

Spiders of the genus *Centromerus* from Crimea (Aranei: Linyphiidae)

О пауках рода *Centromerus* (Aranei, Linyphiidae) в Крыму

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КЛЮЧЕВЫЕ СЛОВА: *Centromerus abditus* sp.n., Linyphiidae, новый вид, описание.

ABSTRACT. An illustrated description of a new spider species, *Centromerus abditus* sp.n., belonging to the *sylvaticus*-group, from the Crimea is presented.

РЕЗЮМЕ. Приводится иллюстрированное описание нового вида пауков из Крыма *Centromerus abditus* sp.n., принадлежащего к группе видов *sylvaticus*.

Introduction

Centromerus sylvaticus (Blackwall, 1841) is the single member of the genus known so far in Crimea [Kovblyuk, 2003]. As a result of investigations of the spider fauna carried out in Karadag Natural Reserve (Crimea), I have found specimens undoubtedly belonging to a second Crimean *Centromerus* species. Study of all available literature sources reveals that these specimens represent a new species.

Abbreviations for the names of the separate structures of the palp and the epigyne were adopted from Merrett [1963] with some changes according Millidge [1977]. Also taken into account were the designations adopted in Saaristo & Tanasevitch [1996]: App — anteroproximal part of the median membrane; DPS — distal part of scapus; EP — embolus proper; LL — lateral lobe of epigyne; MM — median membrane; R — radix; SA — suprategular apophysis; TA — terminal apophysis. Other abbreviations are: Fe — femur; Mt — metatarsus. All measurements are in mm.

Centromerus abditus sp.n.

Fig. 1.

MATERIAL. Holotype: ♂ (Zoological Museum of Moscow State University (ZMMU)), Ukraine, the Crimea, Pheodosiya distr., Karadag Natural Reserve (Fig. 3), bottom of ravine, in dark cavities in dead grass near water, 11.04.2003, V.A. Gnelitsa. Paratypes: ♂; 6 ♀♀ (Zoology Department of the Sumy Teachers' Training University), same data as holotype.

DIAGNOSIS. The male of the new species clearly differs from other *Centromerus* that have similar structure of the palp (*C. sylvaticus* (Blackwall, 1841) (Fig. 2); *C. sylvati-*

cus paucidentatus Deltshv, 1983; *C. obenbergeri* Kratochvil & Miller, 1938; *C. acutidentatus* Deltshv, 2002) [Deltshv, 1983; Deltshv, Curcic, 2002] by the following features:

— cymbium without posteriodorsal protuberance;
— paracymbium lacking a row of teeth in contrast to four abovementioned species;

— terminal apophysis wide with skew cut apex and is almost triangular. Terminal apophysis in other four species is stretched and has almost parallel margins and rounded in front (*C. sylvaticus* (cf. Fig. 2), *C. sylvaticus paucidentatus*) or nearly pointed (*C. obenbergeri*, *C. acutidentatus*).

— embolic division bearing oblong outgrowth which is not short and rounded as in abovementioned species.

— anteroproximal part of the median membrane bears 7 stretched teeth similar in shape and size and arranged close to each other. The number of teeth in similar species either less (*C. sylvaticus* (Fig. 2), *C. sylvaticus paucidentatus*) or much higher (*C. acutidentatus*, *C. obenbergeri*), and are placed appreciably wider apart.

— three large outgrowths (i, ii, iii) of the lamellar part of radix (Fig. 1a, b), not two as the similar species have.

Epigyne of the new species greatly resembles those in abovementioned species and *C. obscurus* Bösenberg, 1902. All these related species can be distinguished by the shape of the scapus (shape of its distal part (DPS) and especially shape of lateral lobes (LL) (Fig. 1d,e)) and details of the vulva.

