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On the Gnaphosid and Lycosid spiders described by L. Giltay from the Balkans (Araneae : Gnaphosidae : Lycosidae)

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Abstract

The Gnaphosidae and Lycosidae described from the Balkan Peninsula by L. GILTAY in 1932 are revised. *Zelotes villicoides* Giltay, 1932 from Greece is a valid species and is transferred to the genus *Drassyllus* Chamberlin, 1922 ; the female is described for the first time on newly collected material from Greece ; *Gnaphosa orchymonti* Giltay, 1932 is a junior synomym of *Gnaphosa dolosa* Herman, 1879 and *Nomisia montenegrina* Giltay, 1932 from Montenegro is also a valid species and is redescribed. Finally, *Trochosa macedonica* Giltay, 1932 is a junior synonym of *Hogna radiata* (Latreille, 1817).

Keywords : Araneae, Greece, Gnaphosidae, Lycosidae, redescription, synonymy.

Samenvatting

De Gnaphosidae en Lycosidae beschreven door L. GILTAY in 1932 van de Balkan regio worden herzien. *Zelotes villicoides* Giltay, 1932 beschreven van Griekenland is een geldige soort en wordt in het genus *Drassyllus* Chamberlin, 1922 ondergebracht ; het wijfje wordt voor het eerst beschreven op basis van nieuw materiaal verzameld in Griekenland ; *Gnaphosa orchymonti* Giltay, 1932 is een junior synoniem van *Gnaphosa dolosa* Herman, 1879 ; *Nomisia montenegrina* Giltay, 1932 van Montenegro is eveneens een geldige soort en wordt herbeschreven. *Trochosa macedonica* Giltay, 1932 is een junior synoniem van *Hogna radiata* (Latreille).

Résumé

Les Gnaphosidae et Lycosidae de la péninsule des Balkans décrits par L. GILTAY en 1932 sont revus. *Zelotes villicoides* Giltay, 1932 de Grèce est une espèce valide et est transférée dans le genre *Drassyllus* Chamberlin, 1922 ; la femelle est décrite pour la première fois à partir du matériel nouvellement collecté de Grèce ; *Gnaphosa orchymonti* Giltay, 1932 est un synonyme junior de *Gnaphosa dolosa* Herman, 1879 et *Nomisia montenegrina* Giltay, 1932 du Montenegro est aussi une espèce valide et redécrite. Finalement, *Trochosa macedonica* Giltay, 1932 est un synonyme junior de *Hogna radiata* (Latreille, 1817).

Introduction

In recent times, spider taxonomy knows a revival, especially with revisions of families or genera on a molecular base. Nevertheless classical taxonomic studies remain necessary, especially in revising species described a long time ago, sometimes without figures or in journals of difficult access. Recently, the forgotten spider species described from Mallorca by L. Koch (L. KOCH, 1882) were revised. Several new synonyms or combinations as well as the redescription of poorly known species were the result (BOSMANS & VAN KEER, 2012). In the present study, the examination of 'forgotten' species is continued by the study of the species described from the Balkan by Louis Giltay (GILTAY,

1932). The type material could be examined and compared with recently collected material during several excursions to Greece. Louis Giltay is known to few people but was a Belgian arachnologist who died at a the age of 34. He published mainly on afrotropical arachnids. One exception was a paper on the arachnids collected by A. d'Orchymont in the Balkan peninsula. Curiously, this paper was published twice (1932, 1933) in two different journals. Six new species were described in it : three gnaphosids, two lycosids and one salticid.

Heliophanes creticus Giltay, 1932 was excellently redescribed by WESOLOWSKA (1986) and METZNER (1999) and is considered to be an endemic species of Crete. *Acantholycosa nigripalpis* Giltay, 1932 was synonymised with *Pardosa morosa* (L. Koch, 1870) by BUCHAR & POLENEC (1974). *Trochosa macedonica* Giltay, 1932 was transferred to the genus *Lycosa* by ROEWER (1955). The three remaining Gnaphosidae, *Gnaphosa orchymonti* Giltay, 1932 ; *Nomisia montenegrina* Giltay, 1932 and *Zelotes villicoides* Giltay, 1932 have never been cited since their first description.

Material and methods

The type material of the species was deposited in the Royal Belgian Institute of Natural Sciences, Brussels, Belgium (RBINS) and could be examined.
Specimens were examined and illustrated using a Wild M5 stereomicroscope. Further details were studied using an Olympus CH-2 stereoscopic microscope with a drawing tube.
Left structures are depicted. Male palps were detached and transferred to glycerol for examination under the microscope. Female genitalia were excised using sharpened needles. These where transferred to clove oil for examination under the microscope. Later, palps and epigynes were returned to 70% ethanol.
The reference material reported in this paper is deposited in the collection of the author.

