The spider genus *Gnaphosa* Latreille, 1804 in the Crimea (Aranei: Gnaphosidae)

Пауки рода *Gnaphosa* Latreille, 1804 Крыма (Aranei: Gnaphosidae)

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KEY WORDS: spiders, *Gnaphosa*, redescriptions, new synonym, new records, ecology, Crimea.


Introduction

The genus *Gnaphosa* contains approximately 130 described species and is probably the best-studied gnaphosid genus. The genus has been revised for North America, Europe and North Asia (Platnick, Shadab, 1975; Grimm, 1985; Ovtsharenko et al., 1992; Platnick, 2004). The Crimean Peninsula is located at the border between Middle Europe, the Mediterranean and Asia, where the genus *Gnaphosa* seems to be well studied. Therefore, it was surprising to discover that species identifications of the Crimean *Gnaphosa* were quite difficult. This paper aims to resolve this problem by redescribing and illustrating the known Crimean species.

Material and Methods

Specimens for this study were recently collected in the Crimea by the author (the other collectors are mentioned in the text below), mostly by pitfall traps. Some
specimens used as comparative material were received for examination from numerous museums and personal collections. All specimens were returned to, or deposited in the following collections: AMNH — American Museum of Natural History, New York, USA, Dr. V.I. Ovtsharenko; EMZ — personal collection of Mr. E.M. Zhukovets, Minsk, Belarus; KVE — the personal collection of Dr. K.V. Evtushenko, Kiev, Ukraine; MNHN — Museum National d‘Histoire Naturelle, Paris, France, Dr. C. Rollard; PSU — Department of Zoology, Perm State University, Perm, Russia, Dr. S.L. Esvyuk; TNU — Zoology Department, V.I. Vernadsky Taurida National University, Simferopol, Ukraine, Mr. M.M. Kovblyuk; YMM — the personal collection of Dr. Yu.M. Marusik, Magadan, Russia; ZISP — Zoological Institute, Russian Academy of Science, St. Petersburg, Russia, Dr. V.A. Krivokhatsky; ZMMU — Zoological Museum of the Moscow State University, Moscow, Russia, Dr. K.G. Mikhailov.

Legs and palpal segments were measured after separation from the cephalothorax. Total length of leg = lengths of femur + patella + tibia + metatarsus + tarsus. Length/width of cephalothorax/abdomen measured after separating them by breaking the petiolar. Coloration was described from specimens preserved in 75% ethanol/water solution with added glycerin (9:1 by volume). Microphotographs were made with a Jeol JSM-5200 SEM in the Zoological Museum, University of Turku, Finland.

The following abbreviations are used in the text and illustrations: a — apical; ah — armature of epigynal hood; c — conductor; cd — copulatory duct; d — dorsal; e — embolus; et — embolic tubercles; f — fertilization duct; h — epigynal hood; lp — lateral pockets; lm — lateral epigynal margins; m — epigynal midpiece; ma — median apophysis; md — median epigynal ducts; mm — median epigynal margins; ml — epigynal midpiece; mp — median apophysis; pr — reservoir of receptacula seminis; sp — same place; ta — tibial apophysis; v — ventral. The abbreviations AM, AL, PM and PL refer respectively to the anterior median, anterior lateral, posterior median and posterior lateral eyes. Most of the terms for genital descriptions are adopted from Ovtsharenko et al. [1992] and Marusik, Koponen [2001]. The species group arrangement is adopted from Ovtsharenko et al. [1992]. All measurements are in mm: minimum—maximum; a figure in brackets represents the average. All scale bars equal 0.1 mm.

Survey of species

Genus Gnaphosa Latreille, 1804
Type species: G. lucifuga (Walckenaer, 1802).

The lucifuga group

Gnaphosa lucifuga (Walckenaer, 1802)
Figs 1–5.

[Platnick, Shadab, 1975: 11, figs 7, 9 (illustrated c’0); Grimm, 1985: 60, figs 43, 60, 61 (c’0); Ovtsharenko, Platnick et Song, 1992: 5, figs 1–6 (illustrated c’0)]. This species is well known, for a complete list of references see Platnick [2004].

MATERIAL. UKRAINE: the Crimea, 1 c’0 (EMZ), Simferopol Dist., Nikolaevka, 16.06.1996, M. Kovblyuk & R. Slushaenko, 1 c’0 (EMZ), same dist., Krasnoyelye, 7.07.1996, R. Slushaenko, 1 c’0 (EMZ), same dist., Kirpichnaya, Herdward field, pitfall, 14-31.05.1997; 1 c’0 (EMZ), same dist., Lozovoe, 16.06.1997, A. Tsetkov, 3 c’0 (EMZ), same dist., Krasnoyelye, Kosh-Kaja Mt, north slope, under stones, 1806.1997; 2 c’0 (EMZ), same dist., Krasnoyelye, under stones, 2106.1997; 1 c’0 (TNU), Simferopol Dist., Chatty-Dag Yaila Mt, 27.06.1997; 2 c’0 (TNU), 1 c’0 (TNU), same dist., 1 c’0 (TNU), Yalta Dist., Crimean State Natural Reserve, Gurzufskaya Yaila, Gurzufskoe sedlo Mt pass, under stones, 15.08.1999, V.P. Kornilov, 1 c’0 (TNU), sp., c. 1300 m a.s.l., under stones, 14.06.2000; 1 c’0 (TNU), same dist., coast of the Simferopol water reservoir, Pshramiteta communis monospecificus (Festuco-Elytrigio gramineae herbosum), 10 pitfall, 14–26.05.2000; 3 c’0, 3 c’0 (TNU), same dist., Nikitskaya Yaila (Simeiz), c. 1200 m a.s.l., Asaphodes taurica; Stipa Festucoides, 10 pitfall, 206-309.01; 1 c’0 (TNU), sp., Parus pallidus; Quercus petraea, Carpinus betulus, Acer sp., 10 pitfall, 14–24.07.2001.

COMPARATIVE MATERIAL. Of Gnaphosa betulki Ovtsharenko, Platnick et Song, 1992. KAZAKHSTAN, 1 c’0 (ZISP; paratype), Zhambei Area, Sarynus Dist., Betpak-Dala Desert, 76 km NE of Ulanbel; loamy plain, 50690.1990, A.A. Zuyzin, A.A. Fedorov; 1 c’0 (ZISP; paratype), Kayal-Orda Area, Barsakel’mes Island in Aral Sea, 22.05.1982, T.V. Pavlenko.

DIAGNOSIS. G. lucifuga is closely related to G. betulki Ovtsharenko, Platnick et Song, 1992, but can be distinguished from it by (1) the much larger body size (Table 1); (2) the epigynal hood, which is wider than lateral pockets in G. lucifuga, but equally wide in G. betulki (Figs 4, 6, 7); (3) the much larger, well-developed armature of the epigynal hood in G. lucifuga (Figs 5, 7); and (4) the palpal structure [Ovtsharenko et al. 1992: figs 1, 2, 11–14].

DESCRIPTION. MALE (n = 5). Measurements. Total length 11.2–15.8 (13.6); carapace 6.0–7.4 (6.8) long and 4.7–5.9 (5.3) wide. Diameters of eyes and distances between them: AM 0.16–0.20 (0.20), AL 0.26–0.30 (0.28), PM 0.26–0.30 (0.28), PL 0.21–0.24 (0.23). AM-AL 0.10–0.12 (0.11), AM-PM 0.08–0.12 (0.09), PM-PL 0.38–0.50 (0.44), AM-PM 0.32–0.42 (0.37), AL-PL 0.48–0.63 (0.56). Distance between anterior eyes and margin of clypeus: AM-clypeus 0.42–0.48 (0.45), AL-clypeus 0.33–0.40 (0.37). Length of leg segments:

<table>
<thead>
<tr>
<th>Leg</th>
<th>Femur</th>
<th>Patella + Tibia</th>
<th>Metatarsus</th>
<th>Tarsus</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>4.7-5.2 (5.0)</td>
<td>6.7-7.4 (7.1)</td>
<td>3.4-3.8 (3.6)</td>
<td>2.2-2.6 (2.4)</td>
<td>17.0-18.8 (18.0)</td>
</tr>
<tr>
<td>II</td>
<td>4.3-5.0 (4.7)</td>
<td>6.3-6.8 (6.6)</td>
<td>3.5-3.8 (3.6)</td>
<td>2.2-2.5 (2.4)</td>
<td>16.3-17.9 (17.3)</td>
</tr>
<tr>
<td>III</td>
<td>3.8-4.2 (4.0)</td>
<td>4.7-5.2 (5.0)</td>
<td>3.5-4.0 (3.7)</td>
<td>2.1-2.3 (2.2)</td>
<td>14.1-15.5 (14.9)</td>
</tr>
<tr>
<td>IV</td>
<td>4.6-5.3 (5.0)</td>
<td>6.3-7.0 (6.7)</td>
<td>5.0-5.8 (5.4)</td>
<td>2.4-2.6 (2.5)</td>
<td>18.4-20.4 (19.6)</td>
</tr>
</tbody>
</table>

Length of palpal segments: femur 2.2–2.5 (2.3), patella 1.0–1.2 (1.1), tibia 0.8–0.9 (0.8), tarsus 1.8–2.0 (1.9). Abdomen 5.3–8.7 (6.8) long, 3.8–6.0 (4.8) wide. Basal segment of anterior (inferior) spinnerets 1.4–1.5 (1.4) long.
The genus *Gnaphosa* in the Crimea

Figs 1–5. The copulatory organs of *Gnaphosa lucifuga* from the Crimea: 1 — male palp, retrolateral view; 2 — male palp, ventral view; 3 — male palp, prolateral view; 4 — epigyne, ventral view; 5 — epigyne, dorsal view.

