

## A new species of *Dactylopisthes* Simon, 1884 from Thailand (Araneae, Linyphiidae)

Andrei V. Tanasevitch

*A.N. Severtsov Institute of Ecology and Evolution, Russian Academy of Sciences, Leninsky prospekt 33, Moscow 119071, Russia. E-mail: tanasevitch@gmail.com*

**Abstract:** A new spider species, *Dactylopisthes marginalis* sp. nov., is described from Thailand on the basis of a single male. The species seems to be most similar to the East Palaearctic - West Nearctic *D. video* (Chamberlin & Ivie, 1947), but clearly differs by its unmodified carapace and by a few details of the palp.

**Keywords:** Erigoninae - Oriental Region - Southeast Asia - new species.

### INTRODUCTION

The erigonine genus *Dactylopisthes* Simon, 1884 comprises eight species (World Spider Catalog, 2018), seven of which are restricted to different parts of the Palaearctic and one species, *D. video* (Chamberlin & Ivie, 1947), which occurs in the East Palaearctic and in the West Nearctic.

The description of a new species of *Dactylopisthes* from Thailand is the subject of the current paper.

### MATERIAL AND METHODS

This paper is based on a spider specimen collected in Thailand and kept at the Muséum d'histoire naturelle de Genève, Switzerland (MHNG). The corresponding sample number is given in square brackets. The specimen preserved in 70% ethanol was studied using a MBS-9 stereomicroscope. A Levenhuk C-800 digital camera was used for taking photos. The terminology of copulatory organs mainly follows that of Merrett (1963), Saaristo (1971) and Hormiga (2000). 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 mm. Scale lines in the figures correspond to 0.1 mm unless indicated otherwise.

### Abbreviations

a.s.l. above sea level  
C cymbium  
D duct  
DP distal process of DSA

DSA distal suprategular apophysis  
E embolus  
LP lateral process of DSA  
MM median membrane  
PP proximal process of DSA  
RA radical apophysis  
Su suprategulum  
Ti tibia  
TmI position of trichobothrium on metatarsus I

### TAXONOMY

#### *Dactylopisthes marginalis* sp. nov.

Figs 1-7

**Holotype:** MHNG; male; THAILAND, Kanchanaburi Province, Sai Yok National Park, near park headquarters, 120 m a.s.l.; 14.XI.2000; leg. P. Schwendinger [sample TH-00/08].

**Diagnosis:** The male palp conformation, namely, the structure of the embolic division in *D. marginalis* sp. nov., is most similar to that of the East Palaearctic - West Nearctic *D. video* (Chamberlin & Ivie, 1947). From it and from other congeners the new species clearly differs by its unmodified carapace, by its short tibial apophysis, as well as by the presence of a thin and long process on the distal suprategular apophysis (PP in Figs 2, 6). All known males of *Dactylopisthes* species (*D. separatus* Zhao & Li, 2014 is so far only known from females) have an elevation on the carapace, and the palpal tibia is equipped with a long, usually sickle-shaped apophysis. In this sense *D. marginalis* sp. nov. seems to be an exceptional representative.