Systematics

GNAPHOSIDAE

Drassyllus villicoides (Giltay) Comb. nov.
(Figs 1-4)

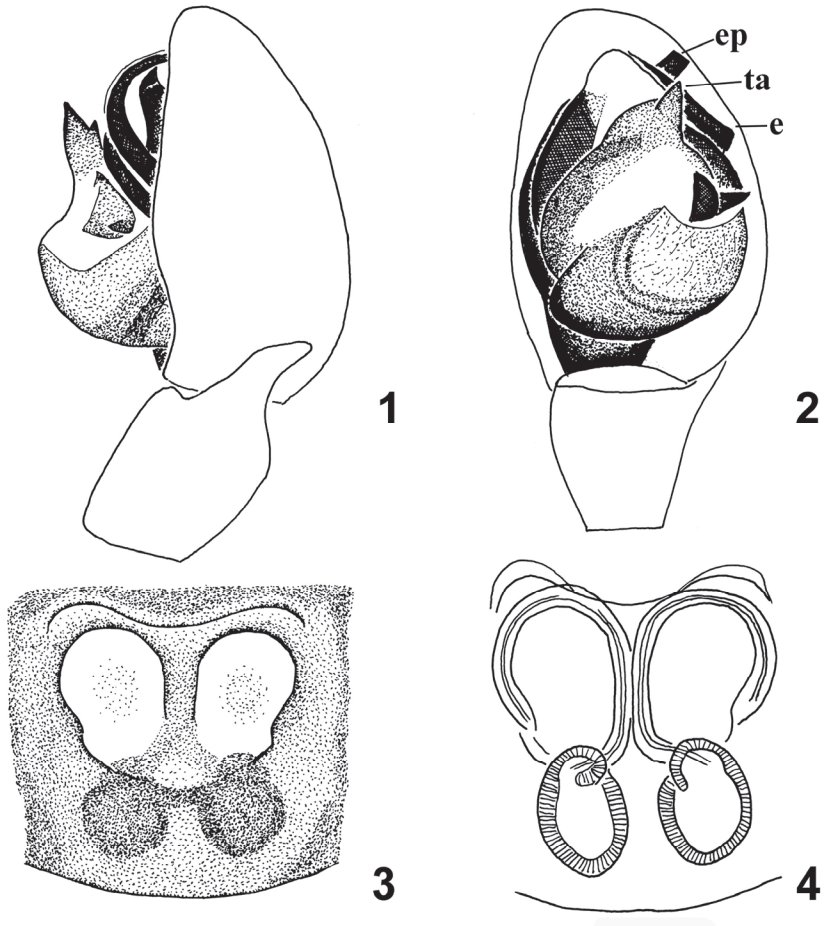
Zelotes villicoides Giltay, 1932 : 28, f. 18 (description male) ; GILTAY, 1933 : 6, pl. 3, f. 4 (description male).

MATERIAL EXAMINED. Holotype male of *Zelotes villicoides* Giltay from Greece, Peloponnisos, Ileia, Krestena, leg. A. d'Orchymont, RBINS.

DIAGNOSE.
Drassyllus villicoides is closely related to *D. praeficus* (L. Koch, 1866) and differs in the shorter cymbium of the male palp and the less wide epigyne (Table 1). Furthermore, males can be distinguished by the bulging, retrolateral margin of the tegular apophysis (straight in *D. praeficus*) and in the truncate tip of the embolar projection (bluntly pointed in *D. praeficus*) (Figs 1-2) ; females are recognised by the oval 'windows' in the epigyne (rounded in *D. praeficus*) and the rounded spermathecae (kidney-shaped in *Z. villicoides*) (Figs 3-4).

Table 1. Length of cymbium and width of epigyne in *Drassyllus villicoides* (Giltay).

	Drassyllus villicoides	*Drassyllus praeficus*
Length of cymbium	0.33-0.40 (n=8)	0.42-0.48 (n=12)
Width of epigyne	0.19-0.22 (n=11)	0.29-0.34 (n=13)



Figs 1-4. *Drassyllus villicoides* (Giltay, 1932). 1. Male palp, lateral view ; 2. Idem, ventral view ; 3. Epigyne, ventral view ; 4. Vulva, ventral view.

