

Typhochrestus longisulcus sp. n., a new spider species from the Crimean Peninsula, Ukraine (Araneae: Linyphiidae)

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Abstract: A new linyphiid spider, *Typhochrestus longisulcus* sp.n., found in broad-leaved forests in the Crimean Peninsula, Ukraine, is described and illustrated. The new species is most closely related to *Typhochrestus digitatus* (PICKARD-CAMBRIDGE, 1872) and *Typhochrestus inflatus* THALER, 1980 but it is well distinguished from both by the peculiar form of the palps, epigyne and vulva.

Key words: spiders, taxonomy, *Typhochrestus longisulcus* sp.n., Ukraine

Introduction

The genus *Typhochrestus* SIMON, 1884 is currently known to comprise 29 species distributed mainly in the Mediterranean region with some exceptions in Central Europe and North America (PLATNICK 2006). Here, we describe a new, quite distinct species found in forest habitats in the Crimean Peninsula, SW Ukraine, thus increasing the number of the species to 30.

Materials and Methods

The specimens were collected using a hand-held suction sampler. The determination was made using binocular microscope MBS-10, drawings were made using camera lucida. The material is currently preserved in the Zoology Department of the Sumy Teacher's Training University (STTU). Abbreviations of the names of the palpal structures follow HORMIGA (2000): ARP – anterior radical process, E – embolus, EM – embolic membrane, P – paracymbium, PT – protegulum, R – radix, St – subtegulum, T – tegulum, Tp – radical tailpiece. Other abbreviations in the text are: Fe – femur, Pt – patella, Ti – tibia, Mt – metatarsus, Ta – tarsus, Tr – position of the metatarsal trichobothria. All measurements are in mm.

Taxonomic part

Typhochrestus longisulcus sp. n.

Material examined: Holotype: male, Ukraine, Crimea, Pheodosia Distr., Caradag Nature Reserve, 20° northwest slope, 15.10.2003, V. Gnelitsa leg.; - Paratype: female, Kirov Distr., ravine to the north of the Big Agarmysh mount 01.05.2003, V. Gnelitsa leg. (STTU).

Etymology: to emphasize the presence of long postocular sulci on the carapax.

Diagnosis: *Typhochrestus longisulcus* sp. n. is most closely related to *Typhochrestus digitatus* (PICKARD-CAMBRIDGE, 1872) and *Typhochrestus inflatus* THALER, 1980 based upon the morphology of the palp. The males of the new species clearly differ in their palp area especially by the short and heavy anterior radical process with skew cut apex; wide and flat distal piece of embolus;

