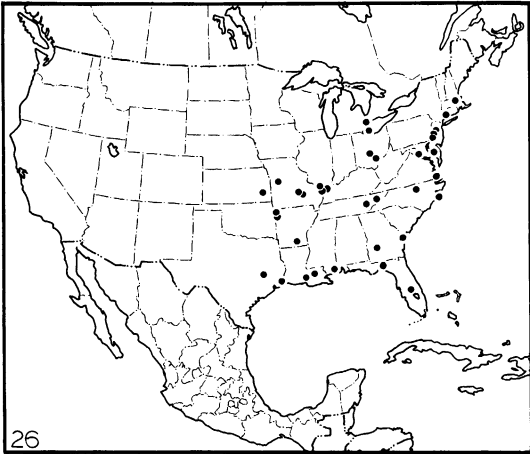
FEMALE: Total length 5.42 ± 0.35 . Cara-

pace 2.17 ± 0.16 long, 1.71 ± 0.11 wide. Femur II 1.59 ± 0.12 long (72 specimens examined). Eye sizes and interdistances: AME 0.08, ALE 0.09, PME 0.14, PLE 0.10; AME-AME 0.07, AME-ALE 0.03, PME-PME 0.01, PME-PLE 0.05, ALE-PLE 0.07. MOQ length 0.30, front width 0.23, back width 0.30. AEM almost semicircular (figs. 153, 160); PED sinuous, with anteromedian projections (fig. 161). Leg spination: tibia IV p1-0-1, v1p-2-2; metatarsus IV v2-1p-0.

RECORDS: **Canada:** *Ontario:* Pelee Island (Lake Erie), Windsor. **United States** (county records only): *Arkansas:* Benton, Bradley, Washington. *Connecticut:* Fairfield. *Florida:* Highlands, Jefferson. *Georgia:* Chat-ham, Sumter. *Illinois:* Jackson, Pope, Union. *Kansas:* Greenwood. *Louisiana:* East Baton Rouge, Saint Martin. *Maryland:* Dorchester. *Massachusetts:* Middlesex. *Mississippi:* Jackson. *Missouri:* Dent, Johnson, Phelps. *New Jersey:* Hunterdon. *North Carolina:* Carteret, Durham. *Ohio:* Franklin, Hocking. *Pennsylvania:* Bucks, Philadel-



FIGS. 158-161. *Drassyllus creolus* Chamberlin and Gertsch. 158. Palp, ventral view. 159. Palp, retrolateral view. 160. Epigynum, ventral view. 161. Epigynum, dorsal view.



MAP 26. North America, showing distribution of *Drassyllus creolus*.

phia. *Tennessee*: Roane, Sevier. *Texas*: Jefferson, Walker. *Virginia*: Fairfax, Norfolk.

DISTRIBUTION: The eastern deciduous forest (map 26).

NATURAL HISTORY: Mature males have been taken from late February through June, mature females from March through August. Specimens have been collected in pitfall and Berlese traps, from pecans, cotton, broom-sedge, and camellias, under boards and rubbish, and in prairies, fields, and pine, pin oak, and oak-hickory forests.

***Drassyllus puebla*, new species**

Figures 162, 163; Map 27

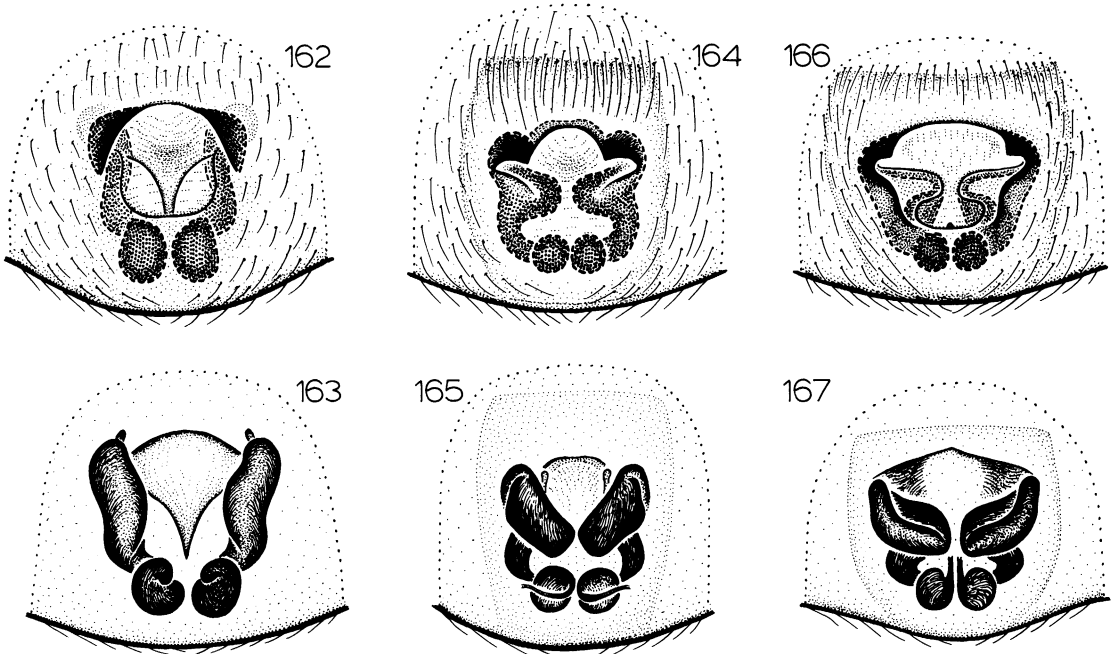
TYPE: Female holotype from 2 miles east of Teziutlán, Puebla, Mexico (February 23, 1953; D. M. Darling), deposited in AMNH.

ETYMOLOGY: The specific name is a noun in apposition taken from the type locality.

DIAGNOSIS: *Drassyllus puebla* seems closest to *D. creolus* but may be distinguished by the straighter MED (fig. 163) of females.

MALE: Unknown.

FEMALE: Total length 4.78. Carapace 2.17 long, 1.67 wide. Femur II 1.48 long. Eye sizes and interdistances: AME 0.09, ALE



FIGS. 162-167. 162, 163. *Drassyllus puebla*, new species. 164, 165. *D. durango*, new species. 166, 167. *D. huachuca*, new species. 162, 164, 166. Epigynum, ventral view. 163, 165, 167. Epigynum, dorsal view.

0.11, PME 0.15, PLE 0.10; AME-AME 0.09, AME-ALE 0.01, PME-PME 0.01, PME-PLE 0.07, ALE-PLE 0.07. MOQ length 0.32, front width 0.27, back width 0.31. AEM almost semicircular (fig. 162); MED almost straight, with anteromedian projections (fig. 163). Leg spination: tibiae: II v0-1r-0; IV p1-0-1.

MATERIAL EXAMINED: Only the holotype.

DISTRIBUTION: Known only from Puebla, Mexico (map 27).

***Drassyllus durango*, new species**

Figures 164, 165; Map 27

TYPE: Female holotype from an elevation of 8200 feet at Otinapa, Durango, Mexico (August 12, 1947; W. J. Gertsch), deposited in AMNH.

ETYMOLOGY: The specific name is a noun in apposition taken from the type locality.

DIAGNOSIS: *Drassyllus durango* seems closest to *D. huachuca* and *D. alachua* (in all three species the MED are widened and shifted obliquely) but may be distinguished by the rounded middle portion of the AEM (fig. 164) of females.

MALE: Unknown.

FEMALE: Total length 6.88. Carapace 2.41 long, 1.80 wide. Femur II 1.66 long. Eye sizes and interdistances: AME 0.07, ALE 0.10, PME 0.11, PLE 0.10; AME-AME 0.07, AME-ALE 0.01, PME-PME 0.02, PME-PLE 0.05, ALE-PLE 0.09. MOQ length 0.30, front width 0.21, back width 0.24. AEM tripartite, with middle portion rounded (fig. 164); MED widened, oriented obliquely (fig. 165). Leg spination: tibiae: II v1r-1r-0; III v2-2-2.

MATERIAL EXAMINED: Only the holotype.

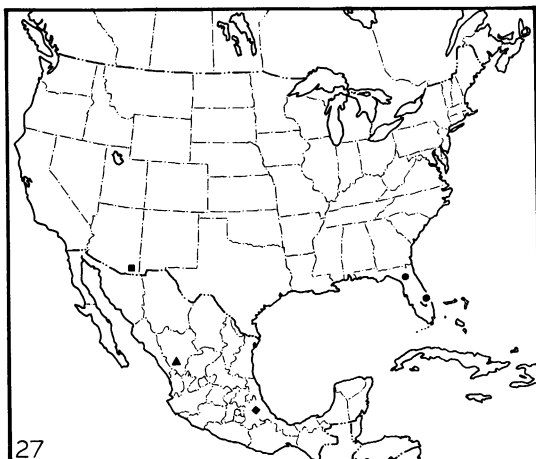
DISTRIBUTION: Known only from Durango, Mexico (map 27).

***Drassyllus huachuca*, new species**

Figures 166, 167; Map 27

TYPE: Female holotype from an elevation of 8000 feet in Carr Canyon, Huachuca Mountains, Cochise County, Arizona (June 3, 1952; W. J. Gertsch, M. Cazier, R. Schrammel), deposited in AMNH.

ETYMOLOGY: The specific name is a noun in apposition taken from the type locality.



MAP 27. North America, showing distribution of *Drassyllus puebla* (diamond), *D. durango* (triangle), *D. huachuca* (square), and *D. alachua* (circles).

DIAGNOSIS: *Drassyllus huachuca* seems closest to *D. durango* and *D. alachua* but may be distinguished by the almost square MED (fig. 167) of females.

MALE: Unknown.

FEMALE: Total length 5.76. Carapace 2.14 long, 1.60 wide. Femur II 1.49 long. Eye sizes and interdistances: AME 0.09, ALE 0.11, PME 0.11, PLE 0.10; AME-AME 0.06, AME-ALE 0.00, PME-PME 0.03, PME-PLE 0.05, ALE-PLE 0.03. MOQ length 0.28, front width 0.24, back width 0.25. AEM extremely wide (fig. 166); MED almost square, with L-shaped elevations (fig. 167). Leg spination (leg I missing): tibiae: II v1r-1r-0; III v2-2-2.

MATERIAL EXAMINED: Only the holotype.

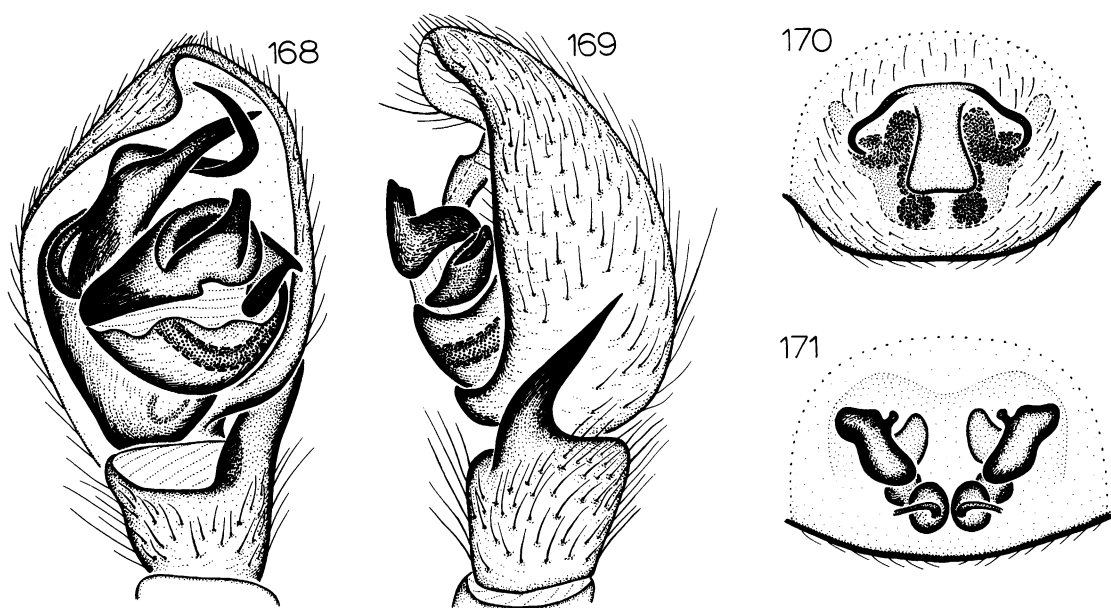
DISTRIBUTION: Known only from the Huachuca Mountains of southeastern Arizona (map 27).

***Drassyllus alachua*, new species**

Figures 168-171; Map 27

TYPES: Male holotype and female paratype from the turkey oak zone at Gainesville, Alachua County, Florida (March 6, 1937; H. K. Wallace and W. M. Barrows), deposited in AMNH.

ETYMOLOGY: The specific name is a noun in apposition taken from the type locality.



FIGS. 168–171. *Drassyllus alachua*, new species. 168. Palp, ventral view. 169. Palp, retrolateral view. 170. Epigynum, ventral view. 171. Epigynum, dorsal view.

DIAGNOSIS: *Drassyllus alachua* seems closest to *D. durango* and *D. huachuca* but may be distinguished by the almost rectangular MP (fig. 170) of females. Males of the last two species are unknown; those of *D. alachua* have the EP and EMB far from the distal edge of the palpal bulb, and an extremely long RTA (figs. 168, 169).

MALE: Total length 4.39, 4.64. Carapace 2.17, 2.23 long, 1.69, 1.72 wide. Femur II 1.35, 1.44 long. Eye sizes and interdistances: AME 0.08, ALE 0.09, PME 0.13, PLE 0.12; AME–AME 0.06, AME–ALE 0.02, PME–PME 0.02, PME–PLE 0.04, ALE–PLE 0.05. MOQ length 0.31, front width 0.22, back width 0.28. EP and EM obliquely directed, far from palpal bulb (fig. 168); RTA extending almost half the CYM length (fig. 169). Leg spination: tibia IV p1-0-1.

FEMALE: Total length 4.70. Carapace 2.16 long, 1.71 wide. Femur II missing. Eye sizes and interdistances: AME 0.08, ALE 0.09, PME 0.12, PLE 0.09; AME–AME 0.07, AME–ALE 0.02, PME–PME 0.02, PME–PLE 0.05, ALE–PLE 0.07. MOQ length

0.29, front width 0.23, back width 0.26. MP almost rectangular (fig. 170); MED widened, oblique, with anteromedian projections (fig. 171). Leg spination (leg II missing): tibia III v2-2-2.

OTHER MATERIAL EXAMINED: UNITED STATES: **Florida:** *Saint Lucie Co.*: 9 mi. N St. Lucie River, Feb. 1, 1959, *Pinus clausa* debris (H. A. Denmark, FSCA), 1♂.

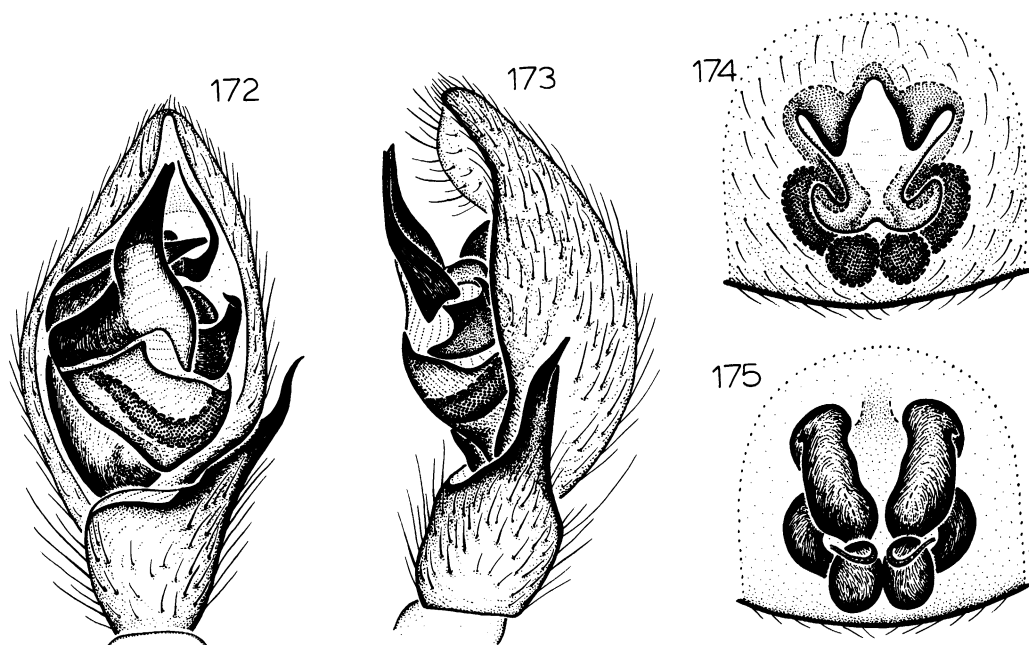
DISTRIBUTION: Known only from Florida (map 27).

Drassyllus orgilus Chamberlin

Figures 172–177; Map 28

Drassyllus orgilus Chamberlin, 1922, p. 169 (female holotype from Austin, Travis County, Texas, in MCZ, examined). Roewer, 1954, p. 416. Bonnet, 1956, p. 1605. Ubick and Roth, 1973, p. 3.

DIAGNOSIS: *Drassyllus orgilus* seems closest to *D. dromeus* (in both species the AEM bear finger-like projections) but may be distinguished by the longer TA, more smoothly rounded embolar origin, and distally wide



FIGS. 172–175. *Drassyllus orgilus* Chamberlin. 172. Palp, ventral view. 173. Palp, retrolateral view. 174. Epigynum, ventral view. 175. Epigynum, dorsal view.

RTA (figs. 172, 173, 176) of males and the much larger projections on the AEM (figs. 174, 177) of females.

MALE: Total length 4.74–5.26. Carapace 2.23–2.41 long, 1.62–1.91 wide. Femur II 1.32–1.79 long (six specimens examined). Eye sizes and interdistances: AME 0.07, ALE 0.10, PME 0.14, PLE 0.11; AME–AME 0.08, AME–ALE 0.02, PME–PME 0.02, PME–PLE 0.04, ALE–PLE 0.05. MOQ length 0.31, front width 0.23, back width 0.30. TA extending beyond rim of alveolus (fig. 172); origin of EMB smoothly rounded (fig. 176); RTA relatively wide distally (fig. 173). Leg spination: tibiae: II v0-1r-0; III v2-2-2, r1-1-1; IV p1-0-1; metatarsus III r1-2-2.

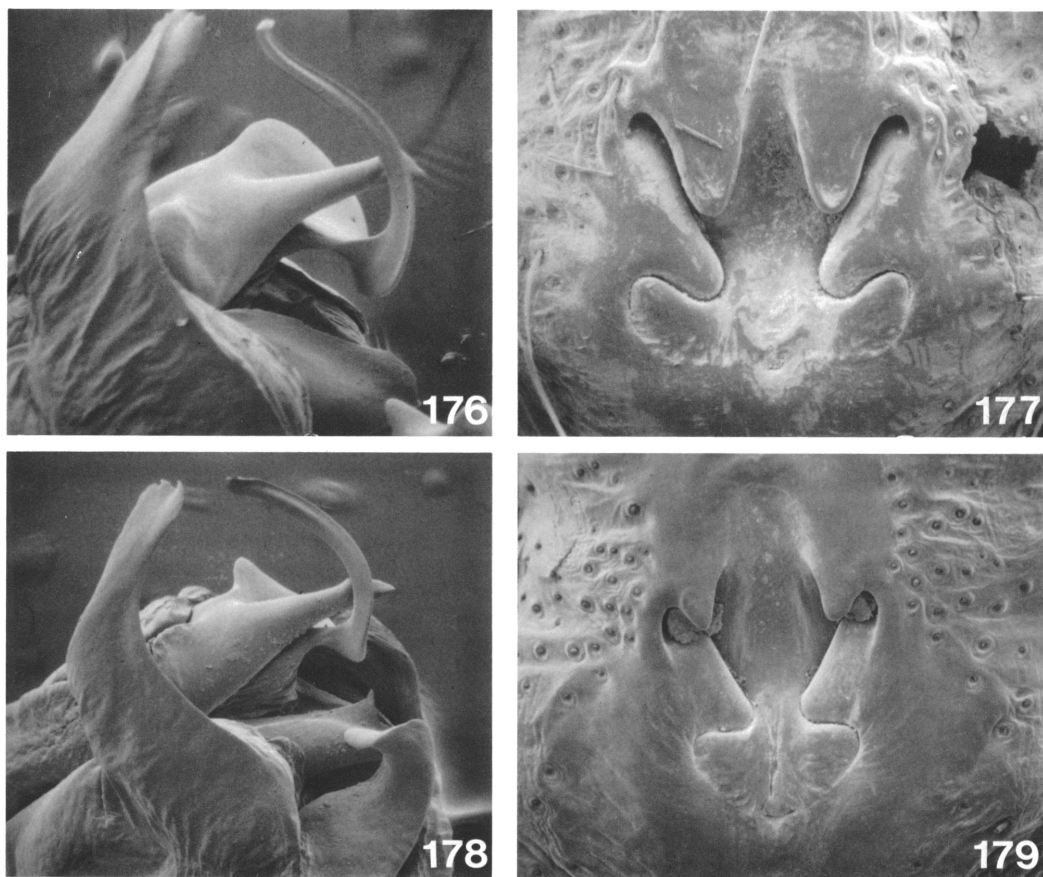
FEMALE: Total length 6.14 ± 0.50 . Carapace 2.37 ± 0.14 long, 1.87 ± 0.12 wide. Femur II 1.68 ± 0.12 long (68 specimens examined). Eye sizes and interdistances: AME 0.10, ALE 0.13, PME 0.14, PLE 0.11; AME–AME 0.06, AME–ALE 0.03, PME–PME

0.02, PME–PLE 0.05, ALE–PLE 0.05. MOQ length 0.29, front width 0.26, back width 0.30. AEM bearing large finger-like projections (figs. 174, 177); PED and MED relatively massive (fig. 175). Leg spination: tibia II v0-1r-0.