DESCRIPTION. MALE. Total length 2.09. Carapace 1.06 long, 0.86 wide, yellow-brown. Sternum 0.60 long 0.55 wide, yellow-gray, gradually darkening towards its margins. Posterior median eyes separated by 1.4X of their diameter. Promargins of chelicerae with 3 separated teeth, retromargins with 3 teeth close together. Legs brownish-yellow, Fel with 1 prolateral spine, tibial spination 1pro2dors : 2dors : 2dors : 2dors, Mt (I–II) with 1 dorsal spine. Position of metatarsal trichobothrium: I — 0.37, II — 0.37, III — 0.40. Abdomen uniformly dark grey. Length of leg segments:

Leg	Femur	Patella	Tibia	Metatarsus	Tarsus
I	0.91	0.29	0.87	0.71	0.50
II	0.83	0.28	0.74	0.66	0.42
III	0.70	0.25	0.59	0.60	0.35
IV	0.95	0.27	0.92	0.81	0.45

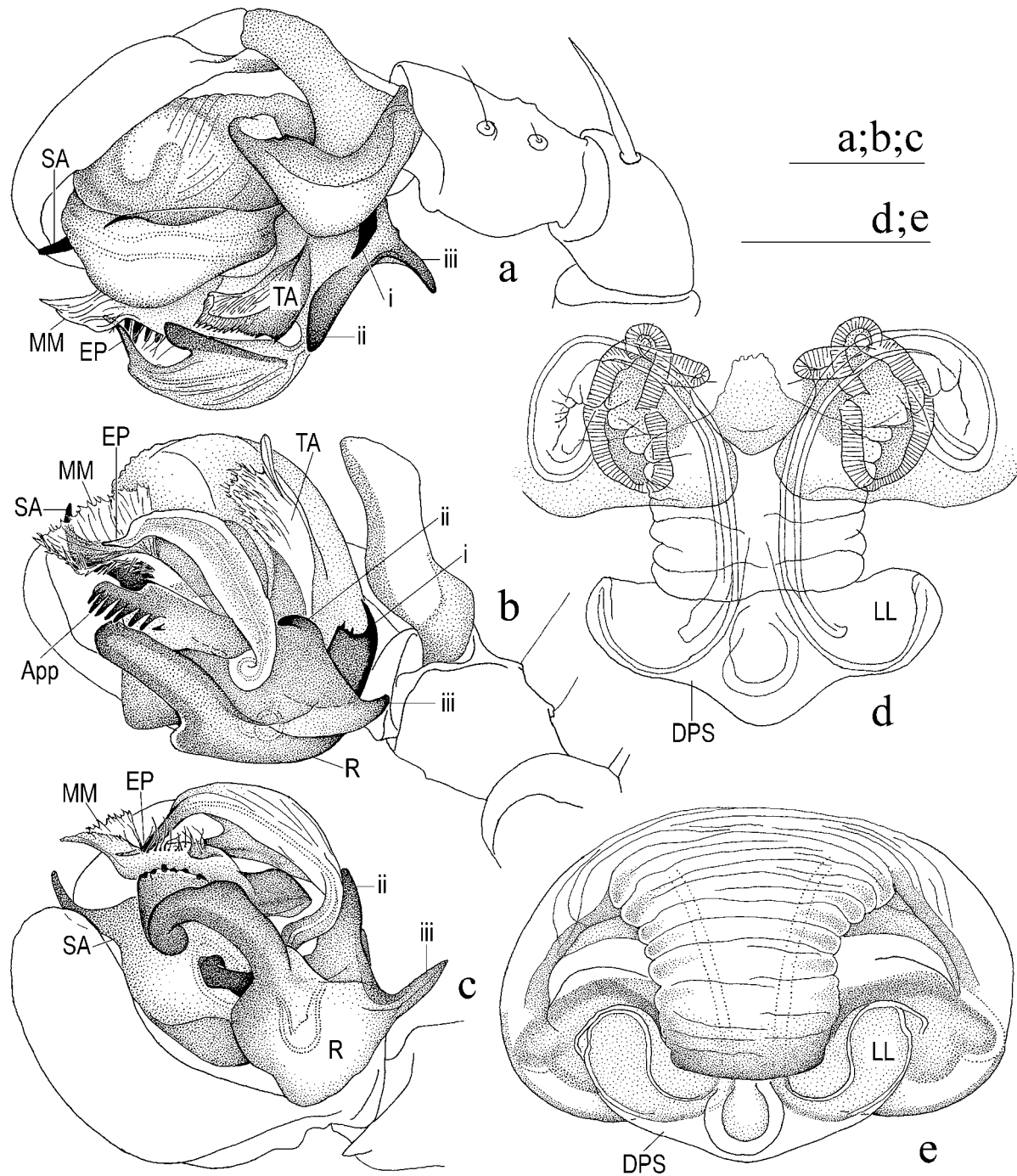


Fig. 1. *Centromerus abditus* sp.n.: a-c — male palp, lateral, ventral and median views; d — vulva; e — epigyne ventral view. Scale 0.1 mm.

Рис. 1. *Centromerus abditus* sp.n.: a-c — палпа самца, вид сбоку, вентрально и медиально; d — вульва; e — эпигина, вид снизу. Масштаб 0,1 мм.

Palp as in Fig. 1 (a-c). Cymbium dorsally without elevation, paracymbium lacking teeth, lamellar part of the radix with three large outgrowth.

FEMALE. Total length 2.58. Carapace 0.98 long 0.69 wide, yellow-brown with darker margins. Sternum 0.56 long

0.50 wide, yellow-grey with slightly darker margins. Posterior median eyes are slightly more than diameter of one apart. Promargins of chelicerae with 3 teeth, retromargins with 4 tiny teeth. Legs yellow; tibial spination as in male. Position of metatarsal trichobothrium: I — 0.41, II — 0.38,

