

ON EURASIAN AND AMERICAN *TALANITES* (ARANEAE, GNAPHOSIDAE)

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Abstract. The North American spider genus *Rachodrasus* Chamberlin is newly synonymized with the Old World genus *Talanites* Simon. The type species, *Talanites fervidus* Simon from Israel, is redescribed, and the species of *Talanites* occurring in the Soviet Union are revised. Four new species are described: *T. mikhailovi* from Kazakhstan, *T. dunini* from Azerbaijan and Turkmenia, and *T. moodyae* and *T. ubicki* from California.

The North American spiders of the genus *Rachodrasus* were revised by Platnick and Shadab (1976), who recognized three species as valid: *R. echinus* Chamberlin and *R. exlineae* Platnick and Shadab from the southeastern United States, and *R. captiosus* (Gertsch and Davis) from southern Texas and northeastern Mexico. We have recently had the opportunity to compare representatives of these species with Eurasian taxa that have been placed in the genus *Talanites* Simon, and have concluded that the New and Old World taxa are congeneric. We present here a redescription of the type species of *Talanites*, *T. fervidus* Simon from Israel, along with a revision of the Soviet fauna of the group and a description of two additional American species from California.

In an unpublished thesis, Penniman (1985) observed that specimens of *Rachodrasus* lack precoxal sclerites (i.e., sclerotized extensions of the sternal margin that reach toward, and sometimes between, the coxae). Because he considered this feature synapomorphic for a large group of gnaphosoids and clubionoids, Penniman suggested that *Rachodrasus* is misplaced as a gnaphosid. Although we have observed tiny but distinct precoxal sclerites in some species, we agree that *Talanites* may prove to be misplaced. In particular, the posterior median eyes are often circular, rather than irregularly shaped as in typical gnaphosids, and the palpal endites may show only vague traces of an oblique depression. The anterior lateral spinnerets, however, are enlarged, heavily sclerotized, tubular, and widely separated at their

base, as in other gnaphosids, and their piriform gland spigots are widened (Platnick 1990, figs. 80-82). Similar piriform gland spigots occur in some male (but not female) Clubionidae; in *Talanites*, however, both sexes have widened piriform gland spigots, and females also have cylindrical gland spigots on the posterior median and posterior lateral spinnerets that are lacking in those clubionids but present in other gnaphosids. We therefore retain *Talanites* in the Gnaphosidae, at least until a better corroborated hypothesis of its relationships can be supported.

The format of the descriptions and abbreviations used follow those of Platnick and Shadab (1976); measurements (taken from type material, unless otherwise indicated) are in mm.

