

Redescription of *Phalangium riedeli* Staręga, 1973 (Opiliones: Phalangiidae) from Turkey with the First Description of the Female

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**REDESCRIPTION OF *PHALANGIUM RIEDELI* STAREĞA,
1973 (OPILIONES: PHALANGIIDAE)
FROM TURKEY WITH THE
FIRST DESCRIPTION OF THE FEMALE¹**

Kemal Kurt²

ABSTRACT: *Phalangium riedeli* Stareğa, 1973, previously known only from the male in Syria, is redescribed on the basis of newly collected material from Turkey. The female of this species is described for the first time. Its description, characteristic features, distribution, measurements and photographs of genitalia and general habitus of both sexes are presented.

KEY WORDS: Opiliones, Phalangiidae, *Phalangium riedeli* Stareğa, 1973, redescription, first description, Turkey

The genus *Phalangium* Linnaeus, 1758 is represented by 20 species worldwide (Tcherneris, 2012) including three from Turkey (Kurt et al., 2010). The genus is characterized by having: basal segment of chelicerae usually normal structured, distal segment dorsally with a horn in male; pedipalps similar to legs, long and slender; legs mostly long, femur covered with a longitudinal row of denticles; penis long and narrow; corpus narrowed distally away from basale, subapically with a spoon-like, triangular-shaped glans (Martens, 1978; Snegovaya and Stareğa, 2009). Stareğa (1973) described the species based on males only from Syria (Stareğa, 1973). Until now the female was unknown. Here I describe the female of *Phalangium riedeli* based on recently collected material.

MATERIALS AND METHODS

Samples were collected by hand and forceps in May 2011 from under stones from Şırnak Province, Turkey. Identification was made using a Leica EZ4 66 stereomicroscope. Examined specimens were preserved in 70% ethanol and deposited in the collection of Arachnological Laboratory of Şiran Vocational School, Gümüşhane University (GUSAL). All measurements are in millimeters.

RESULTS

Taxonomy

Phalangiidae Latreille, 1802

***Phalangium* Linnaeus, 1758**

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Phalangium riedeli* Staręga, 1973 Figs. (1-7)Phalangium riedeli* Staręga, 1973: 136-137, Figs. 16, 17.

Material Examined: TURKEY: Şırnak Province, Cizre District, (N 37° 20' 31,3" E 42° 09' 35,7", 535m), (2♂♂, 1♀), 12-V-2011; leg. E. A. Yağmur. This species was collected from under stones in open places.

Figure 1. Global distribution of *Phalangium riedeli*.**Description****Male:**

Measurements: Body length 4.38, width 3.0; chelicera: basal segment 1.51, distal segment 3.02; penis: length 3.05, length of glans 0.3.

Table 1: Lengths of pedipalp and leg (in millimeters):

	Femur	Patella	Tibia	Metatarsus	Tarsus	Total
Palp	4.6	1.6	2.65	–	4.9	13.75
Leg I	5.28	1.7	4.5	5.11	7.8	24.39
Leg II	6.6	1.95	5.95	6.0	15.0	35.5
Leg III	5.16	1.6	4.21	5.74	9.3	26.01
Leg IV	6.02	1.65	5.6	5.84	13.0	32.11

Body (Fig. 2a): medium size, rectangular shape in dorsal view. Anterior margin of carapace, not equipped with a dark, V-shaped figure with light longitudinal stripe and armed with only one black small denticle. Lateral borders of eye mound and around opening of odoriferous gland with black tipped denticles. Cephalothorax yellowish-white with irregular black spots. Abdomen dorsally with distinct dark brown saddle. Saddle with longitudinal row of a whitish median stripe in the center. Abdominal tergites with rows of black-tipped denticles

and round dark brownish spots. Supracheliceral lamellae visible with single hair-tipped tubercles.

Tuber oculorum: eye tubercle high and 9-10 black hairs tipped denticles in two rows.

Chelicerae (Figs. 2b-d): normal structure. Basal segment extended in to distal and dorsally covered with black-tipped denticles and setae. Distal segment with short horn and covered with setae and on frontal side armed with numerous large granules.

