

## Taxonomic-faunistic notes on the jumping spiders of the Mediterranean (Aranei: Salticidae)

### Таксономически-фаунистические заметки о пауках-скакунчиках Средиземноморья (Aranei: Salticidae)

D.V. Logunov

Д.В. Логунов

The Manchester Museum, University of Manchester, Oxford Road, Manchester M13 9PL, UK. E-mail: dmitri.v.logunov@manchester.ac.uk

KEY WORDS: Spiders, Aranei, Salticidae, the Mediterranean, descriptions, new species, taxonomy, faunistic.

КЛЮЧЕВЫЕ СЛОВА: Пауки, Aranei, Salticidae, Средиземноморье, описания, новые виды, таксономия, фаунистика.

**ABSTRACT.** The paper presents new taxonomic and faunistic data on 162 species of the Mediterranean jumping spiders (Salticidae). Three new species are described: *Heliophanus haymozi* sp.n. (♂♀; Spain, Portugal), *Heliophanus sinaicus* sp.n. (♂♀; Egypt, Sinai) and *Salticus resslis* sp.n. (♂; Turkey). Two new synonyms are proposed: *Chalcoscirtus helverseni* Metzner, 1999 with *C. parvulus* Marusik, 1991 and *Salticus marenzelleri* Nosek, 1905 with *Salticus tricinctus* (C.L. Koch, 1846). The synonymy of *Evarcha syriaca* Kulczyński, 1911 with *Evarcha patagiata* (O. Pickard-Cambridge, 1872) is confirmed. Unknown sexes are described for seven species for the first time: *Habrocestum latifasciatum* (Simon, 1868) (♀), *H. shulovi* Prószyński, 2000 (♂), *Heliophanus fuerteventurae* Schmidt et Krause, 1996 (♀), *H. ramosus* Wesolowska, 1986 (♀), *Icius crassipes* (Simon, 1868) (♀), *I. insolitus* Alicata et Cantarella, 1994 (♀) and *Salticus confusus* Lucas, 1847 (♀). New faunistic records are provided for the following countries: Armenia (2 new species records), Cyprus (19), Egypt (4), Greece (1), Israel (1), Italy (1), Jordan (2), Libya (1), Morocco (4), Oman (1), Portugal (3), Spain (3), Syria (8), Tunisia (1), Turkey (17), Ukraine (1).

**РЕЗЮМЕ.** В статье приводятся данные по таксономии и фаунистике для 162 видов пауков-скакунчиков из Средиземноморья (Salticidae). Описано три новых вида: *Heliophanus haymozi* sp.n. (♂♀; Испания, Португалия), *Heliophanus sinaicus* sp.n. (♂♀; Египет, Синай) и *Salticus resslis* sp.n. (♂; Турция). Предложено два новых синонима: *Chalcoscirtus helverseni* Metzner, 1999 с *C. parvulus* Marusik, 1991 и *Salticus marenzelleri* Nosek, 1905 с *Salticus tricinctus* (C.L. Koch, 1846). Подтверждена синонимия *Evarcha syriaca* Kulczyński, 1911 с *Evarcha patagiata* (O. Pickard-Cambridge, 1872). Впервые описаны неизвестные пола для семи видов: *Habrocestum latifasciatum*

(Simon, 1868) (♀), *H. shulovi* Prószyński, 2000 (♂), *Heliophanus fuerteventurae* Schmidt et Krause, 1996 (♀), *H. ramosus* Wesolowska, 1986 (♀), *Icius crassipes* (Simon, 1868) (♀), *I. insolitus* Alicata et Cantarella, 1994 (♀) и *Salticus confusus* Lucas, 1847 (♀). Новые фаунистические находки даны для следующих стран: Армения (отмечены 2 новых видов), Кипр (19), Египет (4), Греция (1), Израиль (1), Италия (1), Иордан (2), Ливия (1), Марокко (4), Оман (1), Португалия (3), Испания (3), Сирия (8), Тунис (1), Турция (17), Украина (1).

