The second, new species of *Dactylopisthes* Simon, 1884 from southeastern Asia (Aranei: Linyphiidae)

Второй новый вид *Dactylopisthes* Simon, 1884 из юго-восточной Азии (Aranei: Linyphiidae)

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КЛЮЧЕВЫЕ СЛОВА: таксономия, Araneae, пауки, Erigoninae, Ориентальное царство, юго-восточная Азия.

ABSTRACT. A new species, *Dactylopisthes dong-nai* sp.n., is described, based on a single male from southern Vietnam. The species is closely related to the Thai *D. marginalis* Tanasevitch, 2018, but differs clearly from it and other congeners by the presence of a trichobothrium on metatarsi IV, by the shape of the distal suprategular apophysis, as well as by a few structural details of the embolic division.

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РЕЗЮМЕ. Из южного Вьетнама по единственному самцу описан новый вид *Dactylopisthes dongnai* sp.n. Вид очень близок к *D. marginalis* Tanasevitch, 2018, известному из Таиланда, но хорошо отличается как от него, так и от остальных видов рода наличием трихоботрии на предлапке IV, а также деталями строения эмболюсного отдела.

Introduction

The first Oriental representative of the genus *Dactylopisthes* Simon, 1884, *D. marginalis* Tanasevitch, 2018, has recently been described from western Thailand [Tanasevitch, 2018]. The species shows two features that make it clearly distinguished it from congeners, i.e., the unmodified carapace and the absence of a semi-lunar process on the palpal tibia. Another new Oriental *Dactylopisthes* species taken during soil sampling from southern Vietnam has recently been found in the spider collection of the Zoological Museum, Moscow State University, Russia (ZMMU). The new species is very similar to *D. marginalis*, but, in addition to both distinguishing features mentioned above, it

has a trichobothrium on metatarsi IV, a character that makes it disjunct from *D. marginalis* and other congeners. The description of the new species is given below

Material and methods

This paper is based on spider material collected from Vietnam and kept at the ZMMU, one paratype is placed in the collection of the Muséum d'histoire naturelle de Genève, Switzerland (MHNG).

Specimens preserved in 70% ethanol were studied using a MBS-9 stereo microscope and a Wild compound microscope. A Levenhuk C-800 digital camera was used for the execution of some drawings. Images of multiple focal sections were combined using Helicon Focus image stacking software, version 5.1. The chaetotaxy is given in a formula, e.g., 2.2.1.1, which refers to the number of dorsal spines on tibiae I–IV. The sequence of leg segment measurements is as follows: femur + patella + tibia + metatarsus + tarsus. All measurements are given in millimeters. Scale lines in the figures correspond to 0.1 mm unless indicated otherwise. Figure numbers are given above the scale lines, the alternative distance below.

The terminology of copulatory organs mainly follows that of Merrett [1963], Helsdingen [1985, 1986] and Hormiga [1994, 2000].

The following abbreviations are used in the text and figures: D — duct; DSA — distal suprategular apophysis *sensu* Hormiga [2000]; E — embolus; MM – median membrane *sensu* Helsdingen [1965] = embolic membrane *sensu* Helsdingen [1986] and Hormiga [1994]; P — paracymbium; R — radix; RA — radical apophysis; TmI — position of trichobothrium on metatarsus I.



Fig. 1. A photograph of *Dactylopisthes dongnai* sp.n., ♂ holotype. Body, dorsal view.

Рис. 1. Фотография $Dactylopisthes\ dongnai\$ sp.n., голотип \circlearrowleft . Тело, вид сверху.

Description

Dactylopisthes dongnai **sp.n.** Figs 1–10.

HOLOTYPE ♂ (ZMMU), VIETNAM, Dong-Nai Province, Ma-Da forest (= rung Ma Da), from soil sample, 6. VI.1995, leg. T.K. Sergeeva.

PARATYPES. 1 \circlearrowleft (ZMMU), 1 \circlearrowleft (MHNG), collected together with the holotype.

NAME. The specific name is a noun in apposition referring to the "terra typica", the Dong-Nai Province of Vietnam.

DIAGNOSIS. *Dactylopisthes dongnai* sp.n. is the first representative of the genus which shows a trichobothrium on metatarsi IV, even though the new species is very similar to the Thai *D. marginalis*. Both *D. dongnai* sp.n. and *D. marginalis* undoubtedly form a separate species-group within the genus, which is characterized by an unmodified carapace and the absence of a semi-lunar process on the palpal

tibia. Besides the presence of a trichobothrium on metatarsi IV, *D. dongnai* sp.n. differs from *D. marginalis* by the shape of the processes on the distal suprategular apophysis, as well as by the absence of a notch at the edge of the radix and in the shape of the radical apophysis.

