A New Species and a New Record of the Genus *Rilaena* Šilhavý, 1965 (Opiliones: Phalangiidae) from Turkey

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A NEW SPECIES AND A NEW RECORD OF THE GENUS *RILAENA* ŠILHAVÝ, 1965 (OPILIONES: PHALANGIIDAE) FROM TURKEY[1]

Kemal Kurt[2]

ABSTRACT: Two harvestmen species were collected from Trabzon Province in Turkey. *Rilaena ermani* sp. n. is described as new to science, and *Rilaena zakatalica* Snegovaya & Chemeris, 2005 is recorded for the first time in Turkey. Detailed descriptions and illustrations of new species are provided. Differences between the new species and related species are discussed. In addition, illustrations of new record are also presented.

KEYWORDS: Opiliones, Phalangiidae, *Rilaena*, new species, new record, Turkey

INTRODUCTION

Rilaena Šilhavý, 1965 is a genus of the subfamily Phalangiinae in the Phalangiidae and is distrubuted in Italy, Serbia, Bulgaria, Turkey, Caucasus, Iraq, Iran, Afghanistan. *R. triangularis* (Herbst, 1799) is distributed from Western Europe to Urals, USA (Snegovaya and Staręga, 2009). This genus includes 15 species in world. These species are *R. balcanica* Šilhavý, 1965, *R. triangularis* (Herbst,1799), *R. hyrcana* (Thorell, 1876), *R. atrolutea* (Roewer, 1915), *Rilaena picta* (Mcheidze, 1952), *Rilaena pusilla* (Roewer, 1952), *R. anatolica* (Roewer, 1956), *R. buresi* (Šilhavý, 1965), *R. gruberi* Staręga, 1973, *R. augusti* Chemini, 1986, *R. serbica* Karaman, 1992, *Rilaena zakatalica* Snegovaya & Chemeris, 2005, *R. lenkoranica* Snegovaya, 2007, *R. talyshica* (Snegovaya, 2007) (Snegovaya, 2007; Snegovaya and Staręga, 2009; Snegovaya and Staręga, 2011), and *R. kelbajarica* Snegovaya & Pkhakadze, 2014 (Snegovaya and Pkhakadze, 2014). At present, three species of the genus *Rilaena* are known so far from Turkey: *R. anatolica* (Roewer, 1956), *R. buresi* (Šilhavý, 1965), *R. gruberi* Staręga, 1973 (Roewer, 1956; Staręga, 1973; Mitov, 2012; Snegovaya and Marusik, 2012; Kurt, 2014).

The aim of this paper is to provide new data about the genus *Rilaena* of Turkey and a description of a new species.

MATERIALS AND METHODS

Samples were collected by hand from grass in Eastern Black Sea region in Turkey. The specimens were preserved in 70% ethanol. Examined specimens were deposited in Arachnological Laboratory of Şiran Vocational School, Gümüşhane University (GUSAL). Measurements are given in millimeters. Illustra-

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tions were made using a Leica stereomicroscope with a camera lucida. Female descriptions include only features that are different from the male.

RESULTS

Taxonomy

Phalangiidae Latreille, 1802
***Rilaena* Šilhavý, 1965**

Rilaena zakatalica Snegovaya, Chemeris, 2005 (Figs. 1-3, 8a)

Rilaena zakatalica: Snegovaya, Chemeris, 2005: 273–274, Figs. 39–58; Snegovaya, Chumachenko, 2011: 124

Material Examined: TURKEY: Trabzon Province, Maçka district, Zitaş resort road (N40°40'190", E39°25'132", 1691 m), (1♂), 20-VII-2013; leg. K. Kurt. This species was collected in grass.

Distribution: This species had been previously recorded from Azerbaijan (Snegovaya and Chemeris, 2005).

Comments: This species is recorded in Turkey for the first time. For description of this species see Snegovaya and Chemeris (2005).