RECORDS: **United States** (county records only): *Oklahoma:* Comanche. *Texas:* Bexar, Brazos, Cameron, Clay, Dallas, Denton, De Witt, Galveston, Gonzales, Hidalgo, Kerr, Kimble, Llano, McCulloch, San Patricio, Sutton, Tarrant, Taylor, Tom Green, Travis, Webb, Wichita. **Mexico:** *Jalisco:* SE End, Lago de Chapala. *Nuevo León:* Hualahuises, 4 mi. S Monterrey, Río Santa Lucía (below Linares). *San Luis Potosí:* Ciudad del Maíz. *Tamaulipas:* Arroyo, 40 mi. S Linares.

DISTRIBUTION: Oklahoma to Jalisco (map 28). A female in AMNH from “Friday Harbor, Washington” was presumably either mislabelled or transported by humans.

NATURAL HISTORY: Mature males have



FIGS. 176–179. 176, 177. *Drassyllus orgilus* Chamberlin. 178, 179. *D. dromeus* Chamberlin. 176, 178. Palp, ventral view. 177, 179. Epigynum, ventral view.

been taken from late October through January, mature females from November through April. Specimens have been collected by sifting leaves, under rocks, in meadows, fields, and houses, and on sand, at elevations up to 2300 feet.

Drassyllus dromeus Chamberlin

Figures 178–183; Map 29

Drassyllus dromeus Chamberlin, 1922, p. 169 (male holotype from Austin, Travis County, Texas, in MCZ, examined). Roewer, 1954, p. 414. Bonnet, 1956, p. 1603.

Drassyllus lutzi Chamberlin, 1936a, p. 25, fig. 39 (female holotype from Valmont Butte, Boulder County, Colorado, in AMNH, examined). Roewer, 1954, p. 416. Bonnet, 1956, p. 1604.

Ubick and Roth, 1973, p. 3. NEW SYNONYMY.

Drassyllus devexus Chamberlin, 1936b, p. 13, fig. 7 (female holotype from Pinecrest, Salt Lake County, Utah, in AMNH, examined). Roewer, 1954, p. 414. Bonnet, 1956, p. 1603. Ubick and Roth, 1973, p. 2. NEW SYNONYMY.

DIAGNOSIS: *Drassyllus dromeus* seems closest to *D. orgilus* but may be distinguished by the shorter TA, more abrupt embolar origin, and distally narrow RTA (figs. 178, 180, 181) of males and the much smaller projections on the AEM (figs. 179, 182) of females.

MALE: Total length 4.37 ± 0.32 . Carapace 2.04 ± 0.10 long, 1.58 ± 0.04 wide. Femur II 1.36 ± 0.09 long (68 specimens examined).

Eye sizes and interdistances: AME 0.08, ALE 0.09, PME 0.08, PLE 0.09; AME-AME 0.06, AME-ALE 0.02, PME-PME 0.02, PME-PLE 0.05, ALE-PLE 0.04. MOQ length 0.27, front width 0.22, back width 0.18. TA not extending to rim of alveolus (fig. 180); origin of EMB abrupt (fig. 178); RTA greatly narrowed distally (fig. 181). Leg spination: tibiae: II v1r-1r-0; III v2-2-2.

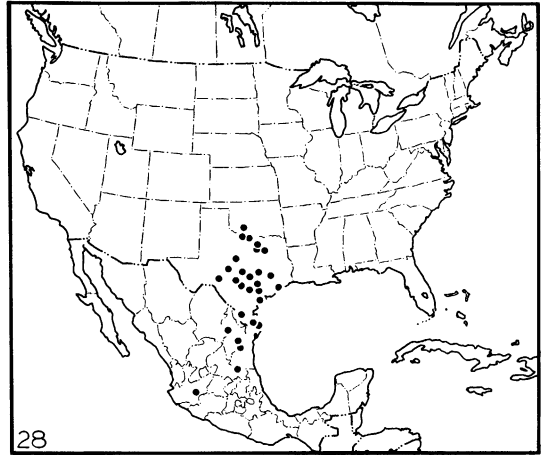
FEMALE: Total length 5.31 ± 1.04 . Carapace 2.19 ± 0.24 long, 1.68 ± 0.14 wide. Femur II 1.48 ± 0.13 long (123 specimens examined). Eye sizes and interdistances: AME 0.08, ALE 0.11, PME 0.11, PLE 0.08; AME-AME 0.09, AME-ALE 0.01, PME-PME 0.03, PME-PLE 0.04, ALE-PLE 0.05. MOQ length 0.27, front width 0.25, back width 0.24. AEM bearing small finger-like projections (figs. 179, 182); MED coiled anteriorly (fig. 183). Leg spination: tibiae: II v1r-1r-0; III v2-2-2.

RECORDS: **Canada:** *British Columbia:* Oliver, Summerland. **United States** (county records only): *Arizona:* Cochise, Gila, Pima. *Arkansas:* Carroll, Washington. *Colorado:* Boulder, Denver, El Paso, Prowers, Pueblo. *Georgia:* Fulton, Thomas. *Idaho:* Idaho. *Massachusetts:* Plymouth. *Nebraska:* New Jersey: Burlington. *New Mexico:* Bernalillo, Grant, Lincoln, Sandoval, Santa Fe, Torrance. *New York:* Orange. *Oklahoma:* Comanche, Texas. *South Dakota:* Custer. *Texas:* Cameron, Comal, Hidalgo, Kerr, Kimble, Llano, Lubbock, Presidio, San Patricio, Travis, Wichita. *Utah:* Emery, Grand, Piute, Salt Lake, Sevier, Utah.

DISTRIBUTION: British Columbia and Massachusetts to Arizona and Georgia (map 29).

NATURAL HISTORY: Mature males have been taken from March through November, mature females from March through December. Specimens have been collected in pitfall traps and houses, under rocks, in tall grass and oak litter, and associated with pinyon pine, juniper, and nolina, at elevations up to 7600 feet.

SYNONYMY: Chamberlin provided no characters by which to distinguish *devexus* from *lutzi*, and there appear to be none; several simultaneous collections of both sexes



MAP 28. North America, showing distribution of *Drassyllus orgilus*.

indicate that these names refer to the female of *dromeus*.

VARIATION: The degree to which the finger-like projections of the AEM are produced varies among females but in no discernible geographic pattern.

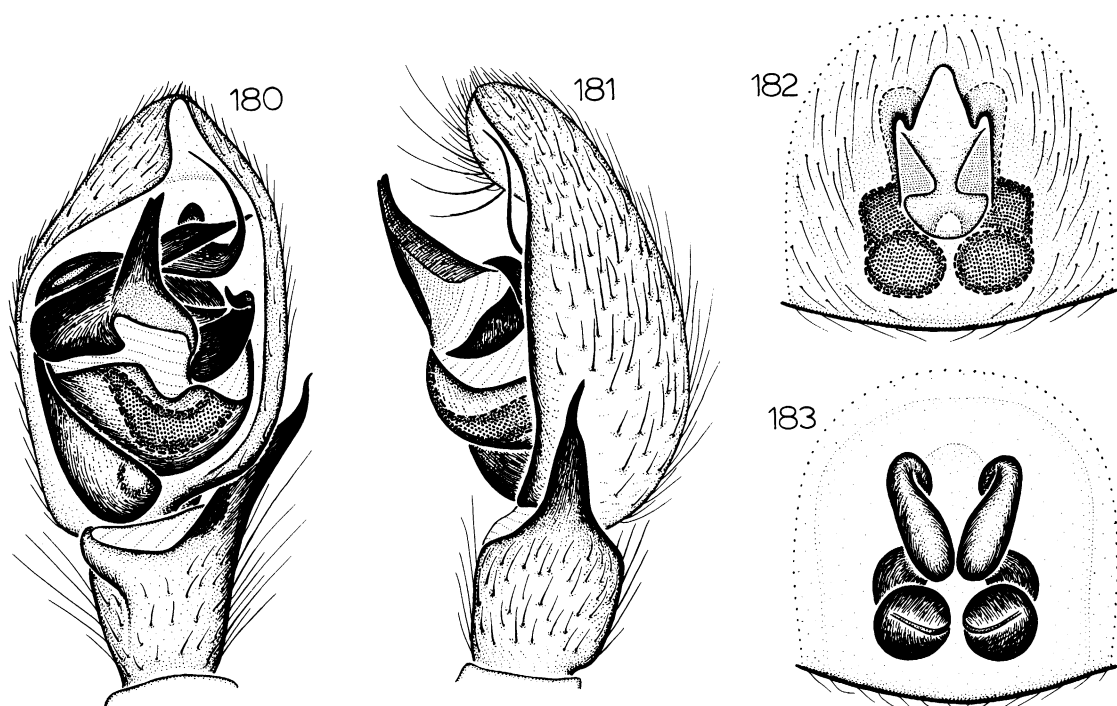
Drassyllus mormon Chamberlin

Figures 184–189; Map 30

Drassyllus mormon Chamberlin, 1936a, p. 27, figs. 36–38 (female holotype from St. George, Washington County, Utah, in AMNH, examined). Roewer, 1954, p. 416. Bonnet, 1956, p. 1605. Ubick and Roth, 1973, p. 2.

DIAGNOSIS: *Drassyllus mormon* seems closest to *D. proclesis* and *D. mexicanus* (in all three species the RTA is sinuous and the lateral thickenings of the AEM are pronounced) but may be distinguished by the much shorter TA (figs. 184, 188) of males and the much narrower middle portion of the AEM (figs. 186, 189) of females.

MALE: Total length 5.12 ± 0.64 . Carapace 2.37 ± 0.27 long, 1.86 ± 0.22 wide. Femur II 1.54 ± 0.15 long (31 specimens examined). Eye sizes and interdistances: AME 0.08, ALE 0.11, PME 0.14, PLE 0.10; AME-AME 0.09, AME-ALE 0.02, PME-PME 0.02, PME-PLE 0.06, ALE-PLE 0.05. MOQ length 0.33, front width 0.25, back width 0.30. TA small, curved, blunt distally



FIGS. 180–183. *Drassyllus dromeus* Chamberlin. 180. Palp, ventral view. 181. Palp, retrolateral view. 182. Epigynum, ventral view. 183. Epigynum, dorsal view.

(figs. 184, 188); RTA abruptly narrowed distally (fig. 185). Leg spination: tibiae: I v0-1r-0; II v1r-1r-0; III v2-2-2.

FEMALE: Total length 6.30 ± 1.04 . Carapace 2.76 ± 0.33 long, 2.07 ± 0.22 wide. Femur II 1.86 ± 0.24 long (72 specimens examined). Eye sizes and interdistances: AME 0.08, ALE 0.11, PME 0.14, PLE 0.10; AME–AME 0.06, AME–ALE 0.01, PME–PME 0.02, PME–PLE 0.05, ALE–PLE 0.05. MOQ length 0.29, front width 0.22, back width 0.28. AEM with long lateral hoods and narrow middle portion (figs. 186, 189); AED long, narrow (fig. 187). Leg spination: tibiae: II v1r-1r-0; III v2-2-2; metatarsus III r1-2-2.

RECORDS: **United States** (county records only): *Arizona:* Cochise, Coconino, Gila, Greenlee, Maricopa, Navajo, Pima, Santa Cruz, Yavapai. *New Mexico:* Catron, Grant, Hidalgo. *Utah:* Washington. **Mexico:** *Baja California Norte:* 41 mi. E El Rosario at San Fernando Mision. *Baja California Sur:* 12

mi. NE Cabo San Lucas, Sierra Laguna (17 mi. NNE Todos Santos).

DISTRIBUTION: Utah to Baja California Sur (map 30).

NATURAL HISTORY: Mature males and females have been taken year-round. Specimens have been collected in pitfall traps, leaf litter, grass, and houses, in oak, ponderosa pine, pinyon pine, and juniper associations, in a palm oasis, and under trash, at elevations up to 7700 feet.

Drassyllus proclesis Chamberlin

Figures 190–195; Map 31

Drassyllus proclesis Chamberlin, 1922, p. 170 (male holotype from Santa Barbara, Santa Barbara County, California, in MCZ, examined). Roewer, 1954, p. 416. Bonnet, 1956, p. 1605. Ubick and Roth, 1973, p. 3.

Drassyllus monicus Chamberlin, 1936a, p. 27, fig. 35 (female holotype from Santa Monica, Los Angeles County, California, in AMNH, exam-

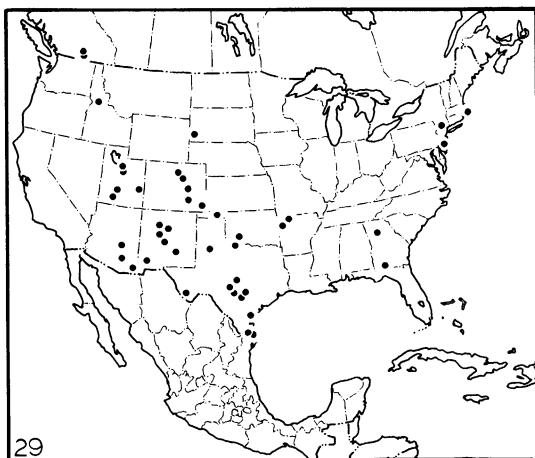
ined). Roewer, 1954, p. 416. Bonnet, 1956, p. 1605. Ubick and Roth, 1973, p. 2. NEW SYNONYMY.

DIAGNOSIS: *Drassyllus proclesis* seems closest to *D. mormon* and *D. mexicanus* but may be distinguished by the distally curled TA (figs. 190, 192) of males and the smoothly sloping AEM (figs. 191, 194) of females.

MALE: Total length 4.03–5.20. Carapace 1.87–2.27 long, 1.51–1.81 wide. Femur II 1.19–1.49 long. Eye sizes and interdistances: AME 0.07, ALE 0.09, PME 0.11, PLE 0.08; AME–AME 0.06, AME–ALE 0.01, PME–PME 0.02, PME–PLE 0.04, ALE–PLE 0.05. MOQ length 0.25, front width 0.20, back width 0.24. TA curled distally (figs. 190, 192); MA short, wide (fig. 193). Leg spination: femur II p0-0-0; tibiae: II v0-1r-0; III v2-2-2.

FEMALE: Total length 4.25–6.86. Carapace 1.87–2.89 long, 1.42–2.17 wide. Femur II 1.22–1.87 long. Eye sizes and interdistances: AME 0.07, ALE 0.10, PME 0.12, PLE 0.10; AME–AME 0.06, AME–ALE 0.02, PME–PME 0.03, PME–PLE 0.04, ALE–PLE 0.04. MOQ length 0.25, front width 0.20, back width 0.27. AEM smoothly sloping to sides (figs. 191, 194); MED coiled posteriorly (fig. 195). Leg spination: femur II p0-0-0; tibia II v0-1r-0.

MATERIAL EXAMINED: UNITED STATES:
California: *Los Angeles Co.:* Mt. Baldy Road (Evey Canyon), Apr. 24–May 12, 1969, elevation 2000 feet, pitfall (D. Bixler, DEB), 2♂; Old Topanga Canyon (Santa Monica Mountains), Apr. 29, 1955 (R. Schick), 1♀; Paradise Springs, June 15, 1954, elevation 1400 feet (O. Bryant, CAS), 1♂; Santa Monica, 1♀ (type); Topanga Canyon, Mar. 18, 1941 (W. Ivie), 1♂, 1♀. *Orange Co.:* Dana Point, San Juan Creek, July 1, 1931 (W. Ivie), 1♀. *Riverside Co.:* Riverside, Apr. 23, 1955, cottonwood litter (I. Newell), 1♀. *San Diego Co.:* 4.8 mi. S Julian, Apr. 26, 1959 (I. Newell), 1♀; Palomar Mountain State Park, July 13, 1953 (W. J. and J. W. Gertsch), 1♀; Santa Ysabel Creek, Aug. 1, 1947 (W. M. Pearce), 1♀. *Santa Barbara Co.:* San Marcos Pass, Apr. 1, 1960, elevation 2200 feet (W. J. Gertsch, W. Ivie, R.



MAP 29. North America, showing distribution of *Drassyllus dromeus*.

Schrammel), 1♂; Santa Barbara, Apr. 13 (R. V. Chamberlin, MCZ), 2♂ (including type).

DISTRIBUTION: Known only from southern California (map 31). A male in AMNH collected in Norwalk, Connecticut, by W. J. Gertsch was presumably transported by humans.

SYNONYMY: The simultaneous collection of both sexes indicates that *monicus* is the female of *proclesis*.

Drassyllus mexicanus (Banks),
new combination

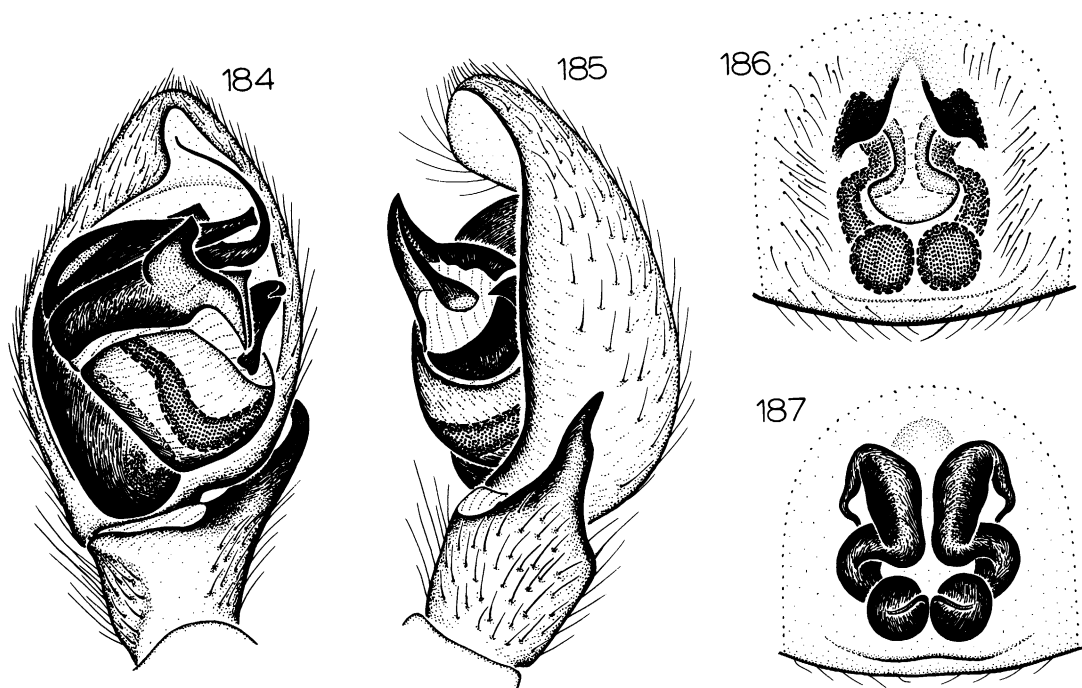
Figures 196–199, 204; Map 32

Prothesima mexicana Banks, 1898, p. 217, pl. 13, fig. 18 (female syntypes from Orizaba, Veracruz, Mexico, in CAS, destroyed, and MCZ, examined).

Zelotes mexicanus: Petrunkevitch, 1911, p. 150. Roewer, 1954, p. 469. Bonnet, 1959, p. 4935. Ubick and Roth, 1973, suppl. 3, p. 2.

Drassyllus lasalus Chamberlin and Gertsch, 1940, p. 13, fig. 30 (female holotype from La Sal Mountains, Grand County, Utah, in AMNH, examined). Roewer, 1954, p. 416. Ubick and Roth, 1973, p. 2. NEW SYNONYMY.

Drassyllus hubbelli Chamberlin and Gertsch, 1940, p. 15, figs. 28, 29 (male holotype from Springerville, Apache County, Arizona, in AMNH, examined). Roewer, 1954, p. 415. Ubick and Roth, 1973, p. 2. NEW SYNONYMY.



FIGS. 184–187. *Drassyllus mormon* Chamberlin. 184. Palp, ventral view. 185. Palp, retrolateral view. 186. Epigynum, ventral view. 187. Epigynum, dorsal view.