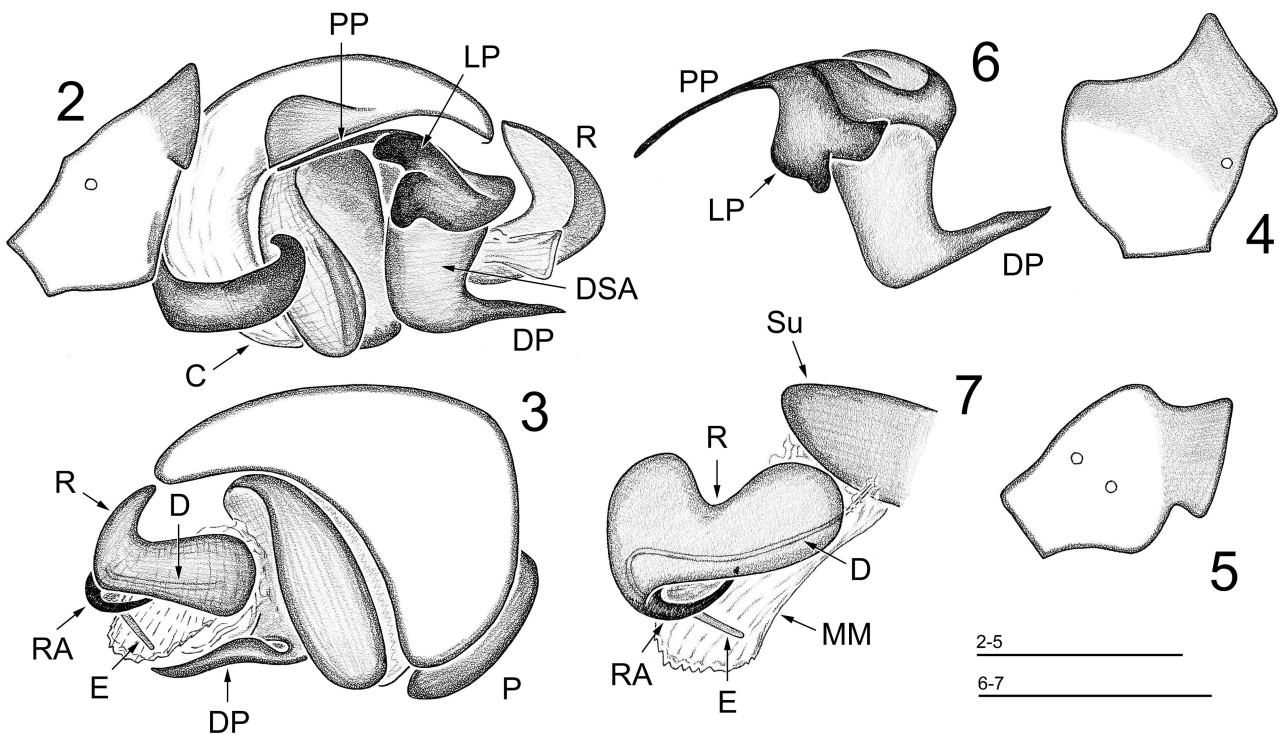


Fig. 1. Photograph of *Dactylopiastes marginalis* sp. nov., male holotype, dorsal view.

Nevertheless, somatic characters, i.e. size, chaetotaxy, trichobothriotaxy, and especially structure of the embolic division, as well as the shape of the distal suprategular apophysis support the generic placement of the new species.

**Etymology:** The specific epithet is a Latin adjective referring to marginal systematic position of the new species within the genus.

**Description:** *Male holotype.* Total length 1.40. Carapace unmodified (Fig. 1), 0.65 long, 0.53 wide, rounded, greyish pale yellow. Eyes normal, not enlarged. Chelicerae 0.28 long, mastidion absent. Legs pale yellow. Leg I 2.15 long ( $0.53+0.18+0.53+0.53+0.38$ ), IV 2.24 long ( $0.58+0.20+0.55+0.53+0.38$ ). Chaetotaxy 2.2.1.1, metatarsi unarmed. Length of spines 1.5-2 diameters of leg segment. Metatarsi IV without trichobothrium. TmI 0.42. Palp (Figs 2-7): tibia short, with a wide, keel-shaped lateral outgrowth. Paracymbium well-sclerotized, L-shaped, its distal part wider than proximal



Figs 2-7. *Dactylopiastes marginalis* sp. nov., male holotype. (2-3) Right palp, prolateral and retrolateral view, respectively. (4-5) Palpal tibia, dorsal and dorsolateral view, respectively. (6) Distal suprategular apophysis, anterolateral view. (7) Embolic division, ventrolateral view.

one, hooked apically. Distal suprategular apophysis (Fig. 6) highly developed, carrying three processes: proximal one (PP in Figs 2, 6) thin, long, directed backwards; distal one (DP in Figs 2, 6) L-shaped, very wide proximally, spike-shaped distally; lateral process (LP in Figs 2, 6) wide, short, highly sclerotized, with two short, unequal lobes, one distally rounded, the other truncate. Median membrane relatively wide and short. Column practically absent, embolic division situating very close to suprategulum. Radix flat, wide, with a notch in dorsal margin. Distal part of radix at base of embolus bent, carrying a wide, flat outgrowth, its edge in lateral view looking like a well-sclerotized, claw-shaped apophysis (RA in Figs 3, 7). Embolus very thin, short. Abdomen 0.75 long, 0.53 wide, dorsally almost white, with a longitudinal row of three pairs of indistinct, grey spots as shown in Fig. 1.

*Female.* Unknown.

**Taxonomic remarks:** *Dactylopisthes separatus* has been described and perfectly illustrated by Zhao & Li (2014) on the basis of females from the extreme south of China. The authors attributed the species to the genus tentatively, and noted that the epigyne of this species resembles that of *D. locketi* (Tanasevitch, 1983), known from the Tian Shan Mts, Uzbekistan (Tanasevitch, 1983). I also doubt that *D. separatus* belongs to *Dactylopisthes*, but even if not, the holotype of new species cannot be the conspecific male of the *D. separatus* types since these females are characterized by a specific coloration of the body. The male of *D. marginalis* sp. nov. has a completely different color pattern, see Fig. 1 and fig. 30B in Zhao & Li (2014). In most cases males and females of the same species have a similar color pattern of the body.

**Distribution:** Known only from the type locality in western central Thailand.

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## REFERENCES

- Chamberlin R.V., Ivie W. 1947. The spiders of Alaska. *Bulletin of the University of Utah* 37(10): 1-103.
- Hormiga G. 2000. Higher level phylogenetics of erigonine spiders (Araneae, Linyphiidae, Erigoninae). *Smithsonian Contributions to Zoology* 609: 1-160.
- Merrett P. 1963. The palpus of male spiders of the family Linyphiidae. *Proceedings of the Zoological Society of London* 140: 347-467.
- Saaristo M.I. 1971. Revision of the genus *Maro* O. P.-Cambridge (Araneae, Linyphiidae). *Annales Zoologici Fennici* 8: 463-482.
- Simon E. 1884. Les arachnides de France, volume 5, part 2. *Roret, Paris*, pp. 181-885, pl. 27.
- Tanasevitch A.V. 1983. New species of spiders of the family Linyphiidae (Aranei) from Uzbekistan. *Zoologicheskii Zhurnal* 62: 1786-1795.
- World Spider Catalog 2018. World Spider Catalog, version 19.0. Natural History Museum Bern. Online at <http://wsc.nmbe.ch> (accessed in February 2018).
- Zhao Q.Y., Li S.Q. 2014. A survey of linyphiid spiders from Xishuangbanna, Yunnan Province, China (Araneae, Linyphiidae). *ZooKeys* 460: 1-181.