Rilaena ermani sp. n. (Figs. 1, 4-7, 8b)

Type material. Holotype: 1♂, TURKEY: Trabzon Province, Maçka district, Zitaş resort road (N40° 40' 190", E39° 25' 132", 1691m), 20-VII-2013; leg. K. Kurt (GUSAL).

Paratypes: 1♂, 5♀, same data as holotype (GUSAL).

Distribution: The type locality only (Fig. 1).

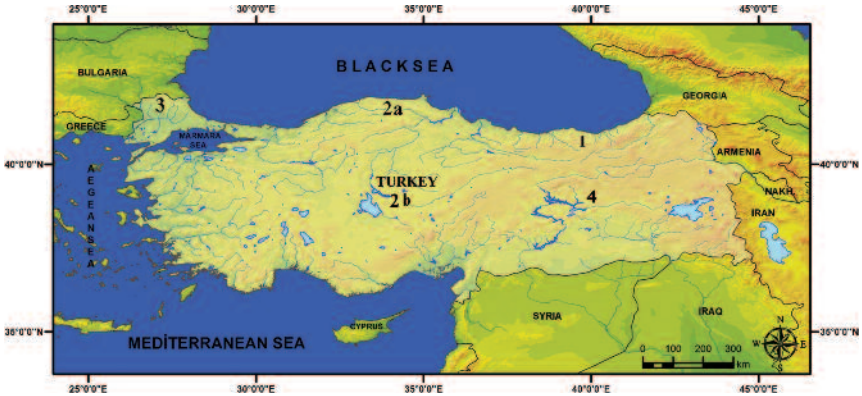

Fig. 1. Distribution of genus *Rilaena* in Turkey. 1. *R. ermani* sp. n. and *R. zakatalica* (Trabzon Province); 2. *R. anatolica* (2a: Kastamonu, 2b: Ankara Province); 3. *R. buresi* (Kırklareli Province); 4. *R. gruberi* (Tunceli Province).

Diagnosis: *R. ermani* sp. n. is closest to *R. balcanica* Šilhavý, 1965 and *R. anatolica* (Roewer, 1956), but can easily be distinguished by the following characters: the glans of penis ventrally is oval-shaped (glans ventrally V-shaped in *R. balcanica*), absence of triangle appendage on the 2nd segment of chelicerae. From *R. anatolica* the new species, *R. ermani* sp. n., differs by having relatively longer legs (in *R. anatolica* the legs are short), femora of palp ventrally with several black spine-tipped tubercles (in *R. anatolica* femora of palp ventrally has much larger denticles), thinner penis form.

Derivatio nominis: The specific epithet is given in honour of Prof. Dr. Ömer Köksal Erman (University of Atatürk, Turkey), a specialist on Dytiscidae, who has made a great contribution to knowledge of entomology research in Turkey.

Description: Body length 5.82, width 3.5; chelicera: basal segment 1.28, distal segment 2.05

Table 1. Measurements (in mm) of male holotype *Rilaena ermani* sp. n.

	Femur	Patella	Tibia	Metatarsus	Tarsus	Total
Palp	1.74	1.0	1.2	-	1.76	5.7
Leg I	3.95	1.43	3.5	4.1	6.5	19.48
Leg II	7.25	1.7	5.9	7.2	12.2	34.25
Leg III	4.45	1.65	4.0	4.8	7.3	22.2
Leg IV	6.7	1.68	4.2	7.9	10.04	30.52

