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## A Revision of the Spider Genera *Trachyzelotes* and *Urozelotes* (Araneae, Gnaphosidae)

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### ABSTRACT

The subgenus *Trachyzelotes* Lohmander is removed from *Zelotes*, elevated to generic rank, and redefined to include those zelotines with a distinctive cluster of stiff setae on the anteromedian surface of the chelicerae; the generic name *Simonizelotes* Marinaro is a *nomen nudum* that was intended by its author to refer to the same group of species. *Trachyzelotes* seems natively Mediterranean but some species have apparently been introduced into (and redescribed from) far-flung areas. Three species groups are recognized within the genus. The *pedestris* group contains only the European type species *T. pedestris* (C. L. Koch). The *lyonneti* group contains one new species, *T. stubbsi* from Cyprus, and four Mediterranean species transferred from *Zelotes*: *T. lyonneti* (Audouin), with which *Zelotes ursinus* (O. P.-Cambridge) of Israel, *Z. brasiliensis* (Keyserling) of Brazil, *Z. philippsoni* Denis of Morocco, *Z. errans* Benoit of Saint Helena, and *Drassyllus agilis* (Bryant) of the southern United States are newly synonymized, and which is newly recorded from Peru; *T. adriaticus* (Caporiacco), the female of which is described for the first time; *T. jaxartensis*

(Kroneberg), with which *Zelotes insipiens* (Simon) of Senegal, *Z. sorex* Denis of Egypt, *Z. cavaleriei* Schenkel of China, *Drassyllus peninsulanus* (Banks) of the southwestern United States and Mexico, *Camillina spinibarbis* (Simon) of Oman, *C. acanthognatha* (Purcell) of South Africa, *Scotophaeus chohanius* Patel and Patel of India, and *Drassodes indraprastha* Tikader and Gajbe of India are newly synonymized, and which is newly recorded from Hawaii; and *T. kulczynskii* (Bösenberg), with which *Z. samoensis* Berland of Samoa is newly synonymized, the male of which is described for the first time, and which is newly recorded from Florida, Jamaica, and St. Kitts. The *barbatus* group contains two new species, *T. huberti* from Algeria and *T. malkini* from Turkey, Crete, and the Soviet Union, and six Mediterranean species transferred from *Zelotes*: *T. barbatus* (L. Koch), newly recorded from California; *T. fuscipes* (L. Koch), with which *Zelotes rubicundulus* (Simon) of France is newly synonymized; *T. ravidus* (L. Koch); *T. holosericeus* (Simon); *T. mutabilis* (Simon), with which *Zelotes microbarbatus* Marinaro of Algeria is newly synonymized; and *T. costatus* (Denis), the

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male of which is described for the first time. The genus *Urozelotes* Mello-Leitão contains the new species *U. mysticus*, from an unknown locality, and the cosmopolitan, synanthropic species *U. rusticus* (L. Koch), transferred from *Zelotes*, with which *Zelotes completus* (Banks) of Mexico, *Z. luteus* (F. O. P.-Cambridge) of Guatemala, *Z. pacificus* (Simon) of Hawaii, *Z. porteri* (Simon) of

Chile, *Z. scutatus* Mello-Leitão of Brazil, *Z. keyserlingi* Roewer of Uruguay, *Camillina amnicola* Tucker of South Africa, *C. gigas* Schmidt of the Canary Islands, *Drassodes agelastus* Keyserling of Brazil, *D. malodes* Tikader of India, and *U. cardiogynus* Mello-Leitão of Argentina are newly synonymized.

## INTRODUCTION

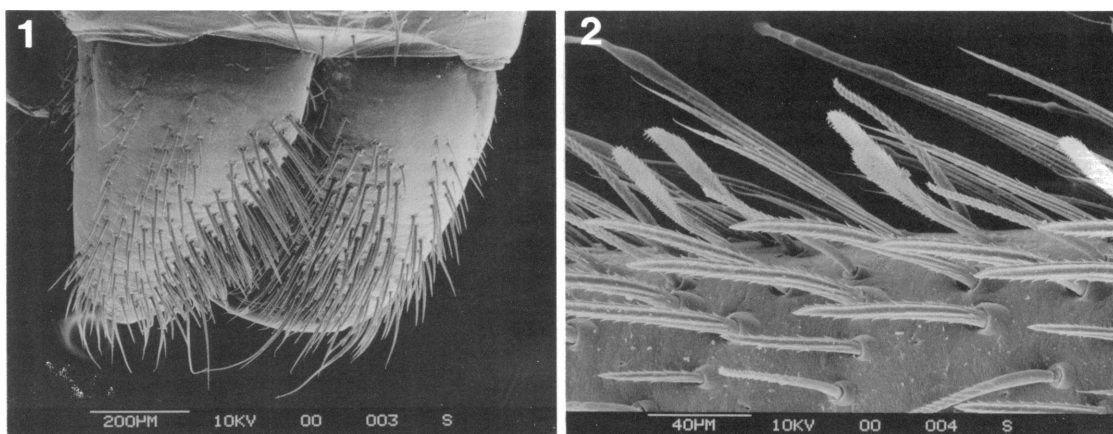
This paper, the twentieth in a series on the spider family Gnaphosidae, is the fourth devoted to representatives of the *Zelotes* complex, a highly speciose and worldwide group containing those gnaphosids with a preening comb on metatarsi III and IV. Three genera belonging to the complex (*Drassyllus*, *Camillina*, and *Zelotes*) have large American faunas recently revised by Platnick and Shadab (1982a, 1982b, 1983). The present paper completes coverage of the New World members of the group by providing accounts of two Old World genera that include species apparently introduced into various parts of America.

The format of the descriptions and standard abbreviations of morphological terms follow those used by Platnick and Shadab (1975); all measurements are in millimeters. We thank Dr. M. U. Shadab of the American Museum for providing illustrations, Ms. J. Whelan of the American Museum for assistance with the scanning electron microscope, Dr. C. D. Dondale of the Biosystematics Research Institute for reviewing a draft of the manuscript, and the curators and collectors listed below for supplying specimens.

## COLLECTIONS EXAMINED

AMNH, American Museum of Natural History, including material made available by Dr. W. J. Gertsch  
BJK, Dr. B. J. Kaston  
BMNH, British Museum (Natural History), Mr. P. Hillyard and Mr. F. Wanless  
BRV, Dr. B. R. Vogel  
CAS, California Academy of Sciences, Dr. W. Pulawski  
CDFA, California Department of Food and Agriculture, Ms. M. J. Moody  
CDU, Mr. D. Ubick  
CEM, Dr. M. Emerit  
CKT, Dr. K. Thaler

CNC, Canadian National Collection, Dr. C. D. Dondale and Mr. J. H. Redner  
CRB, Dr. R. Bosmans  
CUC, Cornell University Collection, housed at AMNH  
DEB, Mr. D. E. Bixler  
DTJ, Dr. D. T. Jennings  
EPC, Exline-Peck Collection, Dr. W. B. Peck  
FIS, Forschungsinstitut Senckenberg, Dr. M. Grasshoff  
FMNH, Field Museum of Natural History, Dr. L. Watrous  
FSCA, Florida State Collection of Arthropods, Dr. G. B. Edwards  
HEC, Hope Entomological Collections, Oxford University, Dr. M. C. Birch and Mr. I. Lansbury  
JAB, Dr. J. A. Beatty  
JAM, Mr. J. A. Murphy  
LACM, Natural History Museum of Los Angeles County, Dr. C. L. Hogue and Mr. C. Nagano  
MCN, Museu de Ciências Naturais, Porto Alegre, Dr. A. A. Lise  
MCV, Museo Civico di Storia Naturale, Verona, Dr. G. Osella  
MCZ, Museum of Comparative Zoology, Dr. H. W. Levi  
MET, Mr. M. E. Thompson  
MLP, Museo de La Plata, Dr. R. F. Arrozpide  
MNHN, Muséum National d'Histoire Naturelle, Dr. M. Hubert  
MRAC, Musée Royal de l'Afrique Centrale, Dr. R. Jocqué  
NVH, Dr. N. V. Horner  
PGA, Dr. P. G. Aguilar F.  
PMB, Dr. P. M. Brignoli  
REL, Dr. R. E. Leech  
SAM, South African Museum, Ms. C. A. Car and Dr. V. B. Whitehead  
SBM, Santa Barbara Museum of Natural History, Dr. F. G. Hochberg and Mr. S. Miller  
SCJ, Mr. S. C. Johnson  
TAM, Texas A&M University, Dr. A. Dean  
UCB, University of California at Berkeley, Drs. E. I. Schlinger and C. Griswold  
UCR, University of California at Riverside, Mr. S. Frommer  
VDR, Mr. V. D. Roth



FIGS. 1, 2. *Trachyzelotes* sp. 1. Chelicerae, anterior view, showing cluster of stiff setae. 2. Metatarsus I, ventral view, showing one doubled row of thick setae.

WAS, Dr. W. A. Shear

WCS, Mr. W. C. Sedgwick

WRI, Mr. W. R. Icenogle

ZIL, Zoological Institute, Leningrad, Dr. V. I. Ovtsharenko

ZMH, Zoologisches Museum, Universität Hamburg, Dr. G. Rack

ZSI, Zoological Survey of India, Dr. B. K. Tikader

#### *TRACHYZELOTES* LOHMANDER, NEW RANK

*Zelotes* (*Trachyzelotes*) Lohmander, 1944, p. 13 [type species by original designation *Zelotes pedestris* (C. L. Koch)].

*Simonizelotes* Marinaro, 1967, p. 702 (*nomen nudum*).

**DIAGNOSIS:** Specimens of *Trachyzelotes* can be distinguished from those of all other zlotine genera by the presence of a cluster of stiff setae on the anteromedian surface of the chelicerae (fig. 1).

**DESCRIPTION:** Total length 3.3–12.4. Carapace oval in dorsal view, widest between coxae II and III, truncated anteriorly and posteriorly, smoothly narrowed opposite palpi, light brown with darker reticulations, long stiff black setae along edge of posterior declivity, and reflexed lateral margins; cephalic area flattened, thoracic groove very short, longitudinal. From above, anterior eye row very slightly recurved, posterior row very slightly procurved; from front, both rows procurved; AME circular, dark, PME irregularly rectangular, light, ALE and PLE oval,

light; PME usually largest, others subequal; typically with AME separated by less than their diameter, much closer to ALE, PME separated by their radius or less, farther from PLE, lateral eyes of each side separated by less than their diameter, MOQ slightly wider in back than long or in front. Clypeal height at AME greater than their diameter. Chelicerae with up to seven small retromarginal teeth; promargin and median half of anterior surface coated with stiff setae (fig. 1); boss present anterolaterally. Endites short, rectangular, obliquely depressed, anteriorly narrowed; labium rounded distally; sternum rebordered, without sclerotized extensions to coxae, with uniformly short setae. Leg formula 4123. Typical leg spination pattern (only surfaces bearing spines listed): femora: I d1-1-0, p0-0-1; II d1-1-0; III d1-1-0, p0-1-1, r0-1-1; IV d1-1-0, r0-0-1; tibiae: III p1-1-1, v1p-2-2, r0-1-1; IV p2-1-1, v2-2-2, r2-1-1; metatarsi: II v2-0-0; III p0-1-2, v2-0-0, r0-1-2; IV p1-2-2, v2-2-0, r1-2-1. Legs light brown with tarsi lightest; ventral surface of metatarsi and tarsi I and II with two doubled rows of thick setae (fig. 2); tarsi with two dentate claws and weak claw tufts; trochanters unnotched; metatarsi III and IV with distal preening combs; trichobothria in two rows on tarsi, one on metatarsi. Abdomen gray (males only with short orange anterior scutum), dorsum with three pairs of lighter muscle impressions, anterior surface with long

bristles, otherwise with uniformly short setae as on sternum; six spinnerets, anteriors typically gnaphosoid, with six long spigots. Palp with simple retrolateral tibial apophysis, elaborate terminal apophysis fused to embolar base, and elongate median apophysis. Epigynum typically with sinuous, m-shaped median ridge.

**TAXONOMIC HISTORY:** The species here placed in *Trachyzelotes* have been recognized as constituting a natural group since the time of Simon (1914), who dealt with the obvious heterogeneity of the French species then assigned to *Zelotes* by separating them into three informal groups. One of those groups (his group C) included only a single species, *Zelotes carmeli* (O. P.-Cambridge), which (as we shall demonstrate in a subsequent paper in this series) does not belong to *Zelotes*. The bulk of the French species were assigned to group B, but the species of *Trachyzelotes* were segregated as group A, although (as noted by Miller, 1967) Simon erroneously included one of those species, *Zelotes rubicundulus* (Simon), in group B instead; Simon also misidentified another member of group A, *Zelotes fuscipes* (L. Koch), as a different group B species. Lohmander (1944), in assigning the Swedish species of *Zelotes* to subgenera, established the name *Trachyzelotes* for one of Simon's group A species, *Zelotes pedestris* (C. L. Koch). Finally, Marinaro (1967) proposed the generic name *Simonizelotes*; although both the Zoological Record for 1968 and Brignoli's (1983) catalog listed another member of Simon's group A, *Zelotes barbatus* (L. Koch), as the type species of *Simonizelotes*, Marinaro actually designated no type species. He said only (p. 701): "A la première catégorie appartiennent, pour l'Algérie, *Zelotes barbatus* (L. Koch), *microbarbatus* n. sp. et *costatus* (Denis); en font aussi probablement partie les espèces françaises du groupe A, type *Z. barbatus* de Simon." Even if he had designated one of these taxa as the type species, *Simonizelotes* would be a junior subjective synonym of *Trachyzelotes*. It should also be noted that one character used by Marinaro to define the group, the presence of unequally sized teeth on the tarsal claws, is inadequate for that purpose, for it can vary even on different legs of the same specimen.

**SPECIES GROUPS:** Three species groups can

be distinguished by genitalic features. The type species, *T. pedestris* (C. L. Koch), has a uniquely elongated terminal apophysis (fig. 3) and massive, fused anterior epigynal ducts (fig. 6). The *lyonneti* group, including the next five species treated below, contains males with obliquely oriented terminal apophyses and embolar bases (as in fig. 7) and females with a semicircular anterior epigynal margin (as in fig. 10). The *barbatus* group, including the remaining eight species, contains males with distally rounded terminal apophyses and embolar bases (as in fig. 27) and females with anterolaterally expanded anterior epigynal ducts (as in fig. 30).

**TREATMENT:** Our treatment of *Trachyzelotes* is preliminary, in two important senses. First, because *Zelotes* is such a large genus, it has not been feasible to locate and examine the type specimens of the many dozens of available specific names. Other described taxa which should be assigned to *Trachyzelotes* may therefore be discovered in the future, and some changes of specific names may ensue. Second, the reader is forewarned that some apparently undescribed species of the *barbatus* group exist that we have not treated below because the material currently available consists only of unassociated males or females, often with inadequate (or no) locality data.

**UNCERTAIN NAME:** Judging by the original description, it seems likely that *Zelotes setiger* (L. Koch, 1875) from Ethiopia belongs to *Trachyzelotes*, but we have not been able to locate the holotype among the BMNH gnaphosids and are unable to identify the species from Koch's illustration. The name is therefore regarded as a *nomen dubium* until topotypical material becomes available.

*Trachyzelotes pedestris* (C. L. Koch)

Figures 3-6

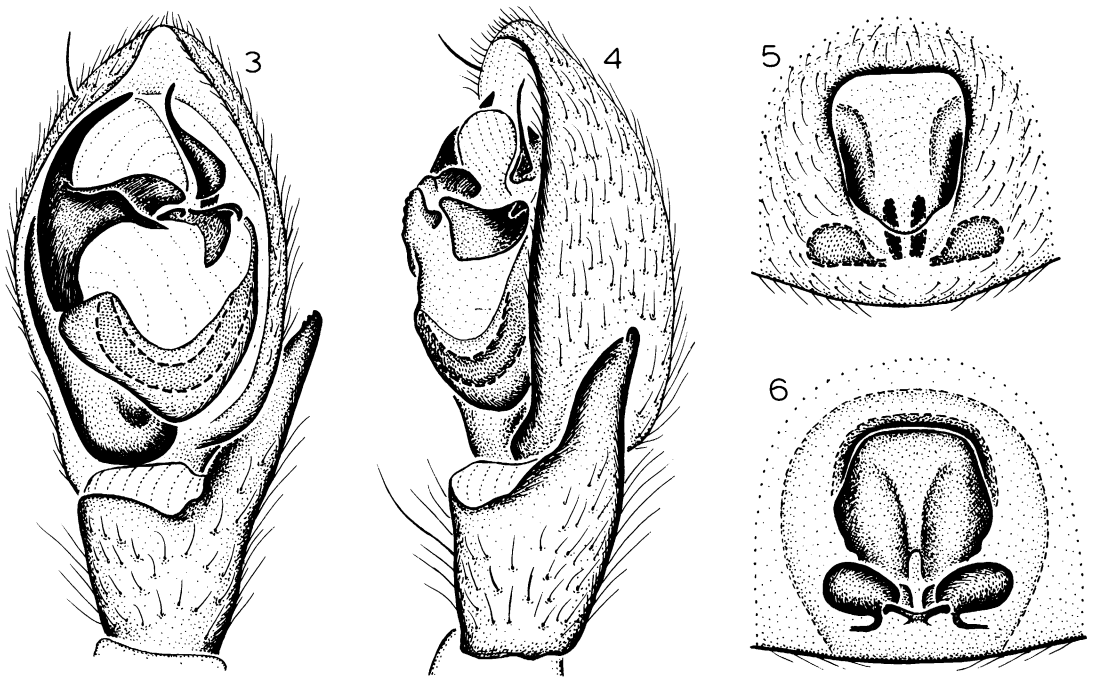
*Melanophora pedestris* C. L. Koch, 1837, p. 17 (holotype from "Bayern," West Germany, may be in Zoologisches Museum, Berlin, not examined).