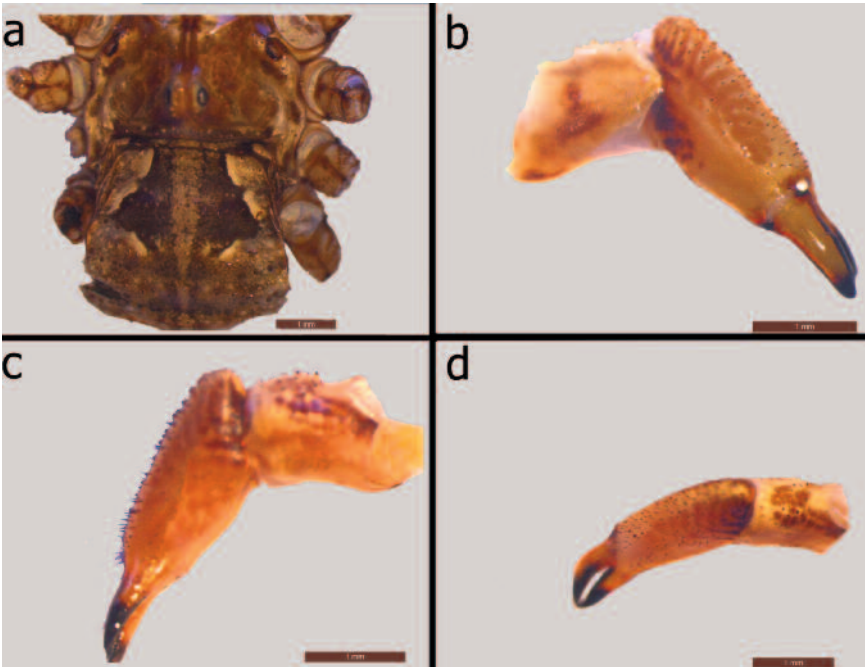


Fig. 2. *Phalangium riedeli*, male: a. body, dorsal view; b, c. chelicera, lateral view; d. chelicera, dorsal view.

Pedipalp (Fig. 3): long, normal structure. Femur and patella prolaterally with invisible apophyses, densely covered with setae. Tibia and tarsus with setae only. Tarsus ventrally with microdenticles.

Legs (Fig. 4): not very long, pair I thicker than others. Femur pentagon-shaped and dorsally with setae, ventrally covered denticles. Patella and tibia dorsally with setae, tibia ventrally covered with denticles. Metatarsus cylindrical shaped and with setae only.

Ventral side: genital operculum and coxae of legs covered only irregularly scattered small setae. Abdomen ventrally ochre, with elongated grey-orange spots.

Penis (Fig. 5): corpus especially dorso-ventral flattened apically, wide at base, narrowed in middle and widened again distally. Glans ventrally convex, laterally elongated. Stylus hook-shaped and visible.

Coloration: body yellowish-white. Chelicera light yellowish, basal segment dorsally and laterally with brown spots, distal segment with brown zebra-like pattern. Pedipalps and legs grey-ochre with brown spots.

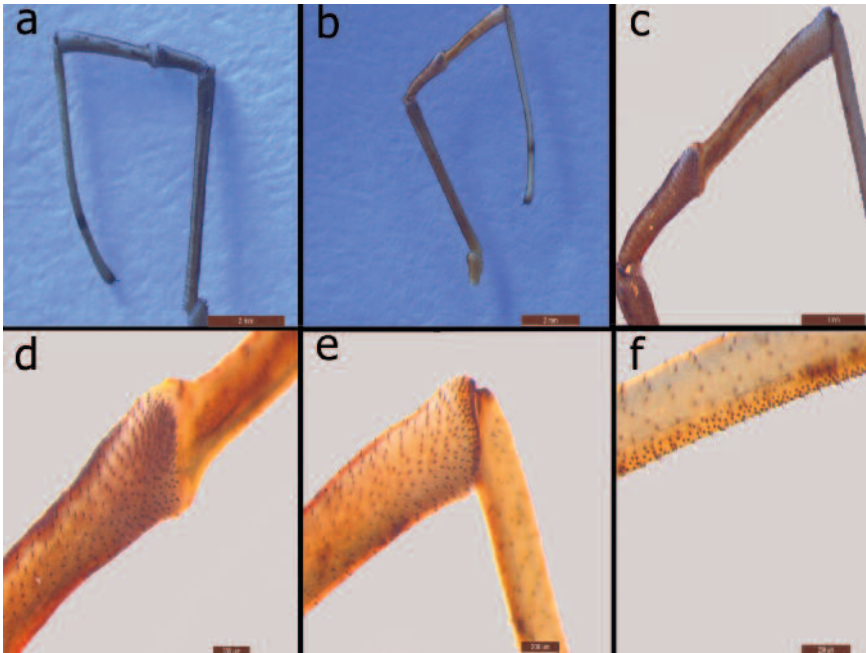


Fig. 3. Pedipalp of *Phalangium riedeli*, male: a, b. entire pedipalp, lateral view; c. patella and tibia, lateral view; d. patella, lateral view; e. tibia, lateral view; f. microdentacles of tarsus, ventral view.