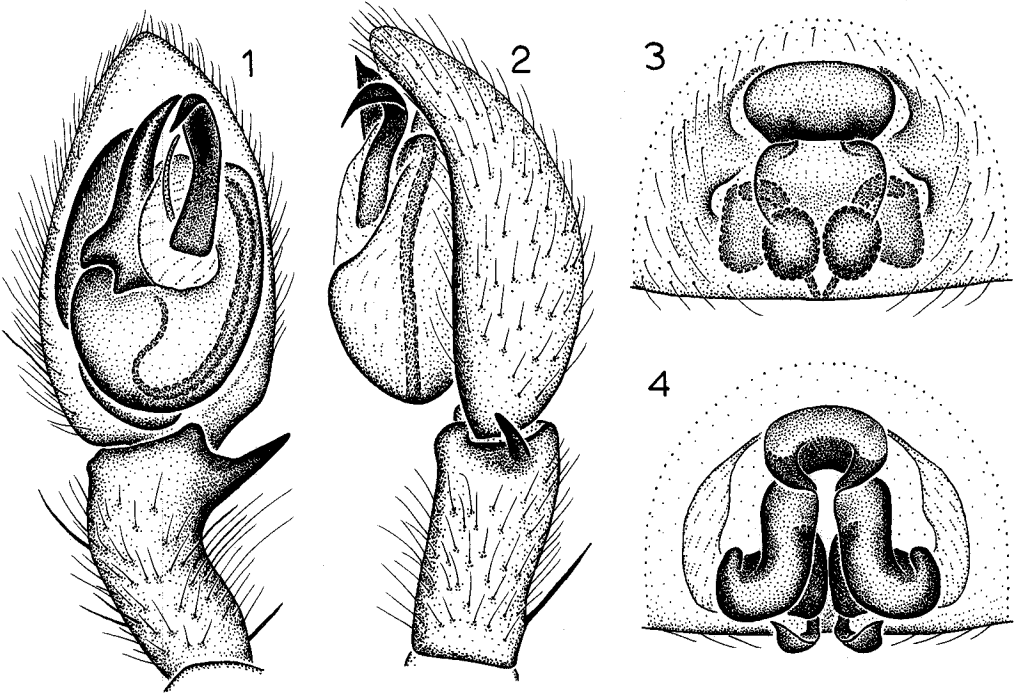
Talanites Simon

Talanites Simon, 1893:363 (type species by original designation *Talanites fervidus* Simon).

Rachodrasus Chamberlin, 1922:160 (type species by original designation *Rachodrasus echinus* Chamberlin). **NEW SYNONYMY.**

Drassyllochemmis Gertsch and Davis, 1940:17 (type species by original designation *Drassyllochemmis captiosus* Gertsch and Davis). First synonymized with *Rachodrasus* by Platnick and Shadab, 1976:4.

Diagnosis.—See Platnick and Shadab (1976: 4); the presence of two dorsal spines on tibia IV has been corroborated for all the Eurasian species examined, but some of those species lack the second point on the median apophysis of the male palp. Those males are readily recognizable as *Talanites*, however, by the palpal conforma-



Figures 1-4.—1, 2, *Talanites fervidus* Simon; 3, 4, *T. ubicki*, new species: 1, left male palp, ventral view; 2, same, retrolateral view; 3, epigynum, ventral view; 4, same, dorsal view.

tion, including a long and arched palpal tibia, a wide prolateral embolus, and a greatly elongated median apophysis.

Description.—See Platnick and Shadab (1976: 4).

Included species.—From America, *T. echinus* (Chamberlin), NEW COMBINATION; *T. exlineae* (Platnick and Shadab), NEW COMBINATION; *T. captiosus* (Gertsch and Davis, NEW COMBINATION; and *T. moodyae* and *T. ubicki*, new species; from Eurasia, at least *T. fervidus* Simon and the four Soviet species discussed below. Examination of the types and other specimens of two further Soviet species, *T. aculeatus* Charitonov (1946, 1969) and *T. atscharicus* Mcheidze (1946), indicates that they do not belong to *Talanites*. The figures provided for *T. tibialis* Caporiacco (1934) from India and Pakistan indicate that it is also misplaced. Of the other described species (from Greece, north Africa, and Burma), little can be said until their types can be examined.

Talanites fervidus Simon

Figs. 1, 2

Talanites fervidus Simon, 1893:363 (male syntype from the Dead Sea area, Israel, in MNHN, examined).

Diagnosis.—Males resemble those of *T. mikhailovi* in having an excavated embolar base, but the embolus (Fig. 1) is longer than in that species.

Male.—Total length 4.09. Carapace 1.88 long, 1.50 wide. Femur II 1.54 long. Eye sizes and interdistances: AME 0.05, ALE 0.05, PME 0.05, PLE 0.05; AME-AME 0.04, AME-ALE 0.03, PME-PME 0.09, PME-PLE 0.08, ALE-PLE 0.03; MOQ length 0.14, front width 0.14, back width 0.19. Leg spination: femora: I p0-1-1; II r0-0-0; III r0-1-1; tibiae: I p1-1-1, v2-2-2; II v2-2-2, r0-0-0; III v1p-2-2; metatarsi: II p0-1-0; IV p1-2-2. Tibial apophysis directed retrolaterally, scarcely wider than basal tibial spine; embolar base excavated, tip twisted; median apophysis without second point (Figs. 1, 2).