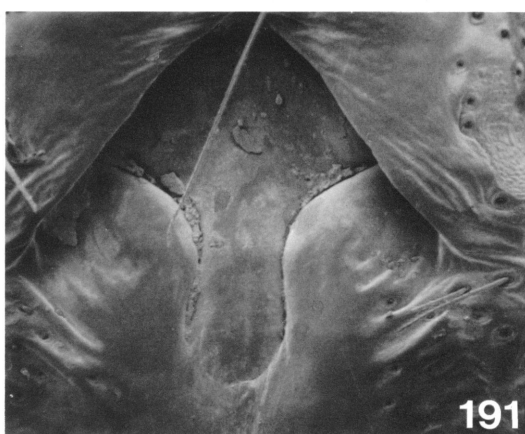
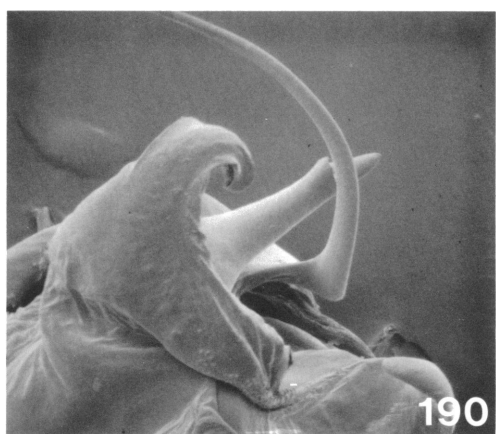
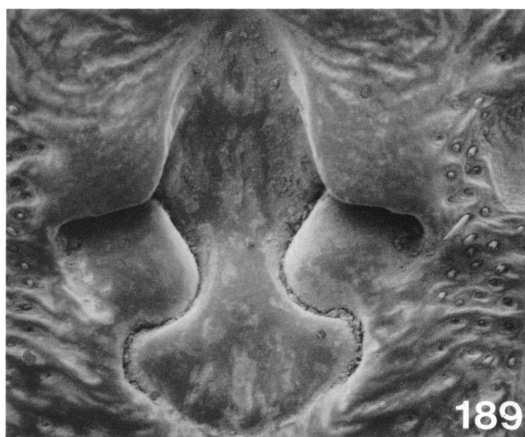
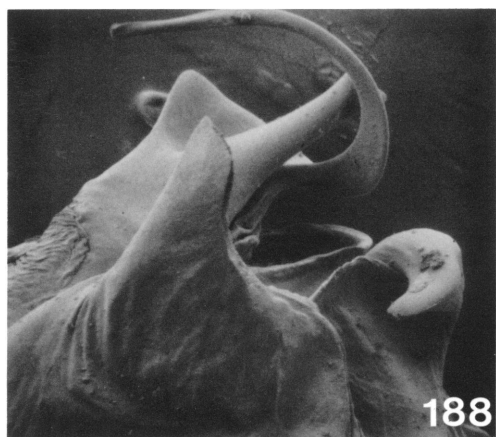
DIAGNOSIS: *Drassyllus mexicanus* seems closest to *D. mormon* and *D. proclesis* but may be distinguished by the long, straight TA (fig. 196) of males and the very wide AEM (figs. 198, 204) of females.

MALE: Total length 5.47, 5.87. Carapace 2.27, 2.57 long, 1.79, 1.98 wide. Femur II 1.58, 1.68 long. Eye sizes and interdistances: AME 0.07, ALE 0.12, PME 0.13, PLE 0.11; AME–AME 0.09, AME–ALE 0.02, PME–PME 0.02, PME–PLE 0.07, ALE–PLE 0.07. MOQ length 0.29, front width 0.23, back width 0.28. Palpal femur greatly expanded ventrally; TA and TAB forming continuous, straight line (fig. 196). RTA short, sinuous (fig. 197). Leg spination: tibiae: II v1r-1r-0; III v2-2-2, r1-1-0.

FEMALE: Total length 4.93–7.78. Carapace 2.12–2.89 long, 1.66–2.23 wide. Femur II 1.45–2.16 long. Eye sizes and interdistances: AME 0.08, ALE 0.11, PME 0.13, PLE 0.11; AME–AME 0.09, AME–ALE 0.01, PME–PME 0.02, PME–PLE 0.05, ALE–PLE 0.04.

MOQ length 0.32, front width 0.25, back width 0.28. AEM extremely wide (figs. 198, 204); MED with anteromedian projections (fig. 199). Leg spination: tibiae: II v1r-1r-0; III v2-2-2.

MATERIAL EXAMINED: UNITED STATES: **Arizona:** *Apache Co.*: 5 mi. E Springerville, Aug. 23–25, 1935 (I. and S. Cantrall, T. Hubbell), 1♂ (type). **Colorado:** *Montezuma Co.*: Mesa Verde National Park, Aug. 20, 1952 (B. Malkin), 1♀. **New Mexico:** *Los Alamos Co.*: White Rock, Sept. 9, 1969, in house (B. Lindberg), 1♀. *Torrance Co.*: no specific locality, Oct. 29, 1949 (C. C. Hoff), 1♀. **Utah:** *Grand Co.*: La Sal Mountains, Oct. 29, 1931 (W. Ivie), 1♀ (type). *San Juan Co.*: E Monticello, Sept. 3, 1941 (W. Ivie), 1♀. *Utah Co.*: 1 mi. S Cedar Fort, Aug. 20, 1971, under rocks (J. C. Cokendolpher, NVH), 1♂. **MEXICO:** **Veracruz:** Orizaba (Eisen and Vabiet, MCZ), 1♀ (type). **Zacatecas:** “Los Patos” Pond (SE Zacatecas), Dec. 29, 1943 (A. and L. Davis), 1♀.



FIGS. 188–191. 188, 189. *Drassyllus mormon* Chamberlin. 190, 191. *D. proclesis* Chamberlin. 188, 190. Palp, ventral view. 189, 191. Epigynum, ventral view.

DISTRIBUTION: Utah to Veracruz (map 32).

SYNONYMY: The similarities of both sexes to those of closely related species suggest that *hubbelli* is the male of *lasalus*. The description of *mexicanus* was inadequate to allow Chamberlin and Gertsch to recognize the species.

Drassyllus arizonensis (Banks)

Figures 200–203, 205; Map 33

Prothesima arizonensis Banks, 1901, p. 582, fig. 3 (female holotype from Catalina Springs, Pima County, Arizona, in USNM, examined).

Zelotes arizonensis: Banks, 1910, p. 7.

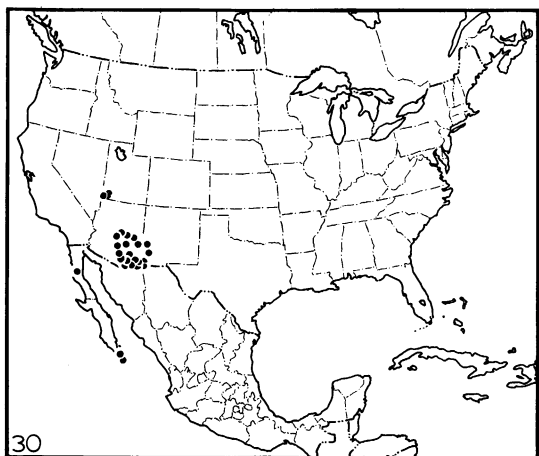
Drassyllus viduus Chamberlin, 1936a, p. 30, fig.

45 (female holotype from Scottsdale, Maricopa County, Arizona, in AMNH, examined). Roewer, 1954, p. 417. Bonnet, 1956, p. 1606. First synonymized by Ubick and Roth, 1973, p. 2.

Drassyllus arizonensis: Fox, 1938, p. 234, pl. 2, fig. 3. Roewer, 1954, p. 414. Bonnet, 1956, p. 1602. Ubick and Roth, 1973, p. 2.

DIAGNOSIS: *Drassyllus arizonensis* is a distinctive species easily recognized by the distally expanded TA (fig. 200) and bent RTA (fig. 201) of males and the anteriorly expanded MP (figs. 202, 205) of females.

MALE: Total length 4.46, 5.40. Carapace 2.03, 2.55 long, 1.58, 1.99 wide. Femur II 1.48, 1.74 long. Eye sizes and interdistances:



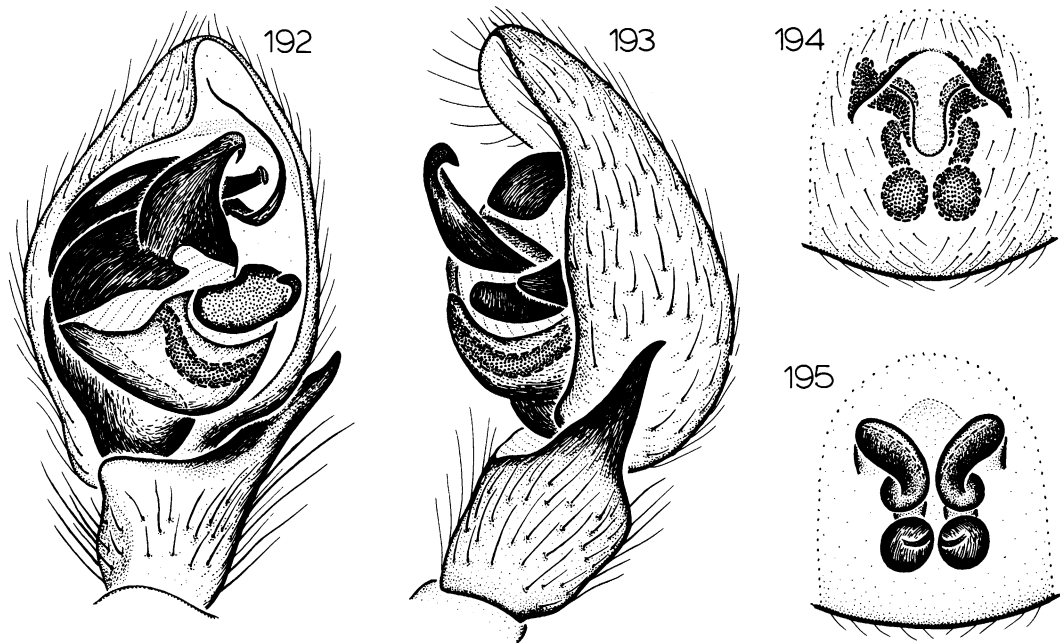
MAP 30. North America, showing distribution of *Drassyllus mormon*.

AME 0.07, ALE 0.10, PME 0.12, PLE 0.09; AME-AME 0.08, AME-ALE 0.01, PME-PME 0.02, PME-PLE 0.03, ALE-PLE 0.05. MOQ length 0.26, front width 0.22, back width 0.26. TA long, narrow, with expanded

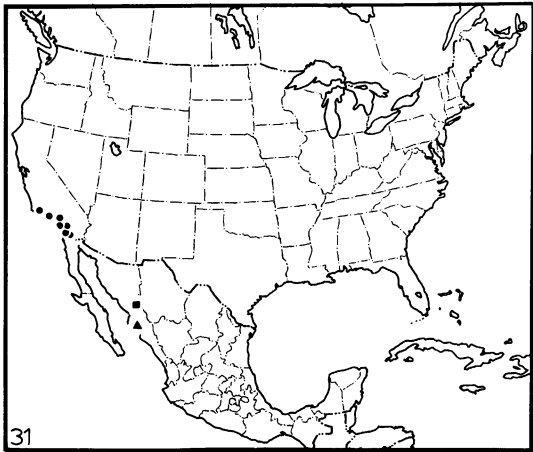
flange distally (fig. 200); RTA wide basally, bent, bifid distally (fig. 201). Leg spination: tibiae: II v1r-1r-0; III v2-2-2; metatarsi I, II, III v2-1p-0.

FEMALE: Total length 6.57 ± 0.46 . Carapace 2.52 ± 0.21 long, 1.91 ± 0.14 wide. Femur II 1.79 ± 0.13 long. Eye sizes and interdistances: AME 0.10, ALE 0.12, PME 0.15, PLE 0.11; AME-AME 0.09, AME-ALE 0.02, PME-PME 0.03, PME-PLE 0.04, ALE-PLE 0.07. MOQ length 0.34, front width 0.29, back width 0.31. MP expanded anteriorly, wider than AEM (figs. 202, 205); AED long (fig. 203). Leg spination: tibiae: II v1r-1r-0; III v2-2-2; metatarsi: I v2-1p-0; II v2-2-0; III v2-1p-0.

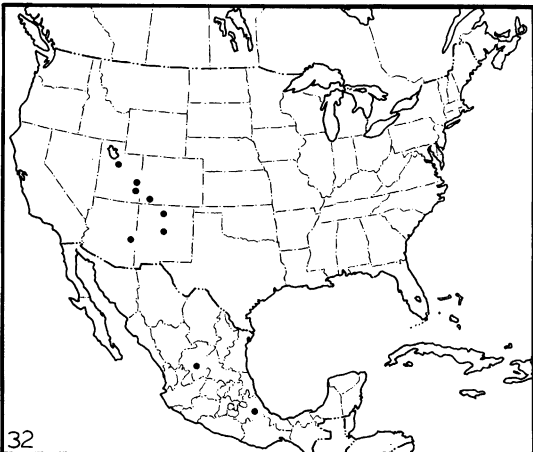
MATERIAL EXAMINED: UNITED STATES: **Arizona:** *Maricopa Co.*: 10 mi. NE Fort McDowell, Mar. 21, 1930 (J. Chamberlin), 1♀; Litchfield Park, Dec. 26, 1940 (S. and D. Mulaik), 2♀; Scottsdale, Dec. 30, 1902 (H. W. Britcher), 1♀ (type). *Pima Co.*: 20 mi. S Ajo, Jan. 4, 1941 (S. and D. Mulaik), 1♂, 3♀; 38 mi. S Ajo, Jan. 4, 1941 (S. and D. Mulaik), 1♀; Catalina Springs, 1♀ (type); Covered



FIGS. 192-195. *Drassyllus proclesis* Chamberlin. 192. Palp, ventral view. 193. Palp, retrolateral view. 194. Epigynum, ventral view. 195. Epigynum, dorsal view.



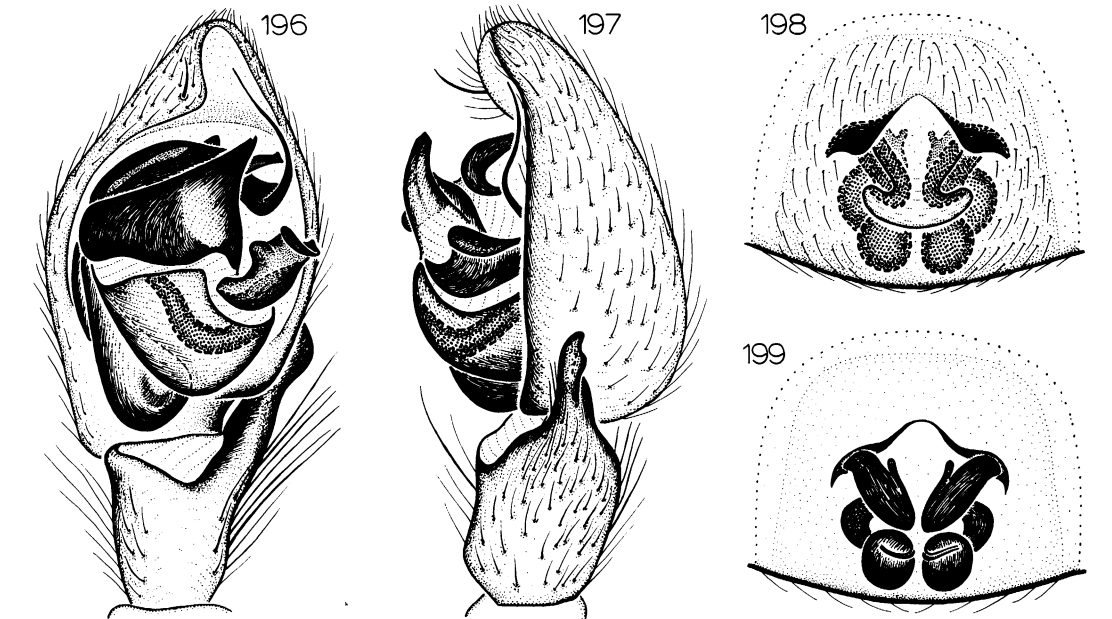
MAP 31. North America, showing distribution of *Drassyllus proclesis* (circles), *D. gammus* (triangle), and *D. callus* (square).



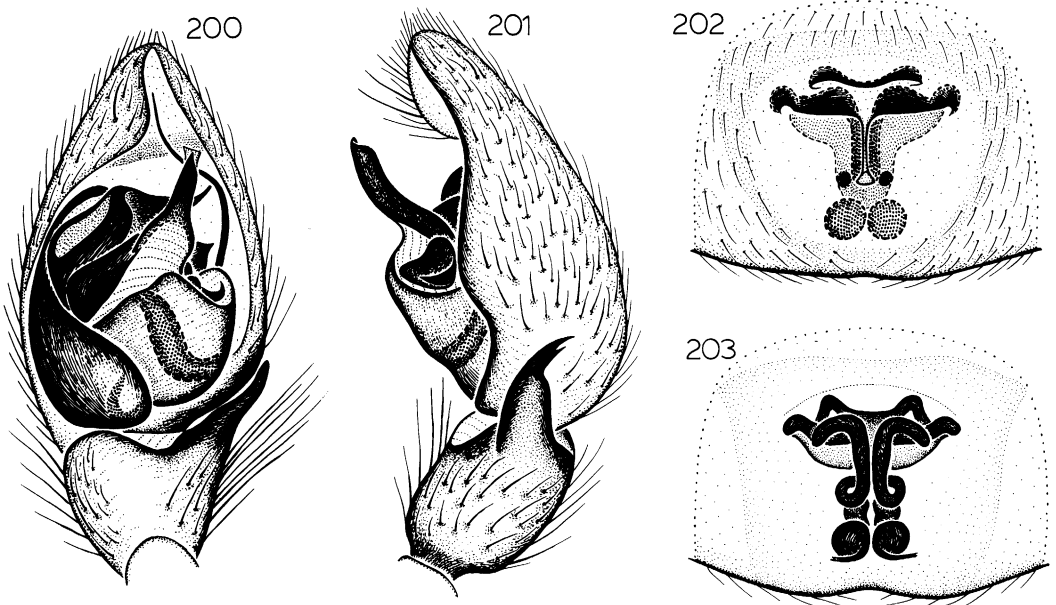
MAP 32. North America, showing distribution of *Drassyllus mexicanus*.

Wells, Jan. 3, 1941 (S. and D. Mulaik), 1 ♀; S Mountain View, Dec. 28, 1940 (S. and D. Mulaik), 2 ♀; Papago Well, Feb. 20, 1958 (V. Roth), 1 ♀; 12 mi. W Robles, Jan. 2, 1941 (S. and D. Mulaik), 3 ♀; Santa Rita Mountains,

Mar. 2, 1940 (R. H. Crandall), 1 ♀; Tucson, Mar. 7, 1935, under stone (O. Bryant), 1 ♀; Tucson Mountains, Jan. 18, 1970 (D. B. Richman, REL), 1 ♀; 10 mi. E Tucson, Dec. 28, 1940 (S. and D. Mulaik), 2 ♀; 3 mi. W Tucson, Jan. 20, 1960, under rock (J. A. Beatty, JAB),



FIGS. 196-199. *Drassyllus mexicanus* (Banks). 196. Palp, ventral view. 197. Palp, retrolateral view. 198. Epigynum, ventral view. 199. Epigynum, dorsal view.



FIGS. 200–203. *Drassyllus arizonensis* (Banks). 200. Palp, ventral view. 201. Palp, retrolateral view. 202. Epigynum, ventral view. 203. Epigynum, dorsal view.

1♀. MEXICO: **Baja California Norte:** Bahía de Los Ángeles, Jan. 15, 1965, on beach (V. Roth), 2♀. **Baja California Sur:** La Paz, Feb. 1–3, 1965 (V. Roth), 1♀; 28 mi. S Mulejé, Jan. 27, 1965 (V. Roth), 2♀; 17 mi. E San Ignacio, Jan. 25, 1965 (V. Roth), 1♀. **Sonora:** Campo Dolar, Feb. 26, 1971, shore (V. and B. Roth, VDR), 1♀; Guaymas, Feb. 1953 (A. Ebeling), 1♀; 13 mi. S turnoff from main highway to Puerto de Lobos, Mar. 18, 1974 (W. Brown, V. Roth), 1♀; 10 mi. W Sonoyta, Mar. 19–20, 1980, elevation 1200 feet (C. E. Griswold, UCB), 1♀; 25 mi. W Sonoyta, Dec. 28, 1960 (V. Roth), 1♀; 40 mi. W Sonoyta, Nov. 29, 1959 (V. Roth), 1♂.

DISTRIBUTION: Arizona, Sonora, and Baja California (map 33).

THE *mumai* GROUP

DIAGNOSIS: The *mumai* group contains those species in which the females have the epigynal midpiece expanded so that its lateral margins are almost parallel (as in figs. 207, 210, 212, 214). Males (known only in *D. mumai*) have a large, recurved terminal apophysis (figs. 206, 208) and a strong retrolateral

projection from the base of the terminal apophysis (fig. 209) similar to the retrolateral extension found in *D. insularis* and related species.

