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On the erigonine spider genera *Dactylopisthes* SIMON, 1884 and *Dactylopisthoides* gen. nov.

(Arachnida, Araneae: Linyphiidae)

With 6 Figures

KIRILL ESKOV
Moscow

The erigonine genus *Dactylopisthes* SIM., 1884 for a long time was considered as containing a single South European species, *D. digiticeps* (SIM., 1881). [1]) MILLIDGE (1977) regarded this monotypic genus as a separate subgroup within the *Savignya* group of genera. Only recently some new *Dactylopisthes* species were described and/or transferred into this genus with new combinations (TANASEVITCH, 1987, 1989).

In the course of my investigations on the linyphiid fauna of Siberia, an undescribed species was found which seems to be closely related to, but not congeneric with *D. digiticeps*. A description of this species, as well as a revision of the generic diagnosis, volume and distribution of *Dactylopisthes* are the subject of the present paper.

The materials have been shared between the collections of the Zoological Museum of the Moscow State University, Staatliches Museum für Tierkunde, Dresden (SMTD) and Senckenberg Museum, Frankfurt a. M. (SMF). All measurements are given in mm. Besides my own collectings abbreviated in the text as (KE), the materials treated herein derive from Dr. A. M. BUKHALO (ABJ), Dr. B. P. CHEVRIZOV (BC), Mrs. I. B. GRISHKAN (IG), Dr. Y. M. MARUSIK (YM) (all – Magadan), Mrs. O. A. KHRULEVA (OK) (Wrangel Island State Reserve) and Mr. S. A. KRASNOBAYEV (SK) (Zhiguli State Reserve). I wish to express my deep gratitude to all the collectors and to my friends and colleagues Dr. A. V. TANASEVITCH and Dr. S. I. GOLOVATCH, for the taxonomic discussion and checking of the English of the final draft, respectively.

Dactylopisthes SIMON, 1884

Dactylopisthes SIMON, 1884, Les Arachnides de France 5 (3): 592.
Scytiella GEORGESCU, 1976, Trav. Inst. Speol. "Emile Racovitza" 15: 9; **syn. nov.**

Type species *Erigone digiticeps* SIM., 1881.

Diagnosis Small, dark-coloured erigonines. Cephalic portion of male carapace with a distinct knob bearing PME, sometimes further modified. Tibial spines 2.2.1.1. Metatarsi I–III each with a trichobothrium, Tm I – 0.40–0.50. Palpal tibia with two trichobothria. Male palpal tibia with a long, more or less falcate outgrowth. Suprategular apophysis strongly developed, with a long, sharp, frontal outgrowth and two additional teeth. Embolic division simple, distally bifurcated, one is embolus usually coiled around the straight other tip. Epigyne with a wide, poorly sclerotized, medial excavation and more or less contiguous lateral lobes. Vulva with medium-sized receptacula and wide, straight entrance ducts.

Composition and distribution Being redelimited in such a way, the genus comprises the following seven species.

[1]) *Erigone paupera* SIM., 1881 assigned originally within *Dactylopisthes* was reconsidered later as the type-species of *Alioranus* SIM., 1926.

1. *Dactylopisthes digiticeps* (SIM., 1881) (*Erigone digiticeps* in the original description): south-western Europe.

2. *Scytiella mirifica* GEORG., 1976: south-eastern Europe; in USSR – middle flow of Volga River (2 ♂♂ – Kuibyshev Area, Zhiguli State Reserve, Zol'noye, 26. VII. 1983, SK leg.).

3. *Dactylopisthes locketi* (TAN., 1983) (*Tapinocyba* (?) *locketi* in the original description, was transferred into *Dactylopisthes* by TANASEVITCH, 1989): Soviet Middle Asia, West Tien-Shang Mts. (TANASEVITCH, 1989).

4. *Dactylopisthes mirabilis* (TAN., 1985) (*Scytiella mirabilis* in the original description, was transferred into *Dactylopisthes* by TANASEVITCH, 1989): Soviet Middle Asia, North Tien-Shang Mts. (TANASEVITCH, 1989).

