A new species of the genus *Buresilia* Šilhavý, 1965 (Opiliones: Phalangiidae) from Cyprus

Новый вид сенокосцев рода *Buresilia* Šilhavý, 1965 (Opiliones: Phalangiidae) с Кипра

Kemal Kurt^{1*}, Kadir Boğaç Kunt², Salih Gücel^{3,4} К. Курт^{1*}, К.Б. Кунт², С. Гюджель^{3,4}

¹ Şiran Vocational High School, Gümüşhane University, Gümüşhane, Turkey.

² Wildlife Research Institute, Taşkent, Kyrenia, Cyprus.

³ Herbarium and Natural History Museum, University of Near East, Nicosia, Cyprus.

⁴ Department of Landscape Architecture, Faculty of Architecture, University of Near East, Nicosia, Cyprus.

KEY WORDS: Opiliones, Phalangiidae, *Buresilia*, new species, Cyprus. КЛЮЧЕВЫЕ СЛОВА: Opiliones, Phalangiidae, *Buresilia*, новый вид, Кипр.

ABSTRACT: A new harvestman species, *Buresilia kibrisensis* sp.n. (Opiliones: Phalangiidae), is described and illustrated based on males collected from Beşparmak Mountains Cyprus. Differences between the new species and other species of the genus *Buresilia* are compared.

How to cite this paper: Kurt K., Kunt K.B., Gücel S. 2022. A new species of the genus *Buresilia* Šilhavý, 1965 (Opiliones: Phalangiidae) from Cyprus // Arthropoda Selecta. Vol.31. No.1. P.63–66. doi: 10.15298/ arthsel. 31.1.07

РЕЗЮМЕ: Дано иллюстрированное описание самцов нового вида сенокосцев *Buresilia kibrisensis* sp.n. (Opiliones: Phalangiidae), собранного в горах Бешпармак, Кипр. Указаны отличия нового вида от других известных видов рода *Buresilia*.

Introduction

Buresilia Šilhavý, 1965 is a genus in the family Phalangiidae, subfamily Platybuninae. Currently, there are only two species placed in combination with *Buresilia*, namely *Buresilia nigerrima* (Roewer, 1956) from Hatay-Antakya (Turkey) and *B. macrina* (Roewer, 1956) from Muğla (Turkey) [Roewer, 1956; Šilhavý, 1965; Staręga, 1981; Crawford, 1992; Kurt, 2014].

The genus *Buresilia* is characterized by the following morphological characteristics: body dorsally and frontal edges of prosoma without heavy denticulation; ocularium normal shape, without enlarged size; supracheliceral lamella with a pair of tubercles; legs round in cross-section, first and third pairs of legs thickened; palps unarmed except denticles on femur and for two rows of smaller denticles ventrally on tarsus, basally with conical apophysis, patella and tibia with apophysis on innerdistal margins [Šilhavý, 1965; pers. observation]; penis thin and long; basally widened, narrowed towards subapex with approximately parallel sides. Glans ventrally slightly expanded, v-shaped; dorsally flat. Stylus long and acicular.

Buresilia is similar to *Rafalskia* Staręga, 1963 by having the palpal femur basally with a conical-apophysis in the male. This genus can be differentiated from *Rafalskia* by having an apophyses on both the pedipalpal patella and tibia and by not having distinct humps on the distal cheliceral segment.

Buresilia is similar to *Platybunoides* Šilhavý, 1955 by having an apophysis on both the pedipalpal patella and tibia (in *Platybunoides* the patella and tibia with only distomesal bumps). It can be distinguished from *Platybunoides* by having the palpal femur basally with a conical-apophysis and by lacking the apophysis on the distal end of the femur (present on *Platybunoides*) [Zang, Zang, 2012].

In the present contribution, a new species of the genus *Buresilia* is described from Cyprus and compared to other members of the genus.

Material and methods

The specimens were collected by hand from Beşparmak Mountains, Cyprus. Species identification was conducted using a Olympus SZ61 stereomicroscope. Photographs were made with a Olympus LC20 camera mounted on the microscope. The specimens are preserved in 70% ethanol and deposited in the collection of the Arachnological Laboratory of Şiran Vocational School, Gümüşhane University (GUSAL), Turkey.

Results. Taxonomy

Buresilia Šilhavý, 1965

Buresilia Šilhavý, 1965: 374; Starêga, 1981: 524; Crawford, 1992: 14.

^{*} Corresponding author. E-mail: kemalkurtmyo@gmail.com



Fig. 1. *Buresilia kibrisensis* sp.n. (male, paratype): a — body, dorsal view; b — pedipalp, lateral view; c — femur of leg I, lateral view; d — penis, lateral view; e — penis, dorsal view; f — end of truncus and glans of penis, lateral view; g, h — chelicera, lateral view; i — patella and tibia of pedipalp, dorsal view.