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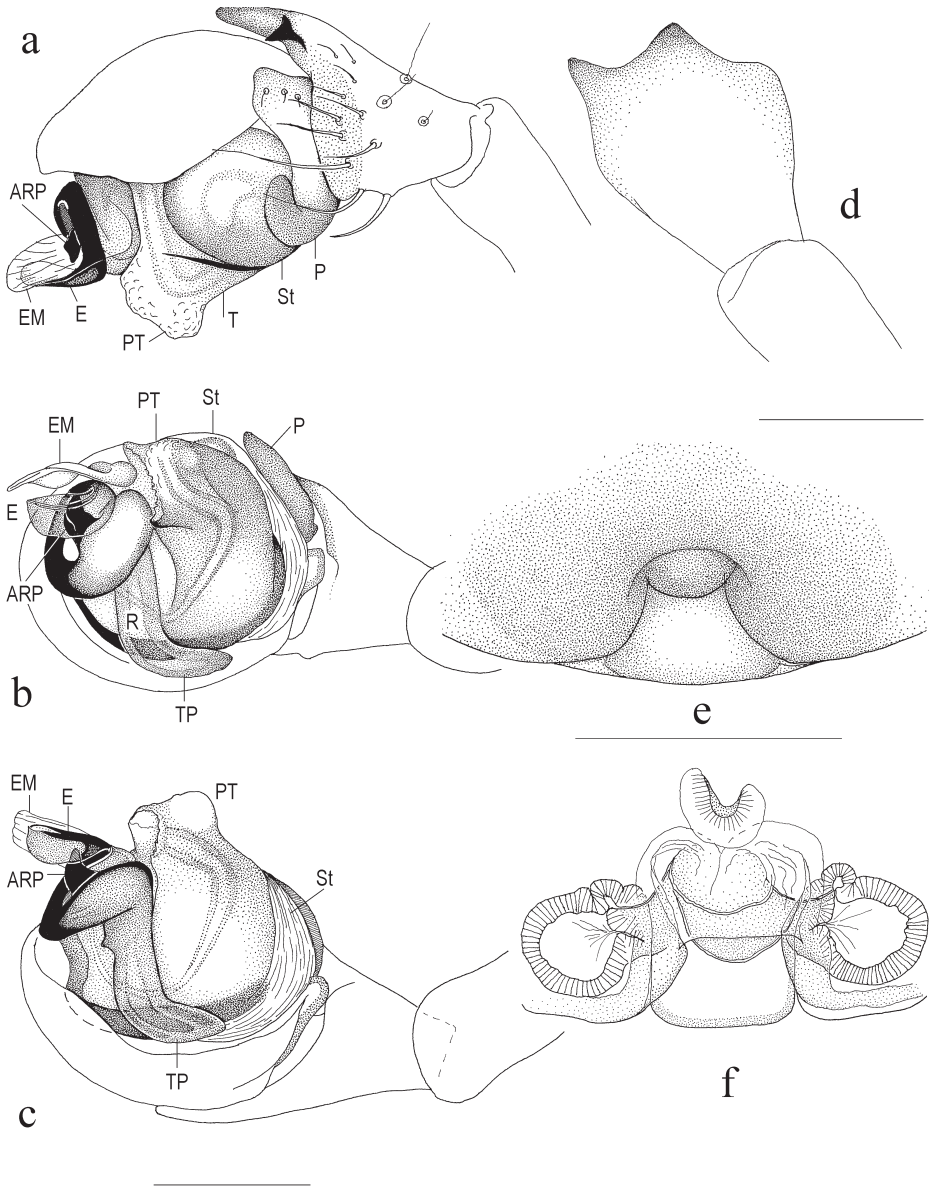


Fig. 1. *Typhochrestus longisulcus* sp.n.: a-c - male palp, lateral, ventral and median views, respectively; d - palpal tibia, dorsal view; e - epigyne, ventral view; f - vulva. Scale lines: 0.1 mm.

palpal tibia configuration and the form of carapace with unusually elongated postocular sulci. The female is distinguished by the peculiar shape of the epigyne and vulva.

Description: Male: Total length: 1.30. Carapace (Fig. 2 c, d): yellow-grey, length: 0.66; width: 0.49. Chelicerae with 4 teeth on their promargins, retromargin with 3 closely-spaced teeth. Sternum with shiny surface, dark grey; length: 0.36; width: 0.32; distance between the posterior median eyes is more than the PME diameter; Tibial spines 2: 2: 2: 1. Abdomen: dark grey, monotonous. Palp: see Fig. 1 a, b, c, d.