Leg spination. I — femur: d 1–1, pl 1; metatarsus: v-pl 1 or 0 (2 of 5 specimens). II — femur: d 1–1, pl 1–1; tibia: v-pl 1–1a or 1 (1 of 5 specimens); metatarsus: v 2 or v-pl 1 (1 of 5 specimens). III — femur: d 1–1, pl 1–1, rl 1–1; patella: rl 1 or 0 (1 of 5 specimens); tibia: pl 1–1–1 or 1–1 (2 of 5 specimens) or 2–1–1 (1 of 5 specimens), rl 1–1–1 or 2–1–1 (2 of 5 specimens), v 2–2–2a; metatarsus: pl 1–2–2 or 1–2 (1 of 5 specimens) or 1–1–2 (1 of 5 specimens) or 1–2–1–2 (1 of 5 specimens), rl 1–1–2, v 2–2–2a or 2–1–2–2a (2 of 5 specimens) or 2–1–2–1–2a (1 of 5 specimens). IV — femur: d 1–1, pl 1–1, rl 1–1; patella: 0 or rl 1 (1 of 5 specimens); tibia: pl 1–1, rl 2–1–1 or 1–1–1 (1 of 5 specimens) or 2–1–1–1 (1 of 5 specimens), v 2–2–2a or 2–1–2–2a (1 of 5 specimens); metatarsus: pl 1–2–2 or 1–2 (1 of 5 specimens).
or 2–2 (1 of 5 specimens), rl 1–2–2, v 2–1–2–2a or 2–2–2a (1 of 5 specimens) or 1–2–1–2a (1 of 5 specimens).

**Coloration.** Carapace brown. Ocular area, chelicerae, labium, palpal endites black-brown. Sternum and coxae of legs I very dark brown. Femora of legs and palps yellow-brown, other leg and palp segments dark brown. Abdomen dark grey, scutum tiny (less than 1/10 length of abdomen); book-lungs yellow, spinnerets yellow-brown.

**Palpal structure** as in Figs 1–3.

**FEMALE** (n = 5). **Measurements.** Total length 17.5–18.3 (17.8); carapace 6.4–7.8 (7.0) long and 4.9–6.1 (5.5) wide. Diameters of the eyes and distances between them: AM 0.18–0.22 (0.20), AL 0.27–0.38 (0.30), PM 0.21–0.32 (0.27), PL 0.21–0.27 (0.25), AM-AM 0.16–0.22 (0.19), AM-AL 0.06–0.12 (0.09), PM-PM 0.08–0.14 (0.10), PM-PL 0.40–0.50 (0.44), AM-PM 0.33–0.40 (0.37), AL-PL 0.52–0.63 (0.59). Distance between anterior eyes and margin of Clypeus: AM-clypeus 0.40–0.46 (0.44), AL-clypeus 0.30–0.40 (0.35). Length of leg segments:

<table>
<thead>
<tr>
<th>Femur + Patella</th>
<th>Metatarsus</th>
<th>Tarsus</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leg I</td>
<td>4.2–4.8</td>
<td>5.8–6.7</td>
<td>6.18</td>
</tr>
<tr>
<td>(4.5)</td>
<td>(3.9)</td>
<td>(3.0)</td>
<td></td>
</tr>
<tr>
<td>Leg II</td>
<td>4.0–4.6</td>
<td>5.4–6.3</td>
<td>6.18</td>
</tr>
<tr>
<td>(4.3)</td>
<td>(3.8)</td>
<td>(3.0)</td>
<td></td>
</tr>
<tr>
<td>Leg III</td>
<td>3.4–4.1</td>
<td>4.4–5.1</td>
<td>6.18</td>
</tr>
<tr>
<td>(3.7)</td>
<td>(4.8)</td>
<td>(3.3)</td>
<td></td>
</tr>
<tr>
<td>Leg IV</td>
<td>4.4–5.2</td>
<td>6.2–6.9</td>
<td>6.18</td>
</tr>
<tr>
<td>(4.8)</td>
<td>(6.5)</td>
<td>(4.8)</td>
<td></td>
</tr>
</tbody>
</table>

Length of palpal segments: femur 1.9–2.2 (2.1), patella 1.0–1.2 (1.2), tibia 0.8–1.0 (0.9), tarsus 1.4–1.8 (1.7). Abdomen 10.0–10.8 (10.3) long, 5.9–7.3 (6.6) wide. Basal segment of anterior (inferior) spinnerets 1.3–1.6 (1.4) long.

**Leg spination.** I — femur: d 1–1, pl 1; metatarsus: v-pl 1, II — femur: d 1–1, pl 1–1; tibia: v-pl 1–1a or 1a (1 of 5 specimens) or 0 (1 of 5 specimens); metatarsus: v 2. III — femur: d 1–1, pl 1–1, rl 1–1; patella: rl 1; tibia: pl 1–1 or 1–1 (1 of 5 specimens), rl 1–1 or 1–1 (1 of 5 specimens), v 2–2–2a or 2–2–2a (1 of 5 specimens); metatarsus: pl 1–2–2 or 1–2–2 (1 of 5 specimens) or 1–2 (1 of 5 specimens), rl 1–1–2 or 1–2 (1 of 5 specimens), v 2–2–2a or 2–1–2–2a (1 of 5 specimens) or 2–1–2–1–2a (1 of 5 specimens). IV — femur: d 1–1, pl 1–1 or 1 (1 of 5 specimens), rl 1–1; tibia: pl 1–1 or 2–1 (1 of 5 specimens), rl 2–1 or 1–1 (1 of 5 specimens) or 2–1–2–2 (1 of 5 specimens), v 2–2–2a or 2–1–2–1–2a (1 of 5 specimens); metatarsus: pl 1–2–2 or 2–2 (1 of 5 specimens), rl 1–2–2 or 1–1–2 (1 of 5 specimens), v 2–2–2a or 2–2–2a (1 of 5 specimens) or 3–1–1–2–1–2 (1 of 5 specimens).

**Coloration.** As in males. Scutum absent.

**Epigyne.** As in Figs 4, 5.

**TYPE LOCALITY.** France [Ovtsharenko et al., 1992].

**DISTRIBUTION.** South and Central Europe, the Caucasus, Kazakhstan, Middle Asia [Bosmans, De Keer, 1985; Ovtsharenko et al., 1992; Esyunin, Efimik, 1996; Marusik, Koponen, 2001; Prokopenko, 2002]; the Crimea [Spasky, 1927; Charatciv, 1932; Mikhailov, 1997; Kovblyuk, 2000, 2003].

**COMMENTS.** It is interesting to note that the specimens *G. lucifuga* from the Crimea are characterized by an intermediate body size between spiders from Central Europe and Kazakhstan. European males have a total body length of 11.1–14.9 and carapace length of 5.3–6.8 [Grimm, 1985]; males from the Crimea 11.2–15.8 and 6.0–7.4 respectively; those from Kazakhstan 18–19 and 8.0–8.5 respectively [Marusik, Koponen, 2001]. Thus, the body size of *G. lucifuga* seems to increase from the west to the east.

**PHENOLOGY.** ♀ ♂ — V–IX; ♀ ♂ — VI–VIII.

**Gnaphosa ukrainica** Ovtsharenko, Platnick et Song, 1992

Figs 8–13.

*G. ukrainica* Ovtsharenko, Platnick et Song, 1992: 17–18, figs 49–50 (♀♂) (the ♀♂ holotype in ZISP, lost; not examined).

*G. turkenica* Ovtsharenko, Platnick et Song, 1992: 18–19, figs 53–54 (♀) (the ♀ holotype in AMNH, examined) — Syn.n.

**MATERIAL.** UKRAINE: Crimea, 8 ♀♂, 1 ♀ (TMU), Saky Distr., Pribrezhnaya railway station, 47°09.317’N 33°30.044’E, c 1 m a.s.l., humid salt-marsh, Salticornia europaea, Halocnemum strictiflorum, 10 pitfalls, 27.03–28.05.2000. TURKMENISTAN: 1 ♀ (AMNH, the ♀ holotype of *Gnaphosa turkenica*), Badakhz Reservation, near Olanzud Lake, salt-marsh, near to water, 30.05.1977, V.Ya. Fet.

**COMPARATIVE MATERIAL.** TMU ♀ (♀♂), Kherzer Area, Golopristinsky Distr., Chernomorski Reserve, Potievka island,
The genus *Gnaphosa* in the Crimea

Figs 6–7. The epigyne of *Gnaphosa betpaki* (paratype) from Kazakhstan: 6 — ventral view; 7 — dorsal view.

The genus *Gnaphosa* in the Crimea: 6 — ventrально; 7 — дорсальном.

salt-marsh, 2006.09.16, N.Yu. Polchaninova; 1 ♂ (ZISP), same area and date, Chernomorski Reserve, Solonozernaya region, bay coast, May 1985; Zelinskaya. The latter label does not correspond to the label data of *G. ukrainica* given by Ovtsharenko et al. [1992: p. 17] in the original description, viz. "male holotype from Potievka Island, Chernomorski Reserve, Kherson, Ukraine, USSR (July 9, 1987; N. Polchaninova), deposited in ZIL [=ZISP]." Thus, I examined the type specimen identified by V.I. Ovtsharenko, rather than the holotype of *G. ukrainica*. It is likely that the holotype is kept in the AMNH.

*G. alacris* Simon. 1878. FRANCE 1 ♂, 1 ♀ (MNHN, AR 9762; the lectotype and paralectotype). "Corse."

**DIAGNOSIS.** *G. ukrainica* is most similar to *G. alacris* (Figs 14–17); from most *Gnaphosa* species it can be distinguished by the extremely small body size (see Table 2), the remarkably wide proximal part of the embolus lacking tubercles (Figs 8–10) and the closely situated median epigynal ducts (Figs 12, 13).

