

Description of *Histopona kurkai* sp. n. with new data for the genus from the Balkan Peninsula (Arachnida, Araneae: Agelenidae)

Christo Deltshv & Simeon Indzhov



doi: 10.30963/aramit5606

Abstract. *Histopona kurkai* sp. nov. (♂♀) is described and illustrated from Albania (Shebenik, Jabllanicë national park) and RN Macedonia (Shar Mountains), where it was collected in beech forest habitats. The new species has somatic characters that correspond well to those of the genus *Histopona* (*torpida* group). Also, *Histopona vignai* Brignoli, 1980 is newly established for the spider fauna of Albania (Hotova national park) and RN Macedonia (Shar Mountains).

Keywords: Albania, faunistics, *Histopona*, Macedonia, taxonomy

Zusammenfassung. Beschreibung von *Histopona kurkai* sp. n. mit neuen Daten der Gattung auf der Balkanhalbinsel (Arachnida, Araneae: Agelenidae). *Histopona kurkai* sp. nov. (♂♀) wird aus Albanien (Shebenik, Nationalpark Jabllanicë) und Mazedonien (Shar Mountains), wo sie in Buchenwäldern vorkommt, beschrieben und abgebildet. Die neue Art gehört morphologisch eindeutig in die Gattung *Histopona* und gehört zur *torpida*-Gruppe. Weiterhin wird *Histopona vignai* Brignoli, 1980 erstmals für die Spinnenfauna Albanien (Hotova Nationalpark) und Mazedoniens (Shar Mountains) gemeldet.

Currently, the genus *Histopona* Thorell, 1869 includes 21 valid species (van Helsdingen 2018, WSC 2018). Most of them inhabit south-eastern Europe and 13 species are presently known only from the Balkan Peninsula, primarily in caves (Deeleman-Reinhold 1983, Deltshv 1978, Deltshv & Petrov 2008, Gasparo 2005). In the present paper, *Histopona kurkai* sp. nov. is described and illustrated from the Shebenik-Jabllanicë national park of Albania and the Shar Mountains of RN Macedonia, where it was collected in beech forest habitats. The new species has somatic characters that correspond well to those of the genus *Histopona*. The descriptions are based on detailed examination of morphological characters of the genital structures which were found to be discrete, allowing a clear separation of the species. Also, *Histopona vignai* Brignoli, 1980 is newly established for the spider fauna of Albania (Hotova national park) and RN Macedonia (Shar Mountains).

Material and methods

Specimens from Albania were collected by hand and these from RN Macedonia using pitfall traps. Coloration is described from 80% alcohol preserved specimens. Male palps were examined and illustrated after they were dissected from the spiders' bodies. Photos were taken with a Lumix digital camera mounted on a Wild M5A stereomicroscope. Measurements of the legs were taken from the dorsal side. Total length of the body includes the chelicerae. All measurements used in the description are in millimeters.

Abbreviations used in the text and figure legends include:

- C = conductor;
- CO = copulatory opening;
- E = embolus;
- RBP = retrolateral basal process;
- RTA = retrolateral tibial apophysis;
- S = spermatheca.

The material is deposited in the collection of National Museum – Natural History Museum, Praha (NMP) (holotype, paratypes, Albania), National Museum of Natural History, Sofia (NMNHS) (male and female paratypes, Albania and all three paratypes from RN Macedonia), Museum für Naturkunde, Humboldt-Universität zu Berlin (ZMB) (male and female paratypes, Albania) and Senckenberg Museum, Frankfurt am Main (SMF) (male and female paratypes, Albania), Naturhistorisches Museum Wien (NMW) (male and female paratypes, Albania).

Agelenidae C. L. Koch, 1837

Histopona Thorell, 1869

Histopona kurkai sp. n. (Figs 1–7, 11–17)

Type material. Holotype ♂, ALBANIA, Shebenik – Jabllanicë NP, beech forest (N 41.3166, E 20.4191, 1300 m a.s.l.), 1.07.2017, leg. A. Kürka (NMP: P6A-6896). Paratypes: 41 ♂, 13 ♀, (NMP: P6A-6897), 1 ♂, 1 ♀ (NMNHS), 1 ♂, 1 ♀ (NMW), 1 ♂, 1 ♀ (SMF), 1 ♂, 1 ♀ (ZMB), same data as holotype; 3 ♂, RN MACEDONIA, Shar Mt., Jelak hut, 1850 m, 10.–19.07.1995 (pitfall traps) (NMNHS); 1 ♂, 1 ♀, Shar Mt., Studena place, 1730 m, 10.–19.07.1995 (pitfall traps) (NMNHS), leg. G. Blagoev.

