UDC 595.44(549.1)

## TWO NEW SPIDER SPECIES OF THE GENUS DRACONARIUS (ARANEAE, AMAUROBIIDAE, COELOTINAE) FROM PAKISTAN

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Accepted 15 June 2004

Two New Spider Species of the Genus Draconarius (Araneae, Amaurobiidae, Coelotinae) from Pakistan. Ovtchinnikov S. V., Inayatullah M. - Draconarius pakistanicus Ovtchinnikov, sp. n. and D. naranensis Ovtchinnikov, sp. n. from Pakistan are described. The typical loci for Coelotes bifidus Caporiacco, 1935 and C. stylifer Caporiacco, 1935 are determined. Three species of the family Amaurobiidae (subfamily Coelotinae) are known now from Pakistan: C. stylifer Caporiacco, 1935 was actually described from India, not from Pakistan.

Key words: Araneae, Amaurobiidae, Draconarius, Coelotes, new species, Pakistan.

Два новых вида рода Draconarius (Araneae, Amaurobiidae, Coelotinae) из Пакистана. Овчинников С. В., Инаятулла М. – Из Пакистана описаны Draconarius pakistanicus Ovtchinnikov, 1999, sp. n. и D. naranensis Ovtchinnikov, 1999, sp. n. Для Coelotes bifidus Caporiacco, 1935 и С. stylifer Caporiacco, 1935 уточнены типовые локусы. Установлено, что в настоящее время в Пакистане известно 3 вида пауков из подсемейства Coelotinae (Amaurobiidae), а C. stylifer Caporiacco, 1935 описан не из Пакистана, а из Индии.

Ключевые слова: Araneae, Amaurobiidae, Draconarius, Coelotes, новые виды, Пакистан.

Up to the present time only one species of the spider subfamily Coelotinae (Amaurobiidae) has been reported from Pakistan - Paracoelotes bidens (Caporiacco, 1935), described from Karakorum (Baltistan, near Baltoro Glacier, 3,900-4,150 m. a. s. l., 35°41'N, 76°09'E) and NW Himalaya (Tolti environs, 2,400 m. a. s. l., 35°02'N, 76°01'E). Type locality of the second coelotin species (*Coelotes stylifer* Caporiacco, 1935) described in the same paper is India (Jammu and Kashmir State, Gund environs, 2,080 m. a. s. l., 34°16'N, 75°05'E, and Kangan, 2,000 m. a. s. l., 34°15'N, 74°55'E).

Two new species of the genus *Draconarius* Ovtchinnikov, 1999 were found by us in 2003 in W Himalaya, both of which are clearly closed to the type species of the genus, D. venustus Ovtchinnikov, 1999 from Gissaro-Darvaz Mountain system, from where we have another, undescribed species.

In the present article these two new species from Western Himalaya are described. The following abbreviations have been used in the text: ALE - anterior lateral eves; AME - anterior median eyes; PLE - posterior lateral eyes; PME - posterior median eyes; PLS – posterior lateral spinnerets. All measurements are in millimetres. The scale unit on all figures equals 0.5 mm. All holotypes and part of paratypes will be deposited in the Zoological Museum of Moscow State University, Moscow (Dr. K. G. Mikhailov); remaining paratypes are in the private collection of the first author (Bishkek, Kyrgyzstan).

#### Draconarius pakistanicus Ovtchinnikov, sp. n. (fig. 1-4)

Type material. Holotype o, Pakistan, W Himalaya, 10 km SE from Babusar Pass, north slope, 4000 m a. s. l., 10.08.2003. Paratypes: 14 ♂, 16 ♀, same data as holotype (Ovtchinnikov).