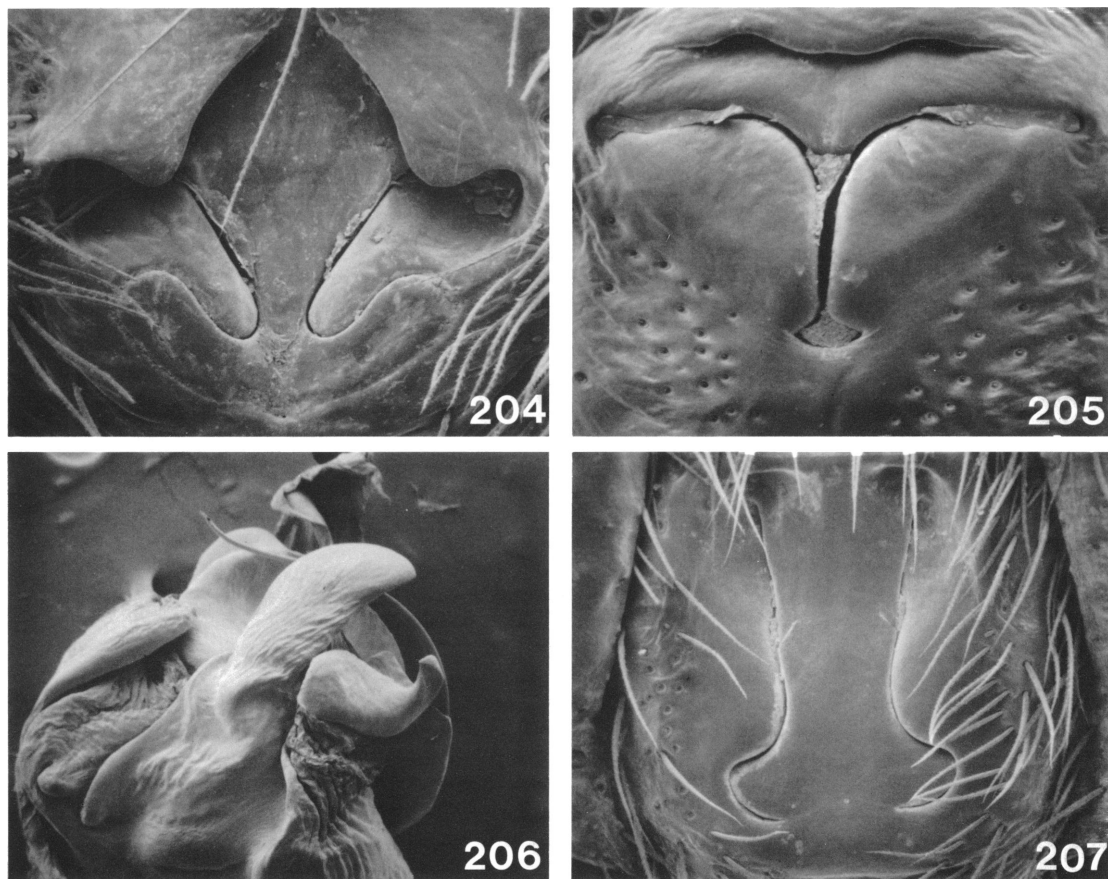
KEY TO SPECIES

1. Males (those of *gammus* and *callus* unknown) with palpi as in figures 206, 208, 209 *mumai*
Females 2
2. MED coiled posteriorly (fig. 211) *mumai*
MED not coiled posteriorly 3
3. MED greatly widened (fig. 215) *callus*
MED not greatly widened (fig. 213) *gammus*

Drassyllus mumai Gertsch and Riechert
Figures 206–211; Map 34

Drassyllus mumai Gertsch and Riechert, 1976, p. 13, figs. 12–14 (female holotype from Carrizozo, Lincoln County, New Mexico, in AMNH, examined).

DIAGNOSIS: Males of *D. mumai* may be recognized by the semicircular tip of the TA (figs. 206, 208) and pronglike extension of the TAB (fig. 209), females by the straight lateral margins of the MP (figs. 207, 210).



FIGS. 204–207. 204. *Drassyllus mexicanus* (Banks). 205. *D. arizonensis* (Banks). 206, 207. *D. mumai* Gertsch and Riechert. 204, 205, 207. Epigynum, ventral view. 206. Palp, ventral view.

MALE: Total length 3.35 ± 0.39 . Carapace 1.47 ± 0.17 long, 1.11 ± 0.13 wide. Femur II 0.92 ± 0.13 long (101 specimens examined). Eye sizes and interdistances: AME 0.06, ALE 0.08, PME 0.10, PLE 0.07; AME–AME 0.06, AME–ALE 0.01, PME–PME 0.02, PME–PLE 0.04, ALE–PLE 0.04. MOQ length 0.21, front width 0.18, back width 0.22. TA with semicircular tip (figs. 206, 208); TAB with distally directed pronglike retrolateral extension (fig. 209). Leg spination: tibia III v2-2-0.

FEMALE: Total length 3.66 ± 0.54 . Carapace 1.52 ± 0.13 long, 1.15 ± 0.11 wide. Femur II 0.98 ± 0.11 long (94 specimens examined). Eye sizes and interdistances: AME 0.05, ALE 0.08, PME 0.10, PLE 0.07; AME–AME 0.05, AME–ALE 0.01, PME–PME

0.02, PME–PLE 0.04, ALE–PLE 0.04. MOQ length 0.20, front width 0.15, back width 0.22. MP expanded, with straight lateral margins (figs. 207, 210); MED coiled posteriorly, with anterolateral projections (fig. 211). Leg spination: femur IV p0-0-0; tibia IV p1-0-1; metatarsus III p1-1-2.

RECORDS: **United States** (county records only): *Arizona:* Cochise, Gila, Maricopa, Pima, Yavapai. *Colorado:* Pueblo. *New Mexico:* Bernalillo, Catron, De Baca, Eddy, Grant, Hidalgo, Lincoln. *Texas:* Brewster, Presidio. **Mexico:** *Coahuila:* Saltillo.

DISTRIBUTION: Arizona to Coahuila (map 34).

NATURAL HISTORY: Mature males have been taken from December through September, mature females from January through

September. Specimens have been collected in pitfall traps, on rangeland, under cow pats, trash, and fallen cholla, and associated with yucca, ephedra, allthorn, and mesquite, at elevations up to 4600 feet.

***Drassyllus gammus*, new species**

Figures 212, 213; Map 31

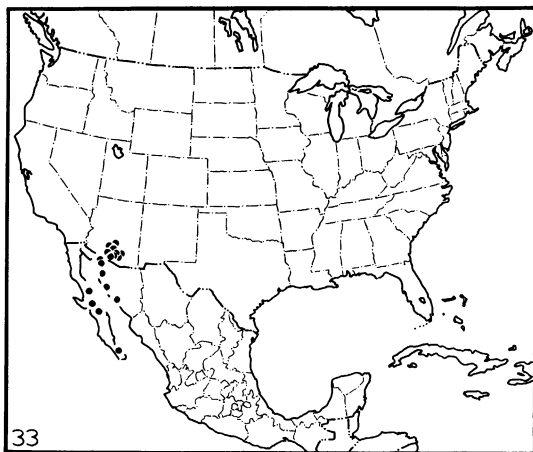
TYPE: Female holotype from jungle 6 miles south of Guamúchil, Sinaloa, Mexico (February 1, 1966; V. Roth), deposited in AMNH.

ETYMOLOGY: The specific name is an arbitrary combination of letters.

DIAGNOSIS: *Drassyllus gammus* may be distinguished by the ovoid enlargements situated behind the AED (fig. 213) of females.

MALE: Unknown.

FEMALE: Total length 6.17. Carapace 2.04 long, 1.58 wide. Femur II 1.49 long. Eye sizes and interdistances: AME 0.09, ALE 0.11, PME 0.13, PLE 0.10; AME-AME 0.05, AME-ALE 0.01, PME-PME 0.02, PME-PLP 0.04, ALE-PLP 0.05. MOQ length 0.26, front width 0.23, back width 0.28. MP widest posteriorly, almost fused with AEM (fig. 212); pair of ovoid enlargements behind AED (fig. 213). Leg spination: tibia II v0-1r-0.



MAP 33. North America, showing distribution of *Drassyllus arizonensis*.

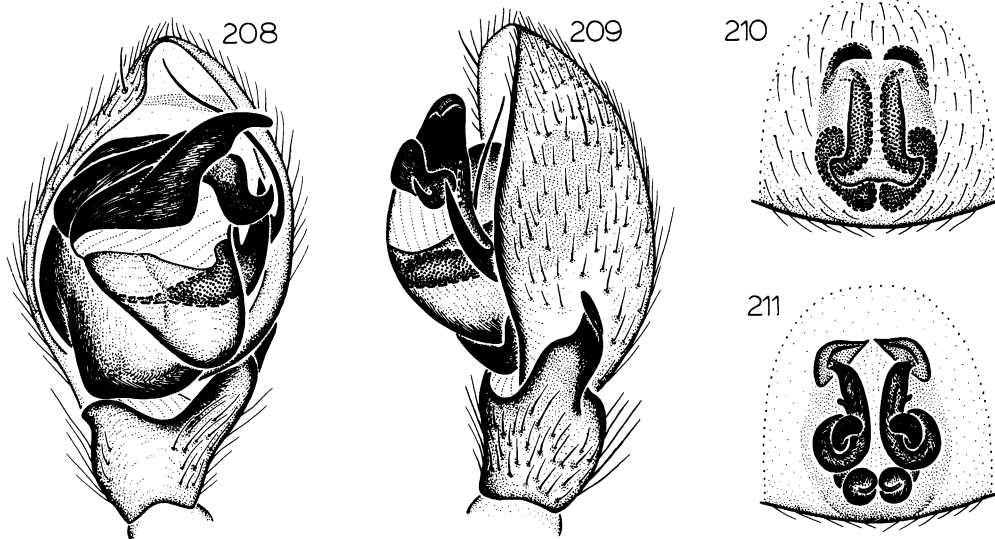
MATERIAL EXAMINED: Only the holotype.

DISTRIBUTION: Known only from Sinaloa, Mexico (map 31).

***Drassyllus callus*, new species**

Figures 214, 215; Map 31

TYPE: Female holotype from Agua Caliente, latitude 26°50' N, longitude 108°36' W,



FIGS. 208-211. *Drassyllus mumai* Gertsch and Riechert. 208. Palp, ventral view. 209. Palp, retro-lateral view. 210. Epigynum, ventral view. 211. Epigynum, dorsal view.

Sonora, Mexico (January 18, 1972; V. Roth), deposited in AMNH.

ETYMOLOGY: The specific name is an arbitrary combination of letters.

DIAGNOSIS: *Drassyllus callus* may be distinguished by the greatly expanded MED (fig. 215) of females.

MALE: Unknown.

FEMALE: Total length 5.49. Carapace 2.44 long, 1.92 wide. Femur II 1.73 long. Eye sizes and interdistances: AME 0.08, ALE 0.11, PME 0.15, PLE 0.11; AME-AME 0.06, AME-ALE 0.02, PME-PME 0.01, PME-PL 0.06, ALE-PL 0.06. MOQ length 0.35, front width 0.22, back width 0.31. AEM invaginated at middle (fig. 214); MED greatly expanded (fig. 215). Leg spination: tibiae: II v1r-1r-0; III v2-2-2.

MATERIAL EXAMINED: Only the holotype.

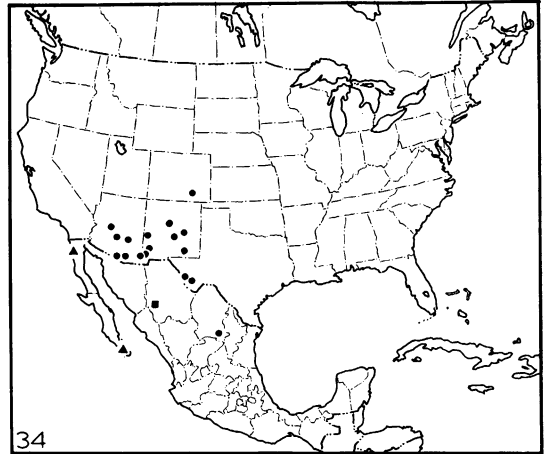
DISTRIBUTION: Known only from Sonora, Mexico (map 31).

THE *insularis* GROUP

DIAGNOSIS: The *insularis* group contains those species in which the females have a pair of median extensions on the anterior epigynal ducts (as in figs. 219, 255, 279) and the anterior edges of the epigynal midpiece extending out to the sides, often at considerable length (as in figs. 250, 266). The known males lack stiff setae dorsally on the palpal tibia and have either a long spur extending from the retrolateral side of the base of the terminal apophysis (as in figs. 216, 224, 248, 252) or a greatly elongated and distally directed embolar projection (figs. 234, 238, 264, 276).

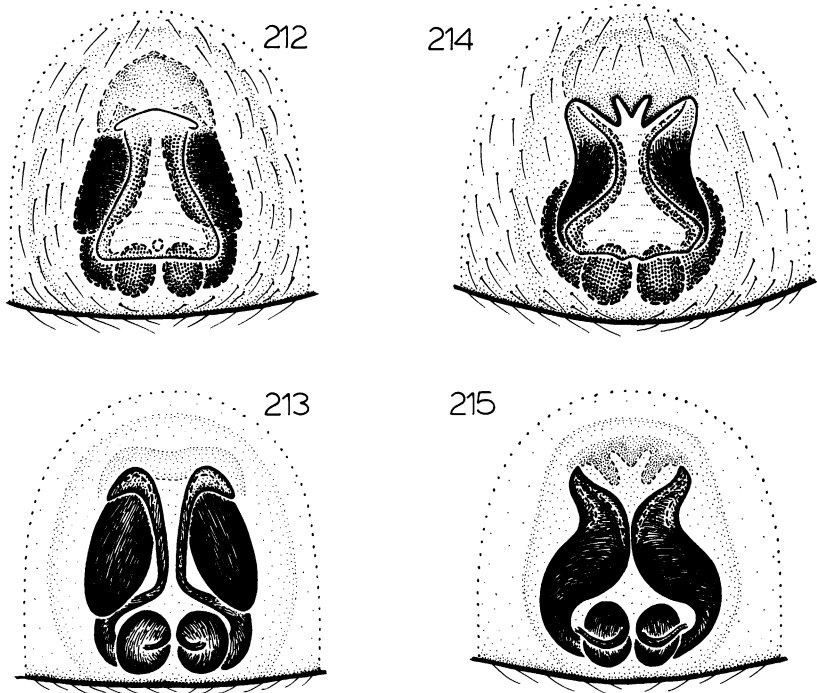
KEY TO SPECIES

1. Males (those of *coajus*, *mazus*, *chibus*, *ojus*, *villus*, *baccus*, *sonus*, *mirus*, *tinus*, and *zimus* unknown) 2
- Females 10
2. TA with pointed projection on retrolateral side (figs. 216, 220, 224) 3
- TA without pointed projection on retrolateral side 4
3. EMB relatively short (figs. 216, 220) *insularis*
- EMB relatively long (fig. 224) *tepus*
4. TAB with long retrolateral extension (figs. 248, 252, 260) 5



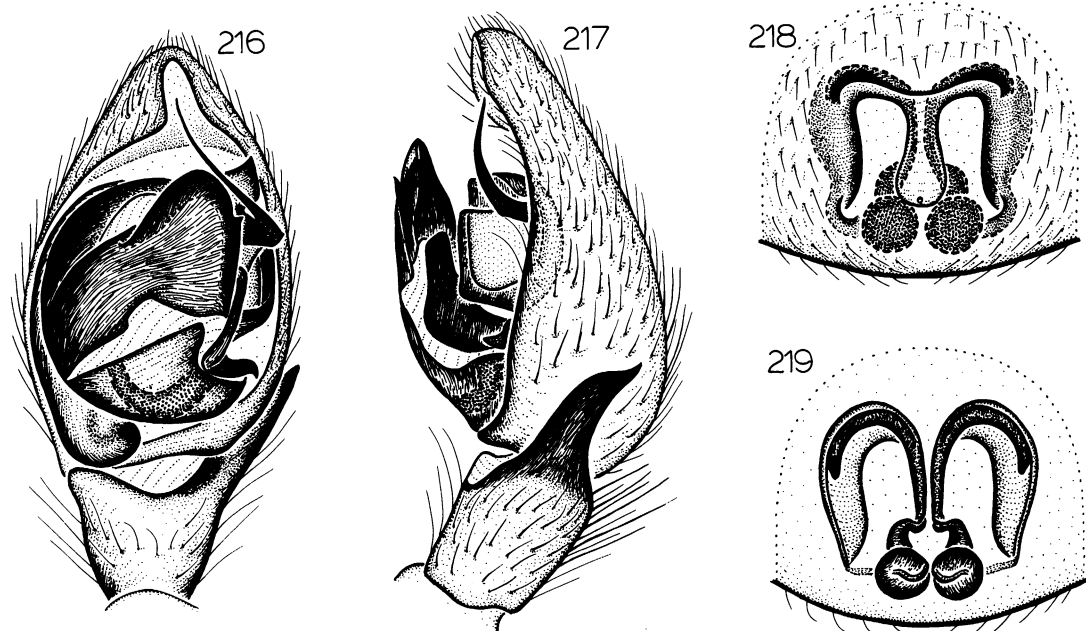
MAP 34. North America, showing distribution of *Drassyllus mumai* (circles), *D. talus* (triangles), and *D. baccus* (square).

- TAB without long retrolateral extension (figs. 234, 238, 264, 276) 7
5. RTA abruptly narrowed distally (figs. 260, 261) *salton*
- RTA smoothly narrowed distally (figs. 249, 253) 6
6. TA abruptly narrowed and twisted distally (figs. 222, 248) *saphes*
- TA smoothly narrowed and not twisted distally (figs. 252, 256) *fractus*
7. TA bifid (figs. 270, 276) *lepidus*
- TA entire 8
8. TA rounded retrolaterally (fig. 264), RTA relatively short (fig. 265) *prosaphes*
- TA angular retrolaterally (figs. 234, 238); RTA relatively long (figs. 235, 239) 9
9. TA relatively long, wide (fig. 234) *eurus*
- TA relatively short, narrow (fig. 238) *talus*
10. AEM extending almost entire width of epigynum (figs. 116, 218, 226, 228, 230, 232, 236, 242, 274, 278, 280) 18
- AEM extending less than half of epigynal width or not present as separate structure 11
11. AEM distinct from MP (figs. 240, 244, 250, 254, 262) 14
- AEM absent, presumably fused to MP (figs. 246, 266, 272) 12
12. Epigynum widest posteriorly (fig. 272) *mirus*
- Epigynum widest anteriorly or at middle (figs. 246, 266) 13



FIGS. 212–215. 212, 213. *Drassyllus gammus*, new species. 214, 215. *D. callus*, new species. 212, 214. Epigynum, ventral view. 213, 215. Epigynum, dorsal view.

- 13. Lateral edges of epigynum straight (figs. 266, 269) *prosaphes*
 Lateral edges of epigynum sinuous (fig. 246) *sonus*
- 14. AEM reduced to small hood between lateral extensions of MP (figs. 259, 262) *salton*
 AEM extending over part of lateral extensions of MP (figs. 240, 244, 250, 254) 15
- 15. Epigynum longer than wide (fig. 240) *talus*
 Epigynum wider than long (figs. 244, 250, 254) 16
- 16. Lateral edges of epigynum straight (fig. 244) *baccus*
 Lateral edges of epigynum curved (figs. 250, 254) 17
- 17. Lateral edges of epigynum extended toward MP (figs. 223, 250) *saphes*
 Lateral edges of epigynum not extended toward MP (figs. 254, 257) *fractus*
- 18. AED extending to near SP (figs. 219, 227, 229, 231) 19
 AED not extending to near SP (figs. 117, 233, 237, 243, 275, 279, 281) 22
- 19. Epigynum roughly square (figs. 218, 226, 228) 20
 Epigynum roughly triangular (fig. 230) *mazus*
- 20. Epigynum wider than long (fig. 228) *coajus*
 Epigynum longer than wide (figs. 218, 226) 21
- 21. Epigynum with posterolateral corners (figs. 218, 221) *insularis*
 Epigynum without posterolateral corners (fig. 226) *tepus*
- 22. MED and AED connected by large flange (figs. 233, 237, 279, 281) 23
 MED and AED not connected by large flange (figs. 117, 243, 275) 26
- 23. AEM extending almost to SP (figs. 271, 278) *lepidus*
 AEM restricted to anterior portion of epigynum (figs. 232, 236, 280) 24
- 24. SP displaced laterally (figs. 280, 281) *eurus*
 SP not displaced laterally (figs. 233, 237) 25
- 25. AED extending beyond AEM (figs. 232, 233) *chibus*



FIGS. 216–219. *Drassyllus insularis* (Banks). 216. Palp, ventral view. 217. Palp, retrolateral view. 218. Epigynum, ventral view. 219. Epigynum, dorsal view.

- AED not extending beyond AEM (figs. 236, 237) *ojus*
 26. AEM with lateral extensions (figs. 116, 274) 27
 AEM without lateral extensions (fig. 242) *villus*
 27. AEM relatively long (fig. 274) *tinus*
 AEM relatively short (fig. 116) *zimus*

Drassyllus insularis (Banks)

Figures 216–221; Map 35

Callilepis insularis Banks, 1900, p. 97 (female holotype from Isla de Guadalupe, Baja California Norte, Mexico, in MCZ, examined). Bonnet, 1956, p. 932.

Zelotes irritans Chamberlin, 1919, p. 6, pl. 2, fig. 6 (male holotype from Claremont, Los Angeles County, California, in MCZ, examined). First synonymized by Ubick and Roth, 1973, p. 2.

Drassyllus irritans: Chamberlin, 1922, p. 170, Roewer, 1954, p. 415. Bonnet, 1956, p. 1604.

Drassyllus apachus Chamberlin, 1922, p. 168 (two female syntypes from Cottonia, Arizona, in MCZ, examined). Roewer, 1954, p. 413. Bonnet, 1956, p. 1602. First synonymized by Ubick and Roth, 1973, p. 2.