Etymology. The species is dedicated to the Czech arachnologist Antonín Kürka, collector of type material from Albania.

Diagnosis. The new species has somatic characters (notched trochanters, patellae with dorsal spines only) that correspond well to those of the genus *Histopona*, and belongs to *torpida* species group according to Deeleman-Reinhold (1983) and Bolzern et al. (2013). Among species of this group, it bears close resemblance to *H. vignai* Brignoli, 1980, but the male of *Histopona kurkai* sp. n. can be easily separated by the thinner conductor, narrowing apically and almost merging with the embolus (Figs 6, 14), while in *H. vignai*, it is rounded and protruding above the embolus (Fig. 9). A significant difference is the presence of a thumb-like process (RBP) retrolaterally-basally on the palpal tibia in *H. kurkai* sp. n. (Figs 6–7, 14–15) which is absent in *Histopona vignai* (Figs 9–10). Also, the distal RTA in both species are different: in *Histopona kurkai* sp. n., the two sclerites of the distal RTA are rectangular and the base of the RTA does not protrude ventrally (Figs 6–7, 14–15), while in *Histopona vignai*, the inner sclerite has



Figs 1–2: *Histopona kurkai* sp. n., male holotype, habitus, dorsal and ventral views, scales: 1.7 mm



Figs 3–4: *Histopona kurkai* sp. n., female paratype, habitus, dorsal and ventral views, scales: 1.6 mm

a convex margin, being distinctly smaller than the outer, and the base of the whole distal RTA-complex protrudes significantly ventrally (Figs 9–10). The female epigyne also resembles that of *H. vignai* (based on Brignoli's drawings) but has a greater distance between the copulatory duct coils (Figs 11–12, 16–17).

Description. Measurements of male ($n = 2$, holotype male and paratype male from Albania): total length, 5.63–6.38; carapace: length, 2.65–2.93, width, 1.80–2.10; clypeus: width, 0.15–0.23; chelicerae: length, 1.13–1.50, width, 0.38–0.60; sternum: length, 1.35–1.50, width, 1.20–1.35; opisthosoma, length, 3.00–4.18.