5. *Diplocephalus diphyus* HEIM., 1987 (= *Walckenaera dentata* ZHU & ZHOU, 1988, **syn. nov.**): West Mongolia, Mongolian Altai Mts. (HEIMER, 1987), and North-West China, Xinjiang (ZHU & ZHOU, 1988).

6. *Scytiella komi* TAN., 1983: Northern Russia, Vorkuta (TANASEVITCH, 1983), and Northern Siberia, Putorana Plateau (ESKOV, 1988).

7 *Scytiella video* (CHAMB. & IVIE, 1947) (*Cheniseo video* in the original description, was transferred into *Scytiella* by ESKOV, 1988): Alaska (CHAMBERLIN & IVIE, 1947), and Northern Siberia, Putorana Plateau and Nizhnyaya Tunguska River (ESKOV, 1988).

The Caucasian species *Dactylopisthes* (?) *procurvus* TAN., 1987 represents in fact a separate monotypic genus (A. V TANASEVITCH, in litt.).

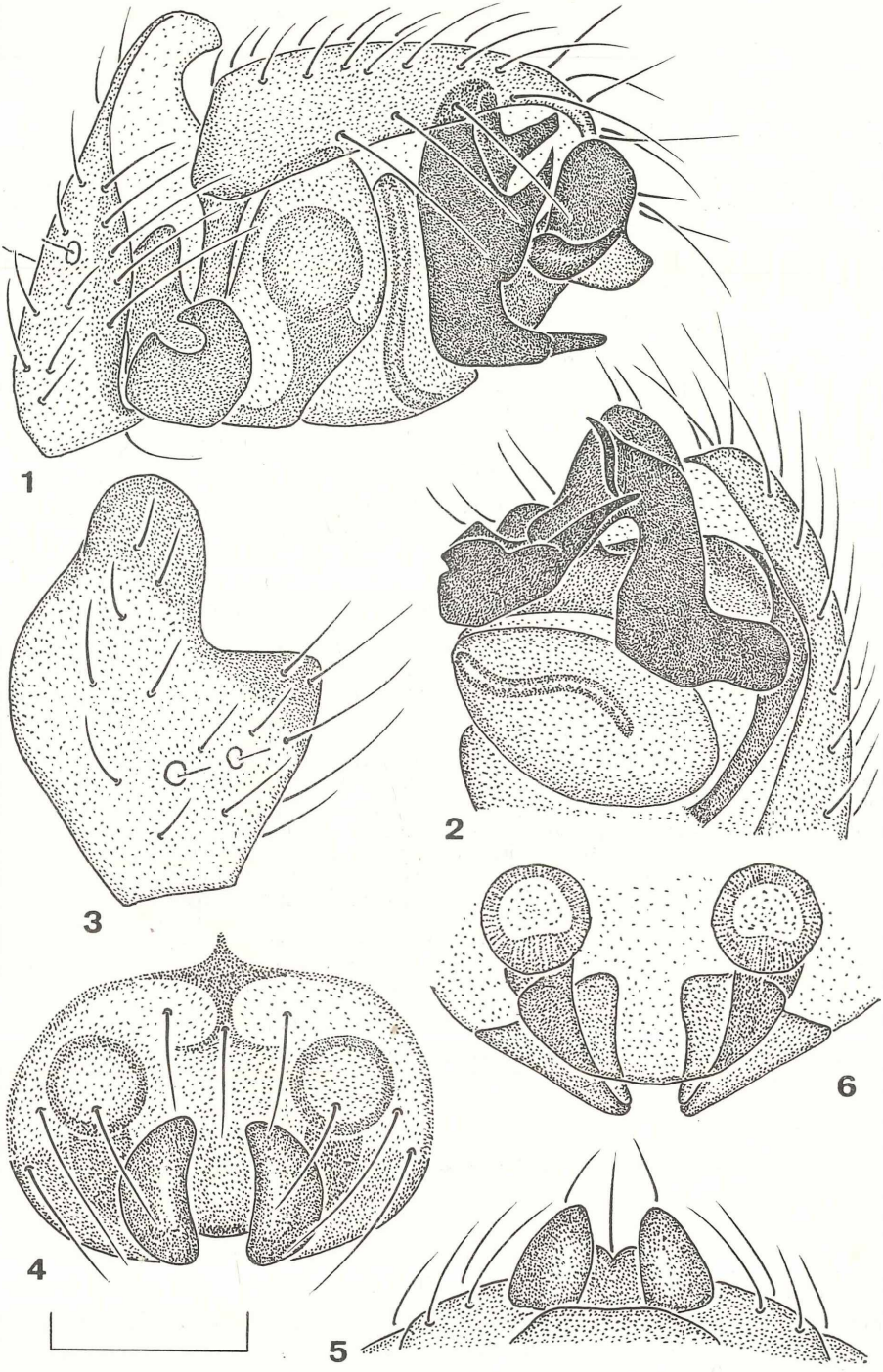
Taxonomic remarks I agree with MILLIDGE's (1977) opinion that *Dactylopisthes* belongs to the *Savignya* group of genera. The proposed synonymy of *Dactylopisthes* and *Scytiella* seems to be doubtless as being based on the unity of the main features of the genitalia, on the one hand, and of both chaetotaxy and shape of the male carapace, on the other hand. The following species groups may be delimited within the genus, basing on the shape of the embolic division.