**DESCRIPTION.** **MALE** (n = 1). **Measurements.** Total length 5.2; carapace 2.3 long and 1.8 wide. Diameters of the eyes and distances between them: AM 0.15, AL 0.12, PM 0.14, PL 0.12, AM-AM 0.02, AM-AL 0.0, PM-PM 0.03, PM-PL 0.09, AM-PM 0.06, AL-PL 0.08. Distance between anterior eyes and margin of clypeus: AM-clypeus 0.06, AL-clypeus 0.09. Length of leg segments:

<table>
<thead>
<tr>
<th></th>
<th>Femur</th>
<th>Patella + Tibia</th>
<th>Metatarsus</th>
<th>Tarsus</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leg I</td>
<td>1.8</td>
<td>2.6</td>
<td>1.4</td>
<td>0.9</td>
<td>6.7</td>
</tr>
<tr>
<td>Leg II</td>
<td>1.6</td>
<td>2.2</td>
<td>1.4</td>
<td>0.8</td>
<td>6.1</td>
</tr>
<tr>
<td>Leg III</td>
<td>1.4</td>
<td>1.7</td>
<td>1.2</td>
<td>0.8</td>
<td>5.1</td>
</tr>
<tr>
<td>Leg IV</td>
<td>2.0</td>
<td>2.6</td>
<td>2.0</td>
<td>1.0</td>
<td>7.5</td>
</tr>
</tbody>
</table>

Length of palpal segments: femur 0.8, patella 0.4, tibia 0.3, tarsus 0.6. Abdomen 3.0 long, 1.8 wide. Basal segment of anterior (inferior) spinnerets 0.3 long.

**Leg spination.** I — femur: d 1–1, pl 1; II — femur: d 1–1, pl 1; metatarsus: v-pl 1; III — femur: d 1–1, pl 1–1, rl 1–1; tibia: pl 1–1–1, rl 1–1, v 2–2–2a; metatarsus: pl 1–1–2, rl 1–2, v 2–2a. IV — femur: d 1–1, pl 1, rl 1; tibia: pl 1–1, rl 1–1–1, v 2–2–2a; metatarsus: pl 1–1–1, rl 1–2–1, v 2–2a.

**Coloration.** Carapace, sternum, legs and palps, abdomen are pale yellow-grey. Chelicerae, labium, palp endites, tarsi of legs I, II and palps, scutum of abdomen are light yellow-brown.

**Palm** as in Figs 8–10. Embolus without tubercles.

**FEMALE** (n = 1). **Measurements.** Carapace 2.4 long and 1.9 wide. Length of leg segments:

<table>
<thead>
<tr>
<th></th>
<th>Femur</th>
<th>Patella + Tibia</th>
<th>Metatarsus</th>
<th>Tarsus</th>
<th>Total</th>
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</thead>
<tbody>
<tr>
<td>Leg I</td>
<td>1.6</td>
<td>2.3</td>
<td>1.0</td>
<td>0.8</td>
<td>5.8</td>
</tr>
<tr>
<td>Leg II</td>
<td>1.5</td>
<td>2.0</td>
<td>1.2</td>
<td>0.8</td>
<td>5.6</td>
</tr>
<tr>
<td>Leg III</td>
<td>1.3</td>
<td>1.6</td>
<td>1.2</td>
<td>0.8</td>
<td>4.9</td>
</tr>
<tr>
<td>Leg IV</td>
<td>1.8</td>
<td>2.5</td>
<td>2.0</td>
<td>1.0</td>
<td>7.3</td>
</tr>
</tbody>
</table>

Length of palpal segments: femur 0.8, patella 0.4, tibia 0.3, tarsus 0.6. Abdomen 3.6 long, 2.2 wide. Basal segment of anterior (inferior) spinnerets 0.5 long.

**Leg spination.** I — femur: d 1–1, pl 1; II — femur: d 1–1, pl 1; metatarsus: v-pl 1; III — femur: d 1–1, pl 1–1, rl 1–1; tibia: pl 1–1–1, rl 1–1, v 2–2–2a; metatarsus: pl 1–1–2, rl 1–2, v 2–2a. IV — femur: d 1–1, pl 1, rl 1; tibia: pl 1–1, rl 1–1–1, v 2–2–2a; metatarsus: pl 1–1–1, rl 1–2–1, v 2–2a.
Table 2. Comparative measurements of some Gnaphosa species after different authors.

<table>
<thead>
<tr>
<th>Species</th>
<th>Gender</th>
<th>Carapace Length</th>
<th>Carapace Width</th>
<th>Other Measurements</th>
</tr>
</thead>
<tbody>
<tr>
<td>G. alacris, after Simon [1878]; Pyrenees</td>
<td>♂</td>
<td>3.5</td>
<td>3.4</td>
<td>1.7 - 3.2</td>
</tr>
<tr>
<td>G. alacris, type specimens, personal data; Pyrenees</td>
<td>♂</td>
<td>2.6</td>
<td>2.4</td>
<td>1.1 - 2.4</td>
</tr>
<tr>
<td>&quot;G. alacris&quot;, after Di Franco [1992]; Italy</td>
<td>♂</td>
<td>4.1</td>
<td>3.6</td>
<td>2 - 2.7</td>
</tr>
<tr>
<td>G. ukrainica, after Ovtsharenko et al. [1992]; Kherson Area</td>
<td>♂</td>
<td>3</td>
<td>2.8</td>
<td>1.4 - 2.1</td>
</tr>
<tr>
<td>G. turkmenica, after Ovtsharenko et al. [1992]; Turkmenistan</td>
<td>♂</td>
<td>3</td>
<td>2.8</td>
<td>1.4 - 2.1</td>
</tr>
<tr>
<td>G. ukrainica, personal data; the Crimea</td>
<td>♂</td>
<td>3</td>
<td>2.8</td>
<td>1.4 - 2.1</td>
</tr>
</tbody>
</table>

Coloration as in males. Scutum absent.

Epigyne as in Figs 11 - 13.

COMMENTS. A comparison of the G. ukrainica topotype with specimens from the Crimea revealed their identity. However, both palps of the topotype were crushed laterally. The figure by Ovtsharenko et al. [1992: fig. 49] is not quite exact; actually, the embolus is not curved as it is illustrated in the revision, but almost straight (Figs 8, 10) and it is not directed laterally, but apico-laterally.

A comparison of the ♂ holotype of G. turkmenica with the Crimean female of G. ukrainica collected together with males revealed their true identity. Therefore, G. turkmenica Ovtsharenko, Platnick et Song, 1992 is here synonymized with G. ukrainica Ovtsharenko, Platnick et Song, 1992.

A further comparison of the Ukrainian specimens of G. ukrainica (♂♀) with the ♂ lectotype and ♀ paralectotype of G. alacris revealed that they are distinctly different species. While examining the types of G. alacris, I found that the drawings of G. alacris by Di Franco [1992 (1994): figs 1 - 4] corresponded to the ♀ paralectotype, but not to the ♂ lectotype. On the contrary, the figures by Pesarini [2000: figs 12, 13] clearly corresponded to the ♂ lectotype, but not to the ♀ paralectotype. I do not know which species was illustrated both by Di Franco [1992 (1994)] as the male of G. alacris and by Pesarini [2000] as its female; however, they were certainly not G. alacris. Measurements of the specimens studied by Di Franco are remarkably smaller in comparison with the type specimens of G. alacris (see Table 2). It is also likely that the females studied by Di Franco do not belong to G. alacris either.

However, Francesca Di Franco [pers. comm.] disagrees and considers the identifications of G. alacris correct, be-

Figs 8 - 13. The copulatory organs of Gnaphosa ukrainica from the Crimea: 8 — male palp, ventral view; 9 — male palp, retrolateral view; 10 — bulb, ventral view; 11 — epigyne, ventral view; 12, 13 — epigyne, dorsal views (variants of views).

Рис. 8 - 13. Копулятивные органы Gnaphosa ukrainica из Крыма: 8 — пальп самца, вентрально; 9 — пальп самца, ретролатерально; 10 — булбус, вентрально; 11 — эпигина, вентрально; 12, 13 — эпигина, дорсально (в немного разных ракурсах).
cause (1) she compared her specimens with those taken from Corsica (most probably identified by Simon), and (2) the differences in the carapace sizes between her specimens and the type specimens of *G. alacris* are, in her opinion, insignificant. This matter needs further attention in the future.

**TYPE LOCALITY.** Ukraine, Kherson Area, Golopristinsky Dist., Chernomorsky Reservation [Ovtsharenko et al., 1992].

**DISTRIBUTION.** Ukraine (Kherson Area, the Crimea); southern Turkmenistan. *G. ukranica* is a new species record for the Crimean fauna.

**PHENOLOGY.** $\sigma^\circ$ — IV–V; $\varphi$ — V.

*Gnaphosa cumensis* Ponomarjov, 1981

Figs 18–28.

*Gnaphosa cumensis* Ponomarjov, 1981: 57–59, fig. 3 ($\varphi$) (the holotype deposited in ZISP, lost, not examined; 2 $\varphi$ paratypes in ZISP, examined).

*Gnaphosa cumensis*: Ovtsharenko et al., 1992: 10–12, figs 9–10, 23–26 ($\varphi$).