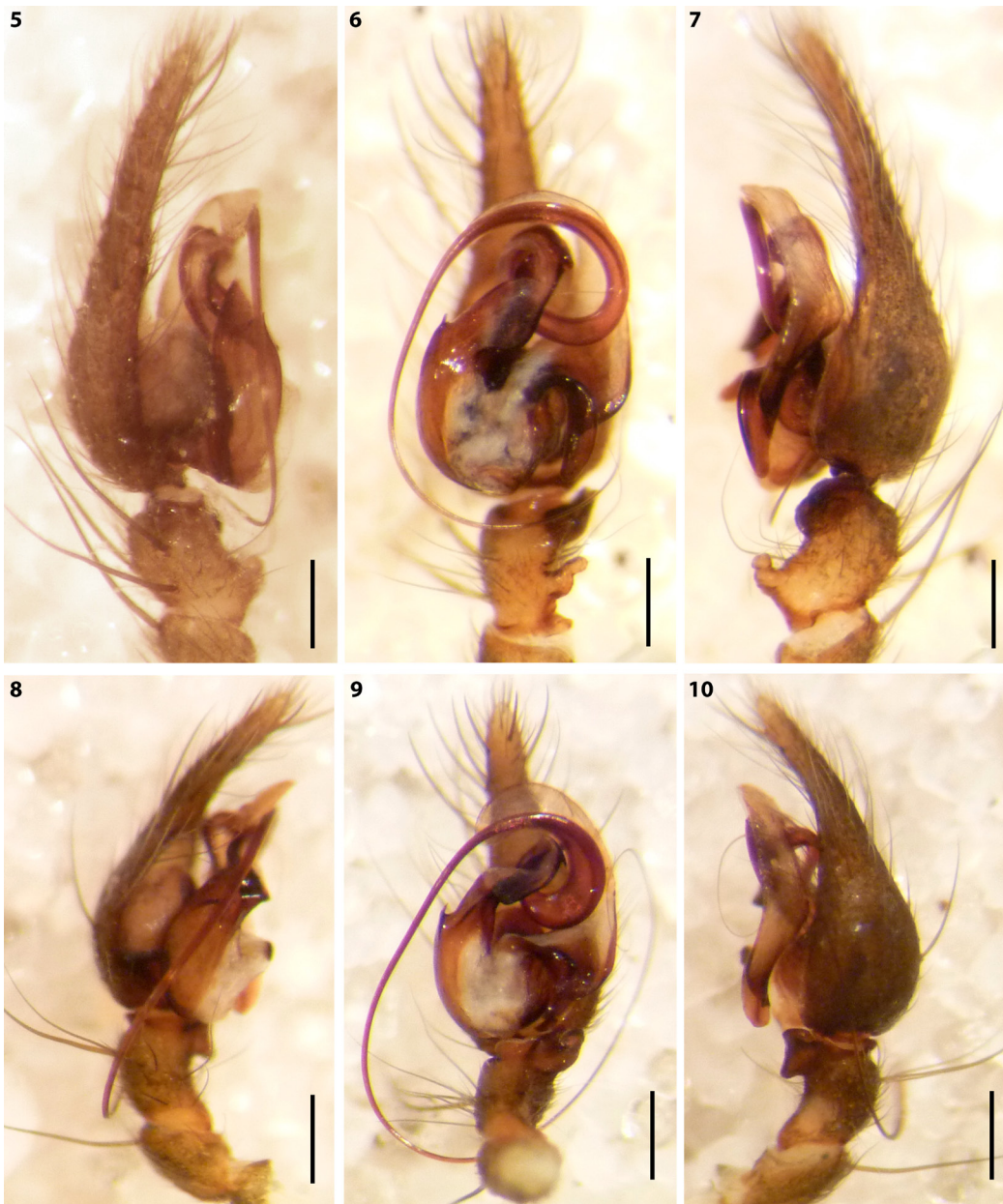
Measurements of female ($n = 2$, paratypes from Albania): total length, 6.75–9.75; carapace: length, 2.40–2.78, width,

1.73–1.88; clypeus: width, 0.15–0.23; chelicerae: length, 1.13–1.28, width, 0.38–0.60; sternum: length, 1.35–1.65, width, 0.90–1.13; opisthosoma, length, 3.75–4.88.

Eyes: Both eye rows straight in dorsal view. Anterior lateral eyes larger than anterior median eyes. Posterior eyes equal in size.

Chelicerae: with three teeth on promargin and four teeth on retromargin.

Legs: All trochanters notched, patellae with dorsal spines only, measurements as in Tabs. 1 and 2. Chaetotaxy see Tab. 3. **Coloration** (Figs 1–4): Carapace brown with yellow median band. Sternum brown, without pattern. Abdomen dark-grey, dorsally with lighter stripes, venter grey. Legs: yellow to yellow-brown.



Figs 5–7: *Histopona kurkai* sp. n., holotype, male palp, pro-lateral, ventral and retrolateral views, scales: 0.25 mm

Figs 8–10: *Histopona vignai* Brignoli, 1980, male palp, pro-lateral, ventral and retrolateral views, scales: 0.3 mm

Male palps (holotype) (Figs 5–7, 13–15). Tibia with two retrolateral apophyses. RTA, consisting of two rectangular sclerites, the outer partially covering the inner, situated distally-retrolaterally on the tibia. Retrolaterally-basally, a further

