

On Four Poorly Known Species of Spiders (Araneae: Gnaphosidae and Lycosidae) Described by T. Thorell from Crimea

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Abstract: Type specimens of four species described by Thorell (1875) from South Ukraine and originally attributed to *Prothesima* L. Koch, 1872 and *Tarentula* Sundevall, 1831 were re-examined for the first time and four new synonyms are proposed: *Prothesima nitida* Thorell, 1875 n. syn. = *Drassyllus pusillus* (C.L. Koch, 1833); *Prothesima rufipes* Thorell, 1875 n. syn. = *Poecilochroa senilis* (O.P.-Cambridge, 1872); *Zelotes kukushkini* Kovblyuk, 2006 n. syn. = *Zelotes fuscus* (Thorell, 1875); *Deliriosa karadagensis* Kovblyuk, 2009 n. syn. = *Deliriosa chiragrica* (Thorell, 1875) n. comb. for *Tarentula chiragrica* Thorell, 1875. In addition it was found that a record of *Zelotes femellus* from Crimea actually refers to *Zelotes hermani* (Chyzer, 1897). Lectotype made is designated for *Zelotes fuscus*. Diagnostic figures for *Zelotes fuscus* and *Deliriosa chiragrica* are provided.

Key words: Thorell, spiders, new synonym, misidentification, South Ukraine, Crimea

Introduction

THORELL (1875a,b) described 67 species from territories now belonging to southern Ukraine and southern Russia. None of his descriptions contain any figures and therefore identification of his species was rather difficult for a long time. Although most of the species described by Thorell from Southern Russia and Ukraine were redescribed on the basis of types (WUNDERLICH 1980; MARIKOVSKI & MARUSIK 1985; OVTSHARENKO *et al.* 1992; NADOLNY & KOVBLYUK 2010, etc.), over a dozen of the species remains unstudied. Recently we got an opportunity to study types of three species of ground spiders described by Thorell in *Prothesima* (now considered as several genera in Zelotini) and a type of one species of wolf spiders, *Tarentula chiragrica*. Besides the type material, we studied some species reported

by Thorell from Southern Ukraine. Type material of Thorell was shared between the Natural History Museum in Stockholm and Zoological Museum of the University of Helsinki.

Material and Methods

All Thorell's material examined is from the Zoological Museum of the University of Helsinki, Finland (ZMH). Comparative material is from either the Zoology Department, V.I. Vernadsky Taurida National University, Simferopol, Ukraine (TNU) or Zoological Museum, Moscow State University, Moscow, Russia (ZMMU).

Photographs were taken in dishes of different sizes with paraffin at the bottom. Specimens were pho-

tographed using an Olympus Camedia E-520 camera attached to an Olympus SZX16 stereomicroscope at the Zoological Museum, University of Turku. Digital images were montaged using a “CombineZM” image stacking software. SEM microphotographs were made with an EVO-40 XVP (LEO 143 OVP) in the South Scientific Centre RAS, Rostov-on-Don, Russia.

Results

Taxonomy

Gnaphosidae BANKS, 1892

THORELL (1875a,b) described eight gnaphosid species from southern Ukraine: *Gnaphosa jucunda*, *G. moesta*, *G. taurica*, *G. trebax*, *Micaria rossica*, *Prothesima fusca*, *P. nitida* and *P. rufipes*. Types of four of them (*Micaria rossica* and *Gnaphosa jucunda*, *G. moesta*, *G. taurica*) were examined and re-described by WUNDERLICH (1979) and OVTSHARENKO *et al.* (1992) respectively. All these species are well known thanks to several recent publications (cf. PLATNICK 2012). Four other species have remained unstudied and known by the original description. The type of *G. trebax* was not found (cf. OVTSHARENKO *et al.* 1992). We were also not able to find the type material in Helsinki or Stockholm. It is possible that a holotype female was sent to Simon, who transferred species to *Pythonissa* C.L. KOCH, 1837 (SIMON 1878: 205), and Simon has not returned the specimen. *Pythonissa* is an objective synonym of *Gnaphosa*. The types of three other species were finally found in Helsinki and were commented on here.

Drassyllus pusillus (C.L. KOCH, 1833)

Prothesima nitida THORELL, 1875a: 83; THORELL 1875b: 107; holotype ♂ from Simferopol, Crimea, leg. A. Nordmann (ZMH 428), examined, **n. syn.**

Type material. Holotype ♂ (ZMH) with two labels: “Mus. Zool. Helsingfors. *Prothesima nitida* Thor. Sympheropol 27.04.1861. Tauria № 118. [Ent. etiketti no 206.]” and “428”.