Drassyllus empiricus Chamberlin, 1924, p. 628,

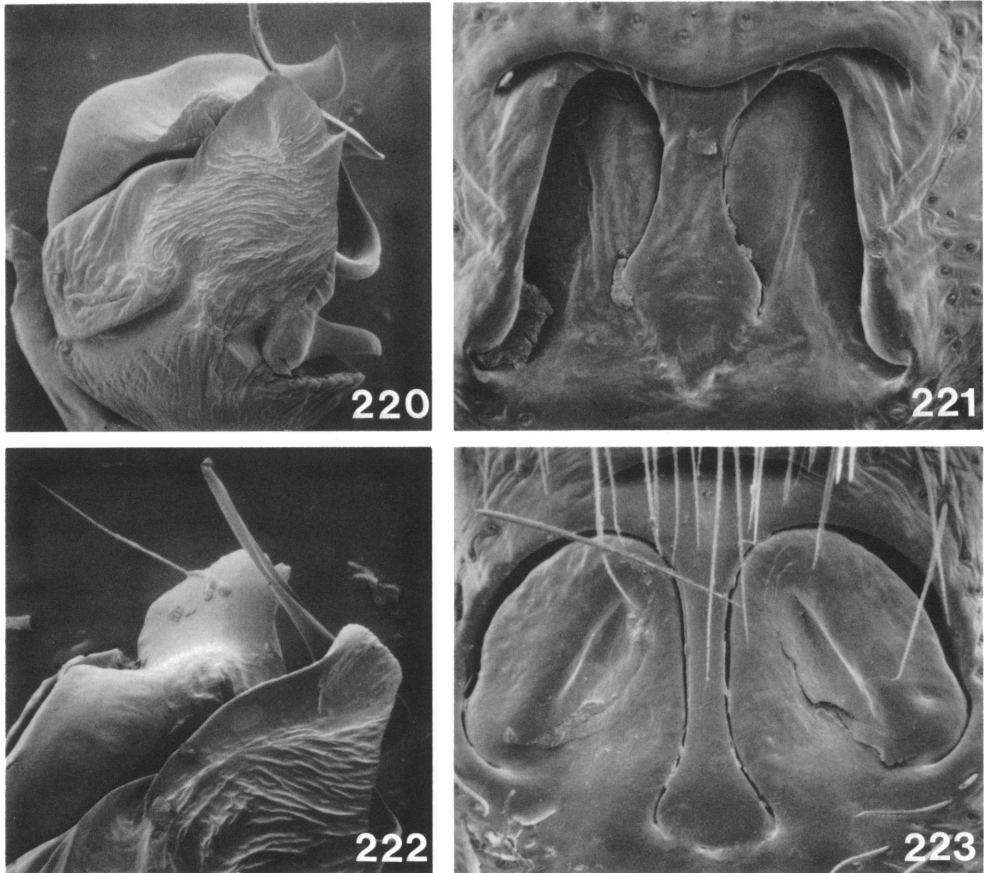
fig. 66 (male holotype from Ensenada, Baja California Norte, Mexico, in CAS, examined). Roewer, 1954, p. 414. Bonnet, 1956, p. 1603. First synonymized by Ubick and Roth, 1973, p. 2.

Drassyllus rationalis Chamberlin, 1924, p. 629, fig. 67 (female holotype from Bahía de Los Angeles, Baja California Norte, Mexico, in CAS, examined). Roewer, 1954, p. 416. Bonnet, 1956, p. 1605. First synonymized by Ubick and Roth, 1973, p. 2.

Drassyllus monteriensis Schenkel, 1950, p. 38, figs. 6, 7 (male lectotype designated by Forcart, 1961, p. 67, from Berkeley Hills, Alameda County, California, in NMB, examined). Roewer, 1954, p. 416. First synonymized by Ubick and Roth, 1973, p. 2.

Pterotricha insularis: Roewer, 1954, p. 378.

DIAGNOSIS: *Drassyllus insularis* seems closest to *D. tepus* (in both species the TA bears a pointed retrolateral projection) but may be distinguished by the relatively short EMB and single retrolateral projection of the TAB (figs. 216, 220) of males and the ridges at the posterolateral corners of the epigynum (figs. 218, 221) of females.



FIGS. 220–223. 220, 221. *Drassyllus insularis* (Banks). 222, 223. *D. saphes* Chamberlin. 220, 222. Palp, ventral view. 221, 223. Epigynum, ventral view.

MALE: Total length 4.82 ± 1.28 . Carapace 2.27 ± 0.32 long, 1.77 ± 0.21 wide. Femur II 1.49 ± 0.23 long (434 specimens examined). Eye sizes and interdistances: AME 0.06, ALE 0.10, PME 0.13, PLE 0.11; AME–AME 0.09, AME–ALE 0.02, PME–PME 0.04, PME–PLE 0.06, ALE–PLE 0.08. MOQ length 0.32, front width 0.21, back width 0.30. TA with retrolateral point, TAB with long, entire retrolateral extension (figs. 216, 220); RTA long, distally sinuous (fig. 217). Leg spination: femur IV r0-1-1; tibiae: II v1r-2-0; III d1-0-0, v2-2-2, r1-1-1; IV p2-1-1, r2-1-1; metatarsus II v2-1p-0.

FEMALE: Total length 5.23 ± 0.82 . Carapace 2.09 ± 0.15 long, 1.57 ± 0.12 wide. Fe-

mur II 1.40 ± 0.09 long (581 specimens examined). Eye sizes and interdistances: AME 0.07, ALE 0.11, PME 0.12, PLE 0.10; AME–AME 0.06, AME–ALE 0.02, PME–PME 0.04, PME–PLE 0.05, ALE–PLE 0.06. MOQ length 0.29, front width 0.20, back width 0.28. AEM wide, MP with long lateral extensions, ridges present at posterolateral corners (figs. 218, 221); AED extending to spermathecae (fig. 219). Leg spination: femora: III d1-1-1; IV r0-1-1; tibiae: II v0-1r-0; III d1-0-0, v2-2-2; IV r2-1-1; metatarsi: II v2-1p-0; III r0-2-2; IV r1-2-2.

RECORDS: **Canada:** *British Columbia:* Lillooet, Oliver, Summerland. **United States** (county records only): *Arizona:* Maricopa,

Mojave, Pima, Pinal, Yavapai, Yuma. *California*: Alameda, Contra Costa, El Dorado, Fresno, Humboldt, Imperial, Inyo, Kern, Lake, Los Angeles, Madera, Marin, Mariposa, Mendocino, Merced, Mono, Monterey, Orange, Riverside, Sacramento, San Benito, San Bernardino, San Diego, San Luis Obispo, San Mateo, Santa Barbara, Santa Clara, Shasta, Siskiyou, Solano, Sonoma, Stanislaus, Tehama, Tulare, Tuolumne, Ventura, Yolo. *Colorado*: Delta, Mesa. *Idaho*: Ada, Owyhee, Payette, Washington. *Nevada*: Humboldt, Nye. *Oregon*: Deschutes, Jackson, Jefferson, Josephine, Malheur, Wheeler. *Utah*: Beaver, Box Elder, Carbon, Emery, Grand, Salt Lake, San Juan, Sevier, Tooele, Uintah, Utah, Washington, Weber. *Washington*: Grant, Kittitas. *Mexico*: *Baja California Norte*: Bahía de Los Angeles, El Rosario, 6 mi. E El Rosario, 22 mi. E El Rosario, Ensenada, 42 mi. S Ensenada, Isla de Guadalupe, Isla de San Martín, 14 mi. N Laguna Hanson, La Jolla Canyon (16 mi. E San José), 10–15 mi. S La Rumorosa, 1 mi. N Millers Landing, San José, 5 mi. E San José, San Telmo de Arriba, Santa Inés, 10 mi. S Tecate, 40 mi. S Tecate, 8 mi. W Tecate, 2 mi. S Tijuana. *Baja California Sur*: Bahía Concepcion (nr. El Coyote), 26 mi. S Loreto, 28 mi. S Mulejé. *Sonora*: Cerro Colorado (SW Sonoyta), 10 mi. W Sonoyta, 81 mi. W Sonoyta.

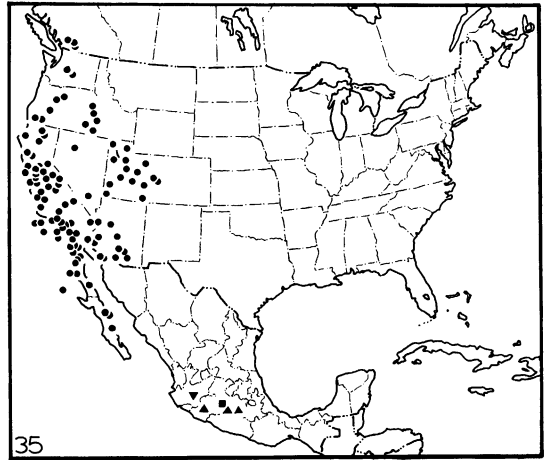
DISTRIBUTION: British Columbia to Baja California and Sonora (map 35).

NATURAL HISTORY: Mature males and females have been taken year-round. Specimens have been collected in pitfall traps in chaparral and citrus litter, under logs and rocks, associated with alfalfa, box elder, cottonwood, oak, poplar, and yucca, in nests of *Neotoma* woodrats and *Phidippus johnsoni* jumping spiders, in the burrows of tarantulas, and in buildings, at elevations up to 7000 feet.

Drassyllus tepus, new species

Figures 224–227; Map 35

TYPES: Male holotype and female paratype from Tepetates Pass, 15 miles west of Hidalgo, latitude 19°39' N, longitude 100°45'



MAP 35. North America, showing distribution of *Drassyllus insularis* (circles), *D. tepus* (square), *D. coajus* (upright triangles), and *D. mazus* (inverted triangle).

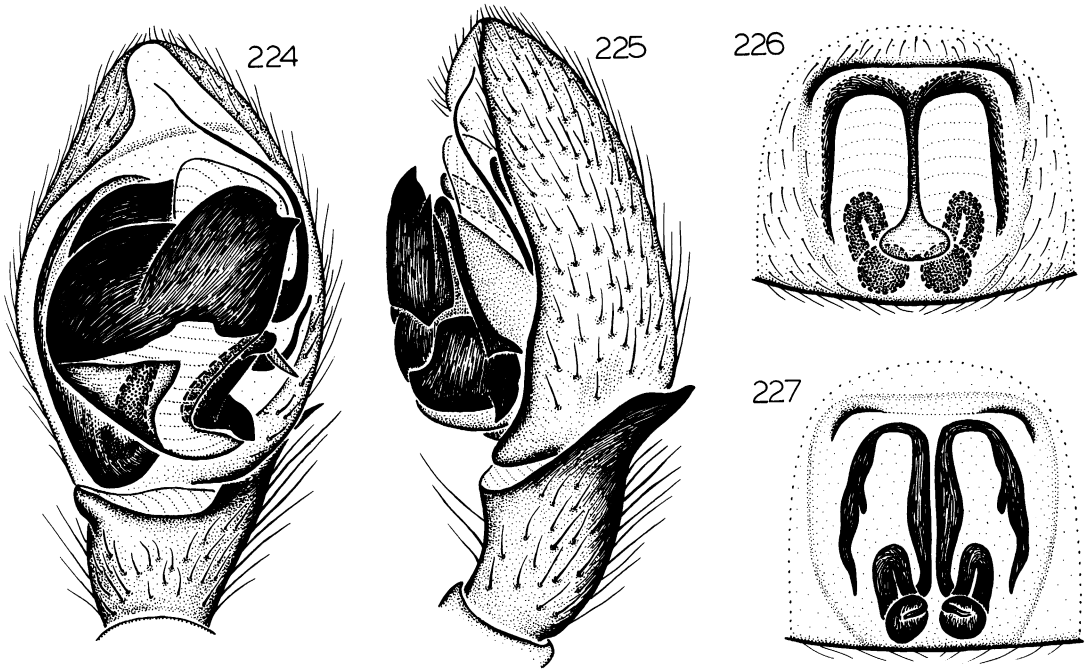
W, Michoacan, Mexico (May 8, 1963; W. J. Gertsch and W. Ivie), deposited in AMNH.

ETYMOLOGY: The specific name is an arbitrary combination of letters.

DIAGNOSIS: *Drassyllus tepus* seems closest to *D. insularis* but may be distinguished by the bifid projection of the TAB (figs. 224, 225) of males and the absence of ridges at the posterolateral epigynal corners (fig. 226) of females.

MALE: Total length 5.04. Carapace 2.10 long, 1.69 wide. Femur II 1.33 long. Eye sizes and interdistances: AME 0.07, ALE 0.08, PME 0.10, PLE 0.09; AME–AME 0.04, AME–ALE 0.01, PME–PME 0.02, PME–PLE 0.05, ALE–PLE 0.03. MOQ length 0.23, front width 0.18, back width 0.22. TA with pointed retrolateral projection, TAB with bifid retrolateral projection (fig. 224); RTA oblique (fig. 225). Leg spination: tibiae: II v1r-1r-0; III v2-2-2; metatarsus III v2-2-0.

FEMALE: Total length 4.63. Carapace 2.08 long, 1.60 wide. Femur II 1.26 long. Eye sizes and interdistances: AME 0.07, ALE 0.08, PME 0.10, PLE 0.10; AME–AME 0.05, AME–ALE 0.01, PME–PME 0.03, PME–PLE 0.05, ALE–PLE 0.04. MOQ length 0.25, front width 0.20, back width 0.22. AEM extending width of epigynum (fig. 226); AED



FIGS. 224–227. *Drassyllus tepus*, new species. 224. Palp, ventral view. 225. Palp, retrolateral view. 226. Epigynum, ventral view. 227. Epigynum, dorsal view.

extending to SP (fig. 227). Leg spination: tibia IV p1-0-1.

MATERIAL EXAMINED: Only the types.

DISTRIBUTION: Known only from Michoacan, Mexico (map 35).

***Drassyllus coajus*, new species**

Figures 228, 229; Map 35

TYPE: Female holotype from Coajomulco, Morelos, Mexico (June 7, 1946; J. C. and D. L. Pallister), deposited in AMNH.

ETYMOLOGY: The specific name is an arbitrary combination of letters.

DIAGNOSIS: *Drassyllus coajus* seems closest to *D. mazus* (in both species the AEM is greatly elongated) but may be distinguished by the rectangular epigynum (fig. 228) of females.

MALE: Unknown.

FEMALE: Total length 4.58–5.83. Carapace 1.86–2.28 long, 1.37–1.73 wide. Femur II 1.20–1.48 long. Eye sizes and interdistances: AME 0.07, ALE 0.09, PME 0.10, PLE 0.07; AME–AME 0.07, AME–ALE 0.01, PME–

PME 0.02, PME–PLE 0.05, ALE–PLE 0.03. MOQ length 0.24, front width 0.21, back width 0.22. AEM greatly elongated (fig. 228); AED extended to SP (fig. 229). Leg spination: tibia IV p1-0-1.

OTHER MATERIAL EXAMINED: MEXICO: México: Ixtapan del Oro, June 8, 1941 (F. Bonet), 1♀. Michoacan: 14.1 mi. W Uruapan, Aug. 15, 1967, elevation 7040 feet (R. E. Leech, REL), 1♀.

DISTRIBUTION: Central Mexico (map 35).

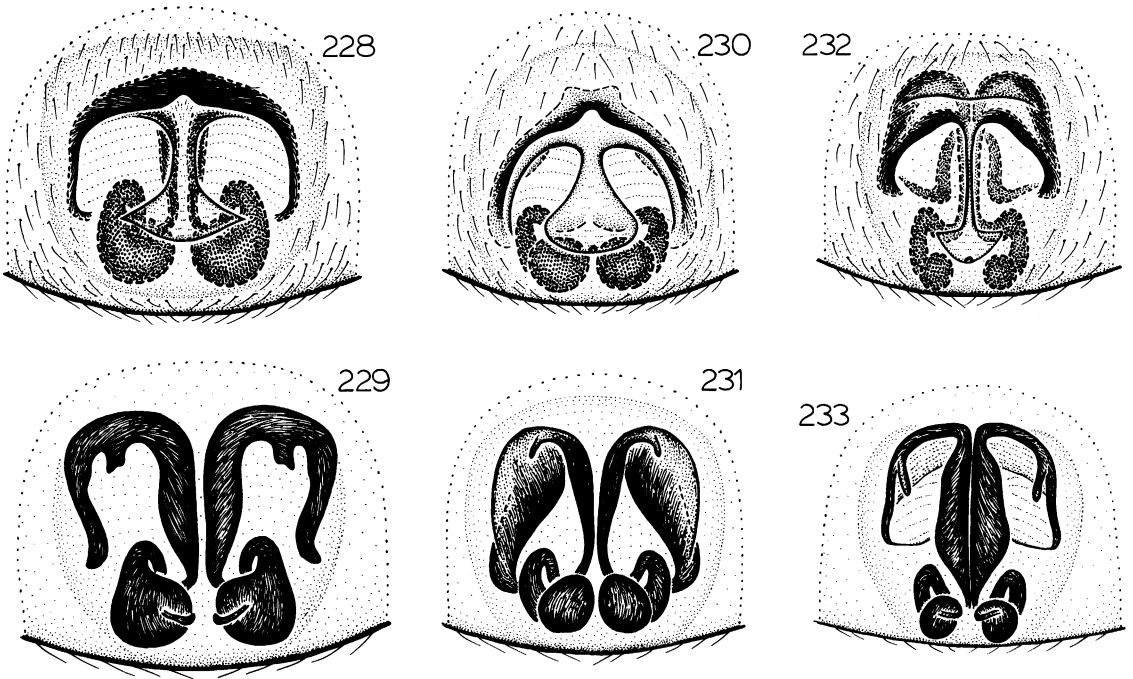
***Drassyllus mazus*, new species**

Figures 230, 231; Map 35

TYPE: Female holotype from 3 miles south of Mazamitla, latitude 19°49' N, longitude 103°05' W, Jalisco, Mexico (May 10, 1963; W. J. Gertsch and W. Ivie), deposited in AMNH.

ETYMOLOGY: The specific name is an arbitrary combination of letters.

DIAGNOSIS: *Drassyllus mazus* seems closest to *D. coajus* but may be distinguished by the triangular epigynum (fig. 230) of females.



FIGS. 228–233. 228, 229. *Drassyllus coajus*, new species. 230, 231. *D. mazus*, new species. 232, 233. *D. chibus*, new species. 228, 230, 232. Epigynum, ventral view. 229, 231, 233. Epigynum, dorsal view.

MALE: Unknown.

FEMALE: Total length 4.07, 4.69. Carapace 1.87, 1.89 long, 1.33, 1.43 wide. Femur II 0.97, 1.17 long. Eye sizes and interdistances: AME 0.07, ALE 0.07, PME 0.10, PLE 0.08; AME–AME 0.05, AME–ALE 0.02, PME–PME 0.02, PME–PLE 0.04, ALE–PLE 0.03. MOQ length 0.23, front width 0.19, back width 0.22. AEM greatly elongated (fig. 230); AED expanded anteriorly (fig. 231). Leg spination: tibia IV p1-0-1; metatarsi: I v0-0-0; III p0-1-2.

MATERIAL EXAMINED: One female taken with the holotype.

DISTRIBUTION: Known only from Jalisco, Mexico (map 35).

***Drassyllus chibus*, new species**

Figures 232, 233; Map 36

TYPE: Female holotype from an elevation of 1000 m. at Barranca de Río Batopilas, 120 km. south of Creel, Chihuahua, Mexico

(February 26, 1966; J. Reddell and W. Bell), deposited in AMNH.

ETYMOLOGY: The specific name is an arbitrary combination of letters.

DIAGNOSIS: *Drassyllus chibus* seems closest to *D. ojus*, *D. eurus*, and *D. talus* (in all four species the MED and AED are connected by a large translucent flange) but may be distinguished by the AED extending beyond the AEM (figs. 232, 233) in females.

MALE: Unknown.

FEMALE: Total length 4.39. Carapace 1.86 long, 1.37 wide. Femur II 1.22 long. Eye sizes and interdistances: AME 0.07, ALE 0.09, PME 0.10, PLE 0.09; AME–AME 0.05, AME–ALE 0.02, PME–PME 0.03, PME–PLE 0.06, ALE–PLE 0.04. MOQ length 0.24, front width 0.19, back width 0.23. AEM extending width of epigynum (fig. 232); AED extending anterior of AEM (fig. 233). Leg spination: tibiae: II v0-1r-0; III v2-2-2.

MATERIAL EXAMINED: Only the holotype.

DISTRIBUTION: Known only from Chihuahua, Mexico (map 36).

***Drassyllus ojus*, new species**

Figures 236, 237; Map 36

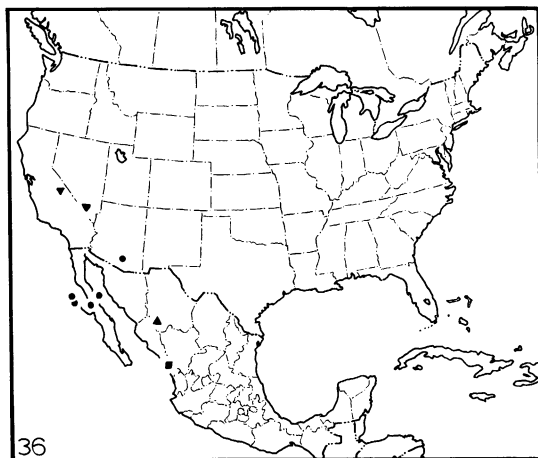
TYPE: Female holotype from Laguna Ojo de Liebre, Baja California Sur, Mexico (February 23, 1966; V. Roth), deposited in AMNH.

ETYMOLOGY: The specific name is an arbitrary combination of letters.

DIAGNOSIS: *Drassyllus ojus* seems closest to *D. chibus*, *D. eurus*, and *D. talus* but may be distinguished by the rounded anterior edges of the MP (fig. 236) of females.