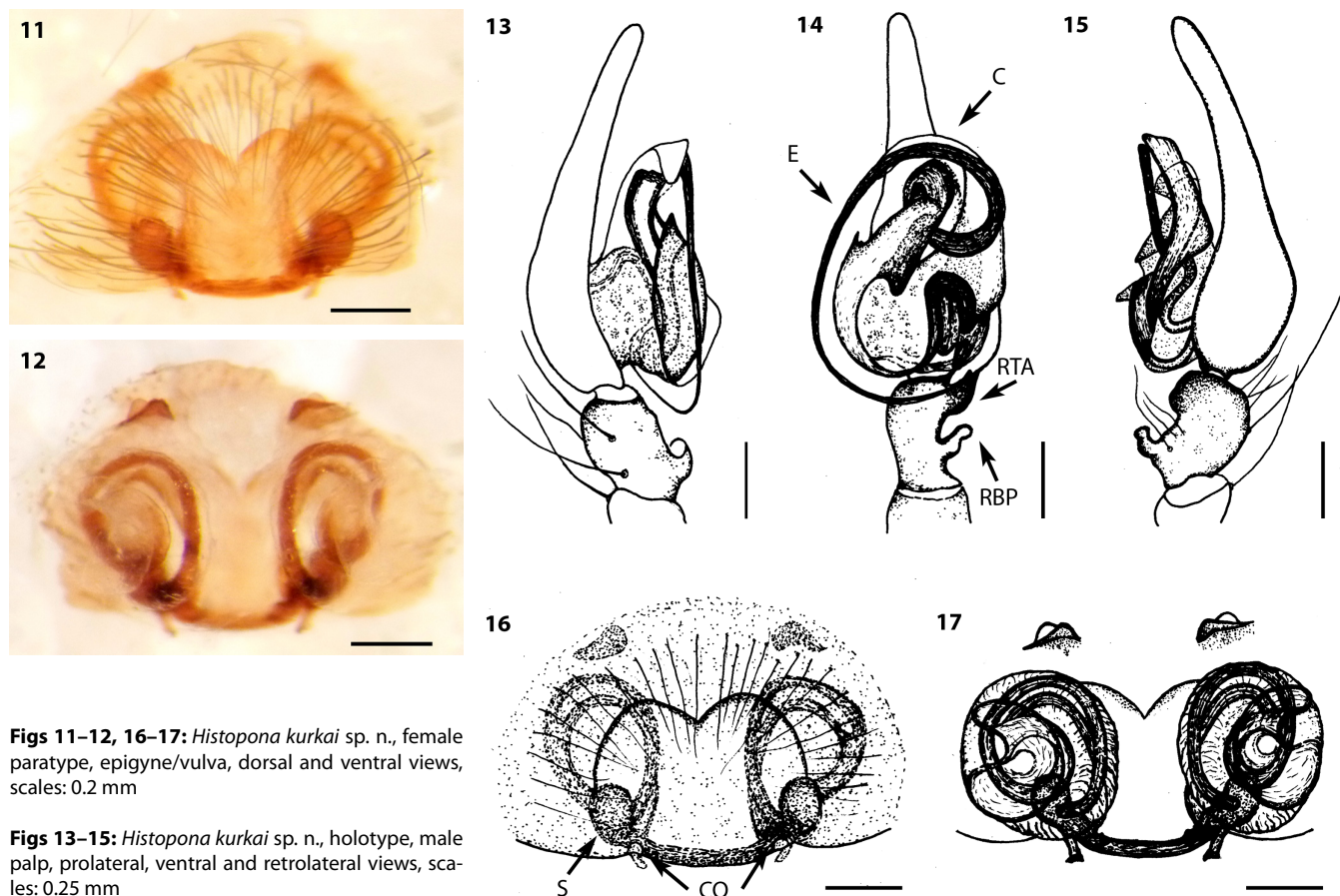
thumb-shaped projection (RBP) is present. Bulbus: Embolus very long and connected to the radix by a peculiar knot. Conductor, narrowing apically and almost merging with embolus. Female genitalia (a paratype) (Figs 11–12, 16–17). The

Tab. 1. *Histopona kurkai* sp. n., leg measurements (holotype male and paratype male from Albania)

| Legs | Femur | Patella | Tibia | Metatarsus | Tarsus | Total |
|------|-----------|-----------|-----------|------------|-----------|-------------|
| I | 2.63–3.00 | 0.90–0.98 | 2.56–2.85 | 2.26–2.70 | 1.73–1.95 | 10.08–11.48 |
| II | 2.40–2.63 | 0.83–0.90 | 2.10–2.55 | 2.10–2.55 | 1.50–1.65 | 8.93–10.28 |
| III | 2.26–2.63 | 0.75–0.83 | 2.03–2.33 | 2.26–2.63 | 1.50–1.58 | 8.80–10.00 |
| IV | 2.93–3.38 | 0.90–0.98 | 2.85–3.38 | 3.60–4.13 | 1.73–1.88 | 12.01–13.75 |