Comparative material. Numerous specimens of *D. pusillus* from Crimea (see KOVBLYUK 2003).

Comments. Male holotype has no morphological differences with widespread trans-Palaeartic *D. pusillus* and therefore two names are synonymised. *Drassyllus pusillus* is a well known species and its description can be found in 40 taxonomic publications (cf. PLATNICK 2012).

Distribution. Trans-Palaeartic range (KOVBLUYK 2003).

Poecilochroa senilis (O. P.-CAMBRIDGE, 1872) (Figs. 1-3)

Prothesima rufipes THORELL, 1875a: 82; Thorell, 1875b: 110; holotype ♀ from Sudak, Crimea, leg. A. Nordmann (ZMH 423), examined, **n. syn.**

P. s.: LEVY 1999: 431, f. 6-9 (♂♀).

P. s.: CHATZAKI *et al.* 2002a: 569, f. 8-11 (♂♀).

P. s.: MURPHY 2007: 50, f. 370-371 (♂♀).

P. s.: KOVBLYUK & TUNEVA 2009: 157, f. 1-9 (♂♀).

Type material. Holotype ♀ with two labels: “Mus. Zool. Helsingfors. *Prothesima rufipes* Thor. Sudagh 10.VIII.1860. Tauria № 44. Ent. etiketti no 202]” and “423”.

Comparative material. Specimens of *P. senilis* from Crimea (see KOVBLYUK & TUNEVA 2009).

Comments. Holotype female has no morphological differences with specimens found in Crimea and illustrations in revisional works by LEVY (1999), CHATZAKI *et al.* (2002) and MURPHY (2007) and therefore two names are synonymised here.

Distribution. From the western Mediterranean to Turkmenistan (KOVBLUYK & TUNEVA 2009).

Zelotes fuscus (THORELL, 1875) (Figs. 4-8, 10-13)

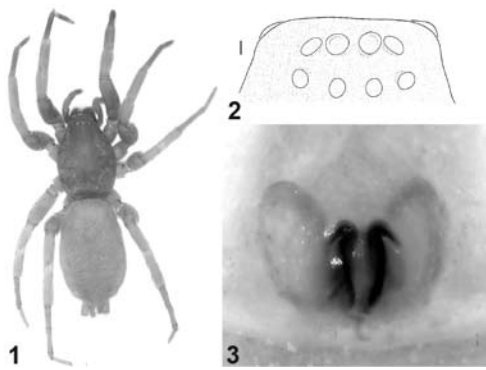
Prothesima fusca THORELL, 1875a: 82; THORELL, 1875b: 109. Syntypes 1♀ from Nikopol, Dnepropetrovsk Area and 1♂ & 2♀♀ from Sudak, Crimea, leg. A. Nordmann (ZMH, 425, 426), examined.

Zelotes kukushkini KOVBLYUK, 2006: 206, f. 1.1-3, 4.1-2, 6.1-2, 7.1-2; holotype ♂ and paratypes ♂♀ from Crimea (ZMMU, TNU), examined, **n. syn.**

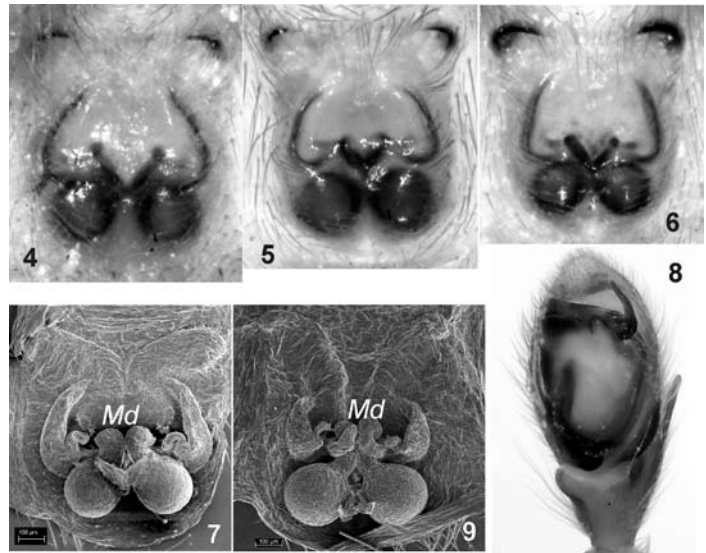
Type material. Lectotype ♂ and 2♀♀ paralectotypes “Mus. Zool. Helsingfors. *Prothesima fusca* Thor. Sudagh. Hadschi. Bei. VIII.1860. Tauria № 78. [Ent. etiketti no 205.]” and “426”; ♀ paralectotype “Mus. Zool. Helsingfors. *Prothesima fusca* Thor. Nicopol. 6.VII.1862. № 82. [Ent. etiketti No 204.]” and “425”.

