



UDC 595.44(55)

## A NEW SPECIES OF SAHASTATA (ARANEI, FILISTATIDAE) FROM SOUTHERN IRAN

Y. M. Marusik<sup>1,2</sup>, A. Zamani<sup>3</sup>

<sup>1</sup>Institute for Biological Problems of the North,  
Portovaya st., 18, Magadan, 68500 Russia  
E-mail: yurmar@mail.ru

<sup>2</sup>Zoological Museum, University of Turku, FI-20014 Turku, Finland

<sup>3</sup>School of Biology, College of Sciences, University of Tehran, Tehran, Iran

**A New Species of *Sahastata* (Aranei, Filistatidae) from Southern Iran.** Marusik, Y. M., Zamani, A. — *Sahastata amethystina* sp. n. is described based on the holotype female from Kerman Province, Iran. The new species is easily differentiated from other congeners by the bright violet carapace in live specimens as well as by shape of the calamistrum and endogyne.

Key words: Araneae, spiders, Filistatinae, Middle East.

### Introduction

*Sahastata* Benoit, 1968 is a small genus with four nominal species of large-sized Filistatinae spiders, distributed from the eastern Mediterranean to western India (Marusik, Zamani, 2015a). Currently, Iran is one of the best-studied regions in the world regarding Filistatidae due to several taxonomical surveys conducted here (Brignoli, 1982; Marusik et al., 2014; Marusik, Zamani, 2015 a, b). So far, ten species of four genera have been recognised in Iran (Zamani et al., 2016; Zonstein, Marusik, 2016). Although the number of species in Iran is presently higher than that in any other country in the West Palaearctic, and the number of genera is the highest in the entire Palaearctic, recent studies of Iranian fauna have revealed an additional undescribed species with unusual colouration and endogyne shape, which is described and illustrated in this paper.

### Material and methods

The specimen was photographed using a Canon 70D camera attached to an Olympus SZX16 stereomicroscope at the Zoological Museum, University of Turku. Digital images were prepared using Zerene Stacker image stacking software. Length of leg segments were measured on the dorsal side. All measurements are given in millimetres (mm). The holotype will be deposited in the Naturmuseum Senckenberg, Frankfurt am Main, Germany (SMF).

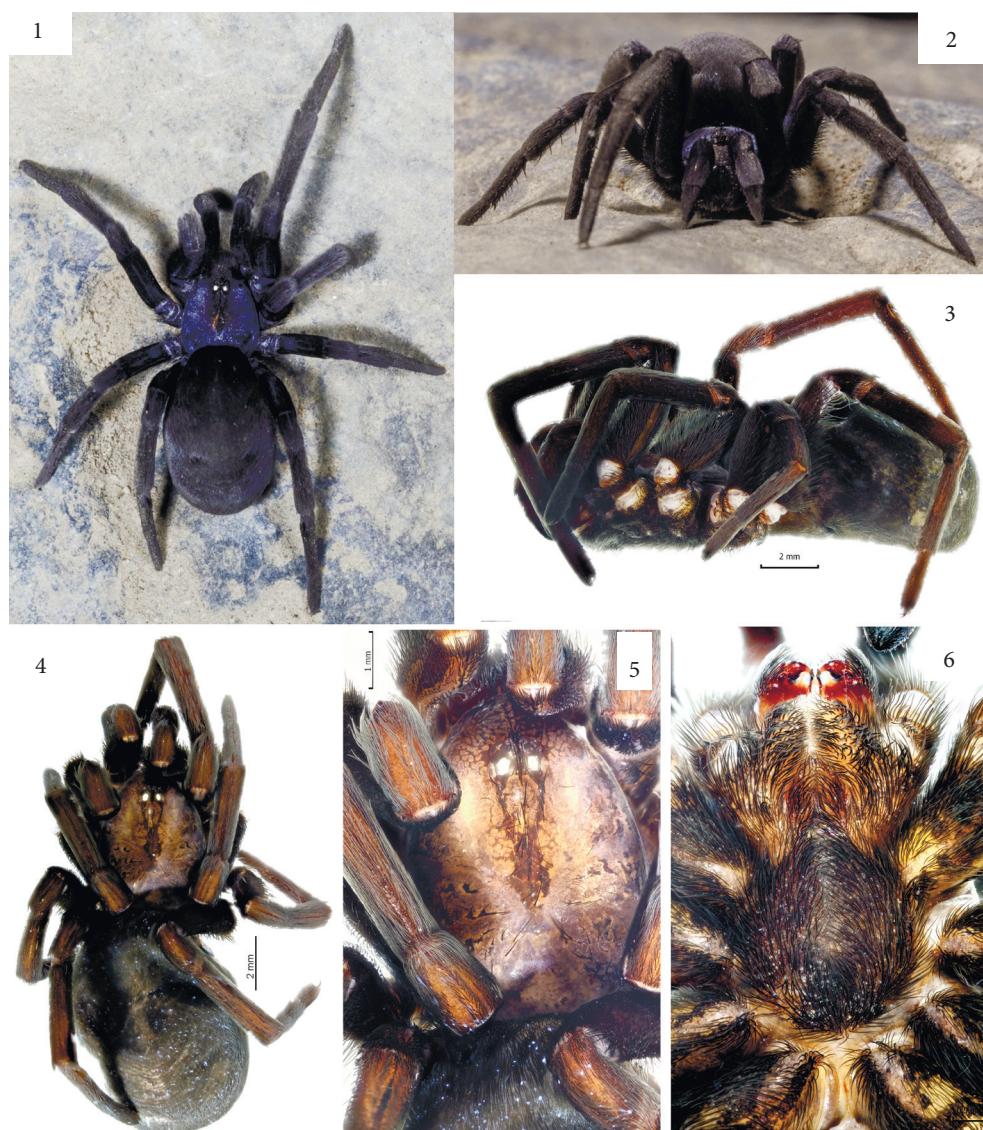
Abbreviations: ALE — anterior lateral eye, AME — anterior median eye, PLE — posterior lateral eye, PME — posterior median eye, d — dorsal, p — prolateral, r — retrolateral, v — ventral.