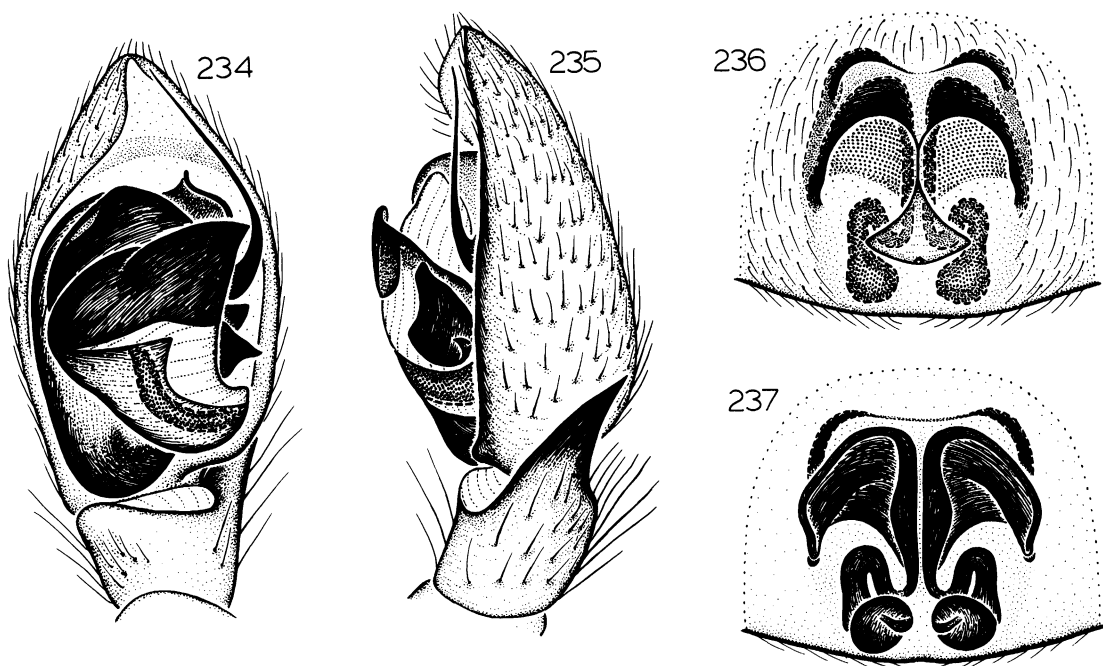
MALE: Unknown.

FEMALE: Total length 3.78–5.94. Carapace 1.52–2.20 long, 1.22–1.71 wide. Femur II 1.08–1.55 long. Eye sizes and interdistances: AME 0.07, ALE 0.09, PME 0.11, PLE 0.08; AME–AME 0.06, AME–ALE 0.02, PME–PME 0.02, PME–PLE 0.04, ALE–PLE 0.03. MOQ length 0.22, front width 0.20, back width 0.24. AEM wide (fig. 236); AED not

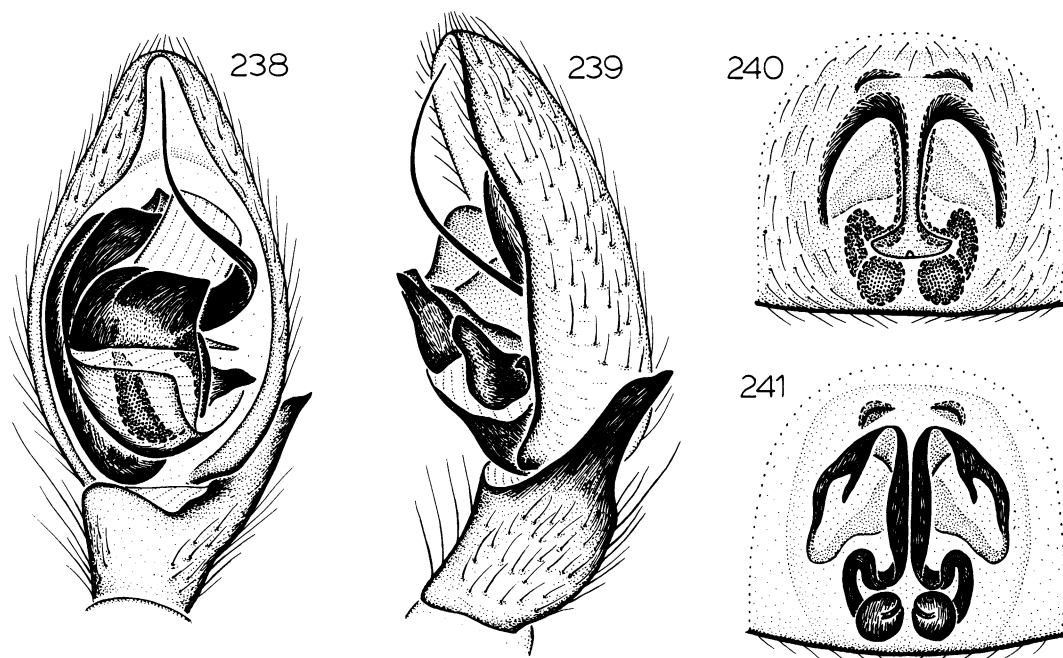


MAP 36. North America, showing distribution of *Drassyllus ojus* (circles), *D. villus* (square), *D. chibus* (upright triangle), and *D. eurus* (inverted triangles).

reaching AEM (fig. 237). Leg spination: tibiae: III v2-2-2; IV p1-0-1; metatarsi: I v1r-0-0; III v2-1p-0.



FIGS. 234–237. 234, 235. *Drassyllus eurus*, new species. 236, 237. *D. ojus*, new species. 234. Palp, ventral view. 235. Palp, retrolateral view. 236. Epigynum, ventral view. 237. Epigynum, dorsal view.



FIGS. 238–241. *Drassyllus talus*, new species. 238. Palp, ventral view. 239. Palp, retrolateral view. 240. Epigynum, ventral view. 241. Epigynum, dorsal view.

OTHER MATERIAL EXAMINED: UNITED STATES: **Arizona:** County uncertain: south-central part of state, quadrant around latitude 33°N, longitude 111°W (W. Ivie), 1♀. MEXICO: **Baja California Norte:** Isla Natividad, May 30, 1944 (B. F. Osorio), 1♀; Isla Salsipuedes, Mar. 15, 1971 (V. F. Lee, CAS), 1♀; Islas San Benito (west side), Jan. 20, 1977 (G. J. Mallick, CAS), 1♀.

DISTRIBUTION: Arizona south to Baja California Sur, Mexico (map 36).

***Drassyllus eurus*, new species**

Figures 234, 235, 280, 281; Map 36

TYPES: Male holotype and female paratype from a pitfall trap on a desert dune at Eureka Valley, Inyo County, California (April 1978; Giuliani, Hardy, and Andrews), deposited in CAS.

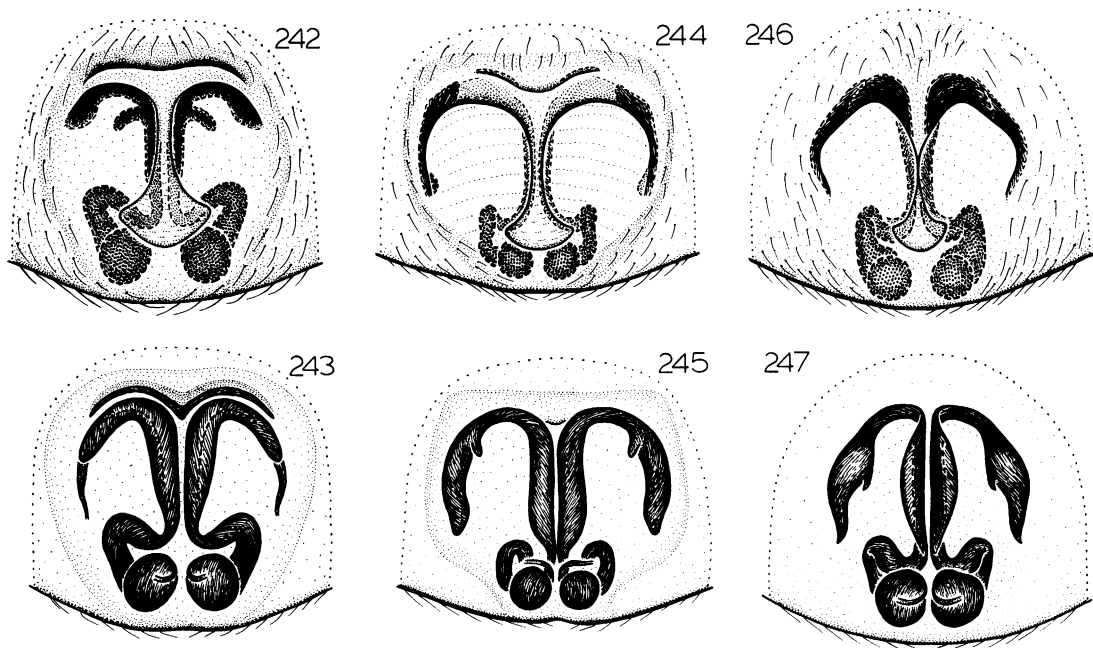
ETYMOLOGY: The specific name is an arbitrary combination of letters.

DIAGNOSIS: *Drassyllus eurus* seems closest to *D. chibus*, *D. ojus*, and *D. talus* but may be distinguished by the relatively long,

wide TA (fig. 234) of males and the laterally displaced SP (figs. 280, 281) of females.

MALE: Total length 1.88–2.34. Carapace 0.94–0.99 long, 0.72–0.81 wide. Femur II 0.60–0.72 long. Eye sizes and interdistances: AME 0.04, ALE 0.06, PME 0.06, PLE 0.05; AME–AME 0.05, AME–ALE 0.01, PME–PME 0.03, PME–PLE 0.03, ALE–PLE 0.03. MOQ length 0.16, front width 0.12, back width 0.15. TA relatively long, wide, arched (fig. 234); RTA relatively short (fig. 235). Leg spination: femora: I p0-0-0; IV p0-0-0, r0-0-0; tibia IV p1-0-1, v1p-1p-2, r1-0-1; metatarsi: I v0-0-0; III p0-1-2, r0-1-2; IV p0-2-2, v2-0-0, r0-2-1.

FEMALE: Total length 2.92. Carapace 1.12 long, 0.82 wide. Femur II 0.74 long. Eye sizes and interdistances: AME 0.05, ALE 0.07, PME 0.09, PLE 0.06; AME–AME 0.04, AME–ALE 0.00, PME–PME 0.01, PME–PLE 0.04, ALE–PLE 0.03. MOQ length 0.16, front width 0.14, back width 0.19. AEM wide (fig. 280); SP displaced to sides of epigynum (fig. 281). Leg spination: femora: I, II



FIGS. 242–247. 242, 243. *Drassyllus villus*, new species. 244, 245. *D. baccus*, new species. 246, 247. *D. sonus*, new species. 242, 244, 246. Epigynum, ventral view. 243, 245, 247. Epigynum, dorsal view.

p0-0-0; III p0-0-1, r0-0-0; IV p0-0-0, r0-0-0; patella III r0-0-0; tibiae: III p0-1-1, v0-1p-1p, r0-1-0; IV p1-0-1, v1p-2-2, r0-1-1; metatarsi: I, II v0-0-0; III p0-0-1, v0-0-0, r0-0-1; IV p0-1-1, v1p-0-0, r0-1-0.

OTHER MATERIAL EXAMINED: One male taken with the types (CDFA) and one male taken at Mercury, Nye County, Nevada on November 13, 1961.

DISTRIBUTION: California and Nevada (map 36).

***Drassyllus talus*, new species**

Figures 238–241; Map 34

TYPE: Female holotype from an elevation of 100 feet at the west end of Punta Banda, Baja California Norte, Mexico (July 11, 1969; S. C. Williams and V. F. Lee), deposited in CAS.

ETYMOLOGY: The specific name is an arbitrary combination of letters.

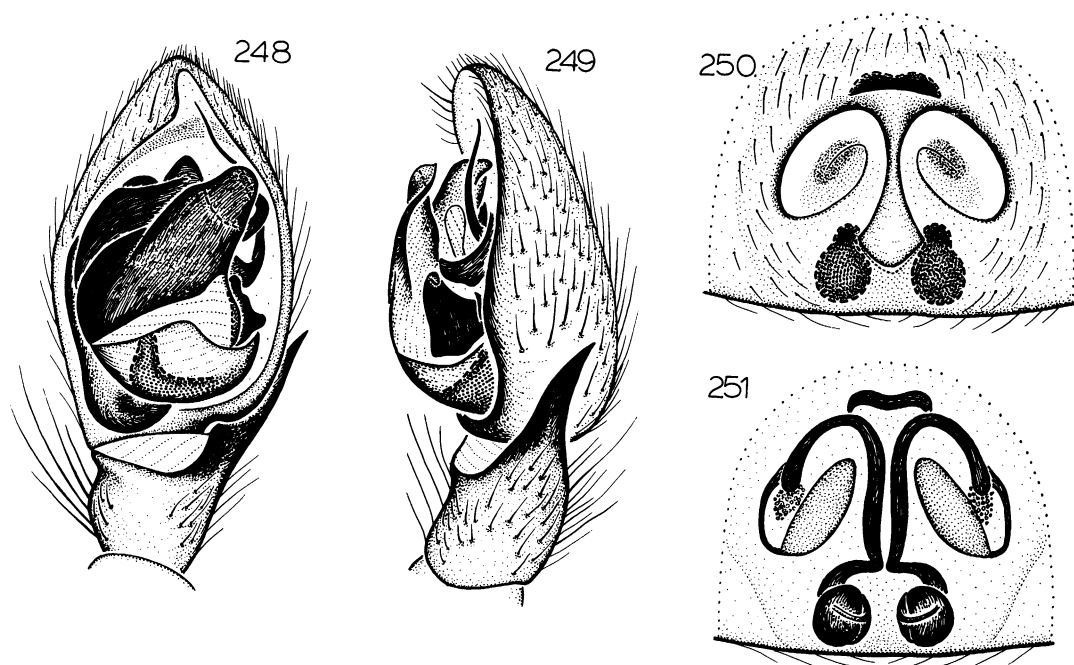
DIAGNOSIS: *Drassyllus talus* seems closest to *D. chibus*, *D. ojus*, and *D. eurus* but may be distinguished by the relatively short, nar-

row TA (fig. 238) of males and the narrow AEM (fig. 240) of females.

MALE: Total length 2.61. Carapace 1.22 long, 0.95 wide. Femur II 0.83 long. Eye sizes and interdistances: AME 0.04, ALE 0.05, PME 0.05, PLE 0.05; AME–AME 0.03, AME–ALE 0.01, PME–PME 0.03, PME–PLE 0.04, ALE–PLE 0.04. MOQ length 0.13, front width 0.12, back width 0.13. TA relatively short, narrow (fig. 238); RTA relatively short (fig. 239). Leg spination: tibia II v0-1r-0; metatarsi: I v0-0-0; II v1p-0-0; III p0-2-2.

FEMALE: Total length 5.90. Carapace 2.43 long, 1.80 wide. Femur II 1.71 long. Eye sizes and interdistances: AME 0.06, ALE 0.10, PME 0.11, PLE 0.09; AME–AME 0.09, AME–ALE 0.02, PME–PME 0.03, PME–PLE 0.05, ALE–PLE 0.05. MOQ length 0.29, front width 0.20, back width 0.25. AEM not extending width of epigynum (fig. 240); MED and AED connected by translucent flange (fig. 241).

OTHER MATERIAL EXAMINED: MEXICO:



FIGS. 248–251. *Drassyllus saphes* Chamberlin. 248. Palp, ventral view. 249. Palp, retrolateral view. 250. Epigynum, ventral view. 251. Epigynum, dorsal view.

Baja California Sur: Sierra Laguna, 17 mi. ENE Todos Santos, Dec. 12–18, 1979, elevation 6000 feet (C. E. Griswold, UCB), 1♂.

DISTRIBUTION: Known only from Baja California, Mexico (map 34).

***Drassyllus villus*, new species**

Figures 242, 243; Map 36

TYPE: Female holotype from an elevation of 6200 feet at about 52 miles east of Villa Unión, Sinaloa, Mexico (August 25, 1965; W. J. Gertsch and R. Hastings), deposited in AMNH.

ETYMOLOGY: The specific name is an arbitrary combination of letters.

DIAGNOSIS: *Drassyllus villus* seems closest to *D. baccus* (both species have recurved extensions of the MP outlining large paramedian discs) but may be distinguished by the wider AEM (fig. 242) of females.

MALE: Unknown.

FEMALE: Total length 4.93. Carapace 1.84 long, 1.43 wide. Femur II 1.30 long. Eye sizes and interdistances: AME 0.06, ALE

0.07, PME 0.09, PLE 0.07; AME–AME 0.04, AME–ALE 0.02, PME–PME 0.03, PME–PLE 0.04, ALE–PLE 0.05. MOQ length 0.22, front width 0.15, back width 0.21. AEM extending almost width of epigynum (fig. 242); AED with narrow posterior extensions (fig. 243). Leg spination: tibiae: III v2-2-2; IV p1-0-1, v1p-2-2.

MATERIAL EXAMINED: Only the holotype.

DISTRIBUTION: Known only from Sinaloa, Mexico (map 36).

***Drassyllus baccus*, new species**

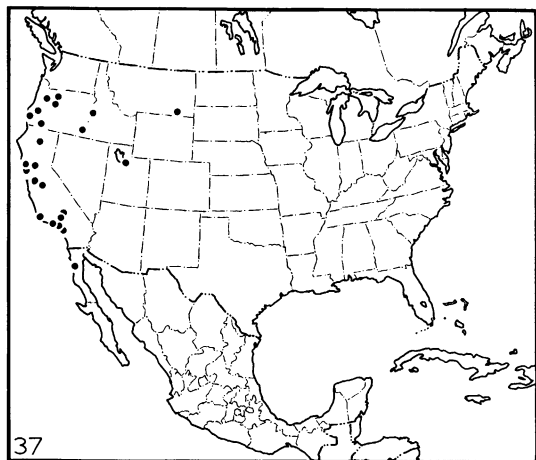
Figures 244, 245; Map 34

TYPE: Female holotype from between Creel and Batopilas, Chihuahua, Mexico (February 28, 1966; J. Reddell and W. Bell), deposited in AMNH.

ETYMOLOGY: The specific name is an arbitrary combination of letters.

DIAGNOSIS: *Drassyllus baccus* seems closest to *D. villus* but may be distinguished by the narrower AEM (fig. 244) of females.

MALE: Unknown.



MAP 37. North America, showing distribution of *Drassyllus saphes*.

FEMALE: Total length 6.62. Carapace 2.22 long, 1.85 wide. Femur II 1.56 long. Eye sizes and interdistances: AME 0.08, ALE 0.09, PME 0.12, PLE 0.09; AME-AME 0.06, AME-ALE 0.01, PME-PME 0.03, PME-PLP 0.04, ALE-PLP 0.04. MOQ length

0.25, front width 0.22, back width 0.28. AEM occupying only half of epigynal width (fig. 244); AED narrowed anteriorly (fig. 245). Leg spination: tibiae: II v1r-1r-0; III v2-2-2.

MATERIAL EXAMINED: Only the holotype.

DISTRIBUTION: Known only from Chihuahua, Mexico (map 34).

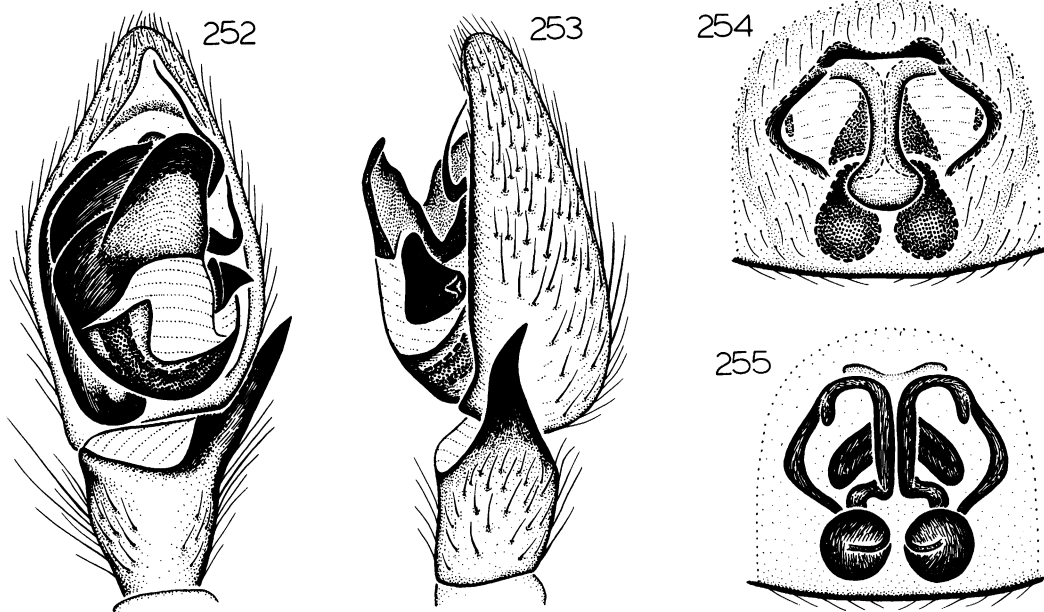
Drassyllus saphes Chamberlin

Figures 222, 223, 248-251; Map 37

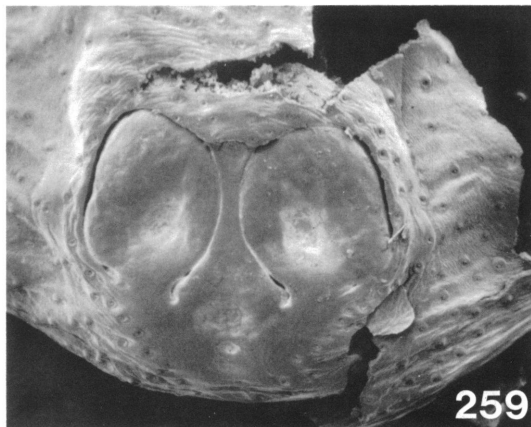
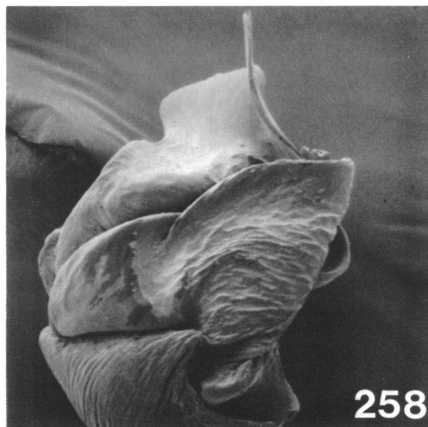
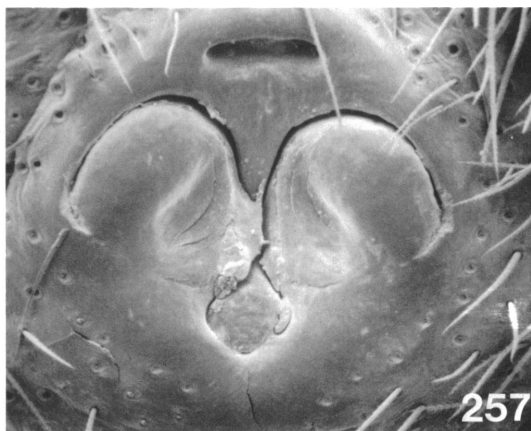
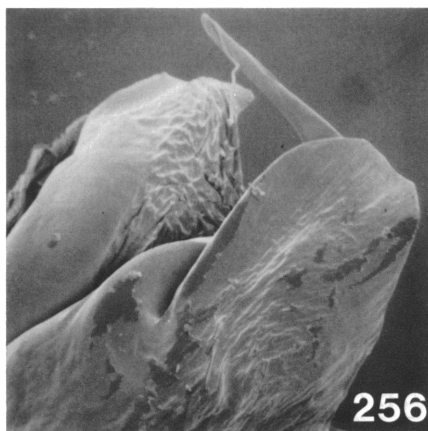
Drassyllus saphes Chamberlin, 1936a, p. 29, fig. 44 (female holotype from Los Angeles, Los Angeles County, California, in AMNH, examined). Roewer, 1954, p. 417. Bonnet, 1956, p. 1606. Ubick and Roth, 1973, p. 3.