Other material examined.
GREECE. Attiki-Saronic Islands : Attiki : Marathon, Enoee, 1♂, 19.IV.2000, leg. R. Bosmans ; Evvoia-Voroies Sporades : Evvoia : between Kimi and Paralia Kimi, 1♀, 13.V.2001, leg. R. Bosmans ; Kimi N., Monastery, 1♂, 13.V.2001, leg. R. Bosmans ; between Prokopi and Nea Pagontas, 1♀, 10.V. 2001, leg. R. Bosmans ; Steni Dirios NE, 1♂ 1♀, 9.V.2000, leg. R. Bosmans ; between Stira and Marmari, 1♀, 14.V.2001, leg. R. Bosmans ; Makedonia : Chalkidiki : between Fourkas and Skala Fourkas, 1♂, 12.VI.2004, leg. L. Provoost ; Kallithea, 1♀, 13.VI.1997, leg. R. Bosmans ; Pieria : Pandeleimonas, 1♂ 1♀, 9.VI.1997, leg. R. Bosmans ; Sithonia, 1♂, 17.VI.2004, leg. L. Provoost ; Peloponnissos : Achaia : Ano Zachlorou, 1♀, 14.IV.2000, leg. R. Bosmans ; Rakita, 1♂, 31.V.1998, leg. R. Bosmans ; Argolida : Arachnaio S., 1♀, 24 .V.1998, leg. R. Bosmans ; Arkadia : Paralia Astros, 1♀, 26.V.1998, leg. R. Bosmans. ; Ileia : Simopoulo, 2♀s, 30.V.1998, leg. R. Bosmans ; Lakonia : Mistras, 1♂, 28.V.1998, leg. R. Bosmans.

Distribution
Drassyllus villicoides occurs all over continental Greece, including Evvoia. The species is even more abundant than the closely related *Drassyllus praeficus* and both species were probably confused in the past. Material of *D. praeficus* from neighbouring countries should be verified in the light of possible misidentifications.

Other *Drassyllus* species examined from Greece.

Drassyllus praeficus (L. Koch, 1866)
Attiki-Saronic Islands : Attiki : Schinias, 12♂ 6♀, pitfalls in *Phragmites* marsh, 8-16.V.2001, leg. R. Bosmans ; Eastern Aegean Islands : Lesvos : Molyvos, 1♂ 7♀, in swimming pool of hotel, leg. A. Decae ; Evvoia-Voroies Sporades : Evvoia : between Ilia and Aghios Georgiou, 1♀, 11.V.2001, leg. R. Bosmans ; Ipeiros : Ionannina : Papigo, Astraka, 1♂ 1♀, 30.IV.2007, leg. B. Vandenberghe ; Makedonia : Thessaloniki : Epanomi, 1♂, 13.VI.1997, leg. R. Bosmans ; Peloponnisos : Achaia : Oros Aroania, 1♀, 31.V.1998, leg. R. Bosmans.

Drassyllus villicus (Thorell, 1875)
Eastern Aegean Islands : Lesbos : Molyvos, 1♀, in swimming pool of hotel, les. A. Decae ; Ipeiros : Konitsa : Arisi, Voidhomatis river, 3♂ 2♀, 11.VII .2007, leg. B. Vandenberghe ; Macrovouni, 1030 m, 1♂, 18.VII.2007, leg. B. Vandenberghe.

Gnaphosa dolosa Herman, 1879

Gnaphosa dolosa Herman, 1879 : 191, 362, f. 167 (descr. male, female) ; Ovtsharenko *et al.,* 1992 : 9 (redescr. male, female) ; CHATZAKI, THALER & MYLONAS 2002 : 611, f. 17-18 (redescr. female).
Gnaphosa orchymonti Giltay, 1932 : 31, f. 20-21 (description male, female) ; GILTAY, 1933 : 7, pl. 4, f. 2-3 (description male, female). **Syn. nov.**
Gnaphosa spadicea Simon, 1914 : 223 (descr. male) ; SOYER, 1964 : 355, f. 8. (synonymy by OVTSHARENKO *et al*., 1992).

MATERIAL EXAMINED. Type series of *Gnaphosa orchymonti*, consisting of 1 male (with 1 palp only), 2 females (1 without epigyne) and 2 juveniles, from Greece, Peloponnisos, Messinia, Kalamata, along the sea, V.1930, leg. A. d'Orchymont, RBINS.

Comparative material examined
Gnaphosa dolosa Herman, 1879
GREECE. Aegean Islands : Lesbos : Molyvos, 1♂, in swimming pool near the sea, 28.V.2009, leg. A. Decae ; Evvoia-Voroies Sporades : Alonyssos : Aghios Dimitrios wetlands, 1♀, wetland near the sea, 16.VI.2005, leg. R. Bosmans.