*Drassus pedestris*: Blackwall, 1861, p. 442.

*Prothesima pedestris*: O. P.-Cambridge, 1874, p. 321.

*Zelotes pedestris*: Simon, 1914, p. 152. Roewer, 1954, p. 455. Bonnet, 1959, p. 4939.

*Zelotes (Trachyzelotes) pedestris*: Lohmander, 1944, p. 13.



FIGS. 3-6. *Trachyzelotes pedestris* (C. L. Koch). 3. Palp, ventral view. 4. Palp, retrolateral view. 5. Epigynum, ventral view. 6. Epigynum, dorsal view.

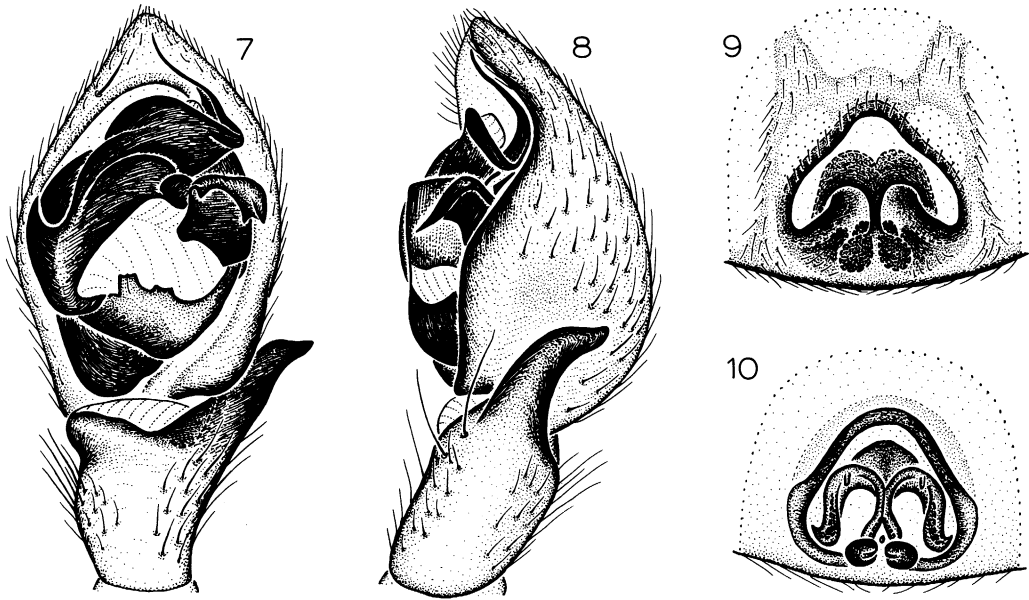
**DIAGNOSIS:** This well-known European species can be easily separated from members of the *lyonneti* and *barbatus* groups by the elongated terminal apophysis of the male palp (fig. 3) and the massive, fused anterior epigynal ducts of females (fig. 6).

**MALE:** Total length 3.98-5.26. Carapace 1.91-2.20 long, 1.57-1.80 wide. Femur II 1.20-1.48 long. Eye sizes and interdistances: AME 0.05, ALE 0.09, PME 0.09, PLE 0.09; AME-AME 0.06, AME-ALE 0.02, PME-PME 0.05, PME-PLE 0.06, ALE-PLE 0.05. MOQ length 0.22, front width 0.16, back width 0.22. Terminal apophysis elongated prolaterally, embolus twisted basally (figs. 3, 4). Leg spination: femora: II p0-0-1; III d1-1-1; IV r0-0-0; tibiae: III v2-2-2; IV p1-1-1; metatarsi: II v0-0-0; III p0-2-2.

**FEMALE:** Total length 7.07 ± 0.88. Carapace 2.53 ± 0.28 long, 2.04 ± 0.25 wide. Femur II 1.59 ± 0.18 long. Eye sizes and interdistances: AME 0.06, ALE 0.09, PME 0.11, PLE 0.10; AME-AME 0.08, AME-ALE 0.03, PME-PME 0.05, PME-PLE 0.06, ALE-

PLE 0.07. MOQ length 0.24, front width 0.20, back width 0.27. Epigynum with anteriorly depressed median plate (fig. 5); anterior epigynal ducts massive, fused (fig. 6). Leg spination: femur IV r0-0-0; metatarsi: II v0-0-0; III r1-1-2; IV r1-2-2.

**MATERIAL EXAMINED:** **England:** BERKSHIRE: Wytham Woods, Apr. 11-July 6, 1954-1955 (J. A. L. Cooke, AMNH), 2♀. DORSET: Ringsted Bay Cliffs, June 19-24, 1978-1983, under stones (P. Hillyard, BMNH), 3♂, 4♀. SUFFOLK: Capel Green, Apr. 14, 1961, grass roots (J. A. L. Cooke, AMNH), 1♀. SURREY: North Downs (J. A. Murphy, AMNH), 1♂, 1♀. **France:** no specific locality (CUC), 1♂, 1♀. BOUCHES-DU-RHÔNE: Marseilles, June 1977 (H. Zibrowius, MCZ), 1♀. DORDOGNE: Les Eyzies, July 20, 1981 (CEM), 1♀. EURE: Vernon, May 21-22, 1982, garden (H. and L. Levi, MCZ), 1♂. PYRÉNÉES-ATLANTIQUES: no specific locality (MNHN), 1♂, 1♀. SEINE-ET-MARNE: Chelles (MNHN), 1♂, 3♀. VENDÉE: Forêt de la Tranche (MNHN), 2♀. VIL-



FIGS. 7–10. *Trachyzelotes lyonneti* (Audouin). 7. Palp, ventral view. 8. Palp, retrolateral view. 9. Epigynum, ventral view. 10. Epigynum, dorsal view.

LE-DE-PARIS: Paris (E. Simon, BMNH), 1♀. **Spain:** SANTANDER: Camaleño, Picos de Europa, July 3, 1967, elevation 500 feet, under stone (B. Malkin, AMNH), 1♀. **Switzerland:** VALAIS: Zermatt (BMNH), 1♂. **Italy:** FRIULI-VENEZIA GIULIA: Trieste: Trieste (BMNH), 1♀. **Yugoslavia:** “Dalmatien” (BMNH), 1♀. **Denmark:** no specific locality (MCZ), 2♀.

DISTRIBUTION: Europe; recorded from England to Israel (Bonnet, 1959).

*Trachyzelotes lyonneti* (Audouin),  
new combination  
Figures 7–10

*Drassus lyonnetii* Audouin, 1827, p. 383, pl. 5, fig. 6 (male holotype from Egypt or Syria, should be in MNHN, lost).

*Melanophora lyonnetii*: Simon, 1864, p. 117 (*lapsus*).

*Melanophora ursina* O. P.-Cambridge, 1872, p. 245, fig. 25 (two female syntypes from “the plains of the Jordan” River, Israel, in HEC, examined). NEW SYNONYMY.

*Drassus secretus* Thorell, 1875b, p. 92 (female holotype from the Madeira Islands, should be in Zoologisk Museum, Copenhagen, lost). First

synonymized with *lyonneti* by Chyzer and Kulczyński, 1897, p. 208.

*Prothesima lyonneti*: Simon, 1878, p. 98 (*lapsus*).

*Prothesima ursina*: Simon, 1878, p. 99.

*Prothesima oceanica* Simon, 1883, p. 273, fig. 6 (female holotype from Ponta Delgada, São Miguel, Azores, should be in MNHN, lost). First synonymized with *lyonneti* by Chyzer and Kulczyński, 1897, p. 208.

*Drassus brasilianus* Keyserling, 1891, p. 34, fig. 13 (female holotype from Rio Grande, Rio Grande do Sul, Brazil, in BMNH, examined). NEW SYNONYMY.

*Prothesima secreta*: Chyzer and Kulczyński, 1896, p. 10.

*Scotophaeus brasilianus*: Mello-Leitão, 1915, p. 143.

*Latonigena brasilianus*: Mello-Leitão, 1918, p. 72, fig. 42. Bonnet, 1957, p. 2363.

*Zelotes ursinus*: Reimoser, 1919, p. 171. Roewer, 1954, p. 460. Bonnet, 1959, p. 4958.

*Zelotes oceanicus*: Reimoser, 1919, p. 204.

*Nodocion agilis* Bryant, 1936, p. 93, fig. 3 (male holotype from Dallas, Dallas County, Texas, in MCZ, examined). Roewer, 1954, p. 427. Bonnet, 1958, p. 3105. NEW SYNONYMY.

*Nodocion zelotoides* Chamberlin, 1936b, p. 6, fig. 20 (female holotype from Green Island Bird Refuge, Cameron County, Texas, in AMNH,

- examined). Preoccupied by *N. zelotoides* Worley (1928).
- Nodocion solaster* Chamberlin, 1937, p. 170 (*nomen novum* for *N. zelotoides* Chamberlin). First synonymized with *agilis* by Ubick and Roth, 1973, p. 2.
- Zelotes brasilianus*: Mello-Leitão, 1943, p. 216 (not fig. 42). Roewer, 1954, p. 467.
- Nodocion chamberlini* Roewer, 1951, p. 443 (superfluous *nomen novum* for *N. zelotoides* Chamberlin); 1954, p. 427.
- Zelotes lyonneti*: Roewer, 1954, p. 453. Bonnet, 1959, p. 4934.
- Zelotes philippsoni* Denis, 1956, p. 275, fig. 1 (female holotype from Rabat, Rabat-Salé, Morocco, in MNHN, examined). NEW SYNONYMY.
- Drassyllus agilis*: Ubick and Roth, 1973, p. 2.
- Zelotes errans* Benoit, 1977, p. 55, figs. 19a-f (female holotype from Basse Fisher's Valley, Saint Helena, in MRAC, examined). NEW SYNONYMY.

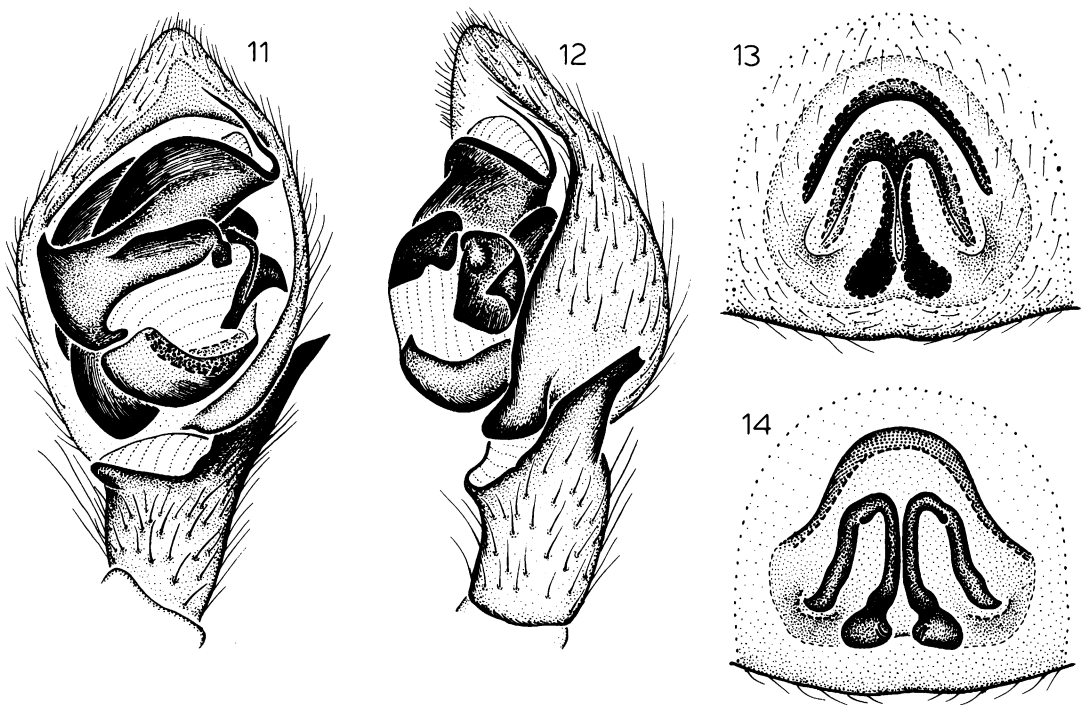
**DIAGNOSIS:** This species seems closest to *T. adriaticus* and *T. stubbsi* (males of all three have distinct prolateral extensions on the terminal apophysis) but can be distinguished by having the prolateral extension of the terminal apophysis sharply pointed (fig. 7) and the m-shaped median ridge of the epigynum short (fig. 9).

**MALE:** Total length  $4.69 \pm 0.38$ . Carapace  $2.16 \pm 0.18$  long,  $1.73 \pm 0.11$  wide. Femur II  $1.48 \pm 0.10$  long. Eye sizes and interdistances: AME 0.08, ALE 0.11, PME 0.09, PLE 0.10; AME-AME 0.03, AME-ALE 0.01, PME-PME 0.06, PME-PLE 0.07, ALE-PLE 0.04. MOQ length 0.25, front width 0.19, back width 0.24. Prolateral extension of terminal apophysis sharply pointed, median apophysis massive (figs. 7, 8). Leg spination: femur II p0-0-1; tibia III v2-2-2; metatarsus III v1p-0-0, r1-1-2.

**FEMALE:** Total length  $7.09 \pm 0.75$ . Carapace  $2.48 \pm 0.25$  long,  $1.90 \pm 0.17$  wide. Femur II  $1.60 \pm 0.10$  long. Eye sizes and interdistances: AME 0.08, ALE 0.12, PME 0.11, PLE 0.12; AME-AME 0.06, AME-ALE 0.02, PME-PME 0.06, PME-PLE 0.06, ALE-PLE 0.07. MOQ length 0.29, front width 0.22, back width 0.28. Median epigynal ridge short, anterior epigynal ducts m-shaped (figs. 9, 10). Leg spination: femur II p0-0-1; tibia III r1-1-1; metatarsi: I v1p-0-0; II v2-1p-0; III r1-1-2.

**MATERIAL EXAMINED: United States:**

CALIFORNIA: *Contra Costa Co.*: Tilden Park, June 20-July 18, 1980 (J. B. Fraser, AMNH), 2♂, 1♀. *Los Angeles Co.*: no specific locality, summer 1955 (H. N. Edison, AMNH), 1♀; Altadena, Aug. 1966 (F. Russell, AMNH), 1♀; Ballona Wetlands, near Playa del Rey, July 9-Sept. 16, 1980 (C. D. Nagano, J. N. Hogue, LACM), 2♀, Mar. 22, 1981 (C. D. Nagano, J. N. Hogue, LACM), 1♂; Eagle Rock, Aug. 12, 1956 (J. D. Soule, AMNH), 2♀; Glendale, Apr. 23-May 21, 1951-1952 (T. Tice, AMNH), 2♀; Long Beach, Apr. 21, 1968 (M. E. Thompson, MET), 1♂; Los Angeles, Apr. 23, 1949 (J. D. Soule, AMNH), 1♂, June 5-Sept. 17, 1956 (J. D. Soule, AMNH), 2♀; Redondo Beach, July 2, 1950 (H. L. Shantz, AMNH), 1♀; San Clemente Island (N end), Mar. 22, 1972 (J. Doyen, UCB), 1♀; San Pedro, Aug. 22, 1950 (D. E. Beck, AMNH), 1♀; Sunland, May 12-June 10, 1955-1957 (R. X. Schick, AMNH), 2♂; Whittier Narrows Recreation Area, Aug. 16, 1976 (M. E. Thompson, MET), 1♀. *Marin Co.*: San Anselmo, Mar. 31, 1973 (J. Zari, CAS), 1♀. *Monterey Co.*: Carmel, Mar. 31, 1954 (AMNH), 1♀; Pebble Beach, Sept. 9, 1953, in stables (H. Baxter, AMNH), 1♂. *Riverside Co.*: Riverside, July 3, 1956 (E. I. Schlinger, AMNH), 1♀, Aug. 7, 1957 (E. I. Schlinger, AMNH), 1♂, May 25, 1976, dry grass (D. Carroll, UCR), 1♂; Winchester, Mar. 23-Nov. 11, 1969-1982, in building, on driveway, and crawling on turned soil (W. R. Icenogle, WRI), 5♂, 3♀. *San Diego Co.*: Alvarado Canyon, Mar. 27, 1976, under rocks (S. C. Johnson, SCJ), 1♂, 1♀; Del Mar, Apr. 15-May 30, 1957 (J. A. Comstock, AMNH), 1♀; La Mesa, Aug. 12, 1952 (W. M. Pearce, AMNH), 1♀, Apr. 20, 1978, in yard (S. C. Johnson, SCJ), 1♂; 8 mi. N Oceanside, Mar. 30, 1960 (W. J. Gertsch, W. Ivie, R. Schrammel, AMNH), 1♀; Otay Mesa, Johnson Canyon, Apr. 1-27, 1977-1978, elevation 500 feet, grassy canyon side, under rocks (S. C. Johnson, W. R. Icenogle, SCJ, WRI), 5♂, 12♀; San Diego, Apr. 1971, pitfalls (B. J. Kaston, BJK), 3♂, 1♀; San Pasqual Valley, May 17, 1948 (W. M. Pearce, AMNH), 1♂, 1♀; Sunset Cliffs, Point Loma, Aug. 26, 1977, on beach sand (S. C. Johnson, SCJ), 1♂. *San Mateo Co.*: Atherton, Dec. 11, 1927 (J. C. Chamberlin, AMNH), 1♂; San Bruno Mountain, Mar. 7, 1979, matured late June (D. Ubick, CDU),



FIGS. 11–14. *Trachyzelotes adriaticus* (Caporiacco). 11. Palp, ventral view. 12. Palp, retrolateral view. 13. Epigynum, ventral view. 14. Epigynum, dorsal view.