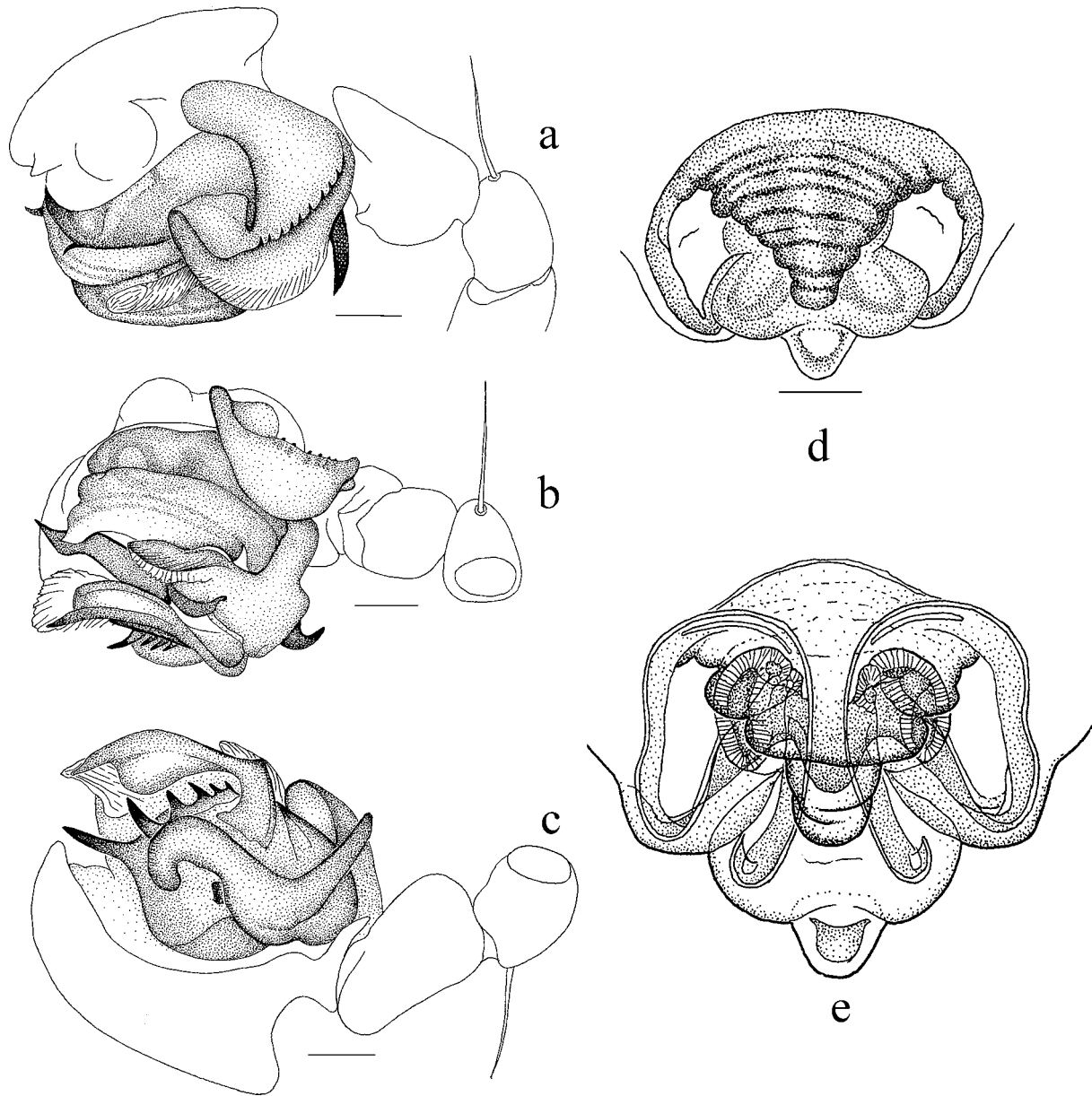


Fig. 2. *Centromerus sylvaticus* (Blackwall, 1841): a–c — male palp, lateral, ventral and median views; d — epigyne; e — vulva ventral view. Scale 0.1 mm.

Рис. 2. *Centromerus sylvaticus* (Blackwall, 1841): а–с — пальпа самца, вид сбоку, вентрально и медиально; d — эпигина; e — вульва, вид снизу. Масштаб 0,1 мм.

III — 0.33. Abdomen uniformly dark grey. Length of leg segments:

Leg	Femur	Patella	Tibia	Metatarsus	Tarsus
I	0.81	0.28	0.74	0.63	0.46
II	0.74	0.28	0.66	0.57	0.41
III	0.67	0.27	0.55	0.52	0.35
IV	0.91	0.27	0.87	0.74	0.43

Epigyne and vulva as in Fig. 1 d, e. Epigyne with widened scapus especially in its distal part.

ETYMOLOGY: the specific name “abditus” means — secretive.