Female:

Measurements: Body length 7.3, width 4.3; Chelicera: basal segment 0.95, distal segment 1.95.

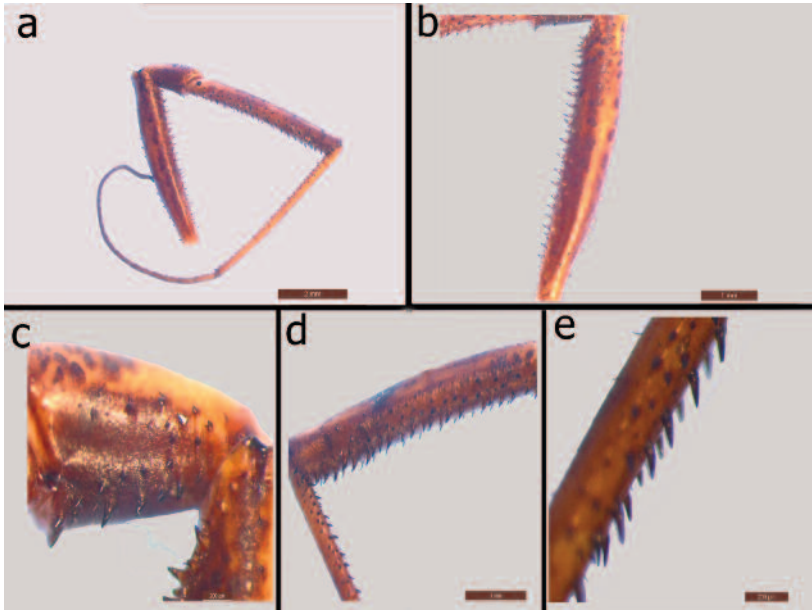


Fig. 4. The first pair of legs of *Phalangium riedeli*, male. a. entire leg, lateral view; b. femur, lateral view; c. patella, lateral view; d. tibia, lateral view; e. metatarsus, lateral view.

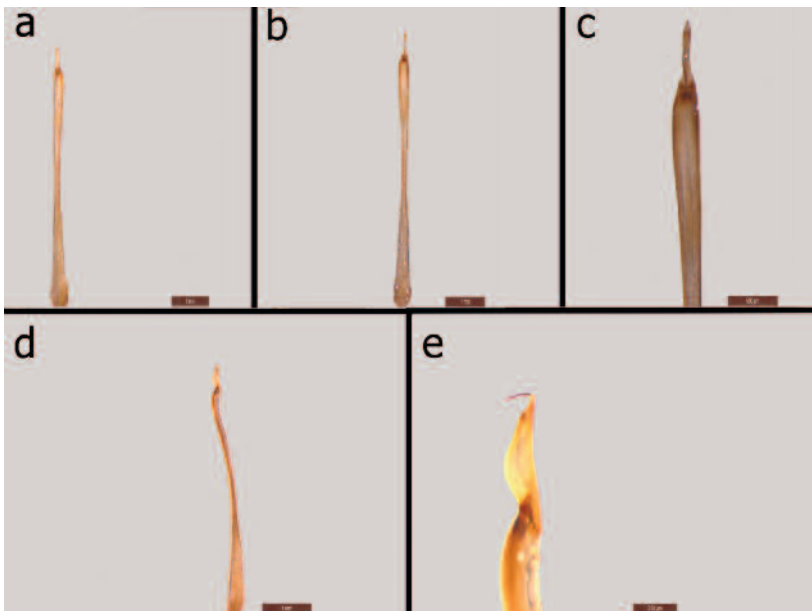


Fig. 5. Penis of *Phalangium riedeli*, male. a. penis, ventral view; b, c. penis, dorsal view; d. penis lateral view; e. glans, lateral view.