1♀; 0.5 mi. W San Mateo, May–Sept. 1962, pitfall (H. Stark, CAS), 1♂. *Santa Clara Co.*: San Jose, May 5–June 3, 1974–1980, under rocks (D. Ubick, CDU), 1♂, 2♀; Stanford University, Palo Alto, July 19, 1924 (C. Duncan, MCZ), 1♀. *Solano Co.*: Fairfield, Apr.–Aug. 1955 (K. W. Haller, AMNH), 1♂, 1♀. *Stanislaus Co.*: 5 mi. N Turlock, May 25, 1976, pitfall, grassland (J. Collins, UCB), 1♀. *Tulare Co.*: Waukena, Aug. 10, 1979, sticky trap in cotton (D. Carroll, CDF), 1♂. *Ventura Co.*: Pt. Mugu Naval Air Station, May 22–Aug. 24, 1981–1982, pitfalls (C. D. Nagano, J. N. Hogue, LACM), 11♂, 9♀. ILLINOIS: *Madison Co.*: Alton, May 10, 1976, under rock in yard (S. Walter, MCZ), 1♀. MISSOURI: *Phelps Co.*: Rolla, June 18–July 24, 1953–1957 (H. Exline, D. L. Frizzell, EPC), 1♂, 2♀. *Saint Louis Co.*: Saint Louis (N. and P. Rau, MCZ), 1♂. OREGON: *Lane Co.*: Coburg Hills, Feb. 22, 1942 (B. Malkin, H. Stobie, AMNH), 1♂; Eugene, Mar. 19–Aug. 12, 1941–1946, elevation 800–1200 feet (B. Malkin, AMNH), 3♂, 5♀; Spencer Butte, June 29–Sept. 13, 1941,

elevation 700–1100 feet (B. Malkin, AMNH), 3♀. TEXAS: *Baylor Co.*: no specific locality, May 10, 1975, ground (T. Emsoff, NVH), 1♀. *Cameron Co.*: Green Island Bird Refuge, May 4, 1935 (S. Mulaik, AMNH), 1♀ (type); 11 mi. E Rio Hondo, Dec. 8, 1954 (K. W. Haller, AMNH), 1♀. *Dallas Co.*: Oak Cliff, Dallas, May 15, 1935 (S. Jones, MCZ), 1♀ (type); Southern Methodist University, Dallas, June 14–July 7, 1935–1936, mule barn (S. Jones, MCZ), 3♀. *Hidalgo Co.*: Rio Grande Valley State Park, Bentsen, July 7–11, 1970, carrion trap (A. Newton, MCZ), 1♂. *Kleberg Co.*: Kingsville, Feb. 26–Dec. 15, 1969 (J. Hallan, AMNH), 1♂, 1♀. *Potter Co.*: Amarillo, Aug. 30, 1942 (B. Malkin, AMNH), 1♂. *Travis Co.*: Austin, May 1–Aug. 1, 1945–1948 (H. Exline, D. L. Frizzell, EPC), 1♂, 5♀. BRAZIL: RIO GRANDE DO SUL: Pôrto Alegre, Jan. 18, 1955 (G. Wiener, MCN), 1♀; Rio Grande (von Ihering, BMNH), 1♀ (type). PERU: CALLAO: Callao, Nov. 16, 1950 (E. S. Ross, A. E. Michelbacher, CAS), 1♂, 1♀. LIMA: Huaura Valley, Jan. 1969, in cotton fields (P. Aguilar



F., PGA), 2♂, 1♀; Lima, in cotton field (W. Weyrauch, EPC), 1♀; 47 km. E Lima, Feb. 8, 1965, elevation 1100 m., under stones in pasture (H. W. Levi, MCZ), 1♂, 1♀; Quebrada de Chilca, 7 km. E Santa María del Mar, Dec. 24, 1973, elevation 720 m. (O. F. Francke, AMNH), 3♀; Quebrada Verde (P. Aguilar F., EPC), 1♀; Valle Lurín, Nov. 1958, cotton leaves (P. Aguilar F., EPC), 1♀. **LORETO:** Iquitos, Nov. 1961 (J. Callan, AMNH), 1♂. **France:** BOUCHES-DU-RHÔNE: Marignane (MNHN), 2♂, 1♀. **Italy:** VENETO: *Venezia:* Pelta di Bo, June 22, 1979 (CKT), 1♀. **Greece:** CRETE: Gortyna, Apr. 16–18, 1979–1981 (J. A. Murphy, JAM), 2♂, 1♀. **Turkey:** ANTALYA: ancient Phaselis, May 13–14, 1981 (B. Malkin, AMNH), 1♂. **Soviet Union:** TURKMEN S.S.R.: Copetdag, Apr. 22–28, 1978 (V. Kuznetsov, ZIL), 1♀. **Israel:** “on the plains of the Jordan” River, 1865 (O. P.-Cambridge, HEC), 2♀ (types). **Algeria:** ALGER: Boufarik, Nov. 7, 1948 (B. Malkin, AMNH), 1♀; El Harrach, May 9, 1983 (R. Bosmans, CRB), 1♂. **Morocco:** RABAT-SALÉ: Rabat, Aug. 17, 1952 (J. Philippon, C. Pollock, MNHN), 1♀ (type). **Madeira Islands:** DESERTA GRANDE: no specific locality, July 2–5, 1957 (MNHN), 1♂. MADEIRA: Pico do Cruz, Apr. 19, 1973 (J. A. Murphy, JAM), 2♀. **Saint Helena:** Basse Fisher’s Valley, Jan. 10, 1966 (MRAC), 1♀ (type).

**DISTRIBUTION:** Natively Mediterranean; apparently introduced in United States, Brazil, and Peru.

**SYNONYMY:** O. P.-Cambridge (1872) was unaware that *ursina* is the female of *lyonneti*; the subsequent redescriptions by Thorell, Keyserling, Bryant, Denis, and Benoit are presumably due to the unexpected occurrence of the same species on five continents as well as several scattered islands.

*Trachyzelotes adriaticus* (Caporiacco),

new combination

Figures 11–14

*Zelotes adriaticus* Caporiacco, 1953, p. 87, figs. 8a, b (male holotype from Insula Diomedea Caprara, Tremeti Islands, Apulia, Italy, in MCV, examined).

**DIAGNOSIS:** Males can be recognized by the short, blunt prolateral extension of the ter-

minial apophysis (fig. 11), females by the laterally short anterior epigynal ducts (fig. 14).

**MALE:** Total length 4.25, 4.28. Carapace 1.90, 1.91 long, 1.53, 1.55 wide. Femur II 1.19, 1.30 long. Eye sizes and interdistances: AME 0.05, ALE 0.08, PME 0.06, PLE 0.09; AME–AME 0.08, AME–ALE 0.02, PME–PME 0.07, PME–PLE 0.06, ALE–PLE 0.03. MOQ length 0.22, front width 0.18, back width 0.19. Terminal apophysis with short, blunt prolateral extension, retrolateral tibial apophysis slightly incised at tip (figs. 11, 12). Leg spination: femur II p0-0-1; tibiae: III v2-2-2; IV p1-1-1; metatarsi: I v2-0-0; III p1-1-2, r1-1-2.

**FEMALE:** Total length 5.23–6.64. Carapace 2.17–2.44 long, 1.67–1.93 wide. Femur II 1.43–1.71 long. Eye sizes and interdistances: AME 0.07, ALE 0.10, PME 0.10, PLE 0.10; AME–AME 0.05, AME–ALE 0.02, PME–PME 0.04, PME–PLE 0.07, ALE–PLE 0.06. MOQ length 0.24, front width 0.19, back width 0.24. Median m-shaped epigynal ridge moderately long, anterior epigynal ducts abruptly terminated laterally (figs. 13, 14). Leg spination: femora: II, IV p0-0-1; metatarsi: II v1p-0-0; IV v2-1p-1p.

**MATERIAL EXAMINED:** **Italy:** APULIA: *Isola Tremeti:* Insula Diomedea Caprara, May 15, 1948 (Ruffo, MCV), 1♂ (type). BASILICATA: *Potenza:* Potenza, June 4, 1962, streamside fields, rocks (H. W. Levi, P. Tongiorgi, MCZ), 1♂. TUSCANY: *Isole Toscano:* Isola di Giannutri, June 3–5, 1966 (E. Capanna, PMB), 1♀. **Yugoslavia:** CROATIA: Insel Unije, off Istrian Peninsula, Aug. 9, 1975 (Schatz, CKT), 1♀; Rovinj, Aug. 1, 1965 (K. Thaler, CKT), 1♀.

**DISTRIBUTION:** Known only from Italy and Yugoslavia.

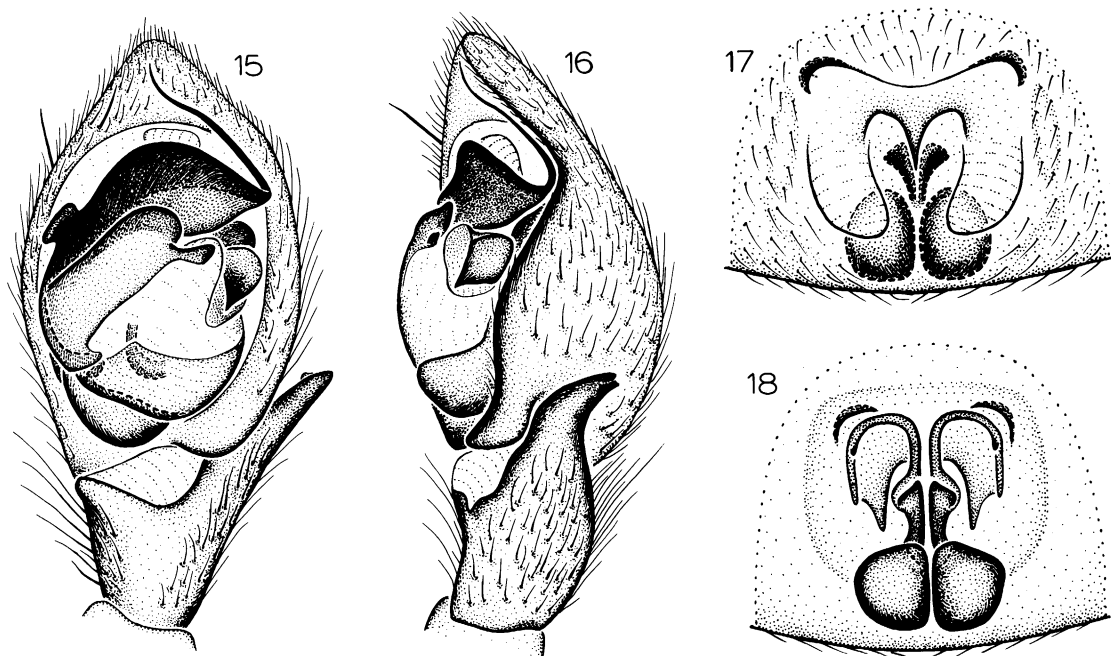
*Trachyzelotes stubbsi*, new species

Figures 15, 16

**TYPE:** Male holotype from coastal cliffs at Cape Kiti, near Larnaca Airport, Cyprus (May 1982; A. Stubbs), deposited in AMNH.

**ETYMOLOGY:** The specific name is a patronym in honor of the collector of the holotype.

**DIAGNOSIS:** Males can be easily recognized by the distally expanded prolateral extension on the terminal apophysis (fig. 15).



FIGS. 15-18. 15, 16. *Trachyzelotes stubbsi*, new species. 17, 18. *T. ravidus* (L. Koch). 15. Palp, ventral view. 16. Palp, retrolateral view. 17. Epigynum, ventral view. 18. Epigynum, dorsal view.

**MALE:** Total length 4.81. Carapace 2.23 long, 1.73 wide. Femur II 1.46 long. Eye sizes and interdistances: AME 0.07, ALE 0.09, PME 0.11, PLE 0.10; AME-AME 0.05, AME-ALE 0.02, PME-PME 0.05, PME-PLE 0.04, ALE-PLE 0.06. MOQ length 0.27, front width 0.19, back width 0.27. Prolateral extension of terminal apophysis wider distally than proximally, tip of retrolateral tibial apophysis slightly incised (figs. 15, 16). Leg spination: femora II, IV p0-0-1; tibia III v2-2-2; metatarsus IV v2-2-2.

**FEMALE:** Unknown.

**OTHER MATERIAL EXAMINED:** None.

**DISTRIBUTION:** Known only from Cyprus.

*Trachyzelotes jaxartensis* (Kroneberg),  
new combination  
Figures 19-22

*Melanophora jaxartensis* Kroneberg, 1875, p. 23, pl. 2, figs. 1a-c (female holotype from Samarkand, Uzbek S.S.R., Soviet Union, depository unknown).

*Prosthesima insipiens* Simon, 1885, p. 382 (two female and three male syntypes from Dakar,

Senegal, in MNHN, examined). **NEW SYNONYMY.**

*Echemus spinibarbis* Simon, 1897, p. 96 (female holotype from Masqat, Oman, in MNHN, examined). Roewer, 1954, p. 419. **NEW SYNONYMY.**

*Prosthesima peninsulana* Banks, 1898, p. 217, pl. 13, fig. 16 (female holotype from Baja California, Mexico, in CAS, destroyed). **NEW SYNONYMY.**

*Prosthesima iaxartensis*: Kulczyński, 1901, p. 323 (*lapsus*).

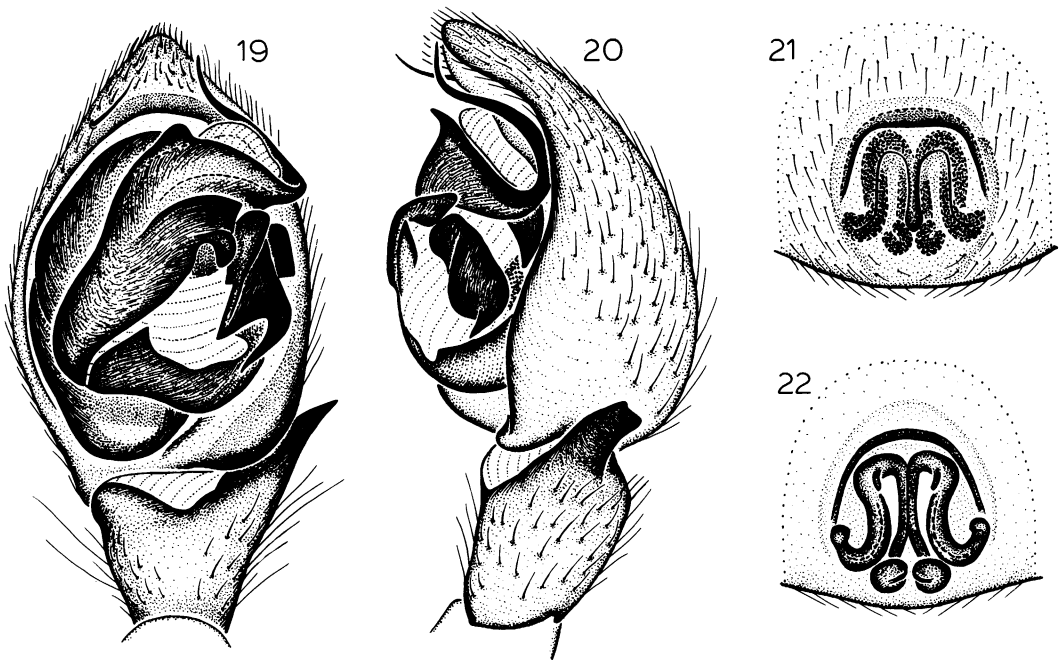
*Melanophora acanthognathus* Purcell, 1907, p. 333, fig. 66 (female lectotype, designated by Tucker, 1923, p. 335, from Bergvliet, Cape of Good Hope, South Africa, in SAM, examined). **NEW SYNONYMY.**

*Zelotes peninsulanus*: Petrunkevitch, 1911, p. 150. Roewer, 1954, p. 469. Bonnet, 1959, p. 4940.

*Zelotes jaxartensis*: Reimoser, 1919, p. 168. Roewer, 1954, p. 451. Bonnet, 1959, p. 4928.

*Camillina spinibarbis*: Berland, 1919, p. 463. Bonnet, 1956, p. 945.

*Nodocion barbaranus* Chamberlin, 1922, p. 154 (female holotype from Santa Barbara, Santa Barbara County, California, in MCZ, examined); 1936a, p. 12, fig. 16. Roewer, 1954, p.