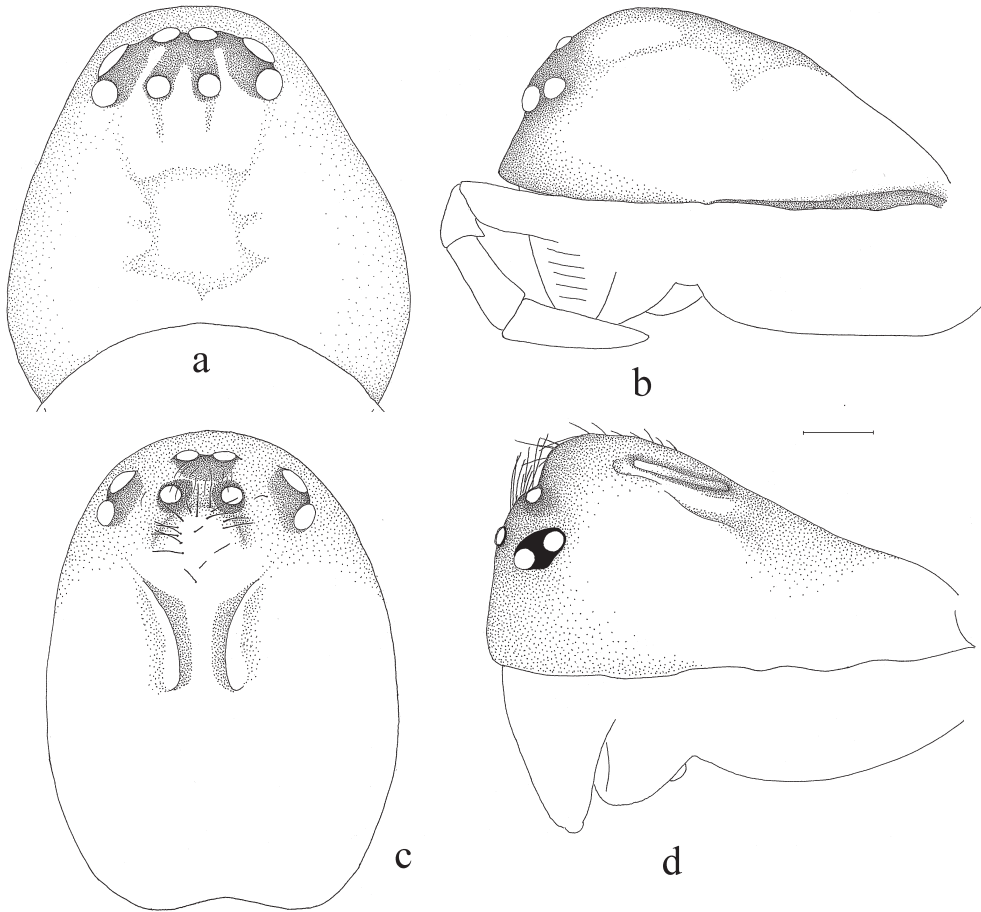


Fig. 2. *Typhochrestus longisulcus* sp.n.: a–b - female carapace, dorsal and lateral views; c–d – male carapace, dorsal and lateral views. Scale line: 0.1 mm.

Legs	Fe	Pt	Ti	Mt	Ta	Tr
I	0.47	0.15	0.43	0.31	0.27	0.43
II	0.41	0.15	0.38	0.28	0.24	0.43
III	0.34	0.14	0.28	0.26	0.22	0.37
IV	0.49	0.15	0.49	0.34	0.25	-

Female: Total length: 1.47. Carapace (Fig. 2 a, b): dark yellow-grey; length: 0.66, width: 0.51. Sternum yellow-grey with darker margins; length: 0.31, width: 0.28. Chelicerae with 5 teeth on their promargins; posterior median eyes is the PME diameter apart. Tibial spines 2: 2: 2: 1. Abdomen black, monotonous. Epigyne and vulva are presented in Figs 1 e and 1 f, respectively.

Legs	Fe	Pt	Ti	Mt	Ta	Tr
I	0.48	0.17	0.42	0.29	0.27	0.46
II	0.43	0.15	0.35	0.27	0.25	0.42
III	0.36	0.15	0.27	0.25	0.19	0.40
IV	0.55	0.18	0.48	0.34	0.25	-

Ecology: The male was found in the soil and grass of broad-leaved forests of *Quercus pubescens*, *Fraxinus* sp., *Pyrus elaeagnifolia* with *Jasminum fruticans*, while the female was collected in the same habitat in forests of *Quercus petraea*, *Carpinus* sp., *Fagus* sp., *Populus* sp. with *Corylus* sp., *Sambucus* sp. and *Euonimus* sp.

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Typhochrestus longisulcus – нов вид паяк от Кримския полуостров, Украйна (Araneae: Linyphiidae)

В. Гнелица

(Резюме)

В статията се описва новият за науката линифииден паяк *Typhochrestus longisulcus*, намерен в широколистни гори на Кримския полуостров. Видът е близък до видовете *T. digitatus* (PICKARD-CAMBRIDGE, 1872) и *T. inflatus* THALER, 1980, но се различава от тях по характерната форма на палпите, епигината и вулвата.