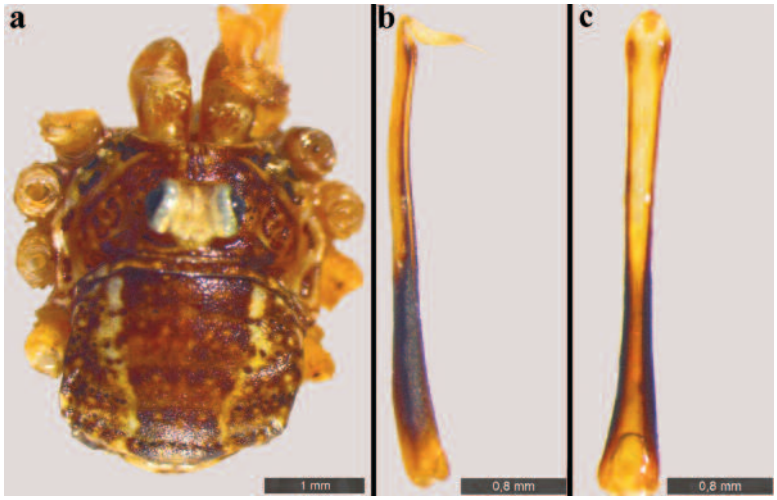

Fig. 2. a-c. *R. zakatalica*: a. Body, dorsal view; b. Penis, lateral view; c. Penis, dorsal view.

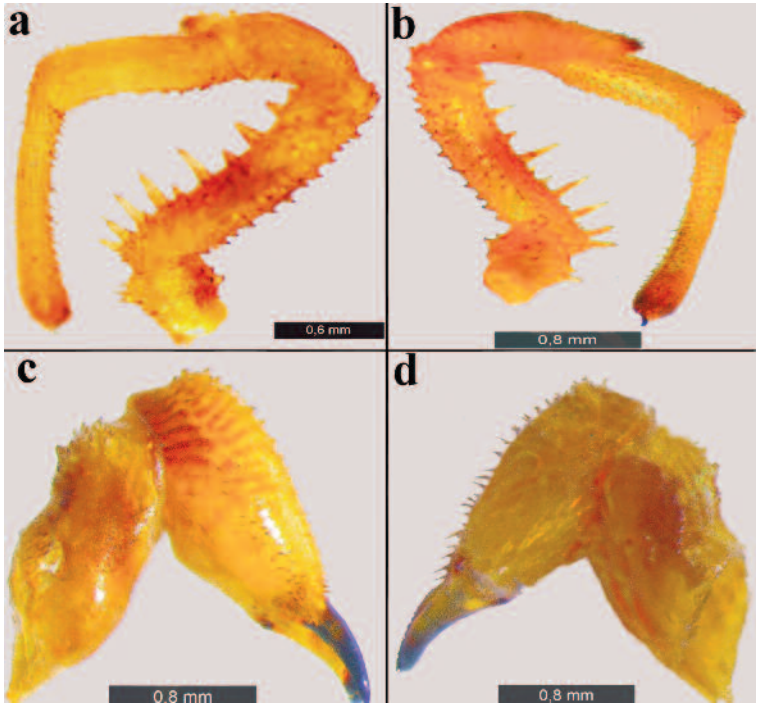

Fig. 3. a-d. *R. zakatalica*: a, b. pedipalp, lateral view; c, d. chelicerae, lateral view.