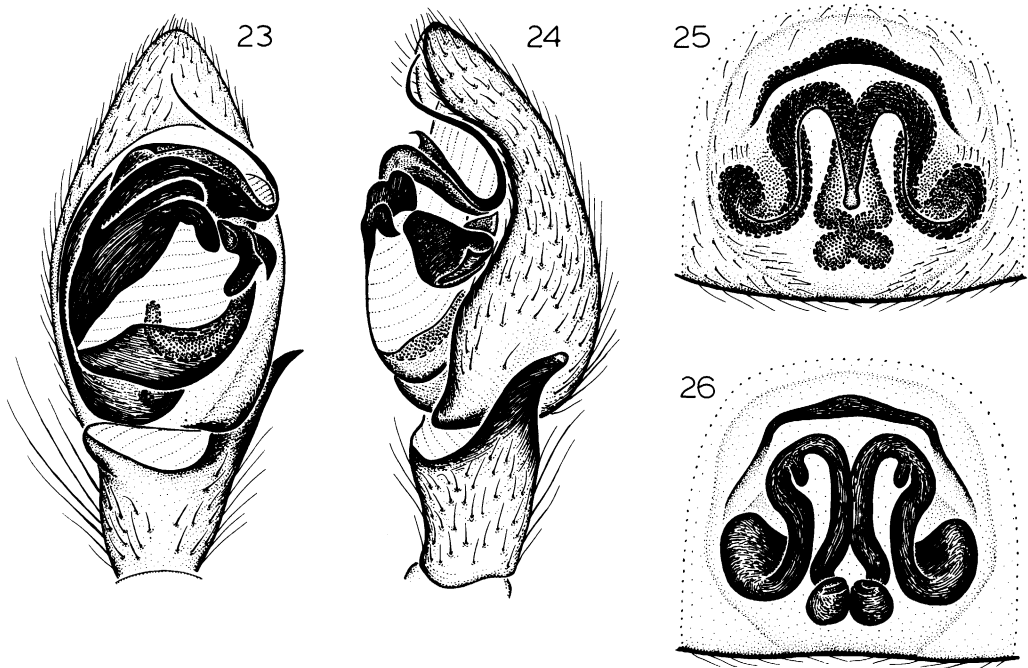
FIGS. 19–22. *Trachyzelotes jaxartensis* (Kroneberg). 19. Palp, ventral view. 20. Palp, retrolateral view. 21. Epigynum, ventral view. 22. Epigynum, dorsal view.

427. Bonnet, 1958, p. 3105. First synonymized with *peninsulanus* by Ubick and Roth, 1973, p. 3.
- Nodocion iugans* Chamberlin, 1922, p. 154 (male holotype from Santa Barbara, Santa Barbara County, California, in MCZ, examined). Roewer, 1954, p. 427. First synonymized with *peninsulanus* by Ubick and Roth, 1973, p. 3.
- Camillina acanthognathus*: Tucker, 1923, p. 335.
- Zelotes sorex* Denis, 1944, p. 6, fig. 12 (female holotype from Luxor, Kafr ash Shaykh, Egypt, in BMNH, examined). Roewer, 1954, p. 466. NEW SYNONYMY.
- Camillina acanthognatha*: Roewer, 1954, p. 410. Bonnet, 1956, p. 943.
- Zelotes insipiens*: Roewer, 1954, p. 464. Bonnet, 1959, p. 4928.
- Nodocion jugans*: Bonnet, 1958, p. 3105 (invalid emendation).
- Zelotes cavaleriei* Schenkel, 1963, p. 50, fig. 25 (female holotype from Anshun, Kweichow, China, in MNHN, examined). NEW SYNONYMY.
- Drassyllus peninsulanus*: Ubick and Roth, 1973, p. 3.
- Scotophaeus chohanis* Patel and Patel, 1975, p. 35, figs. 2a–e (female holotype from Vallabh Vidyanagar, Kaira District, Gujarat, India, should be in ZSI, not examined). NEW SYNONYMY.
- Drassodes indraprastha* Tikader and Gajbe, 1975, p. 276, figs. 11–14 (female holotype from bank of Sot Nadi, Amroh, Moradabad District, Uttar Pradesh, India, in ZSI, examined). Tikader, 1982, p. 419, figs. 283–287. NEW SYNONYMY.
- DIAGNOSIS:** This species seems closest to *T. kulczynskii* (both have very long median epigynal ridges) but can be distinguished by the distinct protuberance on the embolar base (fig. 19) of males and the longer anterior epigynal margin (fig. 21) of females.
- MALE:** Total length  $5.24 \pm 0.71$ . Carapace  $2.32 \pm 0.26$  long,  $1.88 \pm 0.21$  wide. Femur II  $1.60 \pm 0.16$  long. Eye sizes and interdistances: AME 0.09, ALE 0.11, PME 0.14, PLE 0.10; AME–AME 0.07, AME–ALE 0.02, PME–PME 0.02, PME–PLE 0.05, ALE–PLE 0.05. MOQ length 0.28, front width 0.25, back width 0.30. Embolar base with distinct distal protuberance, retrolateral tibial apophysis relatively short (figs. 19, 20). Leg spination: femur III d1-1-1, r0-0-1.

**FEMALE:** Total length  $6.56 \pm 0.78$ . Carapace  $2.73 \pm 0.22$  long,  $2.14 \pm 0.19$  wide. Femur II  $1.78 \pm 0.15$  long. Eye sizes and interdistances: AME 0.11, ALE 0.13, PME 0.15, PLE 0.12; AME-AME 0.08, AME-ALE 0.02, PME-PME 0.03, PME-PLE 0.05, ALE-PLE 0.07. MOQ length 0.34, front width 0.30, back width 0.33. Anterior epigynal margin relatively long, extending down sides, anterior epigynal ducts relatively long, extending up sides (figs. 21, 22). Leg spination: femur III d1-1-1, r0-0-1; metatarsus III p1-1-2, r1-1-2.

**MATERIAL EXAMINED:** **United States:** **ARIZONA:** *Cochise Co.:* 18 mi. E Douglas, Mar. 26, 1963 (S. M. Sutton, BRV), 1♀; Tombstone, Apr. 6, 1938 (AMNH), 1♂. *Maricopa Co.:* Litchfield Park, Dec. 26, 1940 (S. and D. Mulaik, AMNH), 1♂; Scottsdale, Dec. 3, 1902 (H. W. Britcher, AMNH), 1♀. *Pima Co.:* Tucson, Sept. 15–Oct. 12, 1913 (J. T. Carlson, CAS), 1♀, Aug. 1935 (P. Steckler, AMNH), 1♀, Feb.–Apr. 1940 (A. R. Phillips, AMNH), 1♀; 0.5 mi. E Tucson, Feb. 1935 (A. Griswold, MCZ), 1♀; 10 mi. E Tucson, Feb. 27, 1935 (A. Griswold, MCZ), 1♀. *Yuma Co.:* Yuma (N. Banks, MCZ), 1♀, Jan. 30, 1958 (V. Roth, AMNH), 9♂, 3♀, Sept. 15, 1958 (V. Roth, AMNH), 1♀. **CALIFORNIA:** *Imperial Co.:* Brawley, Apr. 20, 1961 (D. Thompson, AMNH), 1♀; Calexico, Jan. 25, 1957, in alfalfa field (E. I. Schlinger, AMNH), 1♀; 7 mi. W El Centro, Mar. 14, 1941 (W. Ivie, AMNH), 1♀; Glamis, Apr. 11, 1965, creosote bush (L. D. Anderson, UCR), 1♀; Meloland Field Station, Sept. 1978, cotton (L. A. Hickle, UCR), 1♂. *Los Angeles Co.:* Los Angeles, Nov.–Dec. 1922 (G. Grant, AMNH), 2♂, 2♀; Point Firmin, San Pedro, July 22, 1931 (R. V. Chamberlin, AMNH), 1♂; Santa Catalina Island: no specific locality, May 13, 1936 (AMNH), 1♀, Avalon, Sept. 10, 1910 (J. T. Carlson, CAS), 1♂, El Rancho Escondido, 1938 (T. D. A. Cockerell, AMNH), 1♀; 3 mi. W Santa Monica, Mar. 17, 1941 (W. Ivie, AMNH), 1♂; Topanga Canyon, near mouth, Mar. 18, 1941 (W. Ivie, AMNH), 1♂. *Orange Co.:* Dana Point, Apr. 8, 1947 (AMNH), 1♀; Laguna Beach, July 14, 1931 (R. V. Chamberlin, AMNH), 1♂, Dec. 28, 1932 (W. Ivie, AMNH), 1♂, May 12, 1936 (AMNH), 1♂. *Placer Co.:* 4 mi. W Newcastle, Apr. 15, 1958 (L. M. Smith, R. O. Schuster, AMNH), 1♀.

*Riverside Co.:* Palm Canyon, Palm Springs, Mar. 27, 1960 (W. Ivie, R. Schrammel, AMNH), 1♂; Riverside, May 6, 1936 (S. C. Bishop, AMNH), 3♀. *San Diego Co.:* 6 mi. E Chula Vista, Feb. 10, 1979, under rock (W. R. Icenogle, WRI), 1♀; National City, July 12, 1931 (R. V. Chamberlin, AMNH), 2♂, 1♀; Otay Mesa, Johnson Canyon, Apr. 27, 1978 (S. C. Johnson, SCJ), 1♂; San Diego, Mar. 1–12, 1922 (G. Merriken, AMNH), 1♀; San Diego River, July 12, 1931 (R. V. Chamberlin, AMNH), 1♀. *Santa Barbara Co.:* Santa Barbara, Apr. 1913 (R. V. Chamberlin, MCZ), 1♂, 1♀ (types), Sept. 5, 1947 (A. Bacon, AMNH), 1♀, Apr. 8, 1949 (H. L. Schantz, AMNH), 2♀, June 19, 1949 (H. L. Schantz, AMNH), 1♂, June–Oct. 1971 (Dodd, SBM), 1♂, 3♀. *Ventura Co.:* Ojai, Jan. 24, 1930 (H. Brandt, AMNH), 1♂; Pt. Mugu Naval Air Station, May 15–Aug. 24, 1981–1982, pitfalls (C. D. Nagano, J. N. Hogue, LACM), 4♂, 2♀. **NEVADA:** *Clark Co.:* Las Vegas, May–Aug. 1944 (D. J. Zinn, AMNH), 1♀. **MEXICO:** **BAJA CALIFORNIA NORTE:** Meling Ranch, San José, May 1–4, 1961 (W. J. Gertsch, V. Roth, AMNH), 3♂, 8♀; 11 mi. SW Punta Prieta, Apr. 15, 1969, elevation 200 feet (S. C. Williams, CAS), 1♀; Rancho San Luis (23 mi. S El Mármol), Jan. 12, 1965, palm oasis (V. Roth, AMNH), 1♂; mouth of Río Guadalupe (32 mi. N Ensenada), Oct. 16, 1926 (H. H. Cleaves, AMNH), 1♂; San Telmo de Arriba, May 3, 1961 (W. J. Gertsch, V. Roth, AMNH), 1♀; 40 mi. S Tecate, Nov. 10, 1957, in oak grove (V. Roth, AMNH), 1♀. **BAJA CALIFORNIA SUR:** Rancho de Parras (12 mi. S Loreto), Jan. 29, 1965 (V. Roth, AMNH), 1♂; San José del Cabo, Mar. 15–17, 1945 (M. Correa, AMNH), 3♀. **COAHUILA:** Saltillo, July 3, 1936 (L. I. Davis, AMNH), 1♂. **SONORA:** “Los Algodones,” 6 mi. W Bahía San Carlos, Mar. 22–23, 1980 (J. Doyen, UCB), 1♂, 1♀; 6 mi. S Presa Obregón, Mar. 24, 1980 (C. E. Griswold, UCB), 1♀. **TAMAULIPAS:** Jaumave, May 5, 1946 (H. Wagner, AMNH), 1♀. **EGYPT:** ASYÛT: Asyût, Mar. 19, 1974, pitfall traps in sugar cane (A. A. Negin, BMNH), 2♀. **KAFR ASH SHAYKH:** Luxor, Mar. 1923 (S. Hirst, BMNH), 1♀ (type). **YEMEN:** Aden (MNHN), 1♀. **OMAN:** Masqat (MNHN), 1♀ (type). **SOVIET UNION:** KALMYK AUTONOMOUS S.S.R.: Caspiiskii, June 11, 1974 (A. Ponomazjov,



FIGS. 23–26. *Trachyzelotes kulczynskii* (Bösenberg). 23. Palp, ventral view. 24. Palp, retrolateral view. 25. Epigynum, ventral view. 26. Epigynum, dorsal view.

ZIL), 1♀. **India:** UTTAR PRADESH: *Moradabad*: bank of Sot Nadi, Amroh, Mar. 12, 1973 (A. Hussain, ZSI), 1♀ (type). **China:** FUKIEN: Gang-keu, July 25, 1936 (L. Gressitt, MCZ), 1♀. KIANGSU: Su-chou (AMNH), 1♀. KWEICHOW: Anshun, 1912 (MNHN), 1♀ (type). PEKING: Tsing Hua College, Peking, Nov.–Dec. 1924 (P. W. Claassen, AMNH), 1♂. **Senegal:** Dakar (MNHN), 3♂, 2♀ (types). **South Africa:** CAPE OF GOOD HOPE: Beaufort West, Oct. 29, 1905 (W. F. Purcell, SAM), 1♀; Bergvliet, Dec. 1899 (W. F. Purcell, SAM), 1♀, Sept. 1904 (W. F. Purcell, SAM), 1♀ (type); Cape Peninsula, 1899 (F. Treleaven, SAM), 1♀; Cape Town, Nov. 1897 (Paynter, SAM), 2♀, July 1898 (R. M. Lightfoot, SAM), 1♀; Cape Town Gardens, Aug. 1903 (W. F. Purcell, SAM), 1♀. **Hawaii:** OAHU: Honolulu, June 12, 1950, in soil (D. E. Hardy, AMNH), 1♀, Feb. 1951, leaf mold (D. E. Hardy, AMNH), 1♂, Nov. 1951 (D. E. Hardy, AMNH), 1♀; Kawaihapai, Feb. 1959, sand dunes near shore (O. and I. Degener, AMNH), 1♀; Koko Head Crater, Oct. 14, 1952 (W. C. Mitchell, AMNH), 1♀.

**DISTRIBUTION:** Natively Mediterranean (Egypt to Soviet Union), apparently introduced in United States, Mexico, India, China, Senegal, South Africa, and Hawaii.

**SYNONYMY:** The numerous redescrptions are presumably due only to the unexpectedly wide distribution of the species.

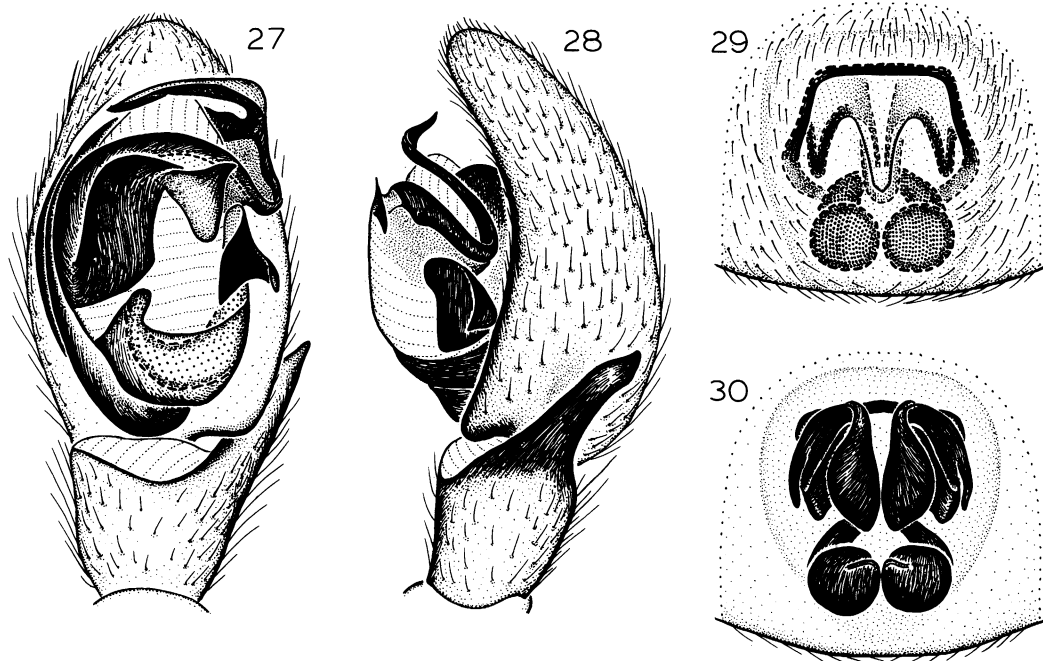
*Trachyzelotes kulczynskii* (Bösenberg),  
new combination  
Figures 23–26

*Prothesima kulczynskii* Bösenberg, 1902, p. 313, figs. 463A, B (female holotype from Pforzheim, Baden-Württemberg, West Germany, destroyed).

*Zelotes kulczynskii*: Reimoser, 1919, p. 168. Roewer, 1954, p. 451. Bonnet, 1959, p. 4929.

*Zelotes samoensis* Berland, 1934, p. 325, figs. 7, 8 (female holotype from Samoa, in BMNH, examined). Roewer, 1954, p. 467. Bonnet, 1959, p. 4949. **NEW SYNONYMY.**

**DIAGNOSIS:** This species seems closest to *T. jaxartensis* but can be distinguished by the



FIGS. 27-30. *Trachyzelotes barbatus* (L. Koch). 27. Palp, ventral view. 28. Palp, retrolateral view. 29. Epigynum, ventral view. 30. Epigynum, dorsal view.

distally smooth embolar base (fig. 23) and the shorter anterior epigynal margin (fig. 25).