Comments
In the original description GILTAY (1932) states that *Gnaphosa orchymonti* is very similar to *Gnaphosa lucifuga* (Walckenaer, 1802) and *Gnaphosa spadicea* Simon, 1913 (= *G. dolosa* Herman, 1879). These two species differ from *G. orchymonti* by the presence of a tooth on the prolateral side of the embolus ("par la forte dent du bord du lobe interne du bulbe"). However, this tooth is also present in *G. dolosa* as stated in OVTSHARENKO (1992) and SOYER (1964) in the redescription of *G. spadicea* (= *G. dolosa*) ("le lobe interne du bulbe peut porter sur sa partie externe et médiane une dent qui peut être aiguë"). The proposed differences are thus non-existent. Equally no differences can be observed in the epigynes of the females. *Gnaphosa dolosa*, *G. orchimonti* and *G. spadicea* are furthermore cited from the same habitat type : stone beds near the sea or along rivers near the sea (LEDOUX, 2007 ; RUSSELL-SMITH *et al*., 2001 ; SOYER, 1964). *Gnaphosa orchymonti* Giltay, 1932 thus becomes a junior synonym of *G. dolosa* Herman, 1879.

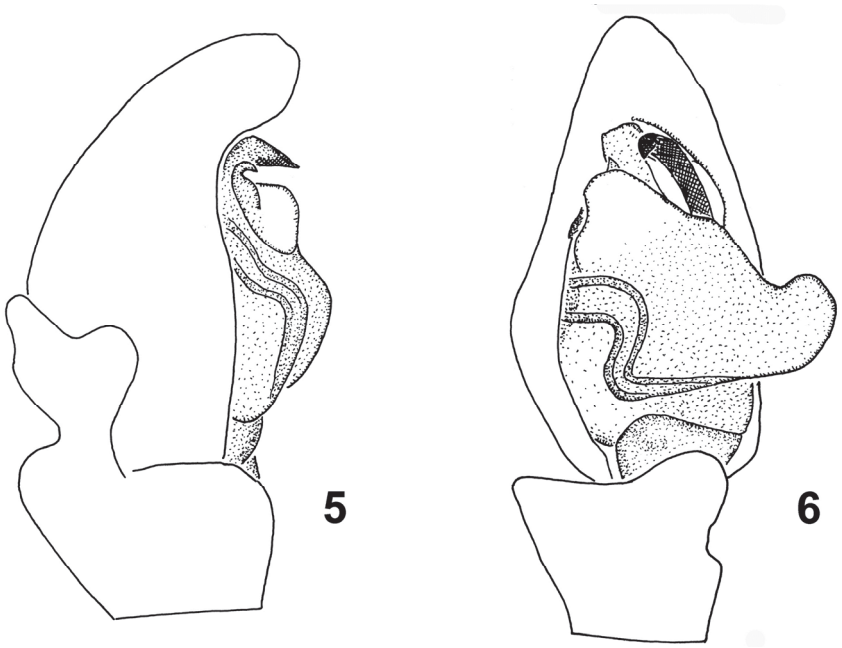
Nomisia montenegrina Giltay, 1932
(Figs 5-6)

Nomisia montenegrina Giltay 1932 : 30, f. 19 (description male) ; GILTAY, 1933 : 6, pl. 4, f. 1 (description male).

MATERIAL EXAMINED. Holotype male of *Nomisia montenegrina* from Montenegro, Cettigne, 16.VI.1930, leg. A. d'Orchymont, RBINS.

Comments
Nomisia montenegrina cannot be mistaken from any other *Nomisia* species in the male palp possessing a tibial apophysis with two rounded processes and by the strongly bulging tegulum. The female is unknown.

Distribution
Only known from the type locality in Montenegro.



Figs 5-6. *Nomisia montenegrina* Giltay, 1932. 5. Male palp, lateral view ; 6. idem, ventral view.

LYCOSIDAE

***Hogna radiata* (Latreille, 1817)**

Trochosa macedonica Giltay, 1932 : 20, f. 14 (description female). **Syn. nov.**
Trochosa macedonica Giltay, 1933 : 5, f. 2 (description female).
Lycosa macedonica Roewer, 1955 : 269 (transfer).

MATERIAL EXAMINED. Holotype female from FYR Macedonia, Sermenli-Negorci, 4.VI.1930, leg. A. D'Orchymont, RBINS ; paratype female from Slovenia, Slivje (Slivia), 16.VII.1929, leg. A. D'Orchymont, RBINS.

Comments
In the holotype of *Lycosa macedonica*, the epigyne has been removed from the abdomen and it is not present in the vial. In the paratype, a so called 'pre-epigyne' is present, a small chitinous plate developing in the pre-adult stadium of many spiders. This phenomenon occurs regularly in large Lycosids, when a kind of pre-epigynal plate develops that has no internal structures. The figure by GILTAY (1932) corresponds with the shape of the pre-epigyne of the paratype, so we must conclude that holotype and paratype belong to the same species. When compared to adult *Hogna radiata* specimens from the region, the annulated legs and the black spot on the ventral side of the abdomen point to a synonymy with this species.

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