Note. Lectotype ♂ designated here.

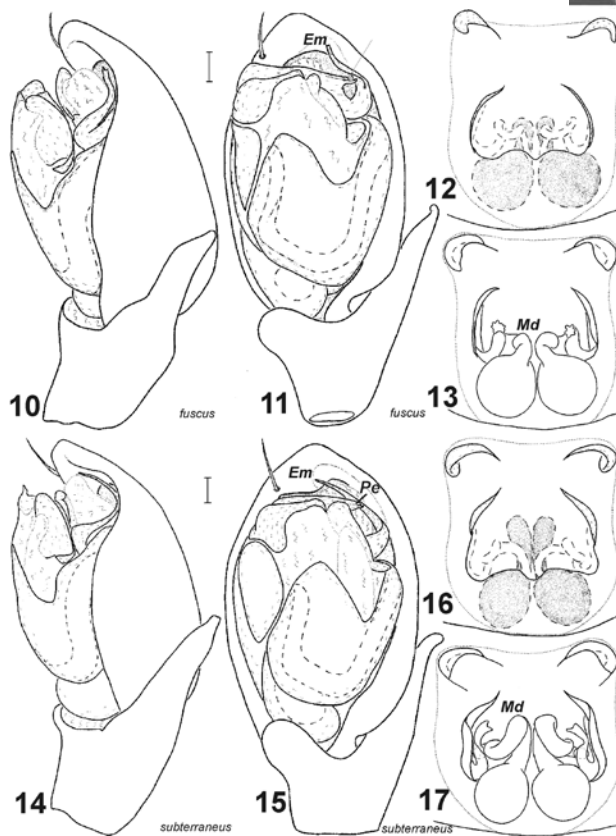
Comparative material. Numerous specimens of *Z. fuscus* from Crimea (see KOVBLYUK 2006, sub *Z. kukushkini*). Specimens of *Z. subterraneus* (C.L. KOCH, 1833) from Finland, Austria, Leningrad Area of Russia and Caucasus (see KOVBLYUK 2006, KOVBLYUK *et al.* 2011).



Figs. 1-3. Female of *Poecilochroa senilis* (holotype of *Prothesima rufipes* THORELL, 1875). 1 – total, dorsal; 2 – eyes, dorsal; 3 – epigyne, ventral



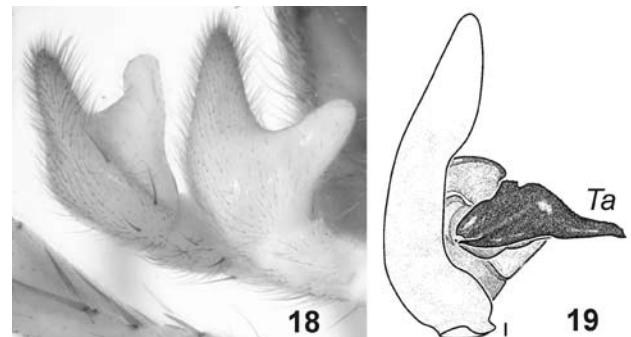
Figs. 4-9. *Zelotes fuscus* (4-8) and *Z. subterraneus* (9, from Caucasus). 4-6 – epigyne, ventral; 7, 9 – epigyne, dorsal; 8 – lectotype male. 4 paralectotype from Nicopol; 5-6 paralectotypes from Crimea; 7 from Rostov Area. Abbreviation: Md – median ducts of epigyne



Figs. 10-17. Copulatory organs of *Zelotes fuscus* from Crimea (10-13) and *Z. subterraneus* from Austria (14-17). 10, 14 – male palp, retrolateral; 11, 15 – male palp, ventral; 12, 16 – epigyne, ventral; 13, 17 – epigyne, dorsal. Scale = 0.1 mm. Abbreviations: Em – embolus; Md – median ducts of epigyne; Pe – projection of embolus

Diagnosis. *Zelotes fuscus* is very similar to *Z. subterraneus*, the type species of the genus, but differs well by the shape of embolus (*Em*), projection of the embolus (*Pe*) and medial ducts of epigyne (*Md*) (cf. Figs. 7, 10-13 and 9, 14-17).

Comments. Comparison of the types of two



Figs. 18-19. Palps of *Deliriosa chiragrica*, retrolateral. 18 – immature holotype of *Tarentula chiragrica* THORELL, 1875; 19 – holotype of *D. karadagensis* KOVBLIYUK, 2009. Abbreviation: Ta – tegular apophysis

species *Z. fuscus* and *Z. kukushkini* leaves no doubts that the two names should be synonymised.