Table 2: Lengths of pedipalp and leg (in millimeters):

	Femur	Patella	Tibia	Metatarsus	Tarsus	Total
Palp	1.87	0.84	1.0	-	2.12	5.83
Leg I	3.4	1.25	2.7	3.41	6.45	17.21
Leg II	5.25	1.65	4.65	4.54	13.25	29.34
Leg III	3.6	1.35	2.5	4.1	7.5	19.05
Leg IV	5.35	1.5	4.04	5.4	9.85	26.14

Similar to male but much larger, abdomen wide. Saddle more pronounced and continuing to end of body, absent longitudinal row of whitish median stripe in the center (Fig. 6a). Chelicera shorter than in male; basal segment dorsally with only setae and not denticles; distal segment but not apophyses covered with setae and lacking granules on frontal side (Figs. 6 b,c). Palps shorter and thicker than in male. Femur and patella prolaterally with visible apophyses, densely covered with setae. Tibia and tarsus with setae only. Tarsus ventrally lacking microdenticles (Fig. 7). Legs shorter, pair I of legs thinner than those of male.

Distribution: Syria (Starega, 1973) and Turkey (this study) (Fig. 1).

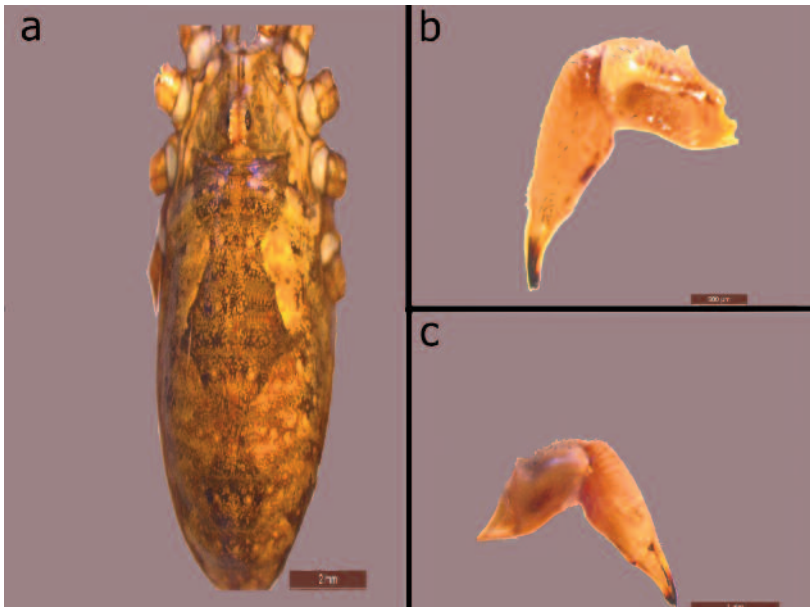


Fig. 6. *Phalangium riedeli*, female: a. body, dorsal view; b, c. chelicera, lateral view.

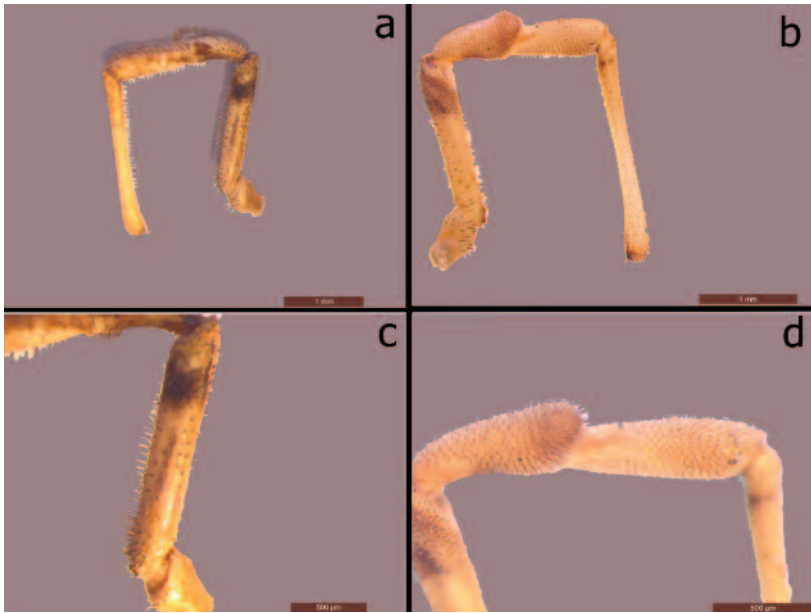


Fig. 7. Pedipalp of *Phalangium riedeli*, female: a, b. entire pedipalp, lateral view; c. femur, lateral view; d. patella and tibia, lateral view.

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