Tab. 2. *Histopona kurkai* sp. n., leg measurements (paratype females from Albania)

| Legs | Femur | Patella | Tibia | Metatarsus | Tarsus | Total |
|------|-----------|-----------|-----------|------------|-----------|------------|
| I | 2.10–2.40 | 0.83–0.98 | 1.95–2.40 | 1.88–2.18 | 1.35–1.65 | 8.26–9.61 |
| II | 1.88–2.25 | 0.75–0.90 | 1.73–2.18 | 1.73–2.18 | 1.50–1.73 | 8.93–9.24 |
| III | 1.88–2.25 | 0.68–0.83 | 1.65–2.03 | 1.88–2.25 | 1.05–1.36 | 7.29–8.80 |
| IV | 2.10–2.50 | 0.83–0.98 | 2.20–2.60 | 1.98–2.38 | 1.35–1.88 | 9.46–10.34 |



Figs 11–12, 16–17: *Histopona kurkai* sp. n., female paratype, epigyne/vulva, dorsal and ventral views, scales: 0.2 mm

Figs 13–15: *Histopona kurkai* sp. n., holotype, male palp, prolateral, ventral and retrolateral views, scales: 0.25 mm

Table 3. *Histopona kurkai* sp. n., chaetotaxy (holotype)

| Leg | Femur | Patella | Tibia | Metatarsus |
|-----|------------|---------|----------------|-----------------|
| I | 3d, 2p, 1r | 2d | 2d, 2p, 4v | 1d, 2p, 2r, 3v |
| II | 3d, 1p, 2r | 2d | 1d, 2p, 5v | 1d, 2p, 2r, 3v |
| III | 2d, 1p, 1r | 2d | 2d, 2p, 2r, 3v | 3d, 3p, 3r, 3 v |
| IV | 2d, 1p, 1r | 2d | 1d, 2p, 24, 4v | 3d, 3p, 3r, 3v |

epigyne has the heart-shaped central sclerite typical for the *torpida* group, with a more strongly sclerotized posterior margin. The copulatory openings are situated just in front of it, well separated. Epigynal plate, nearly hemicircular. Copulatory ducts long, with three large coils, one transparent and two sclerotized. Sclerotized ‘heads’ situated anteriorly at the transparent entrance coil. Spermathecae small, nearly globular, set apart from each other.

Distribution. Albania, RN Macedonia.

***Histopona vignai* Brignoli, 1980** (Figs 8–10)

ALBANIA, Frashër, Hotova NP, 4.07.2017, 1 ♂, leg. A. Kúrka; RN MACEDONIA, Kozhuf Mt., Michailovo, 1 ♂, 26.05.2003, leg. C. Deltshv, G. Blagoev.

Distribution. Albania, Greece, RN Macedonia.

Acknowledgements

We are much obliged to Antonín Kúrka and Petr Dolejš (National Museum – Natural History Museum, Praha) who provided us with spider material from Albania, to Gergin Blagoev (University of Guelph) for the collection of RN Macedonian material and to Angelo Bolzern (Naturhistorisches Museum Basel) and Fulvio Gasparo (Trieste, Italy) for helpful remarks on the manuscript.

References

Bolzern A, Pantini P & Isaia M 2013 Revision of the *Histopona italica* group (Araneae: Agelenidae), with the description of two new species. – *Zootaxa* 3640: 23–40 – doi: [10.11646/zootaxa.3640.1.2](https://doi.org/10.11646/zootaxa.3640.1.2)

Deeleman-Reinhold CL 1983 The genus *Histopona* Thorell (Araneae, Agelenidae) with description of two new cave-dwelling species. – *Mémoires de Biospéologie* 10: 325–337

Deltshv C 1978 A new *Histopona* (Araneae, Agelenidae) from Bulgarian caves. – *Acta Zoologica Bulgarica* 10: 57–59

Deltshv C & Petrov B 2008 The spiders (Araneae) in the caves of the western Rhodope Mountains (Bulgaria). – *Acta Zoologica Bulgarica* 60: 41–50

Gasparo F 2005 Note sulle *Histopona* Thorell, 1986, de gruppo *myops* di Grecia, con descrizione die una nuova specie cavernicola (Araneae, Agelenidae). – *Atti e Memorie della Commissione Grotte “E. Boegan”* 40: 17–35

Helsdingen P van (2018) Fauna Europaea: Araneae. Fauna Europaea version 2.5, <http://www.faunaeur.org>

WSC 2018 World Spider Catalog. Version 19.5. Natural History Museum, Bern. – Internet: <http://wsc.nmbe.ch> (31.7.2018) – doi: [10.24436/2](https://doi.org/10.24436/2)