**MALE:** Total length  $3.94 \pm 0.33$ . Carapace  $1.58 \pm 0.09$  long,  $1.26 \pm 0.07$  wide. Femur II  $1.08 \pm 0.08$  long. Eye sizes and interdistances: AME 0.08, ALE 0.10, PME 0.12, PLE 0.11; AME-AME 0.05, AME-ALE 0.01, PME-PME 0.03, PME-PLE 0.03, ALE-PLE 0.04. MOQ length 0.31, front width 0.21, back width 0.27. Embolar base smoothly rounded distally, retrolateral tibial apophysis relatively short (figs. 23, 24). Leg spination: femur III r0-0-1; tibiae: III p1-0-1, v1p-0-2, r0-1-0; IV p1-0-1, v1p-1p-2, r1-1-1; metatarsi: II v0-0-0; III p0-1-0, v1p-0-0, r0-0-0; IV p0-1-1, v1p-1p-0, r1-2-0.

**FEMALE:** Total length  $5.70 \pm 0.76$ . Carapace  $2.08 \pm 0.12$  long,  $1.64 \pm 0.11$  wide. Femur II  $1.33 \pm 0.12$  long. Eye sizes and interdistances: AME 0.10, ALE 0.11, PME 0.14, PLE 0.12; AME-AME 0.07, AME-ALE 0.01, PME-PME 0.02, PME-PLE 0.04, ALE-PLE 0.03. MOQ length 0.28, front width 0.27, back width 0.30. Anterior epigynal margin relatively short, anterior epigynal ducts great-

ly extended laterally (figs. 25, 26). Leg spination: femora: II p0-0-1; III p0-0-1, r0-0-1; tibiae: III v1p-1p-2; IV p1-1-1, v1p-2-2; metatarsi: II v0-0-0; III r1-2-2; IV v1p-2-0.

**MATERIAL EXAMINED: United States:** FLORIDA: *Monroe Co.*: Fleming Key, Mar. 30, 1980, Australian pine litter (G. B. Edwards, FSCA), 1♂. JAMAICA: ST. CATHERINE: 1.5 mi. W Spanishtown, Oct. 10, 1957 (A. M. Chickering, MCZ), 1♀. **British West Indies:** ST. KITTS: no specific locality, Sept. 14-22, 1966 (A. M. Chickering, MCZ, AMNH), 17♂, 25♀. **Samoa:** no specific locality (BMNH), 1♀ (type).

**DISTRIBUTION:** According to Braun (1982), this species is one of several described by Bösenberg (1902) from Germany which have never again been taken in that country and which have subsequently been recorded only from Balkan localities (in this case, Yugoslavia, Bulgaria, and Romania). Although we have seen no Balkan specimens of the species, Bösenberg's illustration of the epigynum leaves little doubt that he had this species, and not *T. barbatus* (as was suggested by

Braun) or any other member of the *lyonneti* group. We therefore assume that the species is natively Balkan and introduced in Florida, Jamaica, St. Kitts, and Samoa.

SYNONYMY: Berland provided no characters by which to distinguish *samoensis* from *kulczynskii*, and there appear to be none.

*Trachyzelotes barbatus* (L. Koch),  
new combination  
Figures 27–30

*Melanophora barbata* L. Koch, 1866, p. 161, figs. 101–103 (male lectotype, here designated, from "Dalmatien," Yugoslavia, in BMNH, examined).

*Prosthesima barbata*: Simon, 1878, p. 45.

*Zelotes barbatus*: Simon, 1914, p. 153. Roewer, 1954, p. 445. Bonnet, 1959, p. 4914.

DIAGNOSIS: Males can easily be recognized by the broad embolus (fig. 27), females by the medially expanded anterior epigynal ducts (fig. 30).

MALE: Total length  $5.70 \pm 0.63$ . Carapace  $2.63 \pm 0.30$  long,  $2.03 \pm 0.23$  wide. Femur II  $1.65 \pm 0.21$  long. Eye sizes and interdistances: AME 0.10, ALE 0.11, PME 0.15, PLE 0.11; AME–AME 0.09, AME–ALE 0.02, PME–PME 0.03, PME–PLE 0.05, ALE–PLE 0.07. MOQ length 0.34, front width 0.29, back width 0.33. Embolus relatively broad, long, median apophysis prolonged proximally (figs. 27, 28). Leg spination: femora: I d1-0-0, p0-0-0; II d1-0-0; III p0-0-0, r0-0-0; IV r0-0-0; tibiae: III v2-2-2; IV p1-1-1; metatarsi: II v1p-0-0; III p1-1-2, v2-1p-0, r1-1-2.

FEMALE: Total length 7.17–9.37. Carapace 3.00–3.67 long, 2.23–2.93 wide. Femur II 1.91–2.12 long. Eye sizes and interdistances: AME 0.10, ALE 0.14, PME 0.16, PLE 0.11; AME–AME 0.07, AME–ALE 0.02, PME–PME 0.02, PME–PLE 0.06, ALE–PLE 0.05. MOQ length 0.34, front width 0.28, back width 0.34. Epigynum relatively small, anterior epigynal ducts expanded, almost globose, medially (figs. 29, 30). Leg spination: femora as in male; tibia IV p1-0-1; metatarsus III p1-1-2.

MATERIAL EXAMINED: **United States:** CALIFORNIA: *Contra Costa Co.*: Briones Reservoir, June 22–Aug. 2, 1980, pitfall traps (J. B. Fraser, AMNH, UCB), 5♂, 2♀; Tilden Nature Area, July 4–Aug. 15, 1980, pitfall

traps (J. B. Fraser, AMNH, UCB), 1♂, 3♀. *Marin Co.*: Novato, Apr. 25, 1982 (matured late May), grassland, under serpentine floats (D. Ubick, CDU), 3♂. **Spain:** BALEARES: *Ibiza*: C'an Prats, Apr. 13–14, 1980 (J. A. Murphy, JAM), 1♂; Puig de Perella, Apr. 7, 1980 (J. A. Murphy, JAM), 1♂. *Majorca*: Palma (MNHN), 1♂. **France:** "Gallia méridional" (MNHN), 1♂. **CORSE:** *Corsica*: no specific locality (E. Simon, BMNH), 1♀. **Italy:** LATIUM: Mt. Circao, near Terralina, May 16–17, 1962, shrubs (H. and L. Levi, MCZ), 1♂. SICILY: *Trapani*: Isola Favignana, Isole Egadi, June 1966 (E. Riggio, PMB), 1♂. **Yugoslavia:** "Dalmatien" (BMNH), 5♂, 1♀ (including lectotype).

DISTRIBUTION: Spain to Yugoslavia; introduced in California. Although the species has been recorded from north Africa by Koch (1866) and some more recent authors, no specimens have been found in the north African collections available to us, and we suspect that, like Koch's record (based on a male of *T. mutabilis*), they all represent misidentifications of other species in the *barbatus* group.

*Trachyzelotes fuscipes* (L. Koch),  
new combination  
Figures 31–34

*Melanophora fuscipes* L. Koch, 1866, p. 189, figs. 127–129 (male lectotype, here designated, from Sicily, Italy, in BMNH, examined).

*Prosthesima fuscipes*: Simon, 1878, p. 51.

*Prosthesima rubicundula* Simon, 1878, p. 89 (male and female syntypes from several localities in France, should be in MNHN, lost). NEW SYNONYMY.

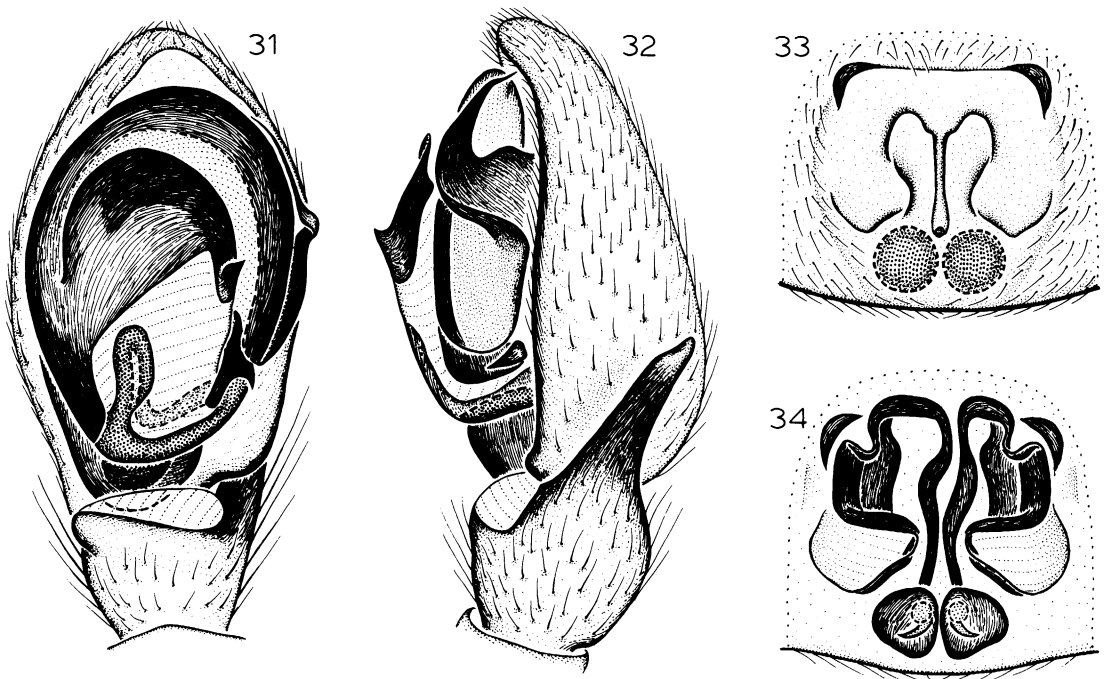
*Melanophora rubicundula*: Galiano, 1910, p. 381.

*Zelotes fuscipes*: Simon, 1914, p. 216 (not fig. 365). Roewer, 1954, p. 450. Bonnet, 1959, p. 4924.

*Zelotes rubicundulus*: Simon, 1914, p. 216, figs. 311, 340. Roewer, 1954, p. 457. Bonnet, 1959, p. 4947.

DIAGNOSIS: Males can easily be recognized by the subdistally twisted embolus (fig. 31), females by the posterolaterally extended anterior epigynal ducts (fig. 34).

MALE: Total length  $4.23 \pm 0.49$ . Carapace  $1.90 \pm 0.21$  long,  $1.53 \pm 0.18$  wide. Femur II  $1.17 \pm 0.16$  long. Eye sizes and interdistances: AME 0.05, ALE 0.09, PME 0.08, PLE 0.07; AME–AME 0.04, AME–ALE 0.01, PME–PME 0.05, PME–PLE 0.04, ALE–PLE



FIGS. 31–34. *Trachyzelotes fuscipes* (L. Koch). 31. Palp, ventral view. 32. Palp, retrolateral view. 33. Epigynum, ventral view. 34. Epigynum, dorsal view.

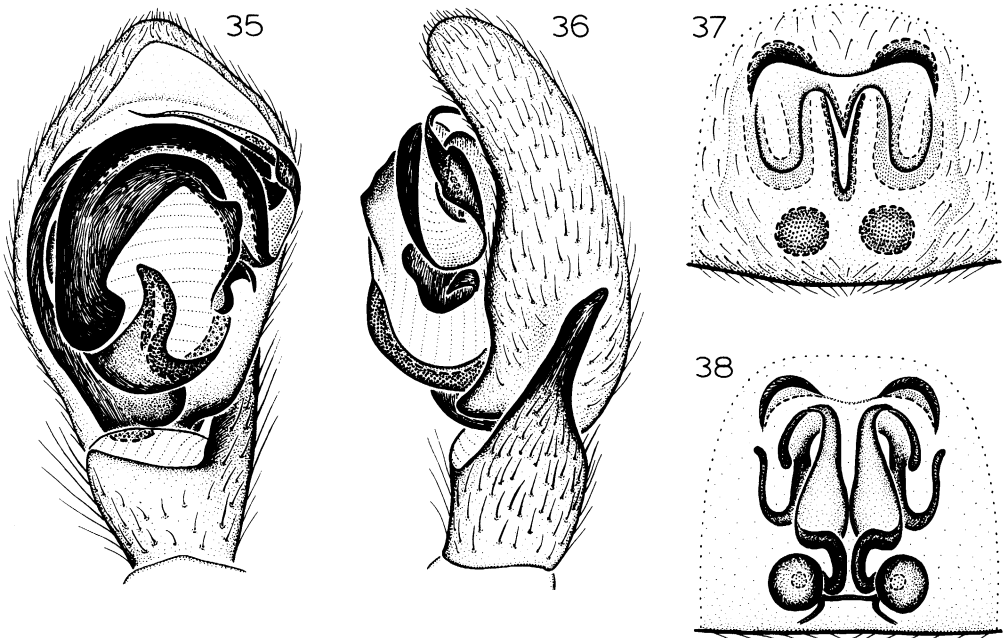
0.03. MOQ length 0.18, front width 0.14, back width 0.21. Embolus twisted subdistally, sharply narrowed dorsally (figs. 31, 32). Leg spination: femur II r0-0-0; tibia III v2-2-2; metatarsi: II v2-1p-0; III p1-2-2, r1-1-2; IV r1-2-2.

**FEMALE:** Total length  $5.01 \pm 0.96$ . Carapace  $2.01 \pm 0.23$  long,  $1.60 \pm 0.20$  wide. Femur II  $1.23 \pm 0.16$  long. Eye sizes and interdistances: AME 0.05, ALE 0.09, PME 0.07, PLE 0.07; AME–AME 0.06, AME–ALE 0.01, PME–PME 0.06, PME–PLE 0.05, ALE–PLE 0.03. MOQ length 0.20, front width 0.16, back width 0.20. Epigynum relatively large, anterior ducts squared anterolaterally (figs. 33, 34). Leg spination: femora: I p0-0-0; II d1-0-0; III r0-0-1; IV p0-0-1; tibia III v2-2-2; metatarsi: II v2-0-0; III p1-2-2, r1-1-2; IV r1-2-2.

**MATERIAL EXAMINED:** **Portugal:** FARO: Fonie, near Monte Gordo, Apr. 8, 1982, filled in rubbish dump (J. A. Murphy, JAM), 1♂; Tavira, Apr. 15–16, 1982 (J. A. Murphy, JAM), 2♂, 2♀. **Spain:** no specific locality

(BMNH), 2♀; Coto Doñana, June 11–16, 1967 (B. Malkin, AMNH), 1♂. **BALEARES:** *Ibiza:* C'an Prats, Apr. 13, 1980, pine woods, litter (J. A. Murphy, JAM), 1♀; Cala Aubarca, Sept. 26–27, 1976 (J. A. Murphy, JAM), 1♂; Puig de Perella, Apr. 7, 1980 (J. A. Murphy, JAM), 1♂. **BARCELONA:** Pineda, May 9, 1981 (J. Dalingwater, JAM), 1♀. **CÁDIZ:** Barbate de Franco, Apr. 8, 1974 (J. A. Murphy, JAM), 1♂. **France:** "Gallia méridional" (E. Simon, MNHN), 14♂, 16♀, (E. Simon, BMNH), 2♂, (E. Simon, CUC), 2♂, 1♀. **BOUCHES-DU-RHÔNE:** no specific locality (MNHN), 4♂, 1♀. **DORDOGNE:** Les Eyzies, July 22, 1981 (CEM), 1♀. **PYRÉNÉES-ORIENTALES:** Banyuls-sur-mer (MNHN), 4♂, 3♀, Mar. 28, 1967, roadside streambed (H., L., and F. Levi, MCZ), 1♀. **VENDÉE:** Les Monettes, Apr. 26, 1960 (J. Denis, MNHN), 1♂. **Italy:** **BASILICATA:** *Potenza:* Potenza, June 4, 1962, elevation 800 m., streamside field, rocks (H. W. Levi, P. Tongiorgi, MCZ), 1♂. **SICILY:** no specific locality (BMNH), 1♂, 1♀ (including lectotype). **Greece:** **AEGEAN ISLANDS:** *Do-*





FIGS. 35–38. *Trachyzelotes holosericeus* (Simon). 35. Palp, ventral view. 36. Palp, retrolateral view. 37. Epigynum, ventral view. 38. Epigynum, dorsal view.

*decanese*: Kos: Kéfalos, Dec. 12, 1978 (B. Malkin, AMNH), 1♀. **Yugoslavia**: CROATIA: Split (MNHN), 1♀. **Tunisia**: Tunis (MNHN), 2♀. **Algeria**: CONSTANTINE: Ouled Rahmoun (MNHN), 1♂.

DISTRIBUTION: Mediterranean.

SYNONYMY: Simon's redescription was apparently due to his consistent misidentification of *fuscipes* as a species of his group B; similar misidentifications have been made by modern authors such as Machado (1941) and Jézéquel (1961).

*Trachyzelotes ravidus* (L. Koch),  
new combination

Figures 17, 18

*Prothesima ravida* L. Koch, 1875, p. 48, pl. 5, figs. 4, 4a (female holotype from "der abyssinischen Provinz Hamaszen" [=Eritrea, Ethiopia], in BMNH, examined).

*Zelotes ravidus*: Roewer, 1954, p. 465. Bonnet, 1959, p. 4946.

DIAGNOSIS: Females resemble those of *T. costatus* in having the median ridge of the epigynum extending beyond the anterior margin of the spermathecae, but can be dis-

tinguished by the more posteriorly situated junction between the spermathecal ducts and the anterior epigynal ducts (figs. 17, 18).

MALE: Unknown.

