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A new *Palliduphantes* Saaristo & Tanasevitch, 1996 from the Elburz Mountains, Iran (Araneae: Linyphiidae)

Andrei V. Tanasevitch*

A. N. Severtsov Institute of Ecology and Evolution, Russian Academy of Sciences, Moscow, Russia

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A new linyphiid spider, *Palliduphantes elburz*, sp. n., is described, based on material of both sexes taken from high altitudes in the Elburz Mts, northern Iran. The male of the new species is easily distinguished not only from the single Iranian congener, *P. sbordonii* (Brignoli, 1970), but also from other species of the genus by the strongly modified palpal tibia, the peculiar shape of the lamella characteristica, as well as the form and armature of the embolus. The epigyne of *P. elburz*, sp. n. seems to be most similar to *P. stygius* (Simon, 1884) from the western Mediterranean, but differs well by the much longer stretcher.

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Introduction

At present, the spider fauna of Iran contains only one representative of the genus *Palliduphantes* Saaristo & Tanasevitch, 1996, i.e. *P. sbordonii* (Brignoli, 1970), which is known from Mount Damawand, Elburz Mts. The species has been described from a cave at 1200 m (Brignoli, 1970), and later recorded as epigean from 4200 m (Thaler, 1986). Another Iranian *Palliduphantes*, which also stems from the Elburz Mts, is described below.

Material and Methods

This paper is based on the spider material collected by Jochen Martens and Harald Pieper from the Elburz Mts, northern Iran in 1978. All specimens are preserved in 70% ethanol and were studied using a MBS-9 stereomicroscope. The type specimens are in the collection of the Senckenberg Museum, Frankfurt am Main, Germany (SMF).

The sequence of leg segment measurements is as follows: femur + patella + tibia + metatarsus + tarsus. All measurements are given in millimetres. The chaetotaxy is given in a formula, e.g., TiI: 2-1-0-4, which means that tibia I has two dorsal spines, one prolateral, no retrolateral and four ventral spines, the apical spines are disregarded.

The terminology of copulatory organs mainly follows those of Merrett (1963), Saaristo (1971, 1973), van Helsdingen, Thaler, and Deltshev (1977), Saaristo and Tanasevitch (1996, 2001) and Hormiga (2000).

*Email: tanasevitch@gmail.com

Abbreviations

BC = Bursa copulatrix *sensu* Saaristo & Tanasevitch (1996). – EP = Embolus proper *sensu* Saaristo (1971). – Fe = Femur. – IO = Inner outgrowth at base of proscape = structure "Z" in Saaristo & Tanasevitch (2001). – Mt = Metatarsus. – PH = Pit hook *sensu* Saaristo (1973) = distal suprategular apophysis *sensu* Hormiga (2000). – PMP = Posterior median plate *sensu* Helsdingen *et al*. (1977). – S = Scape *sensu* Saaristo & Tanasevitch (1996). – St = Stretcher. – T = Teeth. – Ti = Tibia. – TmI = Position of trichobothrium on metatarsus I.

Description

***Palliduphantes elburz* sp. n.** (Figure 1a–j)

Holotype: Male, IRAN, Tehran Province, Elburz Mts, cave 2 near Koolak, road to Shemshak, 2510 m, 25.vi.1978, J. Martens & H. Pieper leg. – Paratypes: 1 female, collected together with the holotype. 1 male, 9 females, below cave 1 near Koolak, road to Shemshak, 2450 m, 24.vi.1978. & 4.vii.1978, J. Martens & H. Pieper leg. ("cave 1" and "cave 2" given according to the specimen labels).

Name. The specific name is a noun in apposition referring to the terra typica of the new species.

Diagnosis. *Palliduphantes elburz*, sp. n. can easily be distinguished from its single Iranian congener, *P. sbordonii*, which also occurs in the Elburz Mts, by the modified palpal tibia; the large lamella characteristica divided into two branches; the presence of only three teeth on the embolus (numerous in *P. sbordonii*), as well as by the development of a long stretcher in the epigyne (absent in *P. sbordonii*). *Palliduphantes elburz*, sp. n. seems to be a single known congener which has a strongly modified palpal tibia, coupled with a peculiar shape of the lamella characteristica, the latter also making this species well defined. The epigyne of *P. elburz* sp. n. is rather typical of the genus, and it seems to be most similar to *P. stygius* (Simon, 1884) from the western Mediterranean (Bosmans, Cardoso, & Crespo, 2010), but differs well by the much longer stretcher.

Description. Male paratype from cave 1 near Koolak. Total length 2.03. Carapace unmodified, 1.00 long, 0.80 wide, pale brown. Chelicerae 0.40 long. Legs pale brown. Leg I, 5.36 long (1.35+0.30+1.50+1.38+0.83), IV, 4.74 long (1.25+0.25+1.23+1.28+0.73). Chaetotaxy. FeI: 0-1-0-0, II-IV: 0-0-0-0; TiI-IV: 2-1-1-0, MtI-IV: 1-0-0-0. TmI 0.16. Metatarsus IV without trichobothrium. Palp (Figure 1a-e): patella slightly conical, with a special, curved spine terminally. Tibia strongly modified, divided into two lobes of different shape. Cymbium without posterodorsal outgrowth. Paracymbium relatively large, toothless; anterior pocket forming a large ridge. Lamella characteristica divided into two branches: upper one almost strait and narrow, lower branch much longer and curved. Embolus with three strong teeth mesally, embolus proper short, narrow, bifid. Abdomen 1.05 long, 0.70, pale grey, dorsal pattern absent.