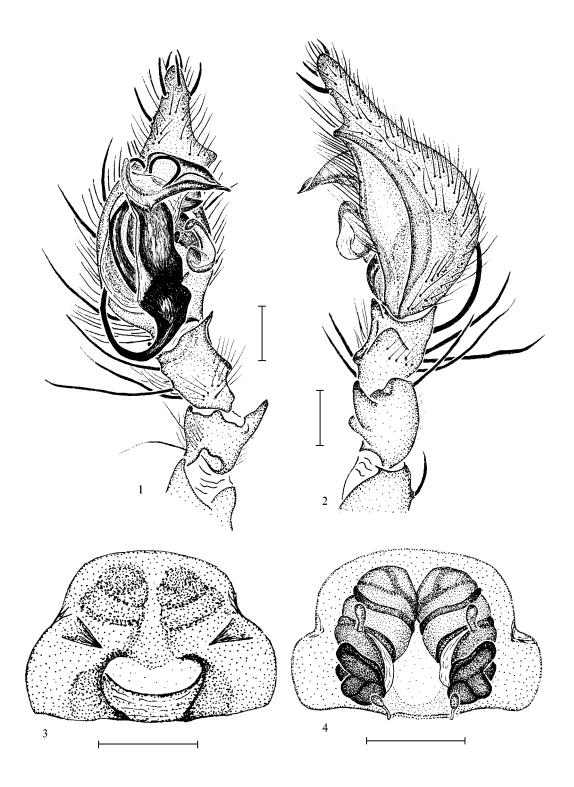


Fig. 1–4. Draconarius pakistanicus: 1 – left palpus, ventral view; 2 – ditto, retrolateral view; 3 – epigynum, ventral view; 4 – ditto, dorsal view.

Рис. 1—4. *Draconarius pakistanicus*: 1 — левый пальпус, вентрально; 2 — то же, ретролатерально; 3 — эпигина, вентрально; 4 — то же, дорсально.

Diagnosis. Copulative structures in both sexes similar to those in *D. venustus* Ovtchinnikov. Male differs by great size, relatively small cymbium of the palpus and correspondingly less developed apophysises of the conductor, and not so long embolus (fig. 1, 2). Females of both species have externally similar epigynae and spermathecae, as well as proportions and the angle of relative position (fig. 3, 4). The new species has fewer convolutions of the copulatory ducts, therefore the last are wider. Spiders of the new species are about twice bigger, and have contrastly bicoloured legs I–III. The new species differs from the geographically closest species *D. naranensis* sp. n. by absence of transverse stripes on legs, by absence of maculae on carapace and sternite, and by shape and relative position of epigynal teeth. The new species is close by male palpus also to *D. aspinatus* (Wang & al., 1990) from Anhui Province, China. But the last one has shorter cymbial apex and conductor, which not twisted on its end. Besides, it has not patellar apophysis.

Description. Male: Total body length 14 (holotype), 11–14 (paratypes). Length of carapace 6.30, width of carapace 4.10, with ratio 1.55; length of head part 1.7, its width in area of PER 0.64 times maximal width of thorax. Relative diameters of an eye and distance between them (in standard units) AME 10, ALE 16, PME 12, PLE 15, AME–AME 10, ALE–AME 9, ALE-PLE 7, PLE–PME 19, PME–PME 14. Sternum length 3.1, width 2.25. Hind tibia + patella to length of carapace 1.11. Leg formula oftenest 4123, commonly 4321, sometimes 4132. Carapace yellow-brown, slightly darkened in the anterior part of head. Metatarsi I-III entirely black-brown; tibiae I and II darkened only partially. Other parts of legs yellow-brown except fore femora and coxae which are somewhat darker. Carapace, sternum and legs devoid of pigment maculations. Carapace clothed in black adpressed hairs with obliquely truncated apex; similar hairs on femora, patellae, tibiae, and bases of metatarsi. Abdomen and sternum in simple hairs. Pattern on abdomen grey, not sharply delineated, prevailing against the white background. Spinnerets of moderate size, apical to basal PLS segment ratio 0.8.

Fe male. Body length 11.5–17. Carapace length 4.5, width 3. Width of head to that of carapace 0.7. Apical segment of PLS to its basal segment 0.95. Epigynum of common type (fig. 3–4). Epigynal teeth are located above fovea, not extending outside its margins. Sperm receptacle ducts form oblong oval coils, pointing towards to each other and adjoin by the apices. Ducts wide, of light colour, delimited below by dark stripes. Spermathecae twice shorter than ducts. Their inner margins delimited by narrow, white bursae copulatrices (tabl. 1).

Ecology. *D. pakistanicus* sp. n. abundantly occurs in subalpine and alpine meadows, its biomass prevailing over most of other spiders. Provided sufficient humidity, it can be found easily under any boulder. It is one of the biggest-sized species, and the sole representative of its family in the area of the research.

Distribution. Pakistan: Western Himalaya.

Etymology. Named after the country name in which it was collected.