1. The *digiticeps*-group. *D. digiticeps*: both embolus and frontal apophysis are sharp, straight and equal in size.

2. The *video*-group. *D. locketi, D. mirabilis, D. komi, D. video*: both embolus and frontal apophysis are more or less sharp and similar in size, but the former is curved whilst the latter is straight.

3. The *mirifica*-group. *D. mirifica, D. diphyus*: the embolus is curved, long and thick, the frontal apophysis very small; in addition, the suprategular apophysis is less developed than in both previous groups.

Zoogeographical remarks The genus *Dactylopisthes* represents spider taxa possessing Ancient-Mediterranean-Siberian pattern. Similar patterns are known for the linyphiid genera *Minicia* THOR., 1875, *Erigonoplus* SIM., 1884 and *Archaraeoncus* TAN., 1987, the salticid genus *Chalcoscirtus* BERT., 1883, the *lapponica*-group in the lycosid genus *Pardosa* C. KOCH, 1848, etc. A remarkable parallelism may be noted in the distribution of *Dactylopisthes* and *Erigonoplus*. Both genera have similarly fragmented ranges: Southern Europe, mountains of Central Asia and Northern Siberia; the sister-groups of taxonomically isolated *Erigonoplus* and *Dactylopisthes* are the monotypic North Siberian genera *Erigonoploides* ESK., 1989 and *Dactylopisthoides* gen. nov., respectively. Members of the above zoogeographical grouping are supposed to have originated in Central Asia, penetrated both Europe and Siberia due to the Plio-Pleistocene aridization and kryo-xerophilization, respectively; in some cases, they have since disappeared in the region of their origin, i. e. Central Asia (ESKOV, 1986a, 1986b).



Figs. 1–6: *Dactylopisthoides hyperboreus* gen. et sp. nov., male and female. 1: male, right palp, retrolateral view – 2: male, right palp, ventral view – 3: male, right palpal tibia, dorsal view – 4: female, epigyne, frontal view – 5: female, epigyne, posterior view – 6: female, vulva, inside view. – Scale = 0.1 mm.

Dactylopisthoides gen. nov.

Type species *Dactylopisthoides hyperboreus* sp. n.

Diagnosis Small, dark-coloured erigonines. Male carapace unmodified. Chelicera with four promarginal teeth. Tibial spines 2.2.2.1. in female, 0.0.2.1. in male. Metatarsi I–III each with a trichobothrium, Tm I – 0.54. Palpal tibia with two trichobothria. Male palpal tibia with a very wide, distally rounded outgrowth. Suprategular apophysis strongly developed, dark-coloured, with a long, attenuated frontal outgrowth and two smaller, sharp ones. Embolic division simple, Z-shaped, distally bifurcated into two flattened ends. Epigyne without medial plate, with two small bean-shaped, protruding, lateral lobes. Vulva with medium-sized, rounded receptacula and wide, slightly curved entrance ducts.