DIAGNOSIS: *Drassyllus saphes* seems closest to *D. fractus* and *D. salton* (in all three species the TA is a broad, rounded lobe) but may be distinguished by the distally twisted TA (figs. 222, 249) of males and the long, rounded lateral extensions of the MP (figs. 223, 250) of females.

MALE: Total length 3.90 ± 0.47 . Carapace 1.70 ± 0.17 long, 1.30 ± 0.13 wide. Femur II 1.06 ± 0.13 long. Eye sizes and interdis-



FIGS. 252-255. *Drassyllus fractus* Chamberlin. 252. Palp, ventral view. 253. Palp, retrolateral view. 254. Epigynum, ventral view. 255. Epigynum, dorsal view.



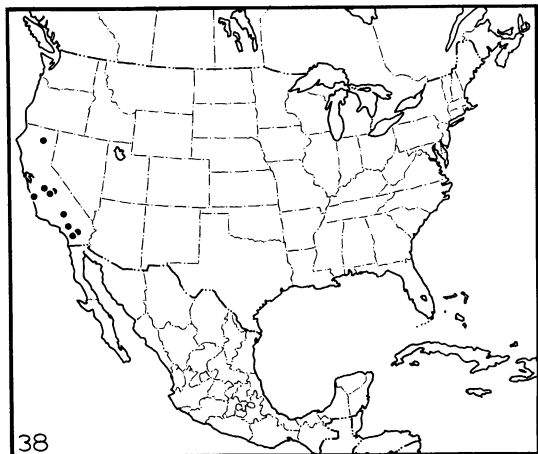
FIGS. 256–259. 256, 257. *Drassyllus fractus* Chamberlin. 258, 259. *D. salton*, new species. 256, 258. Palp, ventral view. 257, 259. Epigynum, ventral view.

tances: AME 0.05, ALE 0.06, PME 0.09, PLE 0.06; AME–AME 0.05, AME–ALE 0.01, PME–PME 0.02, PME–PLE 0.04, ALE–PLE 0.04. MOQ length 0.20, front width 0.16, back width 0.20. TA narrowed, twisted distally (figs. 222, 248); RTA blade-shaped (fig. 249). Leg spination: tibiae: I v0-1r-0; II v1r-0-0; III v2-2-2; IV r2-1-1.

FEMALE: Total length 5.43 ± 1.18 . Carapace 2.27 ± 0.59 long, 1.70 ± 0.42 wide. Femur II 1.42 ± 0.38 long. Eye sizes and interdistances: AME 0.05, ALE 0.07, PME 0.10, PLE 0.07; AME–AME 0.05, AME–ALE 0.01, PME–PME 0.02, PME–PLE 0.04, ALE–PLE 0.05. MOQ length 0.19, front width 0.16, back width 0.22. MP with recurved lateral extensions (figs. 223, 250);

AED expanded at tip (fig. 251). Leg spination: femur IV p0-1-1, r0-1-1; tibiae: III v2-2-2, r1-1-1; IV r2-1-1; metatarsi: I v1p-0-0; III v2-2-0.

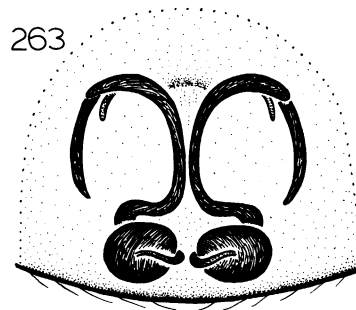
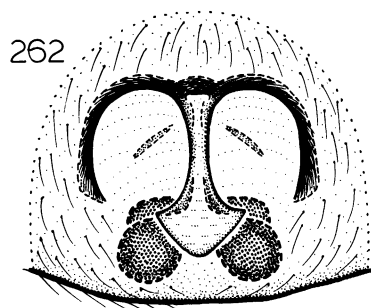
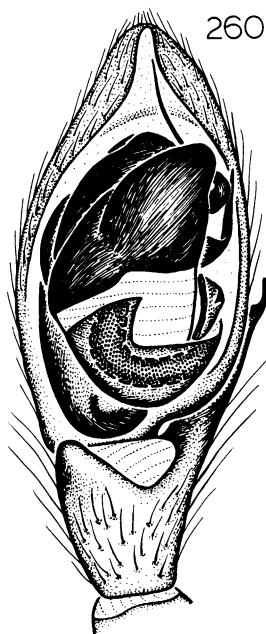
MATERIAL EXAMINED: UNITED STATES: **California:** *Contra Costa Co.:* 4 mi. NE Orinda, May 26, 1967, pitfall (UCB), 1♂; Wildcat Canyon, May 18, 1978 (E. Rogers, UCB), 1♂. *Kern Co.:* Bakersfield, Aug. 19, 1964, cotton (Byerly, UCR), 1♂. *Los Angeles Co.:* Glendale, June 1946 (E. I. Schlinger), 1♀; Los Angeles, Nov.–Dec. 1927 (G. Grant), 1♀ (type); Los Angeles Basin, Dec. 1954 (L. Moszkowski), 1♀. *Marin Co.:* Mt. Tamalpais, May 11, 1968 (B. Butterworth, CAS), 1♂. *Santa Barbara Co.:* Santa Barbara, June



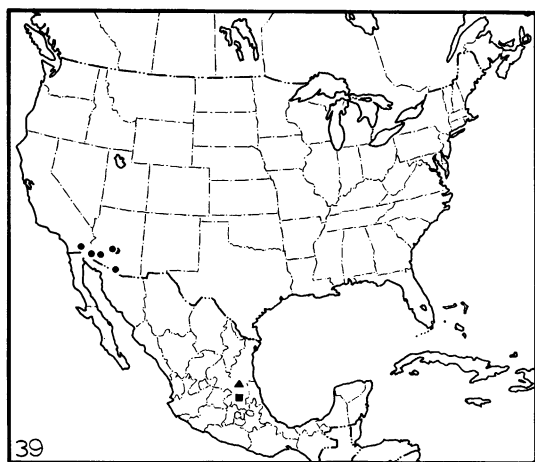
MAP 38. North America, showing distribution of *Drassyllus fractus*.

19–20, 1949–1950 (H. L. Shantz), 2♂. *Shasta Co.*: McArthur, June 29, 1940 (W. M. Pearce), 2♀. *Sonoma Co.*: 3.5 mi. NW Petaluma, Apr. 1979 (D. H. Kavanaugh, CAS), 1♂. *Stanislaus Co.*: 5 mi. N Turlock Lake,

Mar. 18, 1976, vacuum, grassland (J. Collins, LSV), 1♂. *Tulare Co.*: Strathmore, Aug. 26, 1965, debris under citrus (Browner, DEB), 1♀. *Ventura Co.*: Oxnard, June 23, 1952 (W. J. Gertsch), 1♀. *Yolo Co.*: Davis, Aug. 30, 1957 (R. O. Schuster), 1♀, May 15, 1973, alfalfa field (K. Yeargan, CNC), 1♂, July 8, 1973 (K. Yeargan, CNC), 1♀. *Idaho*: *Payette Co.*: Payette, June 30, 1953 (W. Ivie), 1♀. *Oregon*: *Coos Co.*: Charleston, June 17, 1952 (B. Malkin), 1♂. *Jackson Co.*: 6 mi. S Medford, Aug. 16–24, 1962 (H. Fitch), 1♀. *Jefferson Co.*: Fly Lake, Apr. 21 [matured June 4], 1952 (V. Roth), 1♂. *Lane Co.*: Eugene, May–June 27, 1941–1947 (B. Malkin), 4♂, July 1–13, 1941 (B. Malkin), 1♀. *Malheur Co.*: Sucker Creek Canyon, June 15–18, 1951 (B. Malkin), 1♀. *Marion Co.*: 5 mi. SW Salem, July 22, 1954 (V. Roth), 1♂. *Wasco Co.*: The Dalles, June 23, 1882 (S. Henshaw, MCZ), 1♀. *Utah*: *Salt Lake Co.*: SW Salt Lake City, May 17, 1941 (W. Ivie), 1♀. *Wyoming*: *Big Horn Co.*: Greybull, June 3, 1960, rangeland (R. Lavigne, WDF), 1♀. **MEXICO: Baja California Norte: Rancho**



FIGS. 260–263. *Drassyllus salton*, new species. 260. Palp, ventral view. 261. Palp, retrolateral view. 262. Epigynum, ventral view. 263. Epigynum, dorsal view.



MAP 39. North America, showing distribution of *Drassyllus salton* (circles), *D. tinus* (triangle), and *D. zimus* (square).

Las Parritas, 10 mi. S San Quintín, June 27–28, 1977, dunes (C. E. Griswold, UCB), 1♀.

DISTRIBUTION: Oregon and Montana to Baja California Norte (map 37).

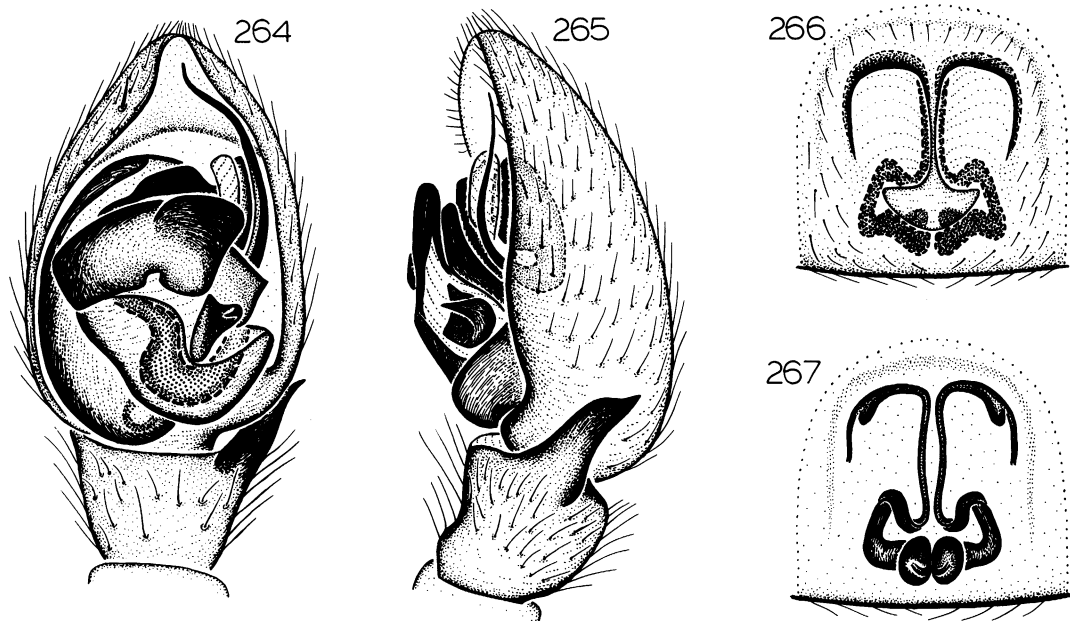
Drassyllus fractus Chamberlin

Figures 252–257; Map 38

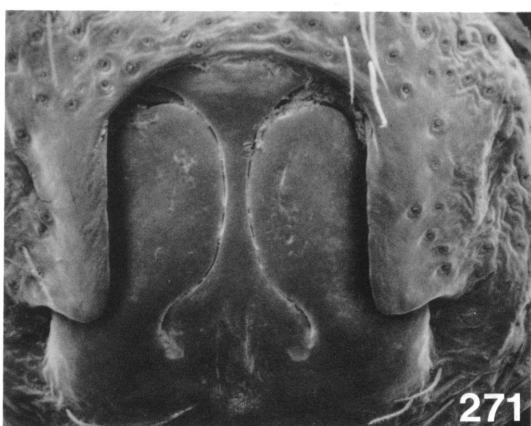
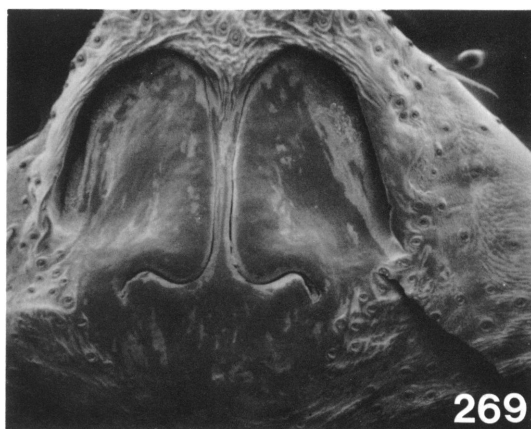
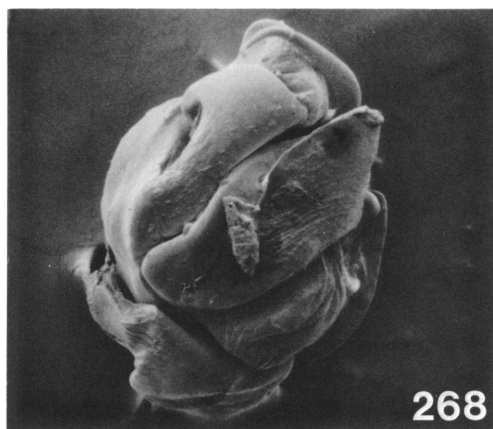
Drassyllus fractus Chamberlin, 1936b, p. 14, fig. 6 (female holotype from Friant, Fresno County, California, in AMNH, examined). Roewer, 1954, p. 415. Bonnet, 1956, p. 1604. Ubick and Roth, 1973, p. 2.

DIAGNOSIS: *Drassyllus fractus* seems closest to *D. saphes* and *D. salton* but may be distinguished by the distally untwisted TA (figs. 252, 256) and gradually narrowed RTA (fig. 253) of males and the angular lateral epigynal ridges (figs. 254, 257) of females.

MALE: Total length 4.19 ± 0.45 . Carapace 1.81 ± 0.15 long, 1.39 ± 0.15 wide. Femur II 1.21 ± 0.15 long. Eye sizes and interdistances: AME 0.04, ALE 0.07, PME 0.08, PLE 0.06; AME–AME 0.06, AME–ALE 0.01, PME–PME 0.03, PME–PLE 0.04, ALE–PLE 0.05. MOQ length 0.18, front width 0.14, back width 0.19. TA distally untwisted (figs. 252, 256); RTA gradually narrowed distally (fig. 253). Leg spination: tibiae: II v1r-1r-0; III v2-2-2, r1-1-1; IV r2-1-1; metatarsus I v1p-0-0.



FIGS. 264–267. *Drassyllus prosaphes* Chamberlin. 264. Palp, ventral view. 265. Palp, retrolateral view. 266. Epigynum, ventral view. 267. Epigynum, dorsal view.



FIGS. 268–271. 268, 269. *Drassyllus prosaphes* Chamberlin. 270, 271. *D. lepidus* (Banks). 268, 270. Palp, ventral view. 269, 271. Epigynum, ventral view.

FEMALE: Total length 4.96 ± 0.78 . Carapace 2.11 ± 0.33 long, 1.54 ± 0.24 wide. Femur II 1.36 ± 0.20 long. Eye sizes and interdistances: AME 0.06, ALE 0.08, PME 0.08, PLE 0.07; AME–AME 0.06; AME–ALE 0.02, PME–PME 0.03, PME–PLE 0.06, ALE–PLE 0.05. MOQ length 0.24, front width 0.18, back width 0.19. MP with angular lateral extensions (figs. 254, 257); MED with lateral lobes (fig. 255). Leg spination: femora: I, II d1-0-0; IV p0-1-1, r0-1-1; tibiae: III v2-2-0, r2-1-1; IV r2-1-1; metatarsi: I v0-0-0; III v2-2-0.

MATERIAL EXAMINED: UNITED STATES: California: *Fresno Co.*: Fresno, San Joaquin Valley, July 16–31, 1955 (R. Schick), 1♂;

Friant, Mar. 1913 (R. V. Chamberlin), 1♀ (type). *Kern Co.*: 8 km. S Welton, May 16, 1973 (F. Ennik, CAS), 1♀. *Los Angeles Co.*: Big Rock Creek, Apr. 25, 1926, 1♀; Pearblossom to Valyermo, Apr. 19, 1960 (W. J. Gertsch, W. Ivie, R. Schrammel), 1♂. *Monterey Co.*: Hastings Natural History Reserve, Robles del Rio, Feb. 1–Mar. 28, 1940–1946, under logs (H. Linsdale), 3♂, 4♀. *Riverside Co.*: Winchester, Apr. 2–Sept. 6, 1967–1971, pitfalls, under rocks, in building (W. Icenogle, WRI, AMNH), 21♂, 4♀. *San Bernardino Co.*: 5 mi. N Yucca Valley, Apr. 19, 1960 (W. J. Gertsch, W. Ivie, R. Schrammel), 1♂, 2♀. *Shasta Co.*: McArthur, June 29, 1940 (W. M. Pearce), 1♀. *Stanislaus*

Co.: Del Puerto Canyon, Feb. 25, 1975 (C. E. Griswold, UCB), 1♀.

DISTRIBUTION: Known only from California (map 38).

***Drassyllus salton*, new species**

Figures 258–263; Map 39

Types: Male holotype and female paratype from Fish Springs, Salton Sea, Imperial County, California (March 12, 1941; A. and W. Ivie), deposited in AMNH.

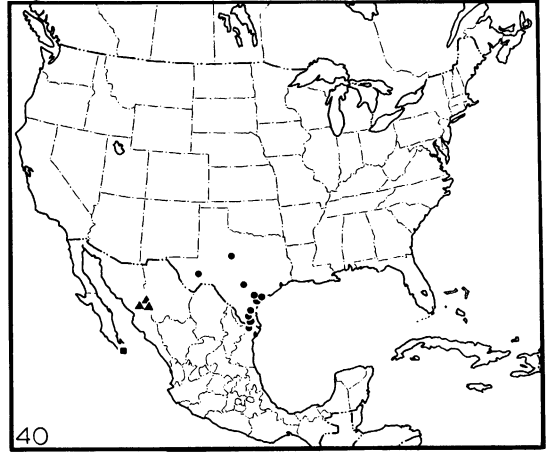
ETYMOLOGY: The specific name is a noun in apposition taken from the type locality.

DIAGNOSIS: *Drassyllus salton* seems closest to *D. saphes* and *D. fractus* but may be distinguished by the abruptly narrowed and excavated tip of the RTA (figs. 260, 261) of males and the tiny AEM (figs. 259, 262) of females.

MALE: Total length 3.28–3.67. Carapace 1.50–1.58 long, 1.17–1.27 wide. Femur II 0.86–1.04 long. Eye sizes and interdistances: AME 0.04, ALE 0.07, PME 0.07, PLE 0.05; AME–AME 0.05, AME–ALE 0.01, PME–PME 0.03, PME–PLE 0.05, ALE–PLE 0.04. MOQ length 0.17, front width 0.14, back width 0.17. TA very broad proximally (figs. 258, 260); RTA excavated distally (fig. 261). Leg spination: tibia III v2-2-2; metatarsus I v0-0-0.

FEMALE: Total length 2.95–5.58. Carapace 1.10–2.17 long, 0.86–1.64 wide. Femur II 0.67–1.33 long. Eye sizes and interdistances: AME 0.07, ALE 0.08, PME 0.10, PLE 0.07; AME–AME 0.06, AME–ALE 0.01, PME–PME 0.03, PME–PLE 0.04, ALE–PLE 0.04. MOQ length 0.21, front width 0.20, back width 0.23. AEM reduced to small hood between lateral extensions of MP (figs. 259, 262); PED, MED, AED all narrow (fig. 263). Leg spination: femur IV p0-1-1, r0-1-1; tibiae: II v0-1r-0; III v2-2-2; IV r2-1-1; metatarsus I v0-0-0.