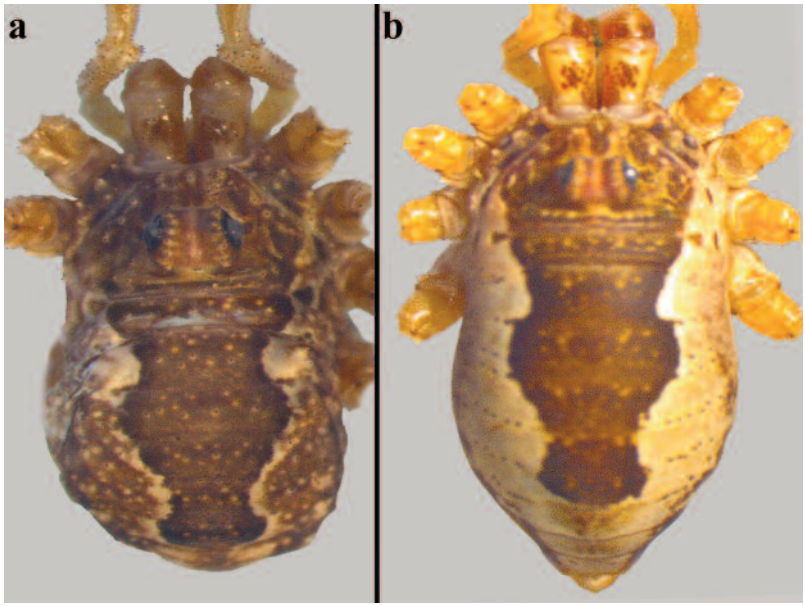

Fig. 4. Dorsal view of *R. ermani* sp. n.: a. Male, dorsal view; b. Female, dorsal view.

Body (Fig. 4): medium size, approximately rectangular shape in dorsal view. Cephalothorax, anterior and lateral borders of eye mound and around opening of odoriferous gland covered with tiny black-tipped denticles. Abdominal tergites with transverse rows of tiny black-tipped denticles.

Tuber oculorum (Fig. 4): relatively high and wide (1.02), trapezoid-shaped, 8-9 black-tipped denticles in two rows.

Ventral side: genital operculum and coxae ventrally covered with dense black setae, abdomen ventrally with transverse rows of brown spots and scattered setae.

Chelicerae (Fig. 5c, d): normal structure, not enlarged, 2nd segment slightly curved. Dorsal of basal segment with scattered brown spots and covered with 2-3 black-tipped denticles and setae. Distal segment with setae and brown zebra-like striped pattern.

Pedipalp (Fig. 5a, b): not very strong, robust, trochanter dorsally and ventrally covered with black spine-tipped tubercles and setae, femur with disto-mesal apophysis consisting of scattered spines and setae; femur ventrally with several black spine-tipped tubercles and setae, laterally covered with small tubercles and setae. Patella with large disto-mesal apophysis and covered with setae. Tibia with small disto-mesal apophysis and covered with setae; ventrally with black micro-

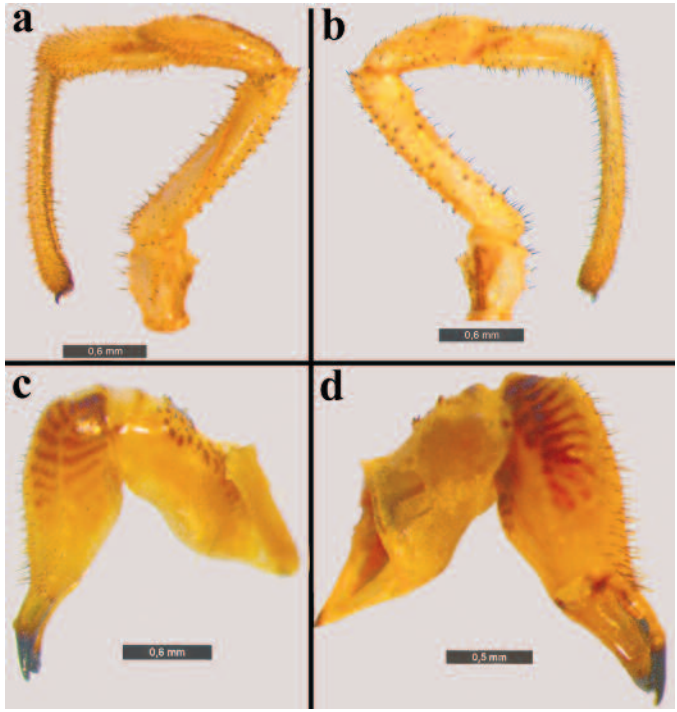

Fig. 5. a-d. *R. ermani* sp. n., male: a, b. pedipalp, lateral view; c, d. chelicerae, lateral view.

denticles; tarsus with setae, but male tarsus ventrally covered with longitudinal rows of black-microdenticles, tarsal claw smooth.