Female paratype from cave 1 near Koolak. Total length 2.20. Carapace 1.00 long, 0.75 wide. Chelicerae 0.43 long. Leg I, 5.34 long (1.45+0.35+1.43+1.33+0.78), IV, 4.96 long (1.35+0.30+1.33+1.28+0.70). TmI 0.16. Abdomen 1.25 long, 0.88 wide. Epigyne (Figure 1f-j): Walls well-protruding. Proscape and stretcher long and narrow, combined forming an S-shaped structure. Inner outgrowth at base of proscape relatively large, distinctly projecting beyond of its edges. Lateral lobes almost entirely reduced, bursae copulatrix distinct. Posterior median plate elongated, slightly narrowing at middle. Body and leg coloration, as well as chaetotaxy as in male.

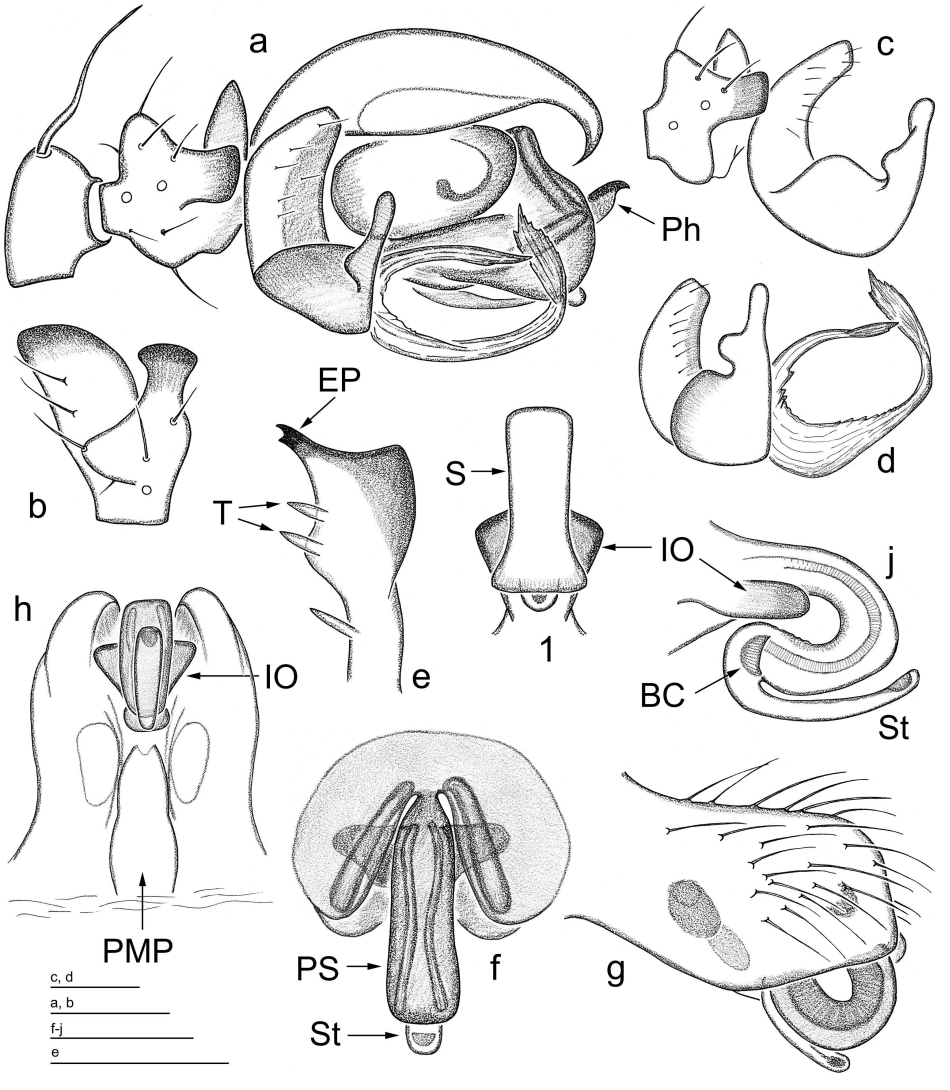

Figure 1. *Palliduphantes elburz*, sp. n., male and female paratypes from cave 1 near Koolak. **a**: right palp, retrolateral view; – **b**: palpal tibia, dorsal view; – **c**: palpal tibia and paracymbium, retrolateral view; – **d**: paracymbium and lamella characteristica, retrolateral view; – **e**: embolus, mesal view; – **f-h**: epigyne, ventral, lateral and dorsal views, respectively; **i**, **j**: scape, ventral and lateral views, respectively. Scale bars = 0.1 mm.

Distribution. The new species is known only from the high altitudes of the Elburz Mts in northern Iran, both as cave-dwelling and epigean.

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Disclosure Statement

No potential conflict of interest was reported by the author.

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