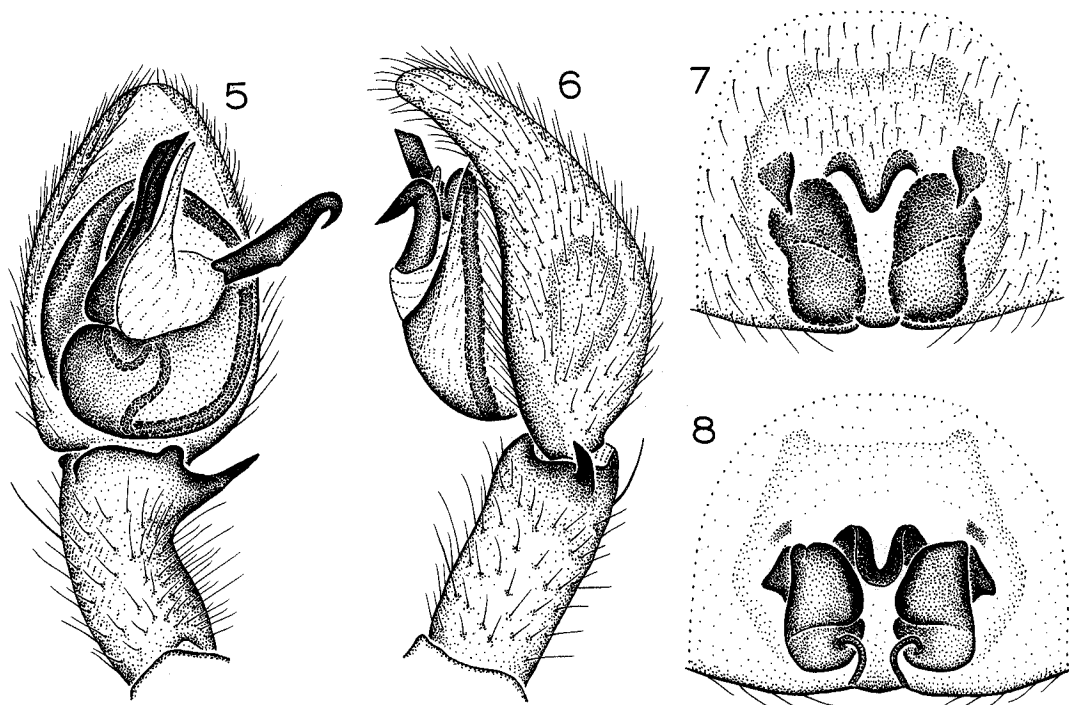
Female.—Although Simon recorded both sexes, no females are now housed with the male syntype described above.

Material examined.—Only the syntype, without date or collector.

Talanites mikhailovi, new species

Figs. 17, 18

Type.—Male holotype from Dzhanibek, Ural, Kazakhstan (30 June-6 July 1982; K. G. Mikhailov), deposited in ZIL.



Figures 5-8.—*Talanites dunini*, new species: 5, left male palp, ventral view; 6, same, retrolateral view; 7, epigynum, ventral view; 8, same, dorsal view.

Etymology.—The specific name is a patronym in honor of the collector of the holotype, Dr. K. Mikhailov of Moscow State University.

Diagnosis.—Males resemble those of *T. fervidus* in having an excavated embolar base, but the embolus (Fig. 17) is shorter than in that species.

Male.—Total length 4.90. Carapace 2.27 long, 1.69 wide. Femur II 1.28 long. Eye sizes and interdistances: AME 0.06, ALE 0.09, PME 0.06, PLE 0.07; AME-AME 0.06, AME-ALE 0.03, PME-PME 0.11, PME-PLE 0.11, ALE-PLE 0.05; MOQ length 0.19, front width 0.18, back width 0.23. Leg spination: femur I p0-1-1; tibiae: I v2-2-2, r0-1-1; II v2-2-2, r1-1-1; metatarsus II p1-1-0. Tibial apophysis short, wide, directed distally; embolar base excavated, tip twisted; median apophysis with second point (Figs. 17, 18).

Female.—Unknown.

Other material examined.—USSR: *Kazakhstan*: Ural: Dzhani-bek, 27-30 June 1975 (Y. I. Chernov), 1 male (ZIL).