**MATERIAL UKRAINE:** 214 of $\sigma^\circ$, 90 $\varphi$ (TNU), the Crimea, Saky Distr., Pribrezhnaya railway station, 45°09'31"N 33°30'04"E, c. 1 m a.s.l., humid salt-marsh, Salicornia europea, Halocnemum strobilaceum, 27.03–18.12.2000; 2 $\sigma^\circ$, 1 $\varphi$ (TNU), sp., halophyte meadow, 10 pitsfalls, 8.06–3.07.2000; 1 $\sigma$ (ZISP), Kherson Area, Golopristinsky Dist., Chernomorsky Reservation, Solonchak region, steppe, 23.05.1985; leg. Zeilinskaya. RUSSIA, Kalmykia. 2 $\varphi$ (ZISP, the paratypes), Chornozemelsk Area, Rybachyi Vil, coast of salt lake, 15–23.06.1974. L.P. Ponomarjov. MONGOLIA: 2 $\sigma^\circ$, 1 $\varphi$ (ZISP, N. 3-927), Bayan Khongor, coast of Orog-Nuur Lake, 10.08.1916, leg. Kirichenko.

**DIAGNOSIS.** *G. cumensis* is similar to *G. zeugitana* Pavesi, 1880, *G. dolosa* O. Herman, 1879, *G. juconda* Thorell, 1875 and *G. sauroidea* Ovtsharenko, Platnick et Song, 1992, but can be separated from them by the pale coloration, the embolus lacking tubercles (Figs 19–23) and the rectangular contours of the lateral pockets (Figs 25–28) (not triangular as at *G. sauroidea* and *G. dolosa*, see Figs 34, 36, 42 or rounded as at *G. zeugitana* [Di Franco F. 1992 (1994): 199, figs 7–8]). *G. cumensis* and *G. zeugitana* are characterized by the long and anteriorly directed median epigynal ducts (Figs 26, 28), *G. sauroidea* and *G. dolosa* possess short and laterally directed ducts (Figs 35, 37, 43–44).

**DESCRIPTION.** MALE (n = 15). Measurements. Total length 9.0–14.1 (9.5); carapace 3.9–6.2 (4.7) long and 3.0–4.7 (3.6) wide. Diameters of the eyes and distances between them: AM 0.15–0.22 (0.18), AL 0.15–0.21 (0.18), PM 0.19–0.27 (0.25), PL 0.14–0.19 (0.17), AM-AM 0.12–0.22 (0.16), AL-AL 0.03–0.12 (0.07), PM-PM 0.02–0.12 (0.05), PL-PL 0.16–0.33 (0.23), AM-PM 0.18–0.28 (0.22), AL-PL 0.20–0.39 (0.27). Distance between anterior eyes and margin of clypeus: AM-clypeus 0.26–0.52 (0.35), AL-clypeus 0.20–0.34 (0.27). Length of leg segments:

<table>
<thead>
<tr>
<th>Femur</th>
<th>Patella + Tibia</th>
<th>Metatarsus</th>
<th>Tarsus</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leg I</td>
<td>2.9-4.1 (3.5)</td>
<td>4.0-5.8 (4.8)</td>
<td>2.0-2.9 (2.4)</td>
<td>1.4-1.8 (1.6)</td>
</tr>
<tr>
<td>Leg II</td>
<td>2.7-3.9 (3.2)</td>
<td>3.6-5.1 (4.3)</td>
<td>1.9-2.8 (2.3)</td>
<td>1.2-1.8 (1.3)</td>
</tr>
<tr>
<td>Leg III</td>
<td>2.8-3.2 (2.7)</td>
<td>2.8-3.8 (3.2)</td>
<td>2.0-2.8 (2.4)</td>
<td>1.2-1.7 (1.4)</td>
</tr>
<tr>
<td>Leg IV</td>
<td>2.8-4.1 (3.6)</td>
<td>3.6-5.2 (4.5)</td>
<td>2.7-4.0 (3.6)</td>
<td>1.5-2.0 (1.7)</td>
</tr>
</tbody>
</table>

Length of palpal segments: femur 1.3–1.9 (1.6), patella 0.6–1.0 (0.8), tibia 0.5–0.7 (0.6), tarsus 0.9–1.3 (1.0). Abdomen 4.8–8.2 (5.6) long, 2.1–4.6 (3.0) wide. Basal segment of anterior (inferior) spinnerets 0.8–1.0 (0.9) long.

**Leg spination.** I — femur: d 1–1, pl 1. II — femur: d 1–1 or 1, pl 1–1 or 1–1 or 1–1 or 1; metatarsus: v-pl or v 2. III — femur: d 1–1, pl 1–1, rl 1–1 or 0; patella: rl 1 or 1–1;ibia: d 1, pl 2 or 1–1 or 2–1–1, rl 1–1 or 2–1 or 1–1 or 1–1 or 2–1–1, v 2–2–2–2a; metatarsus: 11–16 (14) spines. IV — femur: d 1–1, pl 1 or 1–1 or 0, rl 1 or 1–1 or 0; patella: rl 1 or 0;ibia: pl 1–1 or 1–1 or 1–1–1 or 0, rl 1–1 or 2–1–1 or 1–1–1 or 2–1–1, v 2–2–2–2a or 1–2–2–2a or 2–1–2–2a; metatarsus: 13–17 (15) spines.

**Coloration.** Carapace light yellow-brown. Ocular area, chelicerae, labium, palpal endites, sternum and coxae of legs I dark brown. All leg segments light yellow-brown. Palp: coxa, proximal femoral region and tarsus dark brown; distal femoral region, patella and tibia light yellow-brown. Abdomen grey, without scutum.

**Epigyne** as in Figs 25–28.

**TYPE LOCALITY.** RUSSIA: Kalmykia, Chornozemelsky Distr., Rybachyi Vil. [Ponomarjov, 1981].
Figs 14–17. The copulatory organs of *Gnaphosa alacris* (male lectotype and female paralectotype) from the Pyrenees: 14 — male palp, ventral view; 15 — male palp, retrolateral view; 16 — epigyne, ventral view; 17 — epigyne, dorsal view.

Рис. 14–17. Копулятивные органы *Gnaphosa alacris* (самец лектотип и самка паралектотип) с Пиренеев: 14 — пальпа самца, вентрально; 15 — пальпа самца, ретролатерально; 16 — эпигина, вентрально; 17 — эпигина, дорсально.
Figs 18–28. The copulatory organs of *Gnaphosa cuneata* (25, 26 — paratypes from Kalmykiya; 18–23, 27, 28 — specimens from Crimea; 24 — specimen from Mongolia): 18, 22 — male palps, retrolateral view; 19, 21 — male palps, ventral view; 20 — male palp, prolateral view; 23 — bulbus, ventral view; 24 — 1st al apophysis; 25, 27 — epigynes, ventral views; 26, 28 — epigynes, dorsal views.

**DISTRIBUTION.** Mongolia, Russia (Kalmykiya, Vologod Area), Ukraine (Kherson Area — see material; Donetska Area, the Crimea — new record) [Ponomarjov, 1981; Ovtsharenko et al., 1992; Prokopenko, 2002].

*G. cuneata* is a new species record for the Crimean fauna.

**PHENOLOGY.** **♂** — IV—XII; **♀** — V—XI.

**Gnaphosa saurica** Ovtsharenko, Platnick et Song, 1992

Figs 29–46.

*G. saurica* Ovtsharenko, Platnick et Song, 1992: 8–9, figs 15–18 (♂♀) (the ♂ holotype and the ♀ paratypes in ZISP and in AMNH, examined).


*G. saurica*: Eysunin & Efimik, 1996: 107, figs 6–12 (illustrated and compared the ♀ of *G. dolosa sensu* Eysunin & Efimik [1996] and the ♂♀ of *G. saurica*).

**MATERIAL.** UKRAINE: the Crimea, 1 ♂ (TNU), Simferopol Dist., near Lohovce, 707.1996, S.A. Dyadyushkin; 1 ♂ (TNU), Simferopol Dist., Hordeum plantation, pitfalls, 14–31.05.1997; 24 ♂♂, 3 ♀♀ (TNU), Saky Dist., Pribrezhnya railway station, 45°09′31″ N 33°30′04″ E, c. 1 m a.s.l., humid salt marsh, Salicornia europaea, Halocnemum strobilaceum, 10 pitfalls, 30.04–27.08.2000; 1 ♂ (TNU), sp., halophyte meadow, 10 pitfalls, 8–24.06.2000; 1 ♂ (TNU), sp., Artemisia steppe, 10 pitfalls, 9–19.05.2000; 4 ♂♂, 1 ♀ (TNU), sp., Leymus salustos on the sand, 10 pitfalls, 9–19.05.2000.


**DIAGNOSIS.** Ovtsharenko et al. [1992] described *G. saurica* from one male and two females. Levy [1995] examined the ♀ paratypes of *G. saurica* from Kazakhstan and assigned them to *G. barroisi* Simon, 1892.

It is impossible to estimate the variation of diagnostic characters (e.g. the number and shape of teeth at the embolic base) based on a single male. In the diagnosis, the "double-headed tubercle" of the embolus was indicated. However, V.I. Ovtsharenko mentioned a high degree of variability of the tubercles at the embolus base (V.I. Ovtsharenko, pers. comm.) and my data are concordant with his data (see Figs 31–33, 40, 41, 45, 46). Tubercles at the base of the embolus are highly variable in shape and number, so it is impossible to distinguish the males of *G. dolosa* and *G. saurica* based on the diagnosis given by Ovtsharenko et al. [1992]. The epigynal structure is also variable, so that the females of *G. dolosa, G. saurica* and *G. jucunda* are indistinguishable by their epigynes. These species are better distinguished by measurements, but a clear hiatus between them is also absent (see Table 3).

**DESCRIPTION.** MALE (n = 15). **Measurements.** Total length 5.0–7.5 (6.1); carapace 2.2–3.6 (3.1) long and 1.8–2.9 (2.4) wide. Diameters of the eyes and distances between them: AM 0.10–0.14 (0.12), AL 0.14–0.18 (0.15), PM 0.12–
Table 3. Comparative measurements of some *Gnaphosa* species after different authors.