Centromerus sylvaticus (Blackwall, 1841)

Fig. 2.

C. sylvaticus is common in Crimea. About 70 specimens of this species were found in 23 localities chiefly in the

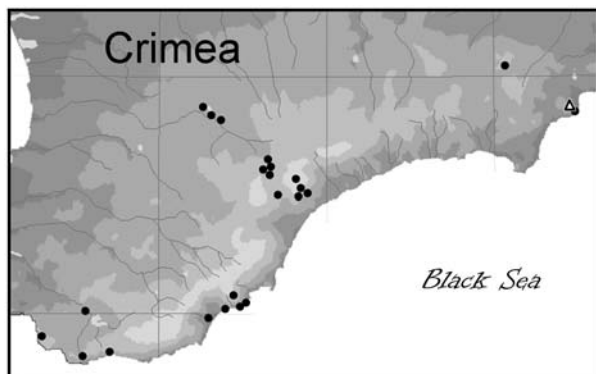


Fig. 3. The points of findings of *Centromerus* spiders in Crimea: round spots — *Centromerus sylvaticus* (Blackwall, 1841); triangle — *Centromerus abditus* sp.n.

Fig. 3. Места находок пауков рода *Centromerus* в Крыму: круги — *Centromerus sylvaticus* (Blackwall, 1841); треугольник — *Centromerus abditus* sp.n.

foothill and mountain regions of the peninsula (Fig. 3). This species inhabits soil litter of *Fagus*, *Quercus*, *Pinus* and mixed forests.

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