MATERIAL EXAMINED: UNITED STATES: **Arizona:** *Maricopa Co.*: Agua Caliente, Jan. 5, 1941 (S. and D. Mulaik), 1♀; Mesa, Apr. 7, 1935, on desert (MCZ), 1♀; Phoenix, Sept. 1964 (W. Eberhard, MCZ), 1♀. *Pima Co.*: N Sasabe, Jan. 1, 1941 (S. and D. Mu-



MAP 40. North America, showing distribution of *Drassyllus prosaphes* (circles), *D. sonus* (triangles), and *D. mirus* (square).

laik), 1♀. *Yuma Co.*: NE Yuma, Jan. 6, 1941 (S. and D. Mulaik), 1♀. **California:** *Imperial Co.*: Fish Springs, Salton Sea, Mar. 12, 1941 (A. and W. Ivie), 3♂, 3♀ (including types).

DISTRIBUTION: Known only from Arizona and southern California (map 39).

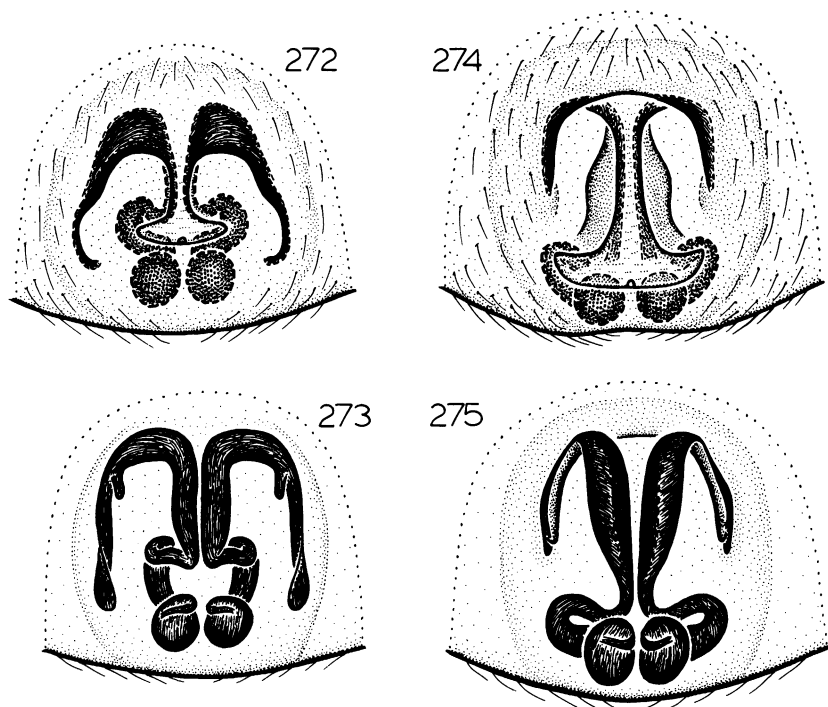
***Drassyllus prosaphes* Chamberlin**

Figures 264–269; Map 40

Drassyllus prosaphes Chamberlin, 1936b, p. 16, figs. 29, 30 (male holotype from Edinburg, Hidalgo County, Texas, in AMNH, examined). Roewer, 1954, p. 416. Bonnet, 1956, p. 1605. Ubick and Roth, 1973, p. 3.

DIAGNOSIS: *Drassyllus prosaphes* seems closest to *D. sonus* and *D. mirus* (in all three species the AEM is absent and has presumably been fused to the MP) but may be distinguished by the horn-shaped EP (figs. 264, 268) of males and the almost rectangular lateral discs outlined by the extensions of the MP (figs. 266, 269) of females.

MALE: Total length 2.80 ± 0.25 . Carapace 1.33 ± 0.08 long, 1.03 ± 0.07 wide. Femur II 0.78 ± 0.06 long. Eye sizes and interdistances: AME 0.04, ALE 0.06, PME 0.07, PLE 0.06; AME–AME 0.05, AME–ALE 0.01, PME–PME 0.02, PME–PLE 0.03,



FIGS. 272–275. 272, 273. *Drassyllus mirus*, new species. 274, 275. *D. tinus*, new species. 272, 274. Epigynum, ventral view. 273, 275. Epigynum, dorsal view.

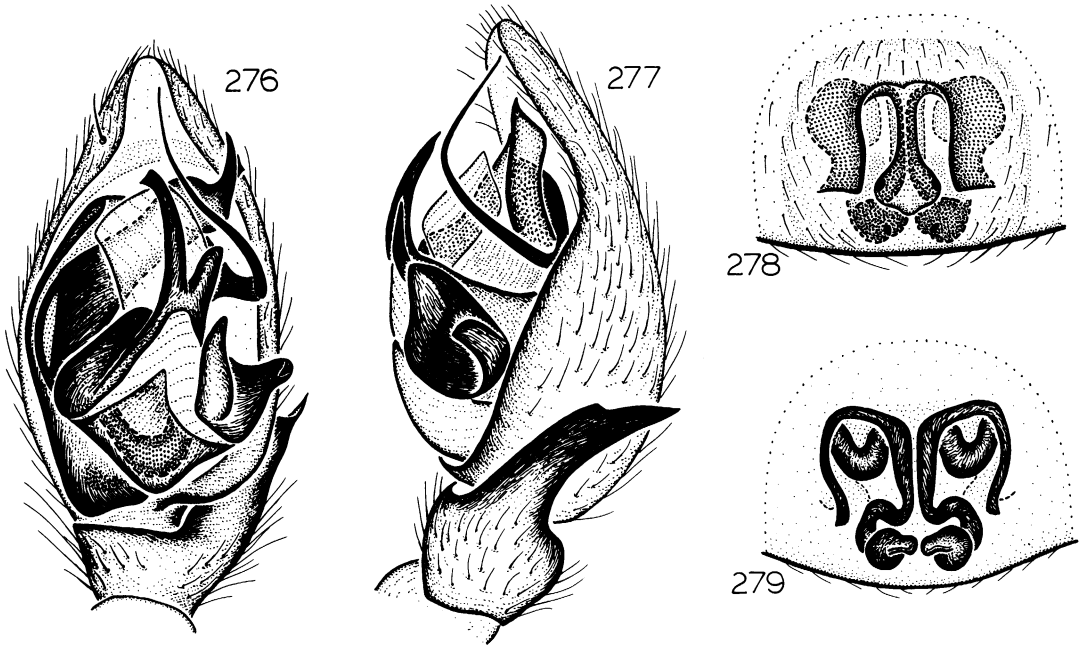
ALE–PLE 0.03. MOQ length 0.18, front width 0.13, back width 0.15. EP enlarged, horn-shaped, with bell of horn directed retrolaterally (figs. 264, 268); RTA short (fig. 265). Leg spination: tibiae: II v1r-1r-0; IV p2-1-1, r2-1-1.

FEMALE: Total length 3.41 ± 0.47 . Carapace 1.44 ± 0.09 long, 1.10 ± 0.09 wide. Femur II 0.83 ± 0.05 long. Eye sizes and interdistances: AME 0.04, ALE 0.06, PME 0.08, PLE 0.06; AME–AME 0.05, AME–ALE 0.01, PME–PME 0.03, PME–PLE 0.02, ALE–PLE 0.04. MOQ length 0.19, front width 0.13, back width 0.19. MP extensions outlining almost rectangular lateral discs (figs. 266, 269); AED short (fig. 267). Leg spination: femur IV p0-0-0; tibia III v2-2-2; metatarsus III p1-1-2.

MATERIAL EXAMINED: UNITED STATES: **Texas:** *Aransas Co.*: 6 mi. N Rockport, June 2, 1968 (L. Herman), 2♂. *Bee Co.*: 3 mi. N Beeville, June 7, 1937 (S. Mulaik), 1♀. *Bex-*

ar Co.: Somerset, Apr. 18, 1931 (A. J. Kith), 1♂. *Brooks Co.*: Laguna Salada, Falfurias, May 8, 1970, leaf litter, 4♂, 3♀. *Brewster Co.*: O. T. L. Cave, 9 mi. E Alpine, June 25, 1963, twilight zone, near cave entrance (J. Reddell, B. Russell), 1♀. *Hidalgo Co.*: Bentzen State Park, May 19, 1965, mesquite woods, ground litter (W. Peck, EPC), 2♂, 1♀; Edinburg, May 2, 1935 (S. Mulaik), 1♂ (type), June 3, 1936 (S. Mulaik), 1♂; 3 mi. E Edinburg, Apr. 12, 1937 (S. Mulaik), 1♀; McCook, Apr. 15, 1936 (S. and D. Mulaik, MCZ, AMNH), 4♂, 2♀. *Kleberg Co.*: Kingsville, Apr. 1, 1970, 1♂, May 28, 1970, *Opuntia*, leaf litter, 2♂, 4♀. *San Patricio Co.*: 8 mi. NE Sinton, June 12, 1960 (H. E. Laughlin), 1♂. *Taylor Co.*: Abilene, June 1962 (K. W. Haller), 1♀. **MEXICO:** **Tamaulipas:** Reynosa, May 2, 1936 (J. Ruthers), 1♀; San Pedro, May 1936 (S. Mulaik), 1♂.

DISTRIBUTION: Known only from Texas and Tamaulipas (map 40).



FIGS. 276–279. *Drassyllus lepidus* (Banks). 276. Palp, ventral view. 277. Palp, retrolateral view. 278. Epigynum, ventral view. 279. Epigynum, dorsal view.

***Drassyllus sonus*, new species**

Figures 246, 247; Map 40

TYPE: Female holotype from Río Cuchujaqui, east of Álamos, Sonora, Mexico (January 14, 1968; V. Roth), deposited in AMNH.

ETYMOLOGY: The specific name is an arbitrary combination of letters.

DIAGNOSIS: *Drassyllus sonus* seems closest to *D. prosaphes* and *D. mirus* but may be distinguished by the sinuous lateral extensions of the MP (fig. 246) of females.

MALE: Unknown.

FEMALE: Total length 4.08–5.67. Carapace 1.81–2.09 long, 1.30–1.69 wide. Femur II 1.19–1.49 long. Eye sizes and interdistances: AME 0.06, ALE 0.09, PME 0.11, PLE 0.10; AME–AME 0.06, AME–ALE 0.02, PME–PME 0.03, PME–PLE 0.05, ALE–PLE 0.05. MOQ length 0.26, front width 0.18, back width 0.25. MP with sinuous lateral extensions (fig. 246); AED expanded at tip (fig. 247). Leg spination: tibiae: II v1r-1r-0; III v2-2-2.

OTHER MATERIAL EXAMINED: MEXICO: Chihuahua: Milpillas, Feb. 1, 1968 (V. Roth), 2♀; Santo Niño, Nov. 18, 1972, elevation 400 meters (V. Roth), 1♀.

DISTRIBUTION: Known only from southern Sonora and Chihuahua, Mexico (map 40).

***Drassyllus mirus*, new species**

Figures 272, 273; Map 40

TYPE: Female holotype from 8 kilometers south of Miraflores on the road to Las Casitas, Baja California Sur, Mexico (December 15, 1977; L. Vincent and C. Griswold), deposited in UCB, on permanent loan to CAS.

ETYMOLOGY: The specific name is an arbitrary combination of letters.

DIAGNOSIS: *Drassyllus mirus* seems closest to *D. prosaphes* and *D. sonus* but may be distinguished by the epigynum being widest posteriorly (fig. 272) in females.

MALE: Unknown.

FEMALE: Total length 4.88, 5.47. Carapace

2.00, 2.17 long, 1.55, 1.76 wide. Femur II 1.25, 1.48 long. Eye sizes and interdistances: AME 0.08, ALE 0.09, PME 0.13, PLE 0.08; AME-AME 0.07, AME-ALE 0.02, PME-PME 0.03, PME-PLP 0.05, ALE-PLP 0.05. MOQ length 0.27, front width 0.23, back width 0.29. Epigynum widest posteriorly (fig. 272); PED and AED twisted (fig. 273). Leg spination: tibiae: II v1r-1r-0; III v2-2-2.

MATERIAL EXAMINED: The holotype and one female taken at Rancho Mata Gorda, 12 km. west of Santiago, Baja California Sur, by L. Vincent and C. Griswold on December 18, 1977 (UCB).

DISTRIBUTION: Known only from southern Baja California Sur, Mexico (map 40).

Drassyllus lepidus (Banks)

Figures 270, 271, 276-279; Map 41

Megamyrmecon lepidum Banks, 1899, p. 190 (female holotype from Shreveport, Caddo Parish, Louisiana, in MCZ, examined).

Drassinella lepidus: Banks, 1910, p. 8.

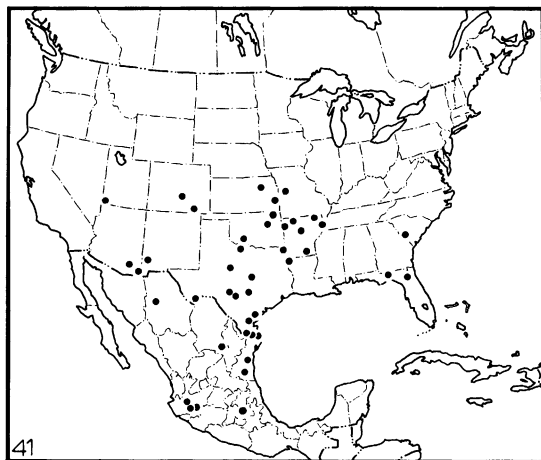
Drassyllus lepidus: Chamberlin, 1922, p. 168. Roewer, 1954, p. 416. Bonnet, 1956, p. 1604. Ubick and Roth, 1973, p. 2.

Drassyllus mephisto Chamberlin, 1936b, p. 14, figs. 3-5 (male holotype from Edinburg, Hidalgo County, Texas, in AMNH, examined). Roewer, 1954, p. 416. Bonnet, 1956, p. 1605. Ubick and Roth, 1973, p. 2. NEW SYNONYMY.

Drassyllus coahuilanus Gertsch and Davis, 1940, p. 7, fig. 15 (female holotype from Saltillo, Coahuila, Mexico, in AMNH, examined). Roewer, 1954, p. 413. Ubick and Roth, 1973, p. 2. NEW SYNONYMY.

DIAGNOSIS: *Drassyllus lepidus* seems closest to *D. tinus* and *D. zimus* (in all three species the AEM extends posteriorly around the MP) but may be distinguished by the bifid TA (figs. 270, 276) of males and the very long AEM (figs. 271, 278) of females.

MALE: Total length 3.01 ± 0.43 . Carapace 1.39 ± 0.14 long, 1.08 ± 0.12 wide. Femur II 0.87 ± 0.06 long (65 specimens examined). Eye sizes and interdistances: AME 0.06, ALE 0.06, PME 0.10, PLE 0.09; AME-AME 0.04, AME-ALE 0.01, PME-PME 0.02, PME-PLP 0.03, ALE-PLP 0.04. MOQ length 0.22, front width 0.16, back width 0.23. TA bifid (figs. 270, 276); RTA

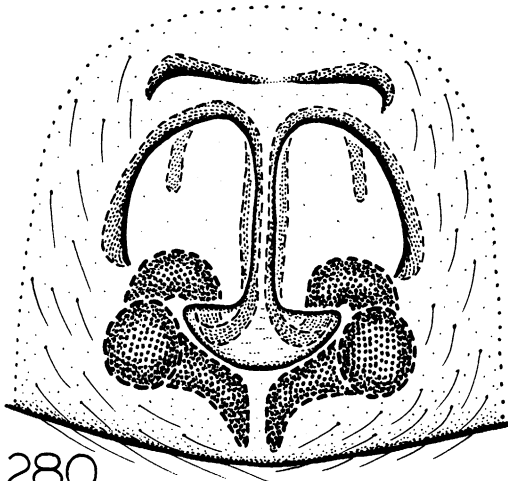


MAP 41. North America, showing distribution of *Drassyllus lepidus*.

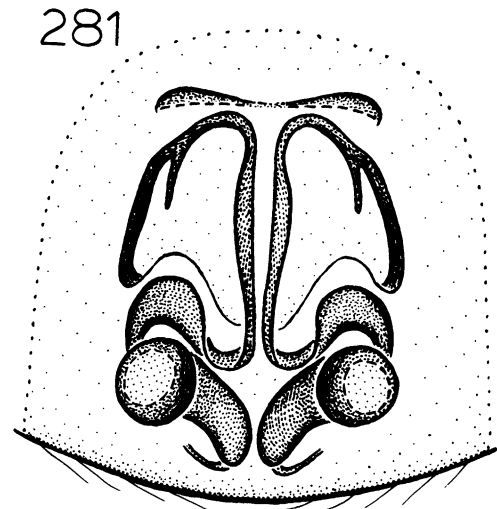
notched (fig. 277). Leg spination: tibiae: II v0-1r-0; IV p1-0-1.

FEMALE: Total length 3.51 ± 0.54 . Carapace 1.42 ± 0.14 long, 1.08 ± 0.12 wide. Femur II 0.90 ± 0.11 long (135 specimens examined). Eye sizes and interdistances: AME 0.06, ALE 0.07, PME 0.09, PLE 0.07; AME-AME 0.05, AME-ALE 0.02, PME-PME 0.02, PME-PLP 0.04, ALE-PLP 0.05. MOQ length 0.23, front width 0.18, back width 0.20. AEM extending almost to base of MP (figs. 271, 278); MED and AED connected by flange (fig. 279). Leg spination typical for genus.

RECORDS: **United States** (county records only): *Arizona*: Cochise, Pima, Pinal. *Arkansas*: Bradley, Carroll, Conway, Mississippi, Randolph, Washington. *Colorado*: El Paso, Las Animas. *Florida*: Alachua, Leon. *Kansas*: Bourbon, Riley. *Louisiana*: Caddo. *Missouri*: Johnson. *New Mexico*: Grant. *Oklahoma*: Comanche, Craig, Tulsa. *South Carolina*: Aiken. *Texas*: Bosque, Bowie, Brewster, Cameron, Hidalgo, Jim Wells, Kerr, Kimble, San Patricio, Starr, Taylor, Travis, Wichita. *Utah*: Washington. **Mexico**: *Chihuahua*: San José Bavicora. *Coahuila*: Saltillo. *Jalisco*: 14 mi. SW Acatlán, Ajijic, W side of Laguna de Sayula, 20 mi. N La Quemada, La Venta. *México*: Teotihuacán. *Tamaulipas*: El Tinieblo, Jiménez, Mesa Llera (summit).



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FIGS. 280, 281. *Drassyllus eurus*, new species. 280. Epigynum, ventral view. 281. Epigynum, dorsal view.

DISTRIBUTION: Utah and South Carolina to southern Mexico (map 41).

NATURAL HISTORY: Mature males and females have been taken year-round. Specimens have been collected in pitfall traps and houses, under rocks, and associated with alfalfa, allthorn, cotton, grass, juniper, mesquite, pinyon pine, soybeans, and yucca, at elevations up to 5735 feet.

SYNONYMY: Chamberlin provided no

characters to distinguish *mephisto* from *lepidus* and there appear to be none. Gertsch and Davis distinguished *coahuilanus* from *mephisto* on the basis of color pattern, which is subject to individual variation in all the populations sampled.

NOTE: It is possible that *Prosthesima fidelis* Banks (1898, p. 218, pl. 13, fig. 19), described from "Minititlan" (probably Minatitlán, Veracruz), Mexico, is an earlier name for this species. However, the holotype and only known specimen has been destroyed and the species is not recognizable with certainty from Banks's description and illustration. The name is therefore best regarded as a *nomen dubium*.

***Drassyllus tinus*, new species**

Figures 274, 275; Map 39

TYPE: Female holotype from Sótano de la Tinaja, 11 kilometers north of Valles, San Luis Potosí, Mexico (February 18, 1970; W. Elliott), deposited in AMNH.

ETYMOLOGY: The specific name is an arbitrary combination of letters.

DIAGNOSIS: *Drassyllus tinus* seems closest to *D. lepidus* and *D. zimus* but may be distinguished by the wide MP (fig. 274) of females.

MALE: Unknown.

FEMALE: Total length 4.43. Carapace 1.83 long, 1.39 wide. Femur II 1.15 long. Eye sizes and interdistances: AME 0.07, ALE 0.09, PME 0.08, PLE 0.07; AME-AME 0.03, AME-ALE 0.02, PME-PME 0.03, PME-PLP 0.04, ALE-PLP 0.03. MOQ length 0.19, front width 0.17, back width 0.19. AEM horseshoe-shaped (fig. 274); MED expanded anteriorly (fig. 275). Leg spination: tibia III v2-2-2; metatarsi: I, II v0-0-0; III p0-1-2, r0-1-2.

MATERIAL EXAMINED: Only the holotype.

DISTRIBUTION: Known only from San Luis Potosí, Mexico (map 39).

***Drassyllus zimus*, new species**

Figures 116, 117; Map 39

TYPE: Female holotype from 5 miles north of Zimapán, Hidalgo, Mexico (November 21, 1946; E. S. Ross), deposited in AMNH.

ETYMOLOGY: The specific name is an arbitrary combination of letters.

DIAGNOSIS: *Drassyllus zimus* seems closest to *D. lepidus* and *D. tinus* but may be distinguished by the short, sinuous AEM (fig. 116) of females.

MALE: Unknown.

FEMALE: Total length 3.35. Carapace 1.55 long, 1.27 wide. Femur II 0.94 long. Eye sizes and interdistances: AME 0.04, ALE 0.07, PME 0.06, PIE 0.05; AME-AME 0.04,

AME-ALE 0.01, PME-PME 0.03, PME-PLA 0.02, ALE-PLA 0.03. MOQ length 0.13, front width 0.12, back width 0.15. AEM short, sinuous (fig. 116); AED short (fig. 117). Leg spination: femur IV p0-1-1; tibiae: III v2-2-2; IV p1-0-1; metatarsi: I, II v0-0-0; III p0-1-2, v0-1-2.

MATERIAL EXAMINED: Only the holotype.

DISTRIBUTION: Known only from Hidalgo, Mexico (map 39).

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