Comparison By the shape of the genitalia of both male and female, the new genus is very close to *Dactylopisthes* and differs from the latter by the unmodified male carapace, presence of two spines on tibia III, of a wide outgrowth of the male palpal tibia, and protruding lateral lobes of the epigyne. By the tibial spine formula (2.2.2.1. in female, 0.0.2.1. in male) *Dactylopisthoides* gen. nov. is clearly distinguishable from all the remaining members of the *Savignya* group of genera.

Composition and distribution. Only the type species, known from the Northeastern Siberia: upper flow of Kolyma River and Wrangel Island.

Dactylopisthoides hyperboreus sp. n. (Figs. 1–6)

Material Holotype, ♂ USSR, Magadan Area, upper Kolyma River, Sibit-Tyellakh, *Pinus pumila* thicket, 14. IX. 1985 (YM). Paratypes: 2 ♀♀ – together with holotype; 4 ♂♂, 8 ♀♀ – same habitat, 12. VII. 1985 (YM); 2 ♂♂, 1 ♀ – same habitat, 9. VII–5. VIII. 1979 (SB); 2 ♂♂, 1 ♀ – same habitat, VI–VIII. 1984 (IG); 1 ♂ – same locality, alpine belt of Bolshoy Annachag Mt. Ridge, h-1250 m, thicket of dwarf *Alnus fruticosa*, 21. VIII. 1984 (YM); 1 ♂, 1 ♀ – same locality, alpine belt, h-1350 m, herbaceous vegetation of southern exposed slope, 2. IX. 1984 (BC); 1 ♂ – same habitat, 13. VII. 1983 (YM); 1 ♀ – same locality, alpine belt, h-1300 m, southern exposed rocky slope, under stones, 7 VIII. 1984 (KE); 1 ♂ – same locality, alpine belt, h-1250, rocky mountain tundra, 20. VIII. 1983 (YM); 1 ♀ – same locality, alpine belt, h-1800 m, gravel slope with lichen vegetation, 3. VII. 1986 (YM); 2 ♂♂, 2 ♀♀ (SMTD), 2 ♂♂, 2 ♀♀ (SMF), 8 ♂♂, 5 ♀♀ – same locality, VI-VIII. 1985 (YM); 1 ♂ – upper Kolyma River, 10 km upstream off Vetrenny, *Salix* bushes at the edge of a *Carex* swamp, 5. VIII. 1984 (KE); 1 ♂ – source of Kolyma River, Kulu River, mouth of Stokovy Spring, *Pinus pumila* bushes on scree, 11. VIII. 1986 (YM); 1 ♂ – Detrin River (right tributary of Kolyma River) 56 km upstream off mouth, 30. VIII. 1986 (YM); 2 ♂♂ – Chukotka Autonomous Region, Wrangel Island, lower Gusinaya River, gravel hilltop, 2. VII. 1984 (OK).

Description Total length of male/female 1.55–1.80/1.53–1.75. Carapace greyish-yellow, with a grey edging and a medial spot, eyes medium-sized, surrounded by black spots, length/width of carapace 0.63–0.68/0.48–0.50 in male, 0.60–0.68/0.45–0.48 in female. Legs greyish-yellow, length of joints of legs I/IV 0.50/0.58 + 0.18/0.18 + 0.45/0.53 + 0.33/0.43 + 0.28/0.30 in male, 0.48/0.53 + 0.18/0.18 + 0.40/0.48 + 0.30/0.38 + 0.25/0.28 in female. Abdomen grey. Genitalia of both male and female as in Figs. 1–6.

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Adress of the author:
Palaeontological Institute, Academy of Science of the USSR,
Profsoyuznaya 123, Moscow, 117 321 (USSR)

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