Talanites dunini, new species
Figs. 5-8

Types.—Male holotype and female allotype from Saatly, Dzhanfarkhan, Saatlinskii, Azerbai-

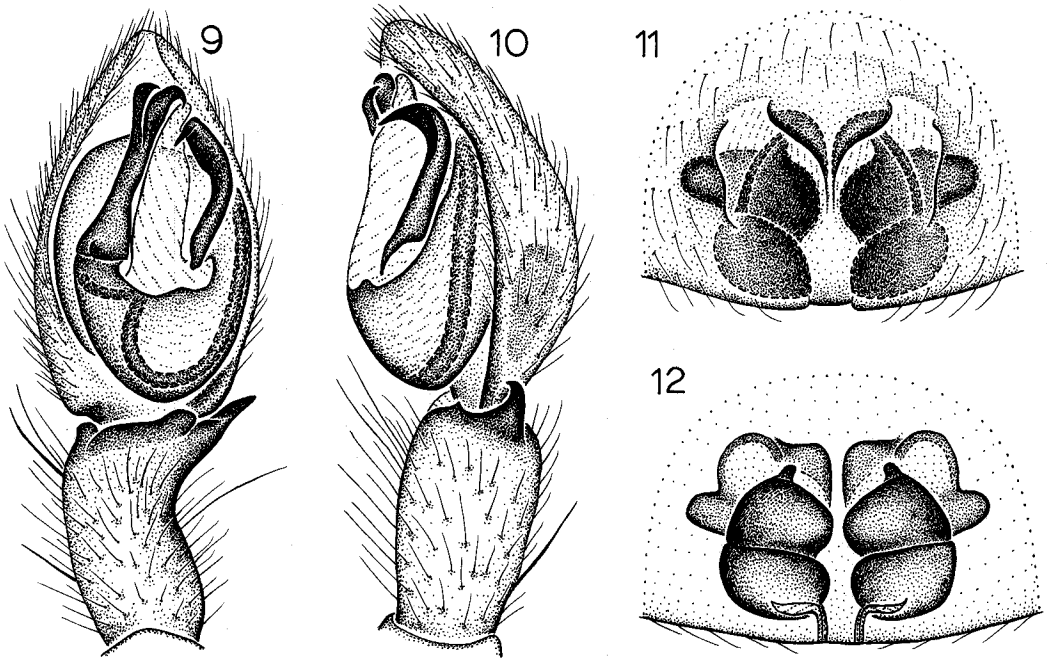
jan (31 August 1982; P. M. Dunin), deposited in ZIL.

Etymology.—The specific name is a patronym in honor of the collector of the types.

Diagnosis.—Males can be recognized by the blade-shaped embolus (Fig. 5), females by the short, flattened, and triangular epigynal hood (Fig. 7).

Male.—Total length 4.43. Carapace 2.03 long, 1.61 wide. Femur II 1.58 long. Eye sizes and interdistances: AME 0.07, ALE 0.09, PME 0.07, PLE 0.09; AME-AME 0.07, AME-ALE 0.03, PME-PME 0.13, PME-PLE 0.09, ALE-PLE 0.04; MOQ length 0.20, front width 0.21, back width 0.27. Leg spination: femora: I p0-1-1; II r0-0-0; tibiae: I, II v2-2-2; III v1p-2-2; metatarsi I, II p1-0-0. Tibial apophysis short, directed retrolaterally; embolus blade-shaped, with narrow base; median apophysis without second point (Figs. 5, 6).

Female.—Total length 5.87. Carapace 2.36 long, 1.76 wide. Femur II 1.61 long. Eye sizes and interdistances: AME 0.07, ALE 0.10, PME 0.08, PLE 0.10; AME-AME 0.06, AME-ALE 0.03, PME-PME 0.14, PME-PLE 0.13, ALE-PLE 0.06; MOQ length 0.26, front width 0.21, back width 0.30. Leg spination: femora: I d1-1-0, p0-



Figures 9-12.—*Talanites fagei* Spassky: 9, left male palp, ventral view; 10, same, retrolateral view; 11, epigynum, ventral view; 12, same, dorsal view.

1-1; II d1-1-0; tibiae: I p0-0-0, v2-2-0; II p0-0-0, v2-2-1p, r0-0-0; III v1p-2-2. Epigynum with pocket-like lateral ridges and short, flattened, triangular anterior hood (Fig. 7); spermathecae rectangular (Fig. 8).