### *Sahastata amethystina* sp. n. (figs 1–11)

Type material. Holotype ♀ (SMF), Iran: Kerman Province, vicinity of Kahnuj-Faryab Rd., 27°57'38" N 57°35'04" E, December 2015 (S. Sami).

**Etymology.** The specific epithet is derived from the Latin “*amethystinus*”, and refers to the amethyst colouring of the carapace in live specimens.

**Diagnosis.** The new species is easily differentiated from the type species, *S. nigra* (Simon, 1897), and *S. sinuspersica* Marusik, Zamani & Mirshamsi, 2014 by the bright violet colour of the carapace (black or dark brown in other congeners), the shape of the calamistrum, comprising 3 rows of thick, short and tightly-spaced bristles directed longitudinally (fig. 10), in contrast to 2 distinct rows of long, wavy bristles directed almost transversely in *S. nigra* or 3 distinct rows of thick setae directed diagonally in *S. sinuspersica*

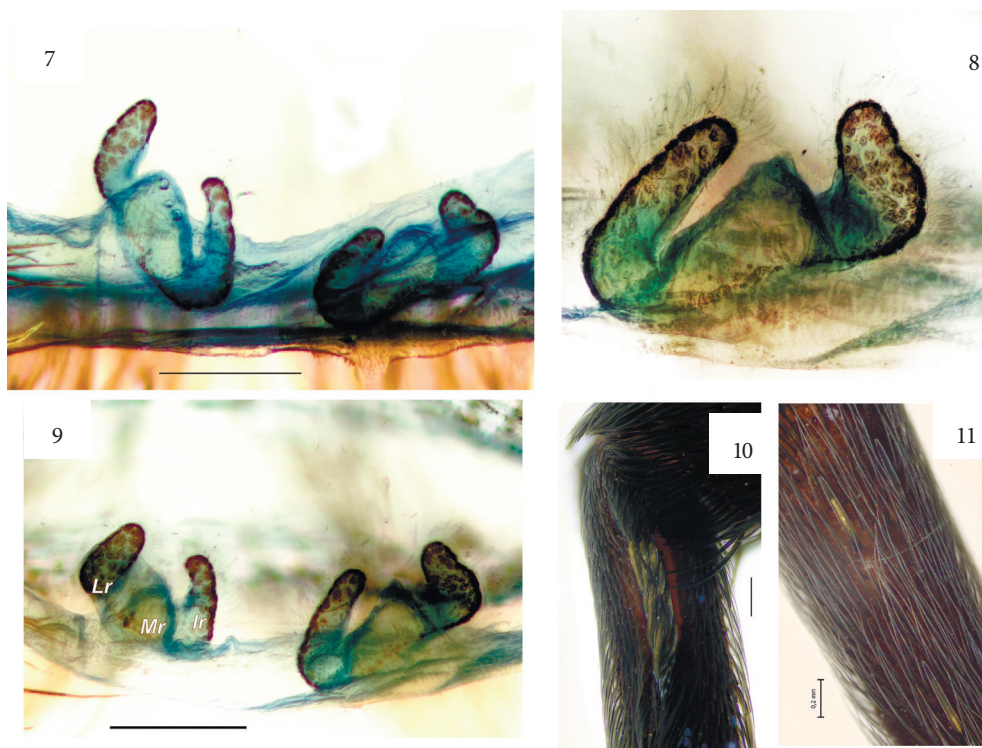


Figs 1–6. Somatic characters of the holotype of *Sahastata amethystina* sp. n.: 1–2 — live specimen, dorsal and frontal; 3–4 — preserved specimen, lateral and dorsal; 5–6 — prosoma, dorsal and ventral. Photographs 1–2 after Ali Mohajeran.