### Introduction

The jumping spiders (Salticidae) of the Mediterranean constitute a very rich and insufficiently studied fauna. According to Canard [2005], the salticid fauna of Europe and the Mediterranean basin consists of 508 valid species of 61 genera (plus 73 invalid names). Of them, 68 species (13%) are known from the females only, and 75 (15%) from the males. The surprising thing is that 172 salticid species (34%) are still known from the original description and/or a single locality only. Thus, at present, neither the regional diversity, nor the distribution patterns of Mediterranean Salticidae can be considered well studied. The best studied salticid faunas of the Mediterranean are those of the Iberian Peninsula [Cardoso, Morano, 2010], Italy [Trotta, 2005; Pantini, Isaia, 2014], Greece [Metzner, 1999; Bosmans, Chatzaki, 2005], and Israel [Prószyński, 2003; Zonstein, Marusik, 2013]; for more details see below under 'Discussion'.

The aims of the present paper are as follows: (1) to provide new faunistic data for 162 species of the Mediterranean salticids in order to clarify their distribution; (2) to describe three new species; and (3) to describe unknown sexes for seven poorly known species.

## Material and methods

This work is based on extensive museum and private collections of the Mediterranean jumping spiders which were sent to the author for identification. A total of 2492 adult specimens belonging to 162 species of Salticidae has been studied. In some cases, additional salticid materials from Central Europe, the Balkans, the Caucasus, Central Asia and Iran are also included in the section 'Material'. The depositories of the studied material are abbreviated in the text as follows: BMNH — British Museum of Natural History, London, UK (J. Beccaloni); FMNH — Finnish Museum of Natural History, University of Helsinki, Finland (P. Cardoso); HUJI — The Hebrew University of Jerusalem, Zoological Department, Israel (G. Levy and E. Gavish-Regev); LMNM — Liverpool Museum, National Museums Liverpool, Liverpool, UK (G. Knight); MMUM — Manchester Museum, University of Manchester, Manchester, UK (D.V. Logunov); MVHN — Museu València d'Història Natural, Valencia, Spain (S.M. Alario); NHMW — Naturhistorisches Museum, Wien, Austria (J. Gruber); NHRS — Swedish Museum of Natural History, Stockholm (T. Kronstedt and G. Lindberg); MHNG — Muséum d'histoire naturelle, Genève, Switzerland (P. Schwendinger); NMPC — National Museum of Prague, Czech Republic (Á. Kurka); NUAM — Arachnology Museum of the Niğde University, Niğde, Turkey (A. Topçu); OUMNH — Oxford University Museum of Natural History, UK (Z. Simmons); PCDM — Personal collection of D. McCowan (UK); PCJK — Personal collection of Johan Van Keer (Kapelle-Op-Den-Dos, Belgium); PCJM — Personal collection of J. Murphy (Hampton, UK); PCJW — Personal collection of J. Wunderlich (Hirschberg, Germany); PCLJ — Personal collection of L. Jonsson (Kristianstad, Sweden); PCMA — Personal collection of M. Askins (Swindon, Wiltshire, UK); PCMJ — Personal collection of M. Janssen (Meeuwen, Belgium); PCMS — Personal collection of M. Schäfer (Berlin, Germany); PCRB — Personal collection of R. Bosmans (Gent, Belgium); PCRG — Personal collection of Richard Gallon (Llandudno, UK); PCSD — Personal collection of R.G. Snazell (Swanage, Dorset, UK); PCRS — Personal collection of A. Russell-Smith (Kent, UK), now partly in the MMUM; SMFM — Naturmuseum und Forschungsinstitut Senckenberg, Frankfurt am Main, Germany (P. Jäger and J. Altmann); SZMN — Siberian Zoological Museum, Institute for Systematics and Ecology of Animals, Novosibirsk, Russia (G.N. Azarkina); ZISP — Zoological Institute of the Russian Academy of Sciences, St-Petersburg, Russia (V.A. Krivokhatsky); ZMTU — Zoological Museum, University of Turku, Finland (S. Koponen and V. Vahtera); ZMUM — Zoological Museum of the Moscow University, Moscow, Russia (K.G. Mikhailov); ZTAU — Zoological Museum, Tel Aviv University, Israel (S.L. Zonstein).