<table>
<thead>
<tr>
<th></th>
<th>G. <em>juunda</em>, after Thorell [1875b]; the Crimea</th>
<th>G. <em>dolosa</em>, after Heeman [1879]; Romania</th>
<th>G. <em>saucia</em>, after Ovtsharenko et al. [1992]; Tuva or East Kazakhstan</th>
<th>G. <em>saucia</em>, personal data; the Crimea</th>
<th>G. <em>saucia</em> (G. <em>dolosa</em> sensu Ovtsharenko), personal data; Abkhazia</th>
</tr>
</thead>
<tbody>
<tr>
<td>Φ, total length</td>
<td>10.25</td>
<td>10</td>
<td>8.7</td>
<td>5.6-6.6</td>
<td>7.0-11.2</td>
</tr>
<tr>
<td>Φ, carapace length</td>
<td>5.0</td>
<td>4.8</td>
<td>3.7</td>
<td>2.6-3.2</td>
<td>3.0-4.3</td>
</tr>
<tr>
<td>Φ, Leg I</td>
<td>13</td>
<td>12</td>
<td>?</td>
<td>5.7-7.4</td>
<td>6.7-10.2</td>
</tr>
<tr>
<td>Φ, Leg II</td>
<td>12.25</td>
<td>11.3</td>
<td>?</td>
<td>5.2-6.8</td>
<td>6.4-9.6</td>
</tr>
<tr>
<td>Φ, Leg III</td>
<td>11.5</td>
<td>9.6</td>
<td>?</td>
<td>4.5-6.0</td>
<td>5.8-9</td>
</tr>
<tr>
<td>Φ, Leg IV</td>
<td>16.6</td>
<td>15.5</td>
<td>?</td>
<td>6.8-8.8</td>
<td>8.5-12.2</td>
</tr>
<tr>
<td>Ψ, total length</td>
<td>?</td>
<td>10</td>
<td>6.6</td>
<td>5.0-7.5</td>
<td>5.9-9.5</td>
</tr>
<tr>
<td>Ψ, carapace length</td>
<td>?</td>
<td>5.2</td>
<td>3.1</td>
<td>2.2-3.6</td>
<td>2.6-4.1</td>
</tr>
</tbody>
</table>

0.18 (0.15), PL 0.12–0.14 (0.13), AM–AM 0.04–0.14 (0.10), AM–AL 0.02–0.04 (0.03), PM–PM 0.02–0.07 (0.04), PM–PL 0.08–0.26 (0.18), AM–PM 0.09–0.21 (0.14), AL–PL 0.15–0.28 (0.21). Distance between anterior eyes and margin of clypeus: AM-clypeus 0.10–0.21 (0.16), AL-clypeus 0.08–0.16 (0.12). Length of leg segments.

<table>
<thead>
<tr>
<th></th>
<th>Femur + Patella + Tibia</th>
<th>Metatarsus</th>
<th>Tarsus</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Leg I</strong></td>
<td>1.6–2.5 (2.2)</td>
<td>2.2–3.5 (3.0)</td>
<td>1.1–2.0 (1.5)</td>
<td>0.9–1.2 (1.0)</td>
</tr>
<tr>
<td><strong>Leg II</strong></td>
<td>1.4–2.4 (2.0)</td>
<td>1.9–3.1 (2.6)</td>
<td>1.0–1.6 (1.4)</td>
<td>0.8–1.1 (1.0)</td>
</tr>
<tr>
<td><strong>Leg III</strong></td>
<td>1.2–2.0 (1.6)</td>
<td>1.6–2.3 (2.0)</td>
<td>1.0–1.6 (1.4)</td>
<td>0.7–1.0 (0.9)</td>
</tr>
<tr>
<td><strong>Leg IV</strong></td>
<td>1.8–2.7 (2.2)</td>
<td>2.3–3.4 (2.9)</td>
<td>1.6–2.5 (2.1)</td>
<td>1.0–1.4 (1.1)</td>
</tr>
</tbody>
</table>

Length of palpal segments: femur 0.8–1.3 (1.1), patella 0.4–0.6 (0.5), tibia 0.2–0.4 (0.4), tarsus 0.6–0.9 (0.8). Abdomen 2.8–3.8 (3.2) long, 1.4–2.4 (1.9) wide. Basal segment of anterior (inferior) spinners 0.4–0.8 (0.6) long.

**Leg spination.** I — femur: d 1–1, pl 1. II — femur: d 1–1, pl 1–1 or 1 (2 of 15 specimens); tibia: 0 or v-pl 1a (1 of 15 specimens); metatarsus: v-pl 1. III — femur: d 1–1, pl 1–1, rl 1–1; patella: rl 1 or 0 (1 of 15 specimens); tibia: pl 1–1 or 2–1 (2 of 15 specimens) or 1–1–1 (1 of 15 specimens), rl 1–1 or 2–1–2 (6 of 15 specimens) or 2–1–1 (3 of 15 specimens), v 2–2–2a; metatarsus: pl 1–2, rl 1–2 or 1–1–2 (3 of 15 specimens), v 2–2–1–2a or 2–2–2a (5 of 15 specimens) or 2–2–2a (1 of 15 specimens). IV — femur: d 1–1 or 1–1–1 (1 of 15 specimens), pl 1–1 or 1 (2 of 15 specimens), rl 1 or 1–1 (1 of 15 specimens); tibia: d 0 or 1 (1 of 15 specimens), pl 1–1 or 2–2–1 (1 of 15 specimens), rl 1–1–1 or 1–1–1–1 (1 of 15 specimens) or 1–2–2–1–1 (1 of 15 specimens) or 2–1–2–1 (1 of 15 specimens), v 2–2–2a or 2–1–2–2–1–2a (1 of 15 specimens); metatarsus: pl 1–2 or 2–2 (1 of 15 specimens) or 1–2–2 (1 of 15 specimens) or 1–2–2–1–2 (1 of 15 specimens), rl 1–1–2 or 1–2 (3 of 15 specimens) or 1–1–1–2 (1 of 15 specimens) or 1–2–2 (1 of 15 specimens), v 2–1–2 or 1–1–2a (2 of 15 specimens) or 1–2–1–1–2a (1 of 15 specimens) or 2–1–1–2a (1 of 15 specimens) or 1–2–1–1–2a (1 of 15 specimens).  

**Coloration.** Carapace brown. Ocular area, chelicerae, labium, palp endites, sternum and coxae of legs I very dark brown. All leg segments brown. Palp: coxa, proximal femoral region and tarsus dark brown; distal femoral region, — patella and tibia brown. Abdomen grey, scutum brown; book-lungs yellow-brown.

**Palp as in Figs 29–33, 38–41, 45, 46.**

**FEMALE (n = 5). Measurements.** Total length 5.6–6.6 (6.2); carapace 2.6–3.2 (3.0) long and 2.0–2.5 (2.3) wide. Diameters of the eyes and distances between them: AM 0.10–0.14 (0.11), AL 0.14–0.18 (0.15), PM 0.12–0.15 (0.14), PL 0.12–0.15 (0.13), AM–AM 0.08–0.14 (0.10), AM–AL 0.03–0.04 (0.03), PM–PM 0.03–0.06 (0.04), PM–PL 0.16–0.22 (0.20), AM–PM 0.12–0.18 (0.16), AL–PL 0.18–0.26 (0.22). Distance between anterior eyes and margin of clypeus: AM-clypeus 0.14–0.18 (0.16), AL-clypeus 0.09–0.14 (0.10). Length of leg segments:

<table>
<thead>
<tr>
<th></th>
<th>Femur + Patella + Tibia</th>
<th>Metatarsus</th>
<th>Tarsus</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Leg I</strong></td>
<td>1.7–2.2 (2.0)</td>
<td>2.2–2.8 (2.7)</td>
<td>1.0–1.4 (1.3)</td>
<td>0.8–1.0 (0.9)</td>
</tr>
<tr>
<td><strong>Leg II</strong></td>
<td>1.5–2.0 (1.8)</td>
<td>2.0–2.6 (2.4)</td>
<td>1.0–1.3 (1.2)</td>
<td>0.8–1.0 (0.9)</td>
</tr>
<tr>
<td><strong>Leg III</strong></td>
<td>1.2–1.9 (1.6)</td>
<td>1.6–2.0 (1.9)</td>
<td>1.0–1.4 (1.2)</td>
<td>0.7–0.9 (0.8)</td>
</tr>
<tr>
<td><strong>Leg IV</strong></td>
<td>1.8–2.2 (2.1)</td>
<td>2.4–3.1 (2.9)</td>
<td>1.6–2.3 (2.1)</td>
<td>0.9–1.1 (1.0)</td>
</tr>
</tbody>
</table>

Length of palpal segments: femur 0.8–1.0 (1.0), patella 0.5, tibia 0.3–0.4 (0.4), tarsus 0.6–0.8 (0.7). Abdomen 3.2–4.0 (3.6) long, 2.2–2.5 (2.4) wide. Basal segment of anterior (inferior) spinners 0.6–0.7 (0.7) long.

**Leg spination.** I — femur: d 1–1 or 1 (1 of 5 specimens), pl 1. II — femur: d 1–1, pl 1–1 or 1 (1 of 5 specimens); metatarsus: v-pl 1. III — femur: d 1–1, pl 1–1, rl 1–1;
Figs 29–37. The copulatory organs of *Gnaphosa saurica* from the Crimea: 29 — male palp, ventral view; 30 — bulb, ventral view; 31–33 — variants of embolus shape; 34, 36 — epigynes, ventral views; 35, 37 — epigynes, dorsal views.