FEMALE: Total length 4.00. Carapace 1.72 long, 1.33 wide. Femur II 0.95 long. Eye sizes and interdistances: AME 0.07, ALE 0.07, PME 0.07, PLE 0.08; AME–AME 0.04, AME–ALE 0.02, PME–PME 0.05, PME–PLE 0.04, ALE–PLE 0.03. MOQ length 0.23, front width 0.18, back width 0.19. Median epigynal ridge long, extending half of spermathecal length, spermathecal ducts relatively short (figs. 17, 18). Leg spination: femora: I p0-0-0; II d1-0-0; III p0-0-1, r0-0-1; IV r0-0-0; tibiae: III p0-1-1, v0-1p-2, r0-1-1; IV p1-1-1, v1p-2-2, r1-1-1; metatarsi: III p0-1-1, r0-1-1; IV p1-1-1, r1-1-1.

MATERIAL EXAMINED: Only the holotype.

DISTRIBUTION: Known only from Ethiopia.

*Trachyzelotes holosericeus* (Simon),  
new combination

Figures 35–38

*Prothesima holosericea* Simon, 1878, p. 47, pl. 14, figs. 10, 11 (male and female syntypes from

Pyrénées-Orientales, France, should be in MNHN, lost).

*Melanophora holosericea*: Galiano, 1910, p. 366.

*Zelotes holosericeus*: Simon, 1914, p. 213, figs. 280, 281. Roewer, 1954, p. 451. Bonnet, 1959, p. 4927.

*Zelotes lyonneti* (misidentification): Denis, 1962, p. 38, fig. 28 (female only).

**DIAGNOSIS:** Males can easily be recognized by the retrolaterally folded embolar base (fig. 35), females by the widely separated spermathecae (figs. 37, 38).

**MALE:** Total length  $6.53 \pm 0.65$ . Carapace  $2.86 \pm 0.35$  long,  $2.28 \pm 0.25$  wide. Femur II  $1.78 \pm 0.20$  long. Eye sizes and interdistances: AME 0.05, ALE 0.11, PME 0.15, PLE 0.12; AME-AME 0.12, AME-ALE 0.04, PME-PME 0.02, PME-PLE 0.07, ALE-PLE 0.08. MOQ length 0.29, front width 0.22, back width 0.31. Embolar base folded over embolus at anterior retrolateral corner of palp (figs. 35, 36). Leg spination: femora: I d1-0-0, p0-0-0; II d1-0-0; III p0-0-1, r0-0-0; IV r0-0-0; tibia IV p1-0-1, v1p-2-2.

**FEMALE:** Total length  $8.72 \pm 1.79$ . Carapace  $3.36 \pm 0.37$  long,  $2.61 \pm 0.29$  wide. Femur II  $1.98 \pm 0.20$  long. Eye sizes and interdistances: AME 0.07, ALE 0.13, PME 0.14, PLE 0.13; AME-AME 0.10, AME-ALE 0.03, PME-PME 0.06, PME-PLE 0.09, ALE-PLE 0.08. MOQ length 0.31, front width 0.24, back width 0.34. Median epigynal ridge near anterior epigynal margin, spermathecae widely separated, anterior ducts usually expanded basally but narrower in some north African specimens (figs. 37, 38). Leg spination: femora: I p0-0-0; III p0-0-1, r0-0-0; IV r0-0-0; tibia IV p1-1-1, r1-1-1; metatarsus III p1-1-2.

**MATERIAL EXAMINED:** **Portugal:** ALGARVE: Mata Nacional, Apr. 13, 1982 (J. A. Murphy, JAM), 1♂; Monte Gordo, Apr. 5, 1971 (J. A. Murphy, JAM), 1♂. **Spain:** CIUDAD REAL: Pornuelo de Calatrava (MNHN), 1♂. CÓRDOBA: Córdoba (MNHN), 1♀. MADRID: Torrejon de Ardoz, 1961 (K. W. Haller, AMNH), 1♂, 1♀. MÁLAGA: Málaga (BMNH), 1♂, 2♀; Ronda (MNHN), 2♂, 4♀. **France:** "Gallia méridional" (E. Simon, CUC), 1♂, 1♀, (MNHN), 5♂, 4♀. **Algeria:** no specific locality (MNHN), 1♂, 3♀. MÉDÉA: Bou Saâda (MNHN), 3♂, 1♀. ORAN: Oran (MNHN), 1♀. SAÏDA: 'Aïn Se-

fra (Vibert, MNHN), 1♀. **Morocco:** no specific locality (MNHN), 2♂, 3♀; Essaouira (MNHN), 1♀; Ourika (MNHN), 3♀. **Madeira Islands:** ILHAS DESERTAS: Ilhéu Chão, May 11, 1957 (H. Coiffait, MNHN), 1♀.

**DISTRIBUTION:** Western Mediterranean.

*Trachyzelotes mutabilis* (Simon),  
new combination  
Figures 39-42

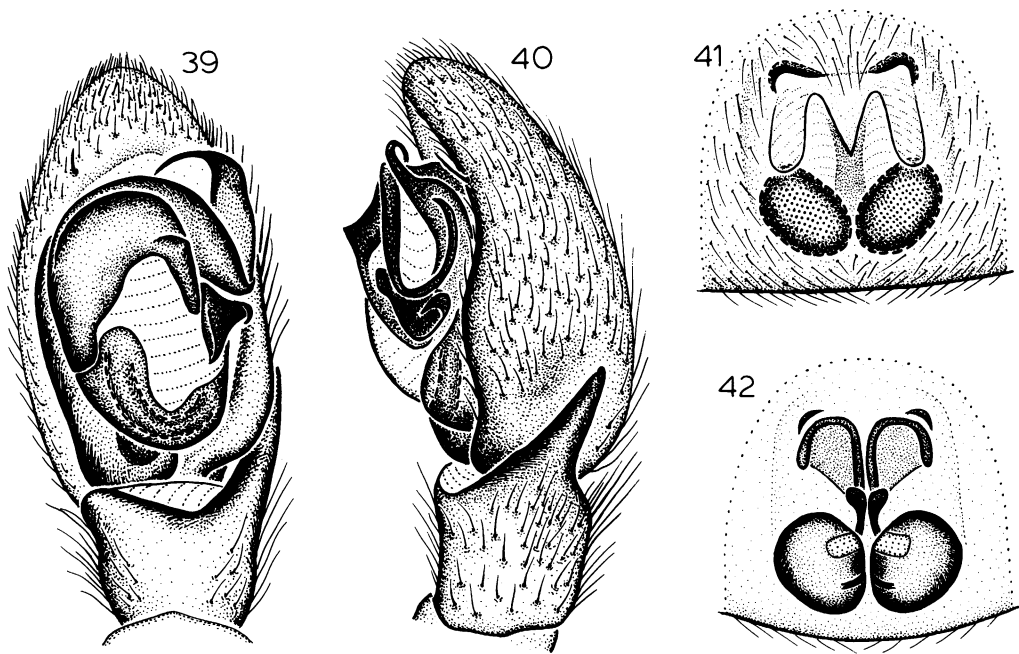
*Melanophora barbata* (misidentification): L. Koch, 1866, p. 161 (record from "Oase Biserá" [=Biskra, Aurès, Algeria] only).

*Prothesima mutabilis* Simon, 1878, p. 46, pl. 14, figs. 7, 8 (male and female syntypes from Portovecchio, Corsica, Corse, France, should be in MNHN, lost).

*Zelotes mutabilis*: Simon, 1914, p. 213, fig. 284. Roewer, 1954, p. 454. Bonnet, 1959, p. 4936.

*Zelotes microbarbatus* Marinaro, 1967, p. 693, figs. 10a, b, 11 (male syntypes from two localities in Algeria, depository unknown). NEW SYNONYMY.

**NOTE:** As with the two other *barbatus* group species described by Simon (*T. rubicundulus* and *T. holosericeus*), no material identifiable as part of the type series of this species currently exists in the Simon collection (MNHN). Unlike those two species, however, no material identified by Simon exists in other collections either, and there is therefore some uncertainty about the identity of the species. We ascribe the males and females detailed below to *T. mutabilis* for the following reasons: 1) the two sexes have been taken together at Oran, Algeria; 2) specimens are known from southern France as well as Tunisia and an island off Sicily, and are therefore likely to occur at the type locality, on Corsica, as well; 3) like *T. rubicundulus* and *T. holosericeus*, but unlike other *barbatus* group species, specimens are well represented in the Simon collection; 4) these males are the only ones with an embolus that is sufficiently arched distally to correspond to Simon's (1878) lateral view of the palp; 5) these females are the only ones from western Mediterranean localities in which the spermathecae are large enough, and the median area of the epigynum small enough, to correspond to Simon's admittedly sketchy (1878 and 1914) figures of the epigynum; and 6) these females match the epigynal figure by Jézéquel (1961),



FIGS. 39–42. *Trachyzelotes mutabilis* (Simon). 39. Palp, ventral view. 40. Palp, retrolateral view. 41. Epigynum, ventral view. 42. Epigynum, dorsal view.

based on an MNHN specimen now represented only by Jézéquel's epigynal slide mount, the label of which bears no locality data. This decision requires us to assume that the only MNHN specimen bearing the name *T. mutabilis* (on a typewritten, not Simon, label) is misidentified; it is a male, from an unknown locality, that belongs to an otherwise unknown species.

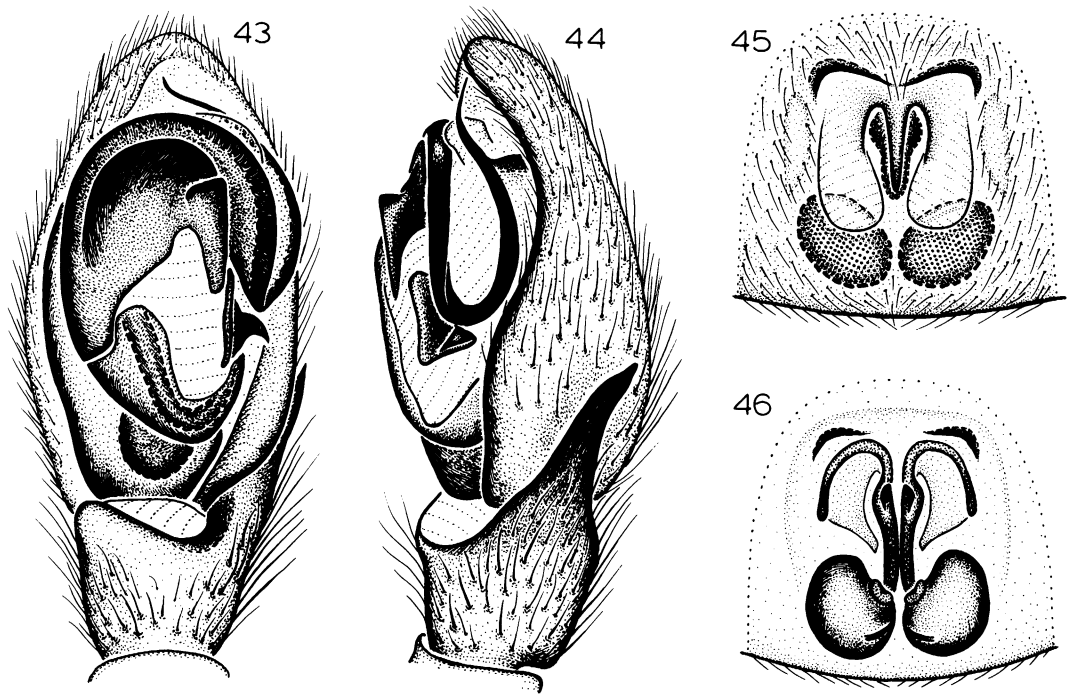
**DIAGNOSIS:** Males can be distinguished by the distally arched embolus (figs. 39, 40), females by the very small median area of the epigynum (fig. 41).

**MALE:** Total length  $4.92 \pm 0.60$ . Carapace  $2.27 \pm 0.27$  long,  $1.75 \pm 0.20$  wide. Femur II  $1.39 \pm 0.17$  long. Eye sizes and interdistances: AME 0.07, ALE 0.10, PME 0.14, PLE 0.12; AME–AME 0.08, AME–ALE 0.02, PME–PME 0.03, PME–PLE 0.04, ALE–PLE 0.05. MOQ length 0.30, front width 0.23, back width 0.31. Embolus highly arched distally (figs. 39, 40). Leg spination: femora: I p0-0-0; III d0-1-0, p0-0-0, r0-0-0; IV r0-0-0; tibiae: III v2-2-2; IV p1-0-1, r1-1-1; metatarsi: II v0-0-0; III p0-2-1, r0-1-0.

**FEMALE:** Total length  $6.60 \pm 0.98$ . Cara-

pace  $2.65 \pm 0.30$  long,  $2.67 \pm 0.23$  wide. Femur II  $1.67 \pm 0.23$  long. Eye sizes and interdistances: AME 0.07, ALE 0.11, PME 0.13, PLE 0.11; AME–AME 0.13, AME–ALE 0.04, PME–PME 0.11, PME–PLE 0.08, AME–PLE 0.08. MOQ length 0.34, front width 0.27, back width 0.37. Median epigynal area very small, spermathecae relatively large, spermathecal ducts relatively short (figs. 41, 42). Leg spination: femora: I p0-0-0; III p0-1-0, r0-0-0; IV r0-0-0; tibiae: III v2-2-2; IV p1-1-1, r1-1-1; metatarsi: II v0-0-0; III p1-2-2, r1-1-2.

**MATERIAL EXAMINED:** **Spain:** ALBACETE: Pozuelo (MNHN), 1♀. ALICANTE: Benidorm, 1961 (K. W. Haller, AMNH), 1♀. ZARAGOZA: Calatayud, June 1907 (MNHN), 1♀. **France:** "Gallia méridional" (MNHN), 1♂. **VAR:** Callian (MNHN), 1♀. **Italy:** SICILY: Agrigento: Linosa, Isole Pelagie, Mar. 12, 1980 (AMNH), 1♂. **Yugoslavia:** "Dalmatien" (BMNH), 1♀ (paralectotype of *Melanophora barbata*). **Tunisia:** Kairouan (MNHN), 2♀. **Algeria:** no specific locality (MNHN), 1♂. **ALGER:** El Harrach, June 22, 1983 (R. Bosmans, CRB), 1♂; Sainem, May



FIGS. 43–46. *Trachyzelotes costatus* (Denis). 43. Palp, ventral view. 44. Palp, retrolateral view. 45. Epigynum, ventral view. 46. Epigynum, dorsal view.

23, 1983 (R. Bosmans, CRB), 1♂. AURÈS: Biskra (BMNH), 1♂ (paralectotype of *Melanophora barbata*). CONSTANTINE: Ouled Rahmoun (MNHN), 1♂. ORAN: Oran (MNHN), 3♂, 3♀. TLEMCEN: Maghnia (MNHN), 1♂.

DISTRIBUTION: Mediterranean.

SYNONYMY: The validity of the synonymy depends on the soundness of our identification of *T. mutabilis*, discussed above.

*Trachyzelotes costatus* (Denis),  
new combination  
Figures 43–46

*Zelotes costatus* Denis, 1952, p. 118, fig. 4 (female holotype from Oued Cherrat, Morocco, in MNHN, examined). Roewer, 1954, p. 447.

*Zelotes spadix* (misidentification): Denis, 1952, p. 116, figs. 5, 6 (male only).

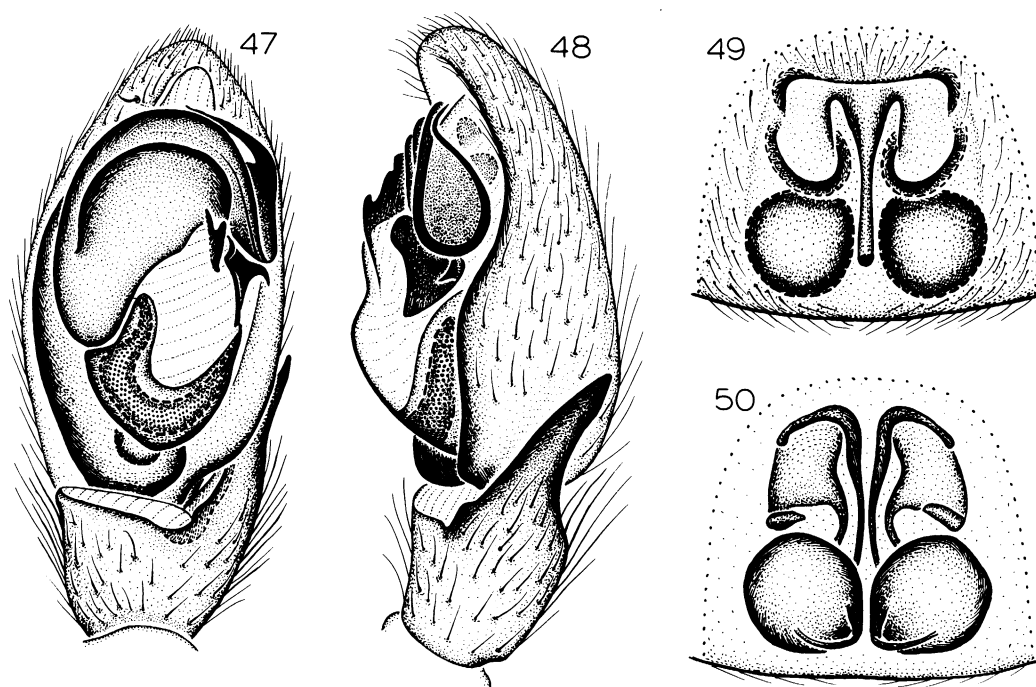
NOTE: Males and females have not been collected together but are matched here because of similarities in their size and distri-

bution and because of genitalic similarities with the respective sexes of *T. huberti*, new species.