DESCRIPTION. Male paratype. Total length 1.60. Carapace unmodified as shown in Fig. 1, 0.80 long, 0.63 wide, yellow to pale brown. Eyes slightly enlarged. Chelicerae 0.35. long. Legs yellow. Leg I, 2.89 long (0.75 + 0.23 + 0.68 + 0.000)0.70 + 0.53), IV, $2.83 \log (0.78 + 0.20 + 0.70 + 0.70 +$ 0.45). Chaetotaxy 2.2.1.1, length of spines about 2-2.5 diameters of segment. TmI 0.42. Each metatarsus with a trichobothrium. Palp (Figs 2–10): palpal tibia slightly elongated, with a retrolateral relatively small, bent outgrowth. Paracymbium narrow, its distal part longer than proximal one. Distal suprategular apophysis strongly developed, carrying several processes differing in shape. Median membrane relatively broad and short. Radix flat, broad, its distal part bent into an outgrowth whose edge in lateral view looks like a well-sclerotized and claw-shaped apophysis (RA in Figs 3, 7). Embolus thin, short. Abdomen 0.90 long, 0.53, pale grey, almost white as shown in Fig. 1.

Female unknown

DISTRIBUTION. Known only from the type locality in southern Vietnam.

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References

Helsdingen P.J. 1965. Sexual behaviour of *Lepthyphantes leprosus* (Ohlert) (Araneida, Linyphiidae), with notes on the function of the genital organs // Zoologische Mededelingen, Vol.41. P.15–42

Helsdingen P.J. 1986. World distribution of Linyphiidae // Proceedings of the Ninth International Congress of Arachnology, Panama 1983, Smithsonian Institution Press, Washington D.C. P.121–126.

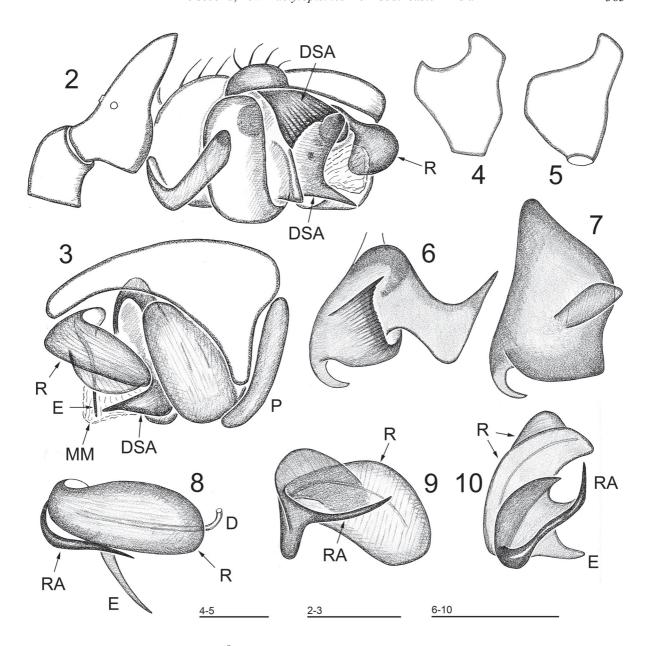
Hormiga G. 1994. Cladistics and the comparative morphology of linyphiid spiders and their relatives (Araneae, Araneoidea, Linyphiidae) // Zoological Journal of the Linnean Society. Vol.111. P.1–71.

Hormiga G. 2000. Higher level phylogenetics of erigonine spiders (Araneae, Linyphiidae, Erigoninae) // Smithsonian Contributions to Zoology. No.609. P.1–160.

Merrett P. 1963. The palpus of male spiders of the family Linyphiidae // Proceedings of the Zoological Society of London. Vol.140. P.347–467.

Tanasevitch A.V. 2018. A new species of *Dactylopisthes* Simon, 1884 from Thailand (Araneae, Linyphiidae) // Revue suisse de Zoologie. T.125. Fasc.2. P.217–219.

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Figs 2–10. *Dactylopisthes dongnai* sp.n., ♂ holotype. 2, 3 — right palp, retrolateral and prolateral views, respectively; 4, 5 — palpal tibia, dorsal view, different aspects; 6, 7 — distal suprategular apophysis, different aspects; 8–10 — embolic division, different aspects. Рис. 2–10. *Dactylopisthes dongnai* sp.n., голотип ♂. 2, 3 — правая пальпа, ретролатерально и пролатерально, соответственно; 4, 5 — голень пальпы, вид сверху, разные аспекты; 6, 7 — дистальный отросток супратегулюма, различные аспекты; 8–10 — эмболюсный отдел, различные аспекты.