Legs (Fig. 6): Relatively long; femur of pair I, III slightly thicker and shorter than others. Femur covered with longitudinal rows of setae. Femur dorsally, patella and tibia ventrally covered by black small denticles and setae. Tarsus and metatarsus with setae and hairs.

Male genital morphology (Fig. 7): Corpus of penis wide at the base, narrowed towards in the middle, then widened again distally and wing-shaped. Stylus long. Penis light brown, wings dark brown. Penis length: 3.4; glans: 0.4.

Coloration: Body with a distict dark brown saddle and round and elongated brown spots in dorsal view. Chelicerae, palps and legs with light brown spots.

Female: Body length 7.2, width 4.6; chelicera: basal segment 1.2, distal segment 2.25. General appearance is similar to that of the male, but the body is larger and wider (Fig. 4b).

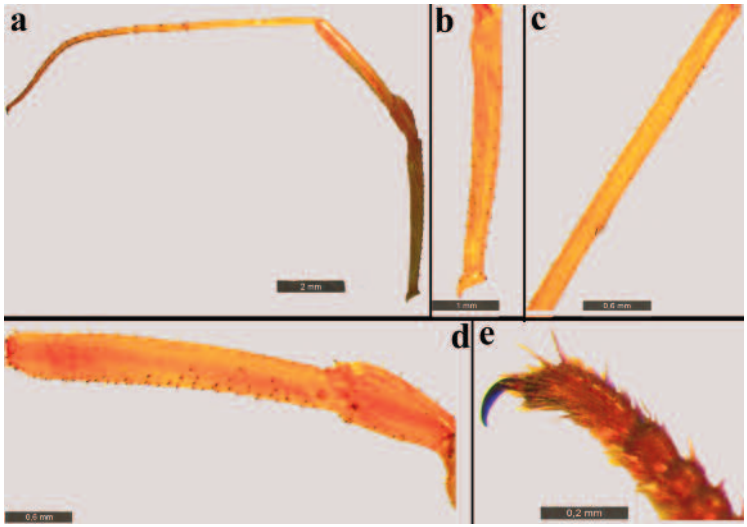

Fig. 6. The first pair of legs of *R. ermani* sp.n., male: a. Entire leg, lateral view; b. Femur, lateral view; c. metatarsus, lateral view; d. Patella and tibia, lateral view; e. Tarsal claw, lateral view.

Table 2. Measurements (in mm) of female paratype of *Rilaena ermani* sp. n.

	Femur	Patella	Tibia	Metatarsus	Tarsus	Total
Palp	1.82	1.0	1.21	-	2.05	6.08
Leg I	3.27	1.17	3.0	3.7	5.5	16.64
Leg II	6.2	1.5	5.4	6.0	10.4	29.5
Leg III	3.8	1.24	3.2	4.7	6.1	19.04
Leg IV	6.1	1.5	4.0	7.5	8.7	27.8

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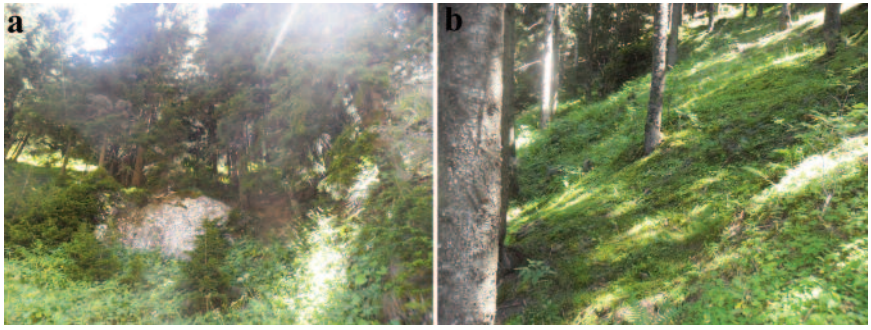
Fig. 7. a-c. Penis of *R. ermani* sp.n.: a, c. lateral view; b. dorsal view.



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