DIAGNOSIS: Males can be distinguished by the enlarged retrolateral loop of the embolar base (figs. 43, 44), females by the very long median epigynal ridge and spermathecal ducts (figs. 45, 46).

MALE: Total length 4.89–7.65. Carapace 2.18–3.40 long, 1.69–2.76 wide. Femur II 1.40–2.23 long. Eye sizes and interdistances: AME 0.05, ALE 0.10, PME 0.07, PLE 0.09; AME–AME 0.08, AME–ALE 0.02, PME–PME 0.06, PME–PLE 0.07, ALE–PLE 0.06. MOQ length 0.21, front width 0.18, back width 0.20. Retrolateral loop of embolar base occupying about half of bulb length (figs. 43, 44). Leg spination: femora: III p0-0-1, r0-0-1; IV r0-0-0; tibia IV p1-1-1.

FEMALE: Total length 5.87–10.01. Carapace 2.61–3.59 long, 2.03–2.66 wide. Femur II 1.67–2.16 long. Eye sizes and interdistances: AME 0.09, ALE 0.14, PME 0.12, PLE



FIGS. 47-50. *Trachyzelotes huberti*, new species. 47. Palp, ventral view. 48. Palp, retrolateral view. 49. Epigynum, ventral view. 50. Epigynum, dorsal view.

0.11; AME-AME 0.07, AME-ALE 0.04, PME-PME 0.05, PME-PLE 0.09, ALE-PLE 0.12. MOQ length 0.34, front width 0.25, back width 0.29. Median epigynal ridge long, extending past anterior margin of spermathecae, spermathecal ducts very long (figs. 45, 46). Leg spination: femora: III d1-1-1, r0-0-1; IV r0-0-0; tibiae: III v2-2-2; IV p1-1-1; metatarsi: II v0-0-0; III p1-1-2.

**MATERIAL EXAMINED:** **Portugal:** FARO: Fonia, near Monte Gordo, Apr. 8, 1982, filled rubbish dump (J. A. Murphy, JAM), 1♂. **Spain:** CÁDIZ: Laguna de Medina, Apr. 10, 1974 (J. A. Murphy, JAM), 1♂; Zahara de los Atunes, Apr. 11, 1974 (J. A. Murphy, JAM), 1♂. MÁLAGA: Ronda (MNHN), 1♀. **Algeria:** no specific locality (MNHN), 1♀. **ALGER:** Bou Zegza, Apr. 16, 1983 (R. Bosmans, CRB), 1♂. **CONSTANTINE:** Ouled Rahmoun (MNHN), 1♀. **Morocco:** Oued Cherrat (between Casablanca and Rabat), Apr. 22-25, 1951 (Gattefossé, MNHN), 1♀ (type); Ourika (MNHN), 1♀.

**DISTRIBUTION:** Western Mediterranean.

### *Trachyzelotes huberti*, new species

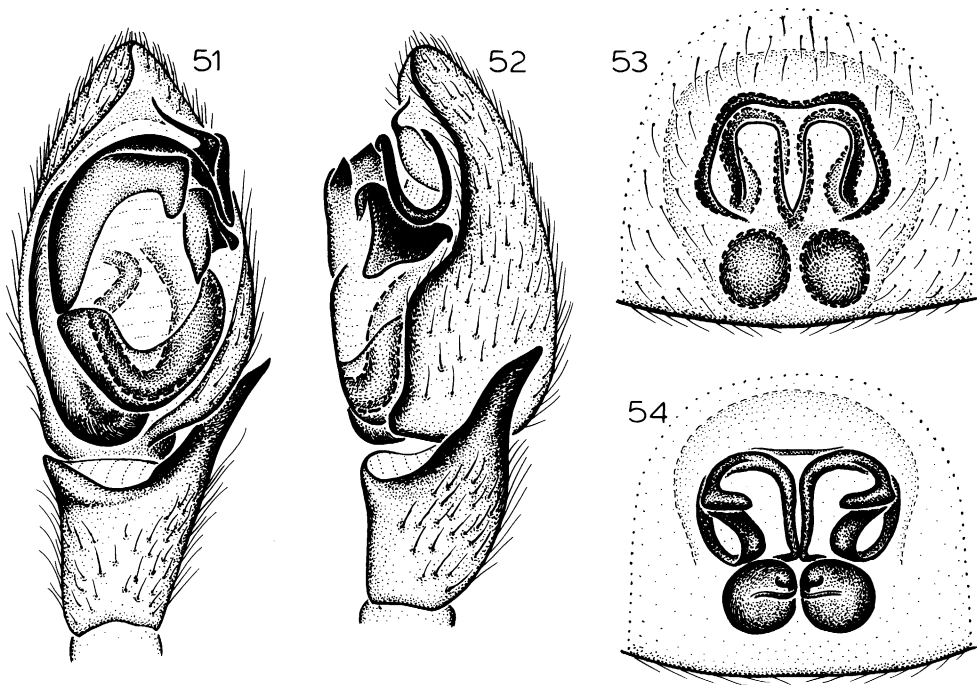
Figures 47-50

**TYPES:** Male holotype and female paratype from Oran, Oran, Algeria (no date or collector), deposited in MNHN.

**ETYMOLOGY:** The specific name is a patronym in honor of Dr. M. Hubert, whose help in dealing with specimens from the Simon collection (MNHN) and their localities enabled us to complete this study.

**DIAGNOSIS:** This species is similar to *T. costatus*, but males can be distinguished by the smaller retrolateral loop of the embolar base (figs. 47, 48), females by the shorter median epigynal ridge, larger spermathecae, and laterally widened anterolateral epigynal ducts (figs. 49, 50).

**MALE:** Total length 5.11-5.53. Carapace 2.25-2.43 long, 1.92-2.08 wide. Femur II 1.58-1.87 long. Eye sizes and interdistances: AME 0.08, ALE 0.13, PME 0.14, PLE 0.13; AME-AME 0.07, AME-ALE 0.03, PME-PME 0.03, PME-PLE 0.06, ALE-PLE 0.07. MOQ length 0.30, front width 0.23, back



FIGS. 51-54. *Trachyzelotes malkini*, new species. 51. Palp, ventral view. 52. Palp, retrolateral view. 53. Epigynum, ventral view. 54. Epigynum, dorsal view.

width 0.31. Retrolateral loop of embolar base occupying less than half of bulb length (figs. 47, 48). Leg spination: femora: II p0-0-1; III r0-0-1; IV p0-0-1; tibia III r0-1-0; metatarsi: II v0-0-0; III p0-2-2; IV r1-2-2.

FEMALE: Total length 6.55-9.69. Carapace 2.61-2.97 long, 2.13-2.50 wide. Femur II 1.84-2.00 long. Eye sizes and interdistances: AME 0.08, ALE 0.11, PME 0.15, PLE 0.13; AME-AME 0.12, AME-ALE 0.04, PME-PME 0.04, PME-PLE 0.08, ALE-PLE 0.07. MOQ length 0.31, front width 0.28, back width 0.34. Median epigynal ridge short, spermathecae large, spermathecal ducts relatively long, anterolateral epigynal ducts widened laterally, with transversely oriented terminal bulb (figs. 49, 50). Leg spination: femora: II p0-0-1; IV p0-0-1; tibia III v2-2-2; metatarsus III r1-1-2.

OTHER MATERIAL EXAMINED: Three males and five females taken with the types (MNHN), one male from an unknown locality in Algeria (MNHN), and one male from an unknown locality (MNHN).

DISTRIBUTION: Known only from Algeria.

### *Trachyzelotes malkini*, new species

Figures 51-54

TYPES: Male holotype taken in a garage near a garden at an elevation of 3000 feet at Ankara, Ankara, Turkey (November 13, 1960; R. Walsh), and female paratype from the Gordium ruins, 50 miles SW of Ankara, Ankara, Turkey (June 2, 1979; B. Malkin), deposited in AMNH.

ETYMOLOGY: The specific name is a patronym in honor of Mr. Borys Malkin, collector of the paratype and many other interesting spiders.

DIAGNOSIS: This distinctive species is easily recognized by the obliquely oriented embolus of males (fig. 51) and the distally situated median epigynal ridge of females (fig. 53).

MALE: Total length 3.38-3.58. Carapace 1.47-1.98 long, 1.17-1.49 wide. Femur II 0.97-1.33 long. Eye sizes and interdistances: AME 0.05, ALE 0.09, PME 0.10, PLE 0.09; AME-AME 0.07, AME-ALE 0.02, PME-PME 0.02, PME-PLE 0.03, ALE-PLE 0.06.

MOQ length 0.25, front width 0.18, back width 0.22. Embolus curved, obliquely oriented (figs. 51, 52). Leg spination: femur III p0-0-1, r0-0-1; tibiae: III r1-1-1; IV r2-2-1; metatarsi: II v0-0-0; III p0-2-2, r1-1-2.

**FEMALE:** Total length 5.88–7.97. Carapace 2.63–2.99 long, 2.04–2.41 wide. Femur II 1.58–1.98 long. Eye sizes and interdistances: AME 0.07, ALE 0.11, PME 0.13, PLE 0.12; AME–AME 0.08, AME–ALE 0.03, PME–PME 0.03, PME–PLE 0.08, ALE–PLE 0.08. MOQ length 0.30, front width 0.22, back width 0.30. Anterior and median epigynal ridges approximate, anterolateral epigynal ducts recurved distally (figs. 53, 54). Leg spination: femora: II p0-0-1; III r0-0-1; tibia III v2-2-2, r1-1-1; metatarsus III p1-1-2, r1-1-2.

**OTHER MATERIAL EXAMINED:** Greece: CRETE: Agios Nikolaos, Apr. 6, 1979 (J. A. Murphy, JAM), 1♂; Kalathas, Akrotiri, Apr. 1981 (J. A. Murphy, JAM), 1♂; Mallia, Apr. 13, 1972 (J. A. Murphy, JAM), 1♂. Soviet Union: RUSSIAN S.F.S.R.: Gelendzhik, Caucasus, June 18–July 15, 1926 (S. Spassky, ZIL), 1♀.

**DISTRIBUTION:** Known only from Crete, Turkey, and the Soviet Union.

#### *UROZELOTES* MELLO-LEITÃO

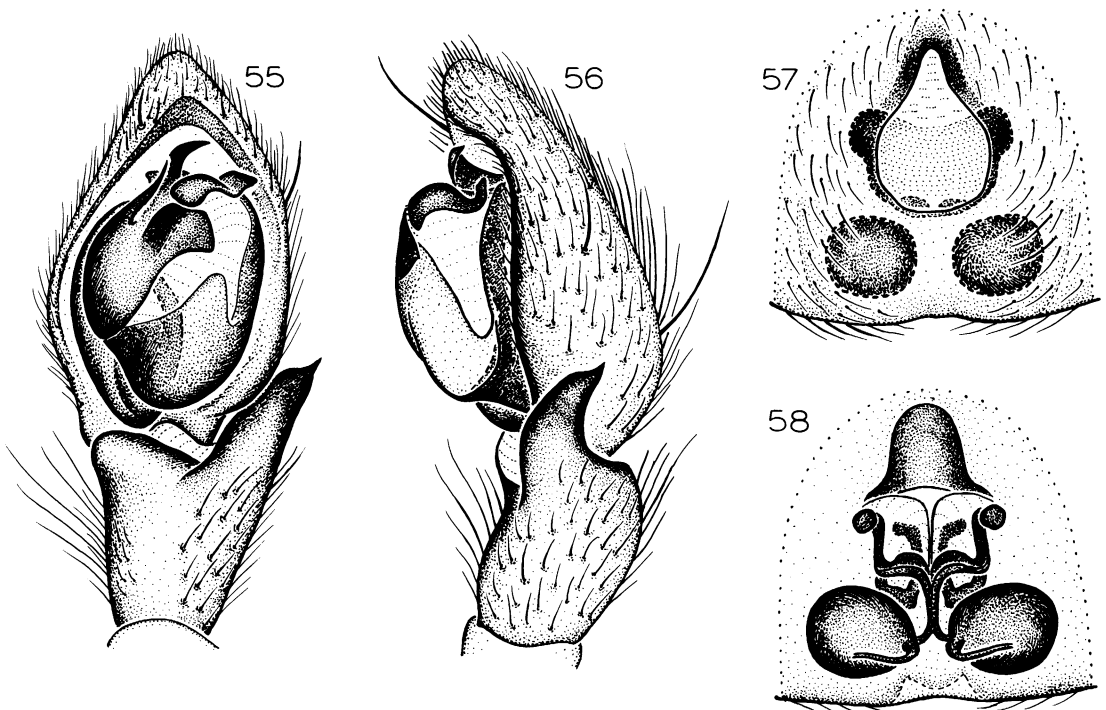
*Urozelotes* Mello-Leitão, 1938, p. 111 [type species by original designation *Urozelotes cardiogynus* Mello-Leitão, = *U. rusticus* (L. Koch)].

**DIAGNOSIS:** Specimens of *Urozelotes* can be distinguished from those of all other zelotine genera by genitalic characters: males have a pointed terminal apophysis closely appressed to the embolus (figs. 55, 59), and females have an epigynum bearing an elongate, triangular median plate (figs. 57, 61) and anterior epigynal ducts bearing bulbous anterolateral extensions (figs. 58, 62).

**DESCRIPTION:** Total length 4.0–7.6. Carapace oval in dorsal view, widest between coxae II and III, truncated anteriorly and posteriorly, abruptly narrowed opposite palpi, light orange, darkest anteriorly, with numerous long, thin, black setae along midline and edge of posterior declivity; lateral margins not reflexed; cephalic area flattened; thoracic groove long, longitudinal. From above, anterior eye row very slightly recurved, posterior row very slightly procurved; from front,

both rows procurved; AME circular, dark, PME irregularly rectangular, light, ALE and PLE oval, light; PME usually largest, AME smallest, ALE and PLE subequal; AME separated by roughly their diameter, much closer to ALE, PME subcontiguous, much farther from PLE, lateral eyes of each side separated by roughly their radius; MOQ wider than long, widest in back. Clypeal height at AME greater than their diameter. Chelicerae typically with one retromarginal and three promarginal teeth, with only scattered setae anteriorly; boss present anterolaterally. Endites long, rectangular, obliquely depressed, anteriorly narrowed; labium narrowed at base; sternum rebordered, with small sclerotized extensions to and between coxae, with scattered long setae. Leg formula 4123. Typical leg spination pattern (only surfaces bearing spines listed): femora: I, II d1-1-0, p0-0-1; III, IV d1-1-0, p0-1-1, r0-1-1; patella III r0-1-0; tibiae: III p1-1-1, v2-2-2, r1-1-1; IV p1-1-1, v2-2-2, r2-1-1; metatarsi: II v2-1p-0; III p1-2-2, v2-2-0, r1-2-2; IV p1-2-2, v2-2-0, r1-2-1. Legs uniformly light orange; all tarsi and anterior metatarsi lightly scopulate; tarsi with two dentate claws; clawtufts virtually obsolete; trochanters unnotched; metatarsi III and IV with distal preening combs; trichobothria in two rows on tarsi, one on metatarsi. Abdomen pale tan (males only with slight orange anterior scutum), dorsum with two pairs of darker muscle impressions, surface coated with long bristles and short setae; six spinnerets, anteriors typically gnaphosoid, with one short ventral and eight long dorsal spigots. Palp with basally thickened retrolateral tibial apophysis, pointed terminal apophysis overlapping embolus, and elongate, distally situated median apophysis. Epigynum with anteriorly narrowed median plate; anterior epigynal ducts with bulbous anterolateral extensions.

**TAXONOMIC HISTORY:** The type species, heretofore usually referred to as *Zelotes rusticus* (L. Koch), has been enigmatic for many years. Platnick and Shadab (1983, p. 100) indicated that "Because of its synanthropic habits, *Z. rusticus* occurs in scattered localities all over the world (and has therefore accumulated what is probably the longest list of synonyms of any gnaphosid species), but no close relatives of the species have been



FIGS. 55–58. *Urozelotes rusticus* (L. Koch). 55. Palp, ventral view. 56. Palp, retrolateral view. 57. Epigynum, ventral view. 58. Epigynum, dorsal view.

identified in the literature on any fauna.” Several workers have expressed dissatisfaction with the placement of the species in *Zelotes*, and Platnick and Shadab (1983) excluded it from that genus because (like the species here assigned to *Trachyzelotes*) it lacks the intercalary sclerite of the male palp that seems synapomorphic for true *Zelotes*. Luckily, the generic name *Urozelotes*, based on one of the numerous synonyms, is available for the species. We have found a second species that is clearly congeneric with *U. rusticus*. Unluckily, it does not answer the question of what part of the world the genus is native to, for the only known specimens of the second species are from the Simon collection (MNHN) and, like most of the unworked material accumulated by Simon, bear no locality data at all. Although we would not normally describe new taxa from unknown localities, in this case it seems necessary, to establish both the relationships of *U. rusticus* and the validity of the genus and thereby to

help counteract the unfortunate tendency of many European arachnologists to lump all European zelotines into the single genus *Zelotes* despite their diverse affinities with various other genera occurring outside of Europe.

*Urozelotes rusticus* (L. Koch),  
new combination  
Figures 55–58

*Prothesima rustica* L. Koch, 1872, p. 309 (female holotype from “Trient,” Trento, Trentino-Alto Adige, Italy, in BMNH, examined).