Рис. 1. *Buresilia kibrisensis* sp.n. (самец, паратип): а — тело, дорсально; b — педипальпа, латерально; с — бедро ноги I, латерально; d — пенис, латерально; e — пенис, дорсально; f — окончание и головка пениса, латерально; g, h — хелицера, латерально; i — колено и голень педипальпы, дорсально.

Buresilia is of feminine gender, specific epithets should be inflected to match. Therefore, the specific name of the type species *nigerrimus* is here emended to *nigerrima* when occurring in combination with *Buresilia*.

TYPE SPECIES. *Metadasylobus nigerrimus* Roewer, 1956, by original designation.

Buresilia kibrisensis **sp.n.** Figs 1–2.

TYPE MATERIAL: Holotype: $1 \circ (GUSAL)$, Cyprus, Beşparmak Mountains, Agave St. (35°17′5.99″N, 33°29′10.65″E), asl 558 m, 21 February 2018, leg. K.B. Kunt & S. Gücel. Paratypes. $3 \circ \circ (GUSAL)$, same data as holotype.

COMPARATIVE MATERIAL: Buresilia macrina (Roewer, 1956): 1°, (Arachnologie Forschungsinstitut und Naturmuseum Senckenberg Frankfurt am Main, Germany, Typus RII/2847/134; Buresilia nigerrima (Roewer, 1956): 1°, (Arachnologie Forschungsinstitut und Naturmuseum Senckenberg Frankfurt am Main, Germany, Typus RII/1158/337.

DIAGNOSIS. Characterized by body dorsally with sparse microdenticles and setae, without trident on anterior edge of the cephalothorax; palpal femur basally with conical-apophyses, ventrally only with setae, both patella and tibia with an apophysis; chelicerae with normal structure, without enlarged, basal segment without ventral spur; legs short, pairs I and III slightly thicker. The differences between the new species and other species of the genus *Buresilia* are given in Table 1.

DESCRIPTION. Male: Body (Fig. 1a).

Body length 3.0 mm, width 1.9 mm. Approximately ovalshaped in dorsal view. Supracheliceral lamellae smooth, with two] black-tipped spurs. Opening of odoriferous gland with several black microdenticles. Front edges of prosoma and in front of ocularium covered with microdenticles and sparse black setae. Three black microdenticles and black setae above the 3–4 leg junction. With one transverse row of microdenticles and setae in a line behind ocularium. Abdomen dorsally not distinctly saddle marked, with transverse rows of dark brown spots and irregularly spaced microdenticles and black setae. Body dorsally and ventrally with light brown.

Ocularium (Fig. 1a): ellipse shaped, wider than long; row of 5 micro-tubercles and black setae over each eye.

Ventral side: Surface of all coxae ventrally only with setae. Genital operculum with irregularly arranged setae. Opisthosomal sternites smooth, with sparse setae and transverse rows of brown spots.



Fig. 2. *Buresilia kibrisensis* sp.n., male genital morphology: a — end of truncus and glans of penis, lateral view; b — penis, dorsal view; c — penis, lateral view.

Рис. 2. *Buresilia kibrisensis* sp.n., морфология мужских гениталий: а — окончание и головка пениса, латерально; b пенис, дорсально; с — пенис, латерально.

Chelicerae (Fig. 1g, h): not enlarged. Basal segment without a ventral spur, dorsally with small black-tipped tubercles and setae. Distal segment with brown zebra stripped pattern and covered with setae. Chelicerae light brown. Basal segment dorsally with brown spots. Length of basal segment: 0.4 mm; distal segment: 0.56 mm.

Pedipalps (Fig. 1b, i): Femur basally with conical apophysis with black setae, femur with small distomesal bump covered with a cluster of setae. Femur ventro-basally with dense black setae, ventro-distally with sparse black setae, dorsally with black-tipped denticles and sparse setae. Patella with finger-shaped apophysis covered with black setae. Tibia prolaterally with apophysis covered with setae. Tarsus covered with setae and ventrally microdenticles. Claw smooth without teeth. Pedipalp light brown. Other parts (except tarsus) with brown spots. Length of palpal segments: femur 0.8, patella 0.4, tibia 0.5, tarsus 0.6; total length 2.3 mm.

Legs (Fig. 1c): Femur, patella and tibia of pairs I and III with slightly thicker. Femur of legs covered with black-tipped microdenticles and setae; patella dorsally with black setae; tibia with setae, ventrally several microdenticles and setae; metatarsi with several microdenticles and hairs; Tarsus only with bristle. Legs light brown with brown spots. Length of legs (in mm): I: 0.8 + 0.4 + 0.7 + 1.2 + 2 = 5.1, II: 1.5 + 0.6 + 1.4 + 2.2 + 3.5 = 9.2, III: 0.9 + 0.4 + 0.8 + 1.3 + 2.3 = 5.7, IV: 1.3 + 0.5 + 1.0 + 1.5 + 3.2 = 7.3.