The abbreviations used in the text: *Eyes*: AME — anterior median eye, PLE — posterior lateral eye. *Leg*

*segments*: Fm — femur, Pt — patella, Tb — tibia, Mt — metatarsus. *Position of spines on legs*: ap — apical, d — dorsal, pr — prolateral, rt — retrolateral, v — ventral. For the leg spination the system adopted is that used by Ono [1988]. *Other abbreviations*: A.No. — accession number; nr. — near. *Collectors' names* of those who collected more than 2–3 samples are abbreviated as follows: AC — A.N. Chemeris; AD — A. Diakonov; AF — A. Fowles; AG — A.A. Gusakov; ARS — A. Russell-Smith; AS — A. Schönhofer; BH — B. Hauser; CF — C. Felton; CL — C. Lienhard; CR — C.F. Roewer; DD — D. Dominguez *et al.*; DL — D.V. Logunov; DMC — D. McCowan; ED — E. Duffey; EG — E.F. Guseinov; EM — E.A. Mikhailova; EP — E. Popov; GL — G. Lampel; HDK — H. De Koninck; HE — H. Eikamp; HEH — H. El-Hennawy; HK — H. Kahmann; JA — J. Altmann; JFM — J. & F. Murphy; JG — J. Gruber, F. Ressler & A. Radda; JM — J. Meier; JMS — J. Martens; KE — K. Eckl; KK — K. Kunt; KM — K.G. Mikhailov; LD — L.J. Dobroruka; LJ — L. Jonsson; LM — L. Mausehund; MA — M. Askins; MB — M. Blamore; MR — M. Řezáč; PC — P. Cardoso; PD — P.M. Dunin; PH — P.J. Haymoz; PJ — P. Jäger; PL — P.T. Lehtinen; PP — P. Poot; RB — R. Bosmans; RK — R. Kinzelbach; RS — R.G. Snazell; SG — S.I. Golovatch; SH — S. Huber; SJ — S. Judd; SM — S. Montagud *et al.*; SV — S.V. Vasilenko; SZ — S. Zarooni; TK — T. Kronstedt; UK — U. Kluge. The sequence of leg segments in measurement data is as follows: femur + patella + tibia + metatarsus + tarsus. All measurements are in mm. The nomenclature for distributional patterns of Salticidae follows Logunov & Marusik [2000b]; the latter work contains a detailed account on how each range type can be specified using its both longitudinal and latitudinal components.

## Descriptions

### *Habrocestum latifasciatum* (Simon, 1868)

Figs 1–3, 7–9.

*Attus latifasciatus* Simon, 1868: 536 (D♂; holotype ♂ from Muséum National d'Histoire Naturelle, Paris, France; not examined).

For a complete set of taxonomic references see WSC [2015].

**MATERIAL. TURKEY:** 3 ♂♂ (PCRS), Akyaka, on rocks behind Cinan Beach, 30.05.1996, ARS; 5 ♂ (PCRS), Akyaka, Sulemin's castle, under stones, 28.05.1996, ARS; 1 ♂ (LMNM), Içel, Tekmen, terraced cultivated slopes above sea, 8.06.1993, CF; 1 ♂ (LMNM), Içel, c. 31 km N of Anamur (36°12'11"N, 32°54'01"E), young, oat grazed, plantation on high, rock strewn, mountain slope, 7.05.1994, CF; 2 ♂♂ (LMNM), Içel, Narlıkuyu (36°26'04"N, 34°06'44"E), garrigue vegetated limestone dominated by *Pinus*, 5.06.1994, MB; 1 ♂ (SMFM), TR Kidirik S of Fethiye (Muğla), river valley and slopes (36°31'N, 29°08'E), 24–28.05.1988, RK; 3 ♂♂, 6 ♀♀ (ZMUM), Antalya, Kemer, pine forest, 50–400 m a.s.l., 23–27.04.2001, KM; 1 ♀ (MMUM), Antalya Prov., Alanya Distr. (no exact locality), 6.11.2003, KK; 2 ♀♀ (ZMUM), Antalya, Yarpuz, open old forest (stony chalky), 27.05.2004, LJ; 1 ♀ (PCRS), Akyaka, Sulemin's castle, under stones, 28.05.1996, ARS; 2 ♀♀ (PCRS), same locality, under stones in pine wood, 29.05.1996,