*Drassus razoumowskyi* Pavesi, 1873, p. 123, fig. 3 (male holotype from Lugano, Ticino, Switzerland, depository unknown, not in Museo Civico di Storia Naturale, Genova [Dr. G. Arbocco, *in litt.*]). First synonymized with (and erroneously given priority over) *rusticus* by Simon, 1914, p. 218.

*Melanophora rustica*: Canestrini, 1875, p. 28.

*Drassus cerdo* Thorell, 1875a, p. 97 (male holotype from Liguria, Italy, depository unknown, not in Museo Civico di Storia Naturale, Genova [Dr.



- G. Arbocco, *in litt.*). First synonymized with *rusticus* by Simon, 1914, p. 218.
- Prothesima pallida* Keyserling, 1877, p. 602, pl. 14, fig. 22 (female holotype from Montevideo, Montevideo, Uruguay, in ZMH, examined). Preoccupied by *Prothesima pallida* O. P.-Cambridge (1874).
- Prothesima larifuga* Simon, 1878, p. 90, pl. 14, fig. 22 (male holotype from Campo di l'Oro, Corsica, Corse, France, in MNHN, examined). First synonymized with *rusticus* by Simon, 1914, p. 218.
- Drassus agelastus* Keyserling, 1891, p. 35, fig. 14 (two female syntypes from Taquara, Rio Grande do Sul, Brazil, in BMNH, examined). NEW SYNONYMY.
- Prothesima blanda* Banks, 1892, p. 18, figs. 57, 57a (male holotype from Ithaca, Tompkins County, New York, in MCZ, examined). First synonymized with *rusticus* by Ubick and Roth, 1973, p. 8.
- Prothesima minima* Banks, 1892, p. 19, fig. 69 (juvenile holotype from Ithaca, Tompkins County, New York, in MCZ, examined). First synonymized with *blanda* by Banks, 1910, p. 8.
- Drassodes cerdo*: Simon, 1893, p. 359.
- Prothesima completa* Banks, 1898, p. 219, pl. 13, fig. 22 (male syntype from La Chuparosa, Baja California Sur, Mexico, in MCZ, examined). NEW SYNONYMY.
- Prothesima lutea* F. O. P.-Cambridge, 1899, p. 57, pl. 4, figs. 16, 16a (female holotype from Guatemala, in BMNH, examined). NEW SYNONYMY.
- Melanophora pacifica* Simon, 1899, p. 412 (female holotype from Laysan Island, Hawaii, should be in MNHN, lost). NEW SYNONYMY.
- Melanophora porteri* Simon, 1904, p. 89 (female holotype from Los Perales, Valparaíso, Chile, in MNHN, examined). NEW SYNONYMY.
- Zelotes femoralis* Banks, 1904, p. 336, pl. 38, fig. 1 (female holotype from Claremont, Los Angeles County, California, in MCZ, examined). First synonymized with *rusticus* by Ubick and Roth, 1973, p. 8.
- Melanophora rustica orientalis* Simon, 1908, p. 77 (female holotype from Tonkin, Vietnam, in MNHN, examined). Roewer, 1954, p. 462. First synonymized with *rusticus* by Bonnet, 1959, p. 4948.
- Zelotes blanda*: Banks, 1910, p. 8.
- Drassodes agelastus*: Petrunkevitch, 1911, p. 137. Bonnet, 1956, p. 1560.
- Zelotes blandus*: Petrunkevitch, 1911, p. 148.
- Zelotes completus*: Petrunkevitch, 1911, p. 148. Roewer, 1954, p. 467. Bonnet, 1959, p. 4919.
- Zelotes luteus*: Petrunkevitch, 1911, p. 150. Roewer, 1954, p. 468. Bonnet, 1959, p. 4934.
- Zelotes pallidus*: Petrunkevitch, 1911, p. 150. Bonnet, 1959, p. 4938.
- Zelotes porteri*: Petrunkevitch, 1911, p. 151. Roewer, 1954, p. 469. Bonnet, 1959, p. 4942.
- Zelotes razoumowskyi*: Simon, 1914, p. 218.
- Zelotes rustica*: Reimoser, 1920, p. 231.
- Drassyllus blandus*: Chamberlin, 1922, p. 168. Roewer, 1954, p. 414. Bonnet, 1956, p. 1602.
- Drassyllus femoralis*: Chamberlin, 1922, p. 170. Roewer, 1954, p. 415. Bonnet, 1956, p. 1603.
- Drassyllus liopus* Chamberlin, 1922, p. 170 (male holotype from Austin, Travis County, Texas, in MCZ, examined). Roewer, 1954, p. 416. Bonnet, 1956, p. 1604. First synonymized with *rusticus* by Ubick and Roth, 1973, p. 8.
- Camillina amnicola* Tucker, 1923, p. 336, figs. 56A, B (female holotype from junction of Crocodile and Marico Rivers, Transvaal, South Africa, in SAM, examined). Roewer, 1954, p. 410. Bonnet, 1956, p. 943. NEW SYNONYMY.
- Zelotes rusticus*: Charitonow, 1932, p. 140. Roewer, 1954, p. 461. Bonnet, 1959, p. 4947.
- Zelotes razoumowskyi*: Roewer, 1932, p. 413 (*lappus*).
- Haplodrassus magister* Chamberlin, 1933, p. 6, figs. 11, 12 (male holotype from Minneapolis, Hennepin County, Minnesota, in AMNH, examined). Roewer, 1954, p. 403. Bonnet, 1957, p. 2091. First synonymized with *rusticus* by Ubick and Roth, 1973, p. 8.
- Zelotes razoumowski*: Bristowe, 1935, p. 745 (*lappus*).
- Zelotes razoumowskii*: Caporiacco, 1936, p. 75 (*lappus*).
- Drassyllus abdalbus* Chamberlin, 1936b, p. 15, figs. 31, 32 (male holotype from Tucson, Pima County, Arizona, in AMNH, examined). Roewer, 1954, p. 413. Bonnet, 1956, p. 1602. First synonymized with *rusticus* by Ubick and Roth, 1973, p. 8.
- Urozelotes cardiogynus* Mello-Leitão, 1938, p. 111, fig. 30 (female holotype from Pehuajó, Buenos Aires, Argentina, in MLP, examined). Roewer, 1954, p. 441. Bonnet, 1959, p. 4781. NEW SYNONYMY.
- Zelotes scutatus* Mello-Leitão, 1939, p. 529, figs. 14, 15 (male holotype from São Paulo, São Paulo, Brazil, in Instituto Butantan, not examined). Bonnet, 1959, p. 4949. Preoccupied in *Zelotes* by *Z. scutatus* (O. P.-Cambridge, 1872); not *Z. scutatus* Mello-Leitão (1941), = *Camillina chilensis* (Simon). NEW SYNONYMY.
- Zelotes keyserlingi* Roewer, 1951, p. 444 (*nomen novum* for *Prothesima pallida* Keyserling); 1954, p. 468. NEW SYNONYMY.
- Zelotes paulistus* Roewer, 1951, p. 444 (*nomen novum* for *Z. scutatus* Mello-Leitão).

*Drassodes agelasius*: Roewer, 1954, p. 396 (*lapsus*).

*Zelotes pacificus*: Roewer, 1954, p. 467. Bonnet, 1959, p. 4938.

*Zelotes elytrogaster* (misidentification): Roewer, 1954, p. 468 (references to *Z. scutatus* Mello-Leitão, 1939, and *Z. paulistus* Roewer only).

*Zelotes (Drassyllus) rusticus*: Gertsch, in Lindroth, 1957, p. 104.

*Drassodes malodes* Tikader, 1962, p. 572, figs. 2a-c (female holotype from Dhakuria, West Bengal, India, in ZSI, examined); 1982, p. 397, figs. 230-232. NEW SYNONYMY.

*Camillina gigas* Schmidt, 1973, p. 362, fig. 3 (female holotype from Playa del Ingles, Grand Canary, Canary Islands, in FIS, examined; not male). NEW SYNONYMY.

DIAGNOSIS: Males can easily be distinguished from those of *U. mysticus* by the smaller terminal apophysis (fig. 55), females by the wider median epigynal plate (fig. 57).

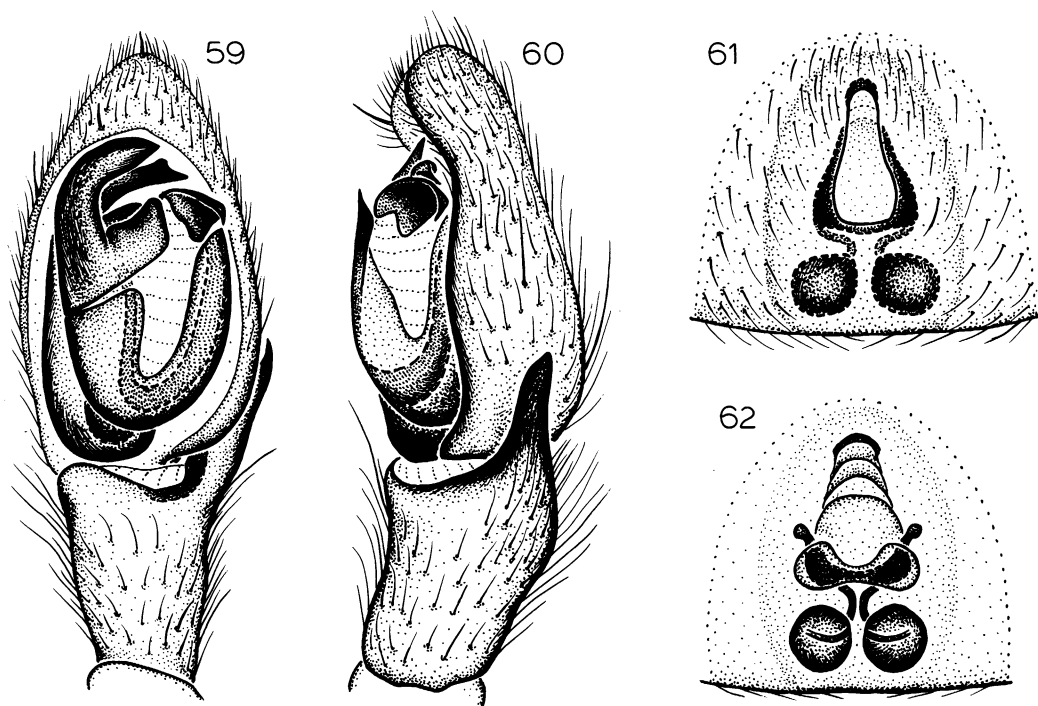
MALE: Total length  $6.50 \pm 0.77$ . Carapace  $3.15 \pm 0.33$  long,  $2.33 \pm 0.27$  wide. Femur II  $2.12 \pm 0.19$  long (143 specimens examined). Eye sizes and interdistances: AME 0.08, ALE 0.13, PME 0.15, PLE 0.11; AME-AME 0.08, AME-ALE 0.02, PME-PME 0.02, PME-PLE 0.06, ALE-PLE 0.04. MOQ length 0.27, front width 0.24, back width 0.32. Terminal apophysis narrow, not reaching as far distally as embolus, retrolateral tibial apophysis curved ventrally at about half its length (figs. 55, 56). Leg spination: metatarsus II v2-0-0.

FEMALE: Total length  $6.66 \pm 0.72$ . Carapace  $3.04 \pm 0.26$  long,  $2.23 \pm 0.20$  wide. Femur II  $2.01 \pm 0.17$  long (145 specimens examined). Eye sizes and interdistances: AME 0.10, ALE 0.14, PME 0.18, PLE 0.12; AME-AME 0.09, AME-ALE 0.03, PME-PME 0.02, PME-PLE 0.09, ALE-PLE 0.07. MOQ length 0.34, front width 0.29, back width 0.38. Median epigynal plate very wide posteriorly (figs. 57, 58). Leg spination: femora I, II 0-1-1.

RECORDS: **Canada**: ONTARIO: Toronto. **United States** (county records only): ALABAMA: Tuscaloosa. ARIZONA: Cochise, Gila, Pima, Yuma. ARKANSAS: Carroll, Washington. CALIFORNIA: Fresno, Imperial, Los Angeles, Orange, Riverside, San Bernardino, San Diego, Santa Barbara, Santa Clara, Shasta, Tulare, Ventura, Yolo. CONNECTICUT: Hartford. FLORIDA: Lake. GEORGIA: Thomas. ILLINOIS: Cook.

KANSAS: Bourbon, Cowley. LOUISIANA: Iberville, Vernon, West Baton Rouge. MARYLAND: Dorchester. MINNESOTA: Hennepin. MISSOURI: Johnson. NEVADA: Clark, Nye. NEW JERSEY: Hunterdon. NEW MEXICO: Bernalillo, Sandoval. NEW YORK: Kings, New York, Queens, Tompkins, Warren. NORTH DAKOTA: Divide, Grand Forks. OKLAHOMA: Comanche. OREGON: Jackson. PENNSYLVANIA: Bucks, Montgomery. SOUTH CAROLINA: Lexington. TEXAS: Dallas, Erath, Garza, Kleberg, Lubbock, Medina, Parker, Travis, Wichita. UTAH: Washington. VIRGINIA: Fairfax. WEST VIRGINIA: Greenbrier. WISCONSIN: Dane. **Mexico**: BAJA CALIFORNIA NORTE: Ensenada. BAJA CALIFORNIA SUR: Bahía Magdalena, La Chuparosa, La Paz, San Ignacio. CHIHUAHUA: Santa Bárbara. COAHUILA: Cueva de León. COLIMA: Cueva de la Finca. SONORA: Desemboque, El Coyote. VERACRUZ: Huatusco. **Guatemala**. **Brazil**: MINAS GERAIS: Minas de Serinha Diamantina. RIO GRANDE DO SUL: Canela, Morro Santana, Taquara. **Uruguay**: MONTEVIDEO: Montevideo. **Argentina**: BUENOS AIRES: Pehuajó. **Chile**: ATACAMA: Copiapó. SANTIAGO: Las Condes, Pirque, Providencia, Santiago. VALPARAÍSO: Los Perales, Quilota, Viña del Mar. **England**: ESSEX: Tilbury Dock. GREATER LONDON: London. **France**: CORSE: Campo di l'Oro. HAUTE-VIENNE. YONNE: Champigny. YVELINES: Versailles. **Italy**: TRENTO-ALTO ADIGE: Trento. **Egypt**: MATRŪH: Siwa. **Libya**: Ghiryan, Sabrata. **Algeria**: ORAN: Oran. **Canary Islands**: GRAND CANARY: Playa del Ingles. **Madeira Islands**: PORTO SANTO: near airport. **India**: TAMIL NADU: Coonoor. WEST BENGAL: Dhakuria. **Vietnam**: Tonkin. **Japan**: HONSHŪ: Higashitakaai-cho. **Borneo**: SABAH: Kinabalu National Park. **Dahomey**: Porto-Novo. **Zimbabwe**: Zimbabwe. **South Africa**: CAPE OF GOOD HOPE: Calvinia, Cedar Mountains, Hanover, Kalk Bay, Paarl, Palmierfontein, Queenstown, St. Helena Bay, Steenbergs Cove, Stompneus. TRANSVAAL: junction, Crocodile and Marico Rivers. **Hawaii**: HAWAII: Pohakuloa. OAHU: Koko Head Crater.

DISTRIBUTION: Synanthropic and thereby



FIGS. 59–62. *Urozelotes mysticus*, new species. 59. Palp, ventral view. 60. Palp, retrolateral view. 61. Epigynum, ventral view. 62. Epigynum, dorsal view.

virtually cosmopolitan, although no specimens have been recorded from Australia or New Zealand.

**NATURAL HISTORY:** Specimens have been most frequently taken in buildings, but are also known from gardens, pastures, citrus orchards, oak forests, and caves.

**SYNONYMY:** The numerous redescriptions are presumably due only to the unexpectedly wide distribution of the species.

***Urozelotes mysticus*, new species**

Figures 59–62

**TYPES:** Male holotype and female paratype from an unknown locality (no date or collector), deposited in MNHN.

**ETYMOLOGY:** The specific name refers to the unknown type locality.

**DIAGNOSIS:** Males can easily be distinguished from those of *U. rusticus* by the larger terminal apophysis (fig. 59), females by the narrower median epigynal plate (fig. 61).

**MALE:** Total length 4.03–5.10. Carapace

1.80–2.27 long, 1.37–1.74 wide. Femur II 1.17–1.37 long. Eye sizes and interdistances: AME 0.05, ALE 0.06, PME 0.08, PLE 0.08; AME–AME 0.05, AME–ALE 0.02, PME–PME 0.03, PME–PLE 0.05, ALE–PLE 0.05. MOQ length 0.20, front width 0.15, back width 0.19. Terminal apophysis wide, reaching farther distally than embolus, retrolateral tibial apophysis not curving ventrally (figs. 59, 60). Leg spination: femora: II p0-1-1; IV p0-0-1, r0-0-1; tibiae: III r0-1-1; IV p1-0-1.

**FEMALE:** Total length 4.79. Carapace 2.19 long, 1.65 wide. Femur II 1.33 long. Eye sizes and interdistances: AME 0.07, ALE 0.08, PME 0.10, PLE 0.09; AME–AME 0.05, AME–ALE 0.02, PME–PME 0.04, PME–PLE 0.05, ALE–PLE 0.04. MOQ length 0.23, front width 0.19, back width 0.24. Median epigynal plate narrow posteriorly (figs. 61, 62). Leg spination: femur IV p0-0-1.

**OTHER MATERIAL EXAMINED:** Three males taken with the types (MNHN).

**DISTRIBUTION:** Unknown.

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