Other material examined.—USSR: *Azerbaijan*: Saatlinskii: Saatly, Dzhafarkhan, 16 June-25 August 1982 (P. M. Dunin), 10 males, 1 female (ZIL). *Turkmenia*: East Kopetdag: Miana-Chaach, 22-28 Apr. 1978 (G. T. Kusnetsov), 5 males (ZIL); Krasnovodskaya: Kara-Kala, Kara-Kalinskii, 4 May 1987 (A. A. Zyuzin), 1 male (ZIL).

Talanites fagei Spassky
Figs. 9-12

Talanites fagei Spassky, 1938:577, figs. 3, 4 (two male and two female syntypes from Turkmenia and Kazakhstan, in ZIL, examined).

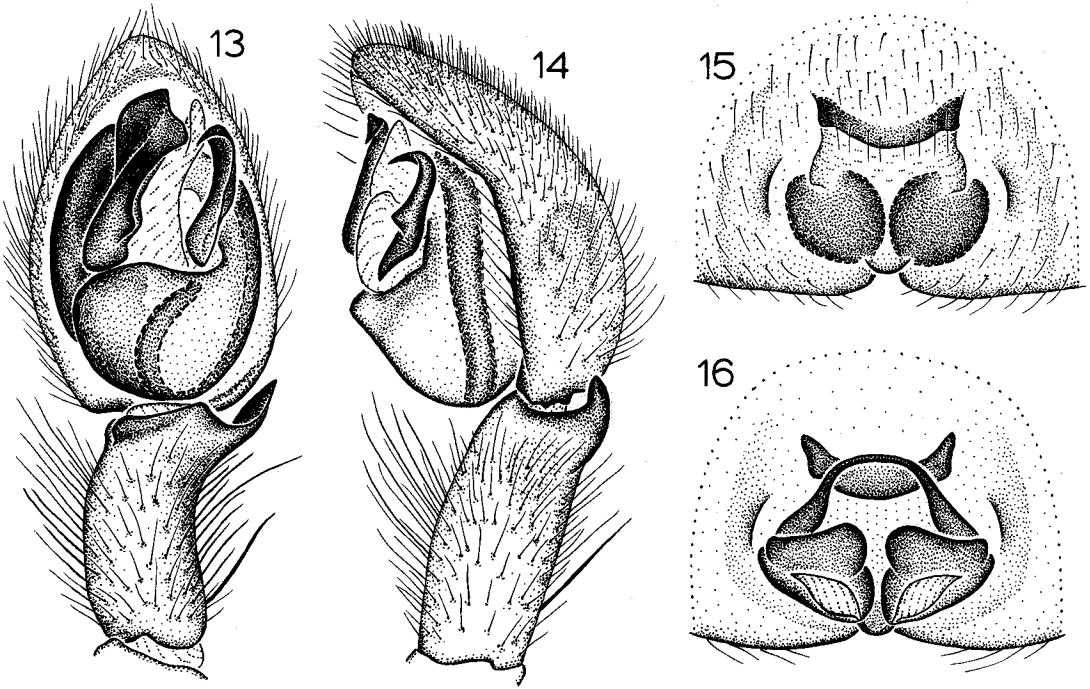
Diagnosis.—Males can be recognized by the distally expanded and bifid embolus (Fig. 9), females by the long, pointed anterior epigynal hood (Fig. 11).

Male (Ustyurt).—Total length 4.54. Carapace 1.99 long, 1.61 wide. Femur II 1.60 long. Eye sizes and interdistances: AME 0.07, ALE 0.09, PME 0.08, PLE 0.09; AME-AME 0.06, AME-

ALE 0.03, PME-PME 0.11, PME-PLE 0.11, ALE-PLE 0.05; MOQ length 0.21, front width 0.20, back width 0.27. Leg spination: femora: I p0-2-1, r0-1-1; IV r0-1-1; tibiae: I v2-2-2, r1-1-0; II v2-2-2, r1-1-0; metatarsi: II p0-1-0; III p2-2-2. Tibial apophysis short, directed retrolaterally; embolus distally expanded, bifid; median apophysis without second point (Figs. 9, 10).