#### Draconarius naranensis Ovtchinnikov, sp. n. (fig. 5, 6)

Type material. Holotype \$, Pakistan, W Himalaya, ca. 3 km NNE Naran, 2,500 m a. s. l., coniferous forest (*Cedrus, Picea, Pinus*) 18.08.2003. Paratype: \$, same data as holotype (S. V. Ovtchinnikov).

Габлица 1. Длина члеников пог (самка)										
Legs	Femur	Patella	Tibia	Metatarsus	Tarsus	Total				
Ι	5.25/4.50	2.25/2.25	4.90/4.15	5.60/4.2	3.35/2.25	21.12/17.35				
II	5.10/4.40	2.10/2.25	4.35/3.60	5.45/4.2	3.10/2.10	20.10/15.55				
III	4.85/3.85	2.10/2.20	3.75/3.15	5.45/4.40	2.85/2.15	19.00/15.75				
IV	5.60/4.95	2.35/2.30	5.05/4.45	7.25/5.95	3.35/2.65	23.60/20.25				

# Table 1. Length of legs (male/female)

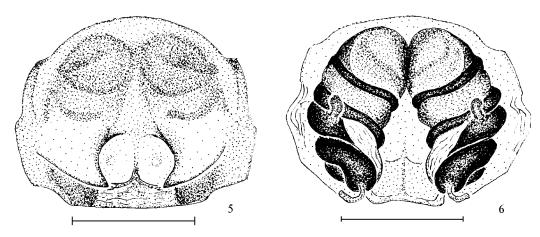


Fig. 5–6. *Draconarius naranensis*: 5 – ерідупит, ventral view; 6 – ditto, dorsal view. Рис. 5–6. *Draconarius naranensis*: 5 – эпигина, вентрально; 6 – то же, дорсально.

Table 2. Length of legs (holotype/paratype) Таблица 2. Длина члеников ног (голотп/паратип)

Legs	Femur	Patella	Tibia	Metatarsus	Tarsus	Total
I	3.35/3.33	1.53/1.43	3.10/3.05	3.18/3.15	1.75/1.73	12.91/12.69
II	3.20/3.05	1.43/1.33	2.65/2.65	2.88/2.85	1.58/1.58	11.74/11.46
III	2.88/2.78	1.25/1.20	2.20/2.18	2.83/2.80	1.38/1.40	10.54/10.36
IV	3.60/3.58	1.38/1.35	3.15/3.10	3.75/3.85	1.63/1.70	13.51/13.58

Diagnosis. Very close to D. pakistanicus sp. n. by the structure and position of copulatory ducts and spermathecae, but differs from it by the external structure of epigynum. (fig. 5,6). Epigynal teeth of D. naranensis sp. n., in difference from the previous species, are weakly sclerotized, poorly pigmented and longer. It also is smaller and more lightly coloured, has all legs uniformly testaceous and femora transversely striped.

Description. Total body length 8.4 (holotype), 8.8 (paratype). Length of carapace 4.0–4.2, width of carapace 2.83–2.88, length: width ratio 1.39–1.48. Length of head part 0.98–1.00, width 1.75–1.88, width of head part to width of carapace 0.61–0.66. Relative diameters of an eye and distance between them (in standard units) AME 12, PME 20, PLE 14; AME–AME 8, AME–ALE 6, ALE–PLE 5, PLE-PME 12, PME-PME 11. Length of carapace to length of patella + tibia 1.07–1.16 (tabl. 2).

C a r a p a c e yellow-brown with darkened anterior part and black-grey marginal line around thoracic region. Radiating from fissure of carapace are 4 elongated spots, pairs 2–4 of which broadening peripherally towards sides where they are delimited by a light marginal stripe encircling thoracic region. Legs yellow-brown with weak bands of lighter colour. Abdomen with a typical amaurobiid pattern.

Distribution. Pakistan: Western Himalaya.

Etymology. Toponymic, after its type locality.

Caporiacco L. di. Aracnidi dell' Himalaia e del Karakoram, raccolti dalla Missione italiana al Karakoram (1929-VII) // Mem. Soc. ent. ital. – 1935. – 13. – P. 161–263.

*Ovtchinnikov S. V.* On the supraspecific systematics of the subfamily Coelotinae (Araneae, Amaurobiidae) in the former USSR fauna // Tethys entomol. Research. – 1999. – **1**. – P. 63–79.