Male genital morphology not previously recorded for any member of the genus. The penis of the new species (Figs 1d–f, 2) is thin and long; basally widened almost rectangular-shaped, narrowed towards subapex with approximately parallel sides. Glans ventrally slightly expanded, v-shaped; dorsally flat. Stylus long, more than half the length of glans. Stylus long and acicular. Penis light brown; truncus length: 2.60 mm; glans length: 0.65 mm.

Female: Unknown.

ETYMOLOGY: The specific name is from the combination of the Turkish name for Cyprus, "Kıbrıs" and the Latin suffix "-ensis", meaning "originating in".

Compliance with ethical standards

CONFLICTS OF INTEREST: The authors declare that they have no conflicts of interest.

Acknowledgements. This study was supported by Near East University, Scientific Research Projects Commission under the grant no: BAP 201-2015. We thank Dr. P. Jaeger and J. Altmann (Naturmuseum und Forschungsinstitut Senckenberg. Frankfurt am Main, Germany) for help in granting of a comparative material. Also we are very grateful to Adriano Kury (Museu Nacional, Universidade Federal do Rio de Janeiro Rio de Janeiro, Brazil) for guidance on the grammatical gender of Latin names and James Cokendolpher (Invertebrate Zoology, Museum of Texas Tech Uni-

Character	Buresilia kibrisensis sp.n. (based on male)	Buresilia nigerrima (based on male)	Buresilia macrina (based on male)
Body	light brown, 3 mm long,	brown-black, 5 mm long (Roewer, 1956)	reddish-brown, 7 mm long, (Roewer, 1956)
Ocularium	5:5 microtubercles and black setae in two rows	7:7 pointed denticles in two rows (Roewer, 1956)	5:5 microtubercles in two rows (Roewer, 1956)
Chelicerae	basal segment dorsally with sparse denticles; second segment normal structure, without dorsal hump	basal segment dorsally with sparse denticles; second segment normal structure, without dorsal hump (Roewer, 1956)	basal segment with dorsal hump and dorsally with many denticles second segment with enlarged (Roewer, 1956)
Palp	femur ventrally with only setae; patella dorsally without denticles	femur ventrally with denticles; patella dorsally without denticles (Roewer, 1956)	femur ventrally with setae; patella dorsally with three denticles (Roewer, 1956)
Penis	truncus penis basally rectangular-shaped	truncus penis basally nearly oval-shaped	truncus penis basally triangular-shaped
Distribution	Cyprus	Turkey (Roewer, 1956)	Turkey (Roewer, 1956)

Table 1. Main diagnostic characters of *Buresilia* species. Таблица 1. Основные диагностические признаки видов рода *Buresilia*.

versity, Lubbock, Texas, USA.) and Dr. N.Yu. Snegovaya (Institute of Zoology of the Azerbaijan National Academy of Sciences) for their advice, helpful comments.critical remarks and improvement of the English.

References

- Crawford R.L. 1992. Catalogue of the genera and type species of the harvestman superfamily Phalangioidea (Arachnida) // Burke Museum Contributions in Anthropology and Natural History. No.8. P.1–60.
- Kurt K. 2014. Updated checklist of harvestmen (Arachnida: Opiliones) in Turkey // Archives of Biological Sciences, Belgrade. Vol.66. P.1617–1631.

- Roewer C.F. 1956. Über Phalangiinae (Phalangiidae, Opiliones Palpatores): Weitere Weberknechte XIX // Senckenbergiana biol. Bd.37. H.3/4. S.247–318.
- Šilhavý V. 1965. Die Weberknechte der Unterordnung Eupnoi aus Bulgarien; zugleich eine Revision Europäischer Gattungen der Unterfamilien Oligolophinae und Phalangiinae (Arachnoidea, Opilionidea) // Ceskoslovenská Spolecnost Entomologická. Bd.62. H.5. S.369–406.
- Starêga W. 1981. Über *Platybunus strigosus* (L. Koch, 1867), nebst Bemerkungen über andere Arten der Platybuninae (Opiliones: Phalangiidae) // Bulletin de l'Académie Polonaise des Sciences. Vol.28. No.8–9. S.521–525.
- Zang C., Zang F. 2002. On the subfamilial assignment of *Platy-bunoides* (Opiliones: Eupnoi: Phalangiidae), with the description of a new species from China // Zootaxa. Vol.3190. P.47–55.

Responsible editor K.G. Mikhailov