Distribution. The species is known from Crimea north to Poltava and Kharkov in Ukraine and east to the Kazakhstan Area of Kazakhstan (KOVBLIYUK 2006; POLCHANINOVA & PONOMAREV, personal communication).

***Zelotes hermani* (CHYZER, 1897)**

Prothesima femellus (not L. KOCH, 1866). THORELL 1875a: 82; ♀ from Simferopol, Crimea (ZMH, 42, examined). Misidentification.

Material. 1 ♀ “Mus. Zool. Helsingfors. *Prothesima femella* C.L.K. Sympheropol. 22.IV.1861. Tauria n: 113. [Ent. ethiketti no 203.]” and “424.”

Comparative material. Numerous specimens of *Z. hermani* from Crimea.

Note. *Zelotes femellus* was reported from Crimea only by THORELL (1875a). Examination of the specimen identified by Thorell as *Z. femellus* reveals that it belongs to *Z. hermanni*.

Distribution. The species is known from Austria and Italy east to West Siberia (MIKHAILOV 2003; HELSDINGEN 2012).

Lycosidae SUNDEVALL, 1833

THORELL (1875a,b) described eight lycosid species from South Ukraine: *Lycosa pontica*, *L. tatarica*, *Tarentula eichwaldii*, *T. krynickii*, *T. beckeri*, *T. chiragrica*, *T. nordmanni* and *Trochosa stigmosa*. Four of them were transferred to different genera and are well redescribed. *Pardosa pontica* was redescribed by ZYUZIN & LOGUNOV (2000); *Pardosa tatarica* was considered in KOVBLYUK *et al.* (2008), *Alopecosa beckeri* was redescribed by NADOLNY & KOVBLYUK (2010) and *Arctosa stigmosa* was treated in numerous publications (cf. PLATNICK 2012). Two of Thorell's species were synonymised: *Tarentula eichwaldii* – with *Alopecosa schmidti* (HAHN, 1835) and *T. nordmanni* – with *Lycosa praegrans* C.L. KOCH, 1836 (cf. PLATNICK 2012). Therefore, only two species described from southern Ukraine remain unstudied: *Tarentula krynickii* and *T. chiragrica*. We had the opportunity to study the holotype specimen of *Tarentula chiragrica*, comments on which is given below.

***Deliriosa chiragrica* (THORELL, 1875) n. comb.** (Figs. 18-19)

Tarentula chiragrica THORELL, 1875a: 105, holotype subadult ♂ from Simferopol, Crimea (ZMH 211), examined.

Tarentula chiragrica: THORELL 1875b: 157.

Tarentula chiragrica: MIKHAILOV 1996: 108, considered as nomen dubium.

Deliriosa karadagensis KOVBLYUK, 2009: 659, f. 1.1-8, 2.1-3, 3.1-5, holotype ♂ and paratypes ♂♂ and ♀♀ from Karadag Nature Reserve, Crimea (ZMMU & TNU), examined, **n. syn.**

Type material. Holotype subadult ♂ with three museum labels “Mus. Zool. Helsingfors. *Tarentula chiragrica* Thor. Sympheropol. Al. v. Nordmann”, “*Tarentula chiragrica* Thor. Sympheropol. Al. v. Nordmann” and “211”. One additional label “Examined, 1988: A.A. Zyuzin”.

Comparative material. Numerous specimens of *D. chiragrica* from Crimea (Karadag Nature Reserve and Dolgorukovskaya Yaila Mt.).

Comments. *Deliriosa* KOVBLYUK, 2009 is a monotypic genus described and known only from Crimea. It differs well from other Lycosidae by the long and massive tegular apophysis. Although the holotype male of *Tarentula chiragrica* is a subadult male and identification of juvenile lycosids is almost impossible it is clear that the two names *Tarentula chiragrica* and *Deliriosa karadagensis* should be synonymised. The holotype (Fig. 18) has well developed premature palp with a long and massive extension of the bulbal part which is unknown in other wolf spiders. *Deliriosa karadagensis* has extraordinary large (for all Lycosidae) tegular apophysis (Fig. 19). Because there are no other wolf spiders with such large tegular apophysis in Crimea and in Palearctic as a whole, we synonymised the two names as *Deliriosa karadagensis* Kovblyuk, 2009 **n. syn.** and made a new combination: *Deliriosa chiragrica* (THORELL, 1875) **n. comb.**

Distribution. Crimea only.

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