(Marusik et al., 2014: figs 26–29, 32, 33), and the complex shape of the receptacles, each having three distinct parts (globular or with two heads in sibling species, Marusik et al., 2014: figs 34–41).

**Description.** Female. Total length 15.0. Carapace 5.75 long, 4.25 wide; clypeus 0.63 long. Sternum 2.88 long, 2.59 wide; labium 1.15 long, 0.86 wide. Fovea deep conical, without distinct margins.

Eye sizes and interdistances: AME 0.23, ALE 0.3, PME 0.26, PLE 0.27; AME-AME 0.16, PME-PME 0.33, PLE-ALE 0.11; anterior eye row 0.46, posterior eye row 0.57. Leg spination (apical spines not counted): I femur 1p, tibia 1p, 3-0v, metatarsus 1p, 3pv, ca. 10v; II Ti 3-3v, metatarsus 3p, 3r or 1r, ca. 10v; III tibia 1d, 2p, 3r, 3-1v, metatarsus 4p, 3e, ca. 6v; IV tibia r1, 3-0v; metatarsus 2p or 0p, ca. 8v. Spines short (shorter than regular setae) and thick (figs 2–11). Ventral spines not paired. Calamistrum comprises three rows of thick, tightly-spaced bristles directed along the axis of metatarsus, transverse section crosses four bristles.



Figs 7–11. Endogyne and legs of the holotype of *Sahastata amethystina* sp. n.: 7, 9 — endogyne, dorsal, different aspects; 8 — right receptacle, dorsal; 10 — proximal part of metatarsus IV with calamistrum, dorsal; 11 tibia II, showing ventral spines. Scale bar 0.2 mm.

**Table 1. Lengths of palp and leg segments**

Limbs	Femur	Patella	Tibia	Metatarsus	Tarsus	Total
Palp	2.5	1.65	1.75	–	1.6	7.5
I	5.5	2.1	5.0	4.9	2.5	20.0
II	4.25	1.9	3.5	3.75	1.9	15.3
III	3.6	2.0	2.9	3.25	1.75	13.5
IV	5.0	2.0	4.0	4.25	2.0	17.25

Colouration in alcohol (figs 3, 4): carapace brown without distinct pattern, eye field dark, with dark median band from behind eye field to fovea; abdomen and legs uniformly dark brown. Colouration in live specimen (figs 1, 2): carapace bright violet, abdomen and legs dark violet (table 1).

Endogyne as in figures 7–9. Each receptacle subdivided into three parts, the inner digitiform arm (*Ir*), triangular middle part (*Mr*) and elongate oval lateral arms (*Lr*). Inner and lateral arms are densely covered with glandular pores; pores with long cilia (longer than diameter of receptacle arms).

Male unknown.

**Habitat.** The holotype was collected during the day from under a large stone in a dry, warm, rocky habitat of sparse *Arecaceae* forest.

**Distribution.** The species is known only from the type locality.

We are grateful to Soheyl Sami for providing us with the collected material. We thank Seppo Koponen (Zoological Museum, University of Turku) for providing museum facilities, Sergei Zonstein for reviewing our manuscript, Sarah Crews (Californian Academy of Sciences, San Francisco, USA) for editing English of the final draft and Ali Mohajeran (Department of Environment) for photographing the live specimen.

**References**

- Brignoli, P. M. 1982. Contribution à la connaissance des Filistatidae paléarctiques (Araneae). *Revue Arachnologique*, **4**, 65–75.
- Marusik, Yu. M., Zamani, A. 2015 a. The spider family Filistatidae (Araneae) in Iran. *ZooKeys*, **516**, 123–135.
- Marusik, Yu. M., Zamani, A. 2015 b. Additional new species of Filistatidae (Aranei) from Iran. *Arthropoda Selecta*, **24** (4), 429–435.
- Marusik, Yu. M., Zamani, A., Mirshamsi, O. 2014. Three new species of mygalomorph and filistatid spiders from Iran (Araneae, Cyrtaucheniidae, Nemesiidae and Filistatidae). *ZooKeys*, **463**, 1–10.
- Zamani, A., Mirshamsi, O., Marusik, Yu. M., Moradmand, M. 2016. *The Checklist of the Spiders of Iran, version 2016*, online at <http://www.spiders.ir>
- Zonstein, S., Marusik, Yu. M. 2016. A revision of the spider genus *Zaitunia* (Araneae, Filistatidae). *European Journal of Taxonomy*, in press.

Received 6 April

Accepted 15 June