Рис. 29–37. Копулятивные органы *Gnaphosa saurica* из Крыма: 29 — пальца самца, вентрально; 30 — бульбук, вентрально; 31–33 — варианты строения эмболюса; 34, 36 — эпигинь, вентрально; 35, 37 — эпигинь, дорсально.
Figs 38–44. The copulatory organs of Gnaphosa saurica from Caucasus (38, 39, 42–44 — specimens from Abkhazia; 40, 41 — specimens from Azerbaijan). 38 — male palp, ventral view; 39 — retrolateral view; 40, 41 — embolar teeth variants; 42 — epigyne, ventral view; 43, 44 — epigyne, dorsal views (variants).


Patella: rl 1 or 0 (2 of 5 specimens); tibia: pl 1–1 or 1–1–1 (1 of 5 specimens); rl 1–1, v 2–2–2a; metatarsus: pl 1–2, rl 1–2, v 2–1–2a or 2–2a (1 of 5 specimens) or 1–2–2a (1 of 5 specimens) or 2–2–2a (1 of 5 specimens). IV — femur: d 1–1, pl 1–1 or 1 (2 of 5 specimens), rl 1; tibia: pl 1–1, rl 1–1–1, v 2–2–2a; metatarsus: pl 1–2 or 2–2 (2 of 5 specimens), rl 1–1–2, v 2–1–2a.

Coloration. As in males. Scutum absent.

Epigyne as in Figs 34–37, 42–44.

COMMENTS. There are a couple of interesting observations. (1) Ovtsharenko et al. (1992) recorded G. dolosa from two females (ZISP, examined) from Andreevka (Dnepropetrovsk Region), which according to my opinion are better assigned to G. saurica (see above under "Material"). Esyunin
and Efimik [1996] recorded *G. saurica* from three females (PSU, not examined) from Botovo (Dnepropetrovsk Area). Thus, both records were made from the same Dnepropetrovsk region of Ukraine. (2) In the same work, Ovtsharenko et al. [1992] recorded *G. dolosa* from one male and five females from Sochi (Adler) and *G. jucunda* Thorell, 1875 from a single female also from Sochi (Khosta). Again, both records were made virtually from the same locality.

It seems unlikely that pairs of such closely related species occur together sympatrically. In other words, it cannot be excluded that the forms described as *G. dolosa*, *G. saurica*, and *G. jucunda* are actually variants of one, polytypic species. Unfortunately, only the type of *G. saurica* have so far been re-examined by the author and they turned out to be identical to the specimens newly collected from the Crimea. Therefore, the Crimean species is here named *G. saurica*. The problem of an apparent synonymy of the three names mentioned above, as well as *G. barroisi* Simon, 1882 (the latter was synonymized with *G. dolosa* by Ovtsharenko et al. [1992], contra Levy [1995]), should be properly addressed in the future.

**TYPE LOCALITY.** Kazakhstan, East-Kazakhstan Area, Saur Mt. Range [Ovtsharenko et al., 1992].

**DISTRIBUTION.** According to the present revised data, *G. saurica* occurs in Kazakhstan, Russia (Orenburg Region), South Ukraine (the Crimea, Dnepropetrovsk Area, Donetsk Area), Georgia and Azerbaijan. *G. saurica* is a new species record for the Crimean fauna.

The range of the *dolosa-jucunda-saurica-barroisi* complex includes France, the Balkans, Crete, Romania, Turkey, Syria, Ukraine (the Crimea, Dnepropetrovsk Region, Donetsk Area), Russia (Chelyabinsk Area, Kalmykia, Krasnodar and Orenburg Regions), Georgia, Azerbaijan, Turkmenist, Kazakhstan [Thorell, 1875a; Herman, 1879; Charkonov, 1932; Tyshchenko, 1971; Ovtsharenko, 1982; Ovtsharenko, et al., 1992; Esyunin, Efimik, 1996; Mikhailov, 1997, 1998; Chatzaki, et al., 2002; Tunaev, Esyunin, 2002].

**PHENOLOGY.** $\varphi\varphi$ — V-VII; $\varphi$ — VI-VIII.

### Gnaphosa jucunda Thorell, 1875

*Gnaphosa jucunda* Thorell, 1875a: 85 (♀) (the ♂ holotype in the Helsinki Zoological Museum, not examined).

*Gnaphosa jucunda* Thorell, 1875b: 104 (♀); Ovtsharenko, et al., 1992: 19, figs 55-56 (illustrated $\varphi$).

**MATERIAL.** No specimens identified as *G. jucunda* were available.

**TYPE LOCALITY:** Ukraine, the Crimea, c. 4 km SSW of Yalta, Oreanda ("Orianda") [Thorell, 1875ab]

**DISTRIBUTION.** Ukraine (the Crimea), Russia (Krasnodar Region) [Thorell, 1875ab; Ovtsharenko et al., 1992].

**COMMENTS.** It is likely that the species name *G. dolosa* is a junior synonym of *G. jucunda* (see above "Comments" under *G. saurica*).

### The rufula group

**Gnaphosa moesta** Thorell, 1875

Figs 47-51.

*Gnaphosa moesta* Thorell, 1875a: 84 (♀) (the ♂ holotype in Naturhistoriska Riksmuseet, Stockholm, not examined).

*Gnaphosa moesta* Thorell, 1875b: 99—100 (♂); Ovtsharenko, et al., 1992 (pro parte): 32, figs 107-110 (illustrated ♂, the ♂ was misidentified).

**MATERIAL.** Ukraine: the Crimea, 2 $\varphi \varphi$ (TNU), Sevastopol Dist., Mt. massif near Foros, 7.07.1997; 1 $\varphi$ (TNU), same

COMPARATIVE MATERIAL OF G. opaca Herman, 1879. UKRAINE: 1 ♀ (KVE; palp — in TNU), Dnepropetrovsk Region, Piyatikhatkhi District, 3–4 km N of Zheltovo, sunflower field, in cracks of soil, 25.05.1995, K.V. Evtushenko.

DIAGNOSIS. G. moesta is closely related to G. opaca, but its males can be distinguished from it by the peculiar shape of the embolic base, viz. (1) the strong prolateral, fan-like structure (Figs 48, 49) (poorly developed in G. opaca [see Ovtsharenko et al., 1992: fig. 103]), (2) the large retro-lateral tubercle (Figs 48, 49) (absent in G. opaca [Ovtsharenko et al., 1992: fig. 103]), (3) the absence of a bulge at the proximal part of the embolus (Fig. 48) (present in G. opaca [Ovtsharenko et al., 1992: fig. 103]). The epignyes of G. moesta and G. opaca are quite similar, and I have been unable to distinguish any differences between the epignyes of G. moesta (Figs 50, 51) and that of G. opaca as shown by Ovtsharenko et al. [1992].

DESCRIPTION. MALE (n = 15). Measurements. Total length 6.0–8.2 (7.3); carapace 2.8–3.9 (3.5) long and 2.15–3.1 (2.7) wide. Diameters of the eyes and distances between them: AM 0.09–0.15 (0.11), AL 0.15–0.21 (0.17), PM 0.10– 0.18 (0.14), PL 0.12–0.15 (0.14), AM-AM 0.06–0.10 (0.09), AM-AL 0.01–0.04 (0.02), PM-PM 0.03–0.09 (0.04), PM-PL 0.14–0.22 (0.19), AM-PM 0.12–0.18 (0.16), AL-PL 0.18–0.27 (0.23). Distance between anterior eyes and margin of clypeus: AM-clypeus 0.16–0.38 (0.26), AL-clypeus 0.09–0.27 (0.18). Length of leg segments:

<table>
<thead>
<tr>
<th>Femur</th>
<th>Patella + Tibia</th>
<th>Metatarsus</th>
<th>Tarsus</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leg I</td>
<td>1.8–2.6 (2.3)</td>
<td>2.4–3.4 (3.0)</td>
<td>1.3–1.8 (1.6)</td>
<td>0.9–1.4 (1.2)</td>
</tr>
<tr>
<td>Leg II</td>
<td>1.8–2.4 (2.2)</td>
<td>2.2–3.0 (2.7)</td>
<td>1.3–1.8 (1.6)</td>
<td>1.0–1.4 (1.2)</td>
</tr>
<tr>
<td>Leg III</td>
<td>1.6–2.2 (2.0)</td>
<td>2.0–2.7 (2.4)</td>
<td>1.5–2.0 (1.8)</td>
<td>0.9–1.2 (1.1)</td>
</tr>
<tr>
<td>Leg IV</td>
<td>2.1–2.8 (2.6)</td>
<td>2.8–3.7 (3.3)</td>
<td>2.4–3.2 (2.8)</td>
<td>1.2–1.9 (1.4)</td>
</tr>
</tbody>
</table>

Length of palpal segments: femur 1.0–1.3 (1.2), patella 0.6–0.7 (0.7), tibia 0.3–0.5 (0.4), tarsus 1.1–1.4 (1.3). Abdomen: 3.0–4.6 (3.8) long, 1.8–2.6 (2.2) wide. Basal segment of anterior (inferior) spinnerets 0.7–1.0 (0.9) long.

Leg spination. I — femur: d 1–1, pl 1; tibia: v-pl 1; metatarsus: v 2. II — femur: d 1–1, pl 1–1 (11 of 15 specimens)
The genus *Gnaphosa* in the Crimea

Figs 47–51. The copulatory organs of *Gnaphosa moesta* from the Crimea: 47 — tibial apophysis, retrolateral view; 48 — male palp, ventral view; 49 — male palp, prolateral view; 50 — epigyne, ventral view; 51 — epigyne, dorsal view.