Female (Ustyurt).—Total length 5.96. Carapace 2.18 long, 1.67 wide. Femur II 1.50 long. Eye sizes and interdistances: AME 0.08, ALE 0.10, PME 0.08, PLE 0.09; AME-AME 0.06, AME-ALE 0.03, PME-PME 0.14, PME-PLE 0.13, ALE-PLE 0.06; MOQ length 0.23, front width 0.22, back width 0.30. Leg spination: femora: I d1-1-0, p0-1-1; II d1-1-0; tibiae: I p0-0-0, v2-2-0; II p0-0-0, v1r-2-1p, r0-0-0; III v1p-2-2, r0-1-1; IV v1p-2-2. Anterior epigynal hood acutely pointed (Fig. 11); spermathecae angular (Fig. 12).

Material examined.—USSR: *Kazakhstan*: Alma-Ata: Alma-Ata, Apr. 1919 (V. Shnitnikov), 1 male (syntype, ZIL), 15 May 1921 (V. Shnitnikov), 1 female (syntype, ZIL); Kurty, Kurtinskii, July 1989 (A. A. Zyuzin), 1 male (ZIL). Gurievskaya: Ustyurt Reservation, Onere River, Ustyurt plateau, 16-21 May 1989 (A. A. Raik-



Figures 13-16.—13, 14, *Talanites strandi* Spassky; 15, 16, *T. moodyae*, new species: 13, left male palp, ventral view; 14, same, retrolateral view; 15, epigynum, ventral view; 16, same, dorsal view.

hanov, S. I. Ibraev), 4 males, 7 females (ZIL). *Kirgizia*: Ferghana Mountain ridge, 16 June 1984, evergreen forest, elev. 1400 m (S. Zonstein), 1 male, 1 female (AMNH). *Russia*: Suvorovskaya, Stavropolskii, July-Aug. 1925 (N. Karancheva), 1 female (ZIL). *Caucasus*: Kabardino-Balkaria, Nalshik, July 1925 (M. Karaitshveva), 1 female (syntype, ZIL). *Turkmenia*: Central Kopetdag: Firyuza, 17 Mar.-26 Apr. 1979 (G. T. Kusnetsov), 2 males, 1 female (ZIL). *Serachskii*: Agar-Tshishme, Serachs, 26 May 1936 (L. Freiberg), 1 male (syntype, ZIL).

Talanites strandi Spassky
Figs. 13, 14

Talanites strandi Spassky, 1940:353, fig. 1 (male holotype from Amvrosievka, Donetskaya, Ukraine, in ZIL, examined).

Diagnosis.—Males can be recognized by the folded and retrolaterally invaginated tip of the embolus (Fig. 13).

Male (Dzhanibek).—Total length 7.61. Carapace 3.28 long, 2.55 wide. Femur II 2.29 long. Eye sizes and interdistances: AME 0.07, ALE 0.11, PME 0.09, PLE 0.10; AME-AME 0.08, AME-ALE 0.04, PME-PME 0.14, PME-PLE 0.15, ALE-PLE 0.07; MOQ length 0.24, front

width 0.22, back width 0.32. Leg spination: femora: I p0-1-1, r1-1-0; II r1-1-1; III p1-1-1; IV p1-1-1, r1-1-1; tibiae: I p1-1-1, v2-2-2, r1-1-1; II v2-2-2, r2-1-1; III r1-1-2; IV p1-1-2, r1-1-2; metatarsi: I p0-1-0, r0-1-0; II p1-1-0, r0-1-0; III p2-2-2. Tibial apophysis broad, shifted dorsally; embolar tip large, folded, retrolaterally invaginated; median apophysis with large second point (Figs. 13, 14).