Рис. 47–51. Копулятивные органы *Gnaphosa moesta* из Крыма: 47 — отросток гимен, ретрометарапофис; 48 — пальпа самца, вентрально; 49 — пальпа самца, пролатерально; 50 — эпигине, вентрально; 51 — эпигине, дорсально.

or 1 (4 of 15 specimens); tibia: v-pl 1a (9 of 15 specimens) or v 2a (2 of 15 specimens) or v 1–2a (2 of 15 specimens) or v-pl 1–1a (1 of 15 specimens) or v-rl 1a (1 of 15 specimens); metatarsus: v 2 (14 of 15 specimens) or v-pl 1 (1 of 15 specimens); III — femur: d 1–1 (12 of 15 specimens) or 1–1–1 (3 of 15 specimens), pl 1–1 (13 of 15 specimens) or 1 (2 of 15 specimens), rl 1–1; patella: rl 1 (12 of 15 specimens) or pl 1, rl 1 (3 of 15 specimens); tibia: d 1 (13 of 15 specimens) or 1–1 (1 of 15 specimens) or 0 (1 of 15 specimens), pl 2–1–1 (14 of 15 specimens) or 2–1–2 (1 of 15 specimens), rl 2–1–1 (12 of 15 specimens) or 1–1–1 (3 of 15 specimens), v 2–2–2a; metatarsus: pl 1–2–2, rl 1–2–2 (13 of 15 specimens) or 1–1–2 (1 of 15 specimens) or 2–2–2 (1 of 15 specimens), v 2–2–2a (10 of 15 specimens) or 2–1–2a (5 of 15 specimens). IV — femur: d 1–1, pl 1–1 (11 of 15 specimens) or 1 (4 of 15 specimens), rl 1–1 (9 of 15 specimens) or 1 (6 of 15 specimens); patella 0 (12 of 15 specimens) or rl 1 (3 of 15 specimens); tibia: d 1 (6 of 15 specimens) or 0 (9 of 15 specimens), pl 2–1–1, rl 2–1–1, v 2–2–2a; metatarsus: pl 1–2–2 (14 of 15 specimens) or 1–1–2 (1 of 15 specimens), rl 1–2–2 (13 of 15 specimens) or 1–2–1–2 (2 of 15 specimens), v 2–2–2a.

*Coloration* as in males. No scutum.

*Epigyne* as in Figs 50, 51.

TYPE LOCALITY. Ukraine, the Crimea, near Simferopol [Thorell, 1875a: 84; 1875b: 99–100].
The lugubris group

*Gnaphosa taurica* Thorell, 1875

Figs 52–57.


DIAGNOSIS. *G. taurica* is closely related to *G. occidentalis* Simon, 1878 and *G. lugubris* (C. L. Koch, 1839), but its males are easily distinguishable from the two aforementioned and other *Gnaphosa* species by the specific shape of the median apophysis and the apophyses arising from the embical base, combined with the bifurcated tubial apophysis (Figs 52–55). Females of *G. taurica* are characterized by the rounded epigynial hood and by the specific shape of the furrows at the base of the epigynal midpiece (Figs 56, 57).

DESCRIPTION. MALE (n = 15). Measurements. Total length 9.9–12.1 (10.8); carapace 4.5–5.4 (4.9) long and 3.5–4.2 (3.9) wide. Diameter of the eyes and distances between them: AM 0.14–0.16 (0.14), AL 0.18–0.24 (0.21), PM 0.14–0.26 (0.20), PL 0.15–0.21 (0.17), AM-AM 0.09–0.15 (0.13), AM-AL 0.04–0.08 (0.05), PM-PM 0.03–0.08 (0.05), PM-PL 0.24–0.32 (0.28), AM-PM 0.18–0.26 (0.22), AL-PL 0.26–0.39 (0.32). Distance between anterior eyes and margin of clypeus: AM-clypeus 0.32–0.40 (0.37), AL-clypeus 0.22–0.32 (0.27). Length of leg segments:

<table>
<thead>
<tr>
<th>Femur</th>
<th>Patella + Tibia</th>
<th>Metatarsus</th>
<th>Tarsus</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Log I</td>
<td>3.2–3.6 (3.4)</td>
<td>4.0–4.8 (4.4)</td>
<td>2.1–2.5 (2.3)</td>
<td>1.6–1.8 (1.7)</td>
</tr>
<tr>
<td>Log II</td>
<td>2.9–3.3 (3.0)</td>
<td>3.7–4.2 (3.9)</td>
<td>2.0–2.4 (2.2)</td>
<td>1.5–1.7 (1.6)</td>
</tr>
<tr>
<td>Log III</td>
<td>2.5–2.9 (2.7)</td>
<td>3.0–3.6 (3.2)</td>
<td>2.0–2.6 (2.4)</td>
<td>1.1–1.5 (1.4)</td>
</tr>
<tr>
<td>Log IV</td>
<td>3.0–3.8 (3.5)</td>
<td>3.9–4.9 (4.4)</td>
<td>3.0–3.8 (3.6)</td>
<td>1.5–1.9 (1.7)</td>
</tr>
</tbody>
</table>

Length of palpal segments: femur 1.7–2.0 (1.8), patella 1.0, tibia 0.4–0.7 (0.6), tarsus 1.7–2.0 (1.8). Abdomen 5.3–6.2 (5.8) long, 2.6–4.3 (3.4) wide. Basal segment of anterior (inferior) spinnerets 0.9–1.1 (1.0) long.

Leg spination. I — femur: d 1–1, pl 1, rl 0 or 1 (1 of 15 specimens); tibia: 0 or v-pl 1a (6 of 15 specimens); metatarsus: v 2 or v-pl 1a (1 of 15 specimens). II — femur: d 1–1, pl † 1–1; tibia: v-pl 1a or v 2a (1 of 15 specimens) or 0 (2 of 15 specimens); metatarsus: v 2. III — femur: d 1–1, pl 1–1, rl 1–1; patella: rl 1; tibia: d 1, pl 2–1 or 1–1 (6 of 15 specimens), rl 1–1 or 2–1 (2 of 15 specimens) or 1–1 (3 of 15 specimens), v 2–2–2a; metatarsus: d 0 or 1 (1 of 15 specimens), pl 1–2 or 1–1 (2 of 15 specimens) or 1–2–2–2 (1 of 15 specimens), rl 1–1–2 or 1–1–2 (1 of 15 specimens) or 1–1–1 (2 of 15 specimens) or 1–1–2–2 (1 of 15 specimens). IV — femur: d 1–1, pl 1–1 or 1 (2 of 15 specimens) or 0 (1 of 15 specimens), rl 1–1 or 2 (2 of 15 specimens); patella: 0 or rl 1 (2 of 15 specimens); tibia: pl 2–1 or 1–1–1 (5 of 15 specimens) or 1 (1 of 15 specimens), rl 2–1–1 or 1–1–1 (2 of 15 specimens) or 2–1–2 (1 of 15 specimens), v 2–2–2a; metatarsus: pl 1–2 or 2–2–2 (1 of 15 specimens) or 1–2 (1 of 15 specimens), rl 1–2 or 1–2–1 (1 of 15 specimens) or 1–2 (1 of 15 specimens), v 2–2–2a or 1–2–2–2a (1 of 15 specimens).


Palp as in Figs 52–55.

FEMALE (n = 15). Measurements. Total length 9.2–16.2 (12.5); carapace 4.8–5.8 (5.3) long and 3.6–4.9 (4.1) wide. Diameter of the eyes and distances between them: AM 0.15–0.18 (0.16), AL 0.18–0.24 (0.22), PM 0.15–0.27 (0.21), PL 0.15–0.20 (0.18), AM-AM 0.10–0.20 (0.15), AM-AL 0.04–0.09 (0.06), PM-PM 0.02–0.10 (0.06), PM-PL 0.28–0.39 (0.33), AM-PM 0.21–0.28 (0.25), AL-PL 0.32–0.46 (0.39). Distance between anterior eyes and margin of clypeus: AM-clypeus 0.30–0.44 (0.36), AL-clypeus 0.21–0.30 (0.26). Length of leg segments:
The genus *Gnaphosa* in the Crimea

Figs 52–57. The copulatory organs of *Gnaphosa taurica* from the Crimea: 52 — male palp, prolateral view; 53 — male palp, ventral view; 54 — male palp, retrolateral view; 55 — bulb, dorsal view; 56 — epigyne, ventral view; 57 — epigyne, dorsal view.

Рис. 52–57. Копулятивные органы *Gnaphosa taurica* из Крыма: 52 — палпа самца, проксимально; 53 — палпа самца, вентрально; 54 — палпа самца, ретролатерально; 55 — булбус, дорсально; 56 — эпигиная, вентрально; 57 — эпигиная, дорсально.

<table>
<thead>
<tr>
<th>Femur</th>
<th>Patella + Tibia</th>
<th>Metatarsus</th>
<th>Tarsus</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leg I</td>
<td>2.4-3.5 (3.2)</td>
<td>3.2-4.8 (4.2)</td>
<td>1.6-2.2 (2.0)</td>
<td>1.2-1.6 (1.5)</td>
</tr>
<tr>
<td>Leg II</td>
<td>2.8-3.2 (3.0)</td>
<td>3.5-4.2 (3.8)</td>
<td>1.8-2.2 (2.0)</td>
<td>1.2-1.6 (1.4)</td>
</tr>
<tr>
<td>Leg III</td>
<td>2.4-2.8 (2.6)</td>
<td>3.0-3.5 (3.2)</td>
<td>2.0-2.5 (2.3)</td>
<td>1.2-1.5 (1.3)</td>
</tr>
<tr>
<td>Leg IV</td>
<td>3.2-3.8 (3.5)</td>
<td>4.2-5.0 (4.5)</td>
<td>3.0-3.7 (3.4)</td>
<td>1.5-1.8 (1.6)</td>
</tr>
</tbody>
</table>

Length of palpal segments: femur 1.4–1.8 (1.6), patella 0.8–1.0 (0.9), tibia 0.6–0.8 (0.6), tarsus 1.2–1.5 (1.3). Abdomen 4.9–10.6 (7.5) long, 3.0–6.6 (4.4) wide. Basal segment of anterior (inferior) spinnerets 0.8–1.0 (0.9) long.

**Leg spination.** I — femur: d 1–1 or 1 (1 of 15 specimens), pl 1 or 3 (1 of 15 specimens); tibia: v-pl 1a or 0 (5 of 15 specimens); metatarsus: v 2 or 0 (1 of 15 specimens). II — femur: d 1–1 or 1 (1 of 15 specimens), pl 1–1 or 1 (2 of 15 specimens) or 1–1–1 (1 of 15 specimens); tibia: v-pl 1a; metatarsus: v 2, pl 0 or 1 (1 of 15 specimens). III — femur: d 1–1, pl 1–1, rl 1–1; patella: rl 1; tibia: d 1 or 0 (1 of 15 specimens), pl 2–1–1 or 2–1–2 (1 of 15 specimens) or 1–1–1 (1 of 15 specimens), rl 1–1 (6 of 15 specimens).
or 1–1 (5 of 15 specimens) or 2–1–1 (4 of 15 specimens), v 2–2–2; metatarsus: pl 1–2–2 or 2–2–2 (1 of 15 specimens), rl 1–1–2 or 1–2–2 (3 of 15 specimens) or 2–1–2 (1 of 15 specimens), v 2–2–2. IV — femur: d 1–1, pl 1 or 1–1 (7 of 15 specimens), rl 1–1 or 1 (5 of 15 specimens); patella: 0 or rl 1 (1 of 15 specimens); tibia: pl 2–1–1 or 1–1–1 (5 of 15 specimens) or 2–1–1–6 (1 of 15 specimens), rl 2–1–1 or 2–1–1–2 (1 of 15 specimens), v 2–2–2a or 2–2–2a (1 of 15 specimens) or 2–1–2–2a (1 of 15 specimens); metatarsus: pl 1–2–2 or 2–2–2 (2 of 15 specimens) or 0–2–2 (1 of 15 specimens) or 1–1–2–2 (1 of 15 specimens) or 1–2–3 (1 of 15 specimens), rl 1–2–2 or 0–2–2 (1 of 15 specimens) or 1–1–2 (1 of 15 specimens) or 1–1–2–2 (1 of 15 specimens) or 2–2–1–1 (1 of 15 specimens), v 2–2–2a.

*Coloration* as in males. No scutum.

*Epigyne* as in Figs 56, 57.

**TYPE LOCALITY.** Ukraine, the Crimea, near Simferopol [Thorell, 1875a: 84; 1875b: 98–99; Ovtsharenko et al., 1992: 22].

**DISTRIBUTION.** The steppe zone of Eurasia, from Bulgaria to China: South Ukraine (Donetsk Area, the Crimea), south of the European part of Russia (Bashkiria, Chelyabinsk Area, Orenburg Region, Rostov Area), the Caucasus, Kazakhstan, Kirghizia, NW China (Xinjiang) [Thorell, 1875ab; Spassky, 1925, 1927; Charitonov, 1932; Ovtsharenko, 1982; Ovtsharenko et al., 1992; Esyunin, Efimik, 1996; Mikhailov, 1997; Deltsev, Blagoev, 2001; Marusik, Koponen, 2001; Prokopenko, 2002; Tuneva, Esyunin, 2002; Kovblyuk, 2003; Platnick, 2004].

**PHENOLOGY.** ♀♂ — IV–VI; ♀♀ — IV–IX.

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**Nomen dubium**

*Gnaphosa trebax* Thorell, 1875

*Gnaphosa trebax* Thorell, 1875a: 85 (♀) (the ♂ holotype lost, not examined).


**TYPE LOCALITY.** Ukraine, the Crimea, near Simferopol [Thorell, 1875a: 85; 1875b: 104–105].

**DISTRIBUTION.** The type locality only.

**COMMENTS.** The type of *G. trebax* was not found by Ovtsharenko et al. [1992: 5] or by Yu.M. Marusik [pers. comm.]. This species was never illustrated or re-described and therefore is a *nomen dubium*.

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**Phenology**

Many specimens were collected by pitfall traps, which were regularly checked for one year or longer. Thus, it was possible to analyze the seasonal dynamics of the activity of adults. The maximum number of individuals and peak of activity for the adults of *G. ukrainica* occurred in April; for *G. taurica* in May; for *G. lucifuga*, *G. saurica* and *G. moesta* in June and for *G. cumensis* in July (Fig. 58). A second peak (in October) was observed only for *G. cumensis*. It is evident from Fig. 58 that all the species studied have only one generation per year, except possibly *G. cumensis*. 
The genus *Gnaphosa* in the Crimea

Table 4. Habitat distribution of the *Gnaphosa* species in the Crimea, based on the specimens collected by the author.

<table>
<thead>
<tr>
<th>Landscape zones</th>
<th><em>Gnaphosa</em> species</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>lucifuga</td>
</tr>
<tr>
<td>Semi-desert steppe and saline lands</td>
<td>+</td>
</tr>
<tr>
<td>Genuine steppe</td>
<td>+</td>
</tr>
<tr>
<td>Submontane forest-steppe</td>
<td>+</td>
</tr>
<tr>
<td>Forests of the northern slope</td>
<td>+</td>
</tr>
<tr>
<td>Montain meadows and yaila steppe</td>
<td>+</td>
</tr>
<tr>
<td>Forests of the southern slope</td>
<td>+</td>
</tr>
<tr>
<td>Sub-Mediterranean vegetation of the southern coast</td>
<td>+</td>
</tr>
</tbody>
</table>

**Chorology**

Traditionally, seven natural (landscape, altitudinal, physico-geographical) zones are described from the Crimean peninsula [Biodiversity...1999]. The distribution of the *Gnaphosa* species in these zones is shown in Table 4.

**Addition**

Post acceptance of this paper and thanks to the kindness of Drs Tamas Szuts, Christine Rolland and Herve Christophe, I received important additional material (two tubes with specimens of *Gnaphosa dolosa* Herman, 1879) from the Hungarian Natural History Museum, Budapest. The first tube contained a single ♀ and five labels: “1187/1900 Coll. Chyzer *Gnaphosa dolosa* O.H.”, “*Gnaphosa dolosa* O.H. Coll. Chyzer 1187”, “Relyerat-gebga VIII”, “Type material [in Russian – MK]”, “material from Hungarian Museum Natural History [in Russian — MK]”. The second tube contained three ♀♀ and two labels: “Araneae Mus. Nat. HUNG. *Gnaphosa dolosa* O.H. Orsova, det. Szombathy”, “Not type material [in Russian — MK]”. I suspect that the labels written in Russian were added by V.I. Ovtsharenko.

The type locality for *D. dolosa* is Orsova, Mehedinti, Romania [see Herman, 1879: 192; Ovtsharenko et al., 1992: 9]. Thus, I re-examined the topotypes of this species (vial # 2). The carapace length of these specimens varied between 3.4–4.6mm. When the epigynes of the females from the Hungarian Museum were compared with those identified as *G. saurica* [see above under “Material” of *G. saurica*], they were found to be identical. Therefore, *Gnaphosa dolosa* Herman, 1879 is a senior synonym of *G. saurica* Ovtsharenko, Platnick et Song, 1992, syn.n., and all the aforementioned information regarding *G. saurica* should be assigned to *D. dolosa*.

ACKNOWLEDGEMENTS. The author sincerely thanks Dr. Yu.M. Marusik (Magadan, Russia) and Dr. V.I. Ovtsharenko (New York, USA) for useful advice during the preparation of this paper. Dr. F. Di Franco (Catania, Italy) for commenting on the *G. alcestis* problem, and additionally Dr. Yu.M. Marusik for the geographical coordinates of localities. I wish to express deep gratitude to the following colleagues who gave type or comparative material from their museums or personal collections: Dr. K.V. Evtushenko (Kiev, Ukraine), Dr. E.F. Guseinov (Baku, Azerbaijan), Dr. V.A. Krivokhatsky (ZISP), Dr. Yu.M. Marusik (Magadan, Russia), Dr. K.G. Mikhailov (ZMMU), Dr. V.I. Ovtsharenko (AMNH), Dr. N.Yu. Polchaninova (Kharkiv, Ukraine), Dr. E.V. Prokopenko (Donetsk, Ukraine), Dr. C. Rollard (MNHN), Ms. T.K. Tuneva (PSU), E.M. Zhukovets (Minsk, Belarus). I also thank Dr. R. Bosmans, Dr. Ch. Deltchev, Dr. M. Chatzaki, Dr. F. Di Franco, Dr. S.L. Esyunin, Dr. K.V. Evtushenko, Dr. G. Levy, Dr. Yu.M. Marusik, Dr. K.G. Mikhailov, Dr. C. Pesarini, Dr. N.I. Platnick, Dr. H.V. Prokopenko for their great help in the search for relevant references. Special thanks must go to Dr. S. Koponen (Turku, Finland) for making possible the use of his Lab’s SEM and to Dr. Yu.M. Marusik for assistance. I am deeply obliged to S.A. Dyadyushkin, V.P. Kornilov, O.V. Kukushkin, R.L. Slushaenko, L. Trukhanovich and A. Tsvelev for providing me with specimens of *Gnaphosa* from the Crimea. I thank Mr P.E. Gol’din for improving the English of the earlier draft. Drs Dmitri V. Logunov and D. Penney (both from Manchester, UK) edited the final version.

**References**

Azheganova NS. 1968. [A brief key to spiders (Aranei) of the forest and forest-steppe zone of the USSR]. Leningrad: Nauka. 149 pp [in Russian].


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