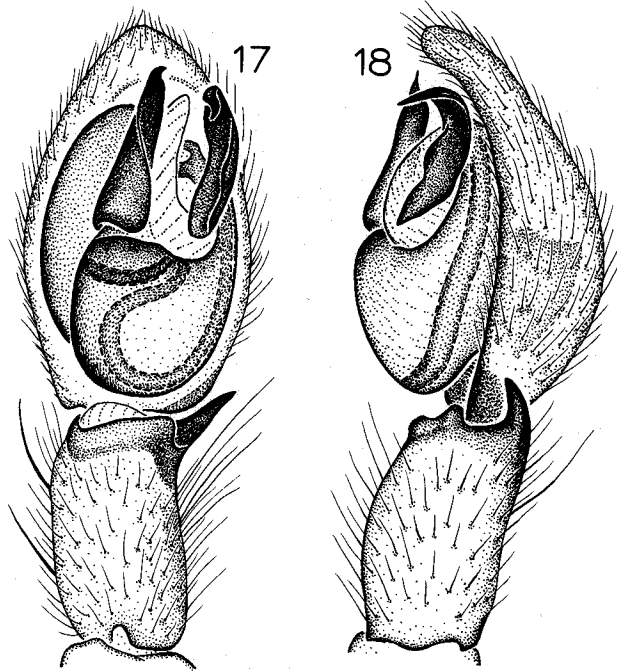
Female.—Unknown.

Material examined.—USSR: *Kazakhstan*: Ural: Dzhanibek, 8-11 Sept. 1982 (K. G. Mikhailov), 2 males (ZIL). *Ukraine*: Donetskaya: Amvrosievka, June 1912 (N. Spasskaja, S. Spassky), 1 male (holotype, ZIL).

Talanites moodyae, new species
Figs. 15, 16

Type.—Female holotype taken under a large rock on the north slope of Rocky Hill, near Exeter, Tulare Co., California (6 January 1983; M. J. Moody, W. L. Abel), deposited in AMNH courtesy of Ms. Moody.

Etymology.—The specific name is a patronym in honor of the collector of the type, who first recognized the species as new.



Figures 17-18.—*Talanites mikhailovi*, new species: 17, left male palp, ventral view; 18, same, retrolateral view.

Diagnosis.—Females resemble those of *T. ubicki* in having unusually small eyes, but can be distinguished by their relatively short, wide spermathecae (Fig. 16).

Male.—Unknown.

Female.—Total length 10.36. Carapace 4.43 long, 3.36 wide. Femur II 2.88 long. Eye sizes and interdistances: AME 0.06, ALE 0.12, PME 0.08, PLE 0.09; AME-AME 0.10, AME-ALE 0.12, PME-PME 0.24, PME-PLE 0.26, ALE-PLE 0.12; MOQ length 0.23, front width 0.22, back width 0.40. Leg spination: femora: I d1-1-0, p0-1-2, r0-1-0; II d1-1-0, p1-1-1, r0-1-0; III, IV d1-1-1, p1-1-1, r0-1-1; tibiae: I v2-2-1p; II v2-2-2; metatarsi: III p1-2-2, v2-2-2, r2-2-2. Epigynum with distinct anterior margin, short lateral margins, and wide median plate (Fig. 15); spermathecae short, wide (Fig. 16).

Other material examined.—None.

Talanites ubicki, new species
Figs. 3, 4

Type.—Female holotype taken under serpentine floats along San Marin Drive, Novata, Marin Co, California (7 March 1982; D. Ubick), deposited in AMNH courtesy of Mr. Ubick.

Etymology.—The specific name is a patronym in honor of the collector of the type, who first recognized the species as new.

Diagnosis.—Females resemble those of *T. moodyae* in having unusually small eyes, but can be distinguished by their longer spermathecae (Fig. 4).

Male.—Unknown.

Female.—Total length 6.08. Carapace 2.67 long, 2.08 wide. Femur II 1.80 long. Eye sizes and interdistances: AME 0.06, ALE 0.10, PME 0.05, PLE 0.07; AME-AME 0.07, AME-ALE 0.06, PME-PME 0.16, PME-PLE 0.15, ALE-PLE 0.05; MOQ length 0.18, front width 0.19, back width 0.27. Leg spination: femora: I d1-1-0, p0-0-1; II d1-1-0, p0-1-1; III d1-1-1, p0-1-1, r1-1-1; IV d1-1-1, p0-1-1, r0-1-1; tibiae: I v2-2-0; II v2-2-1p; metatarsi: III p2-2-2, v2-2-2, r1-2-2. Epigynum with small anterior hood and weak lateral margins (Fig. 3); spermathecae long (Fig. 4).

Other material examined.—One female taken with the type, three females taken at the same locality (18 Dec. 1982), and one female taken at the same locality (2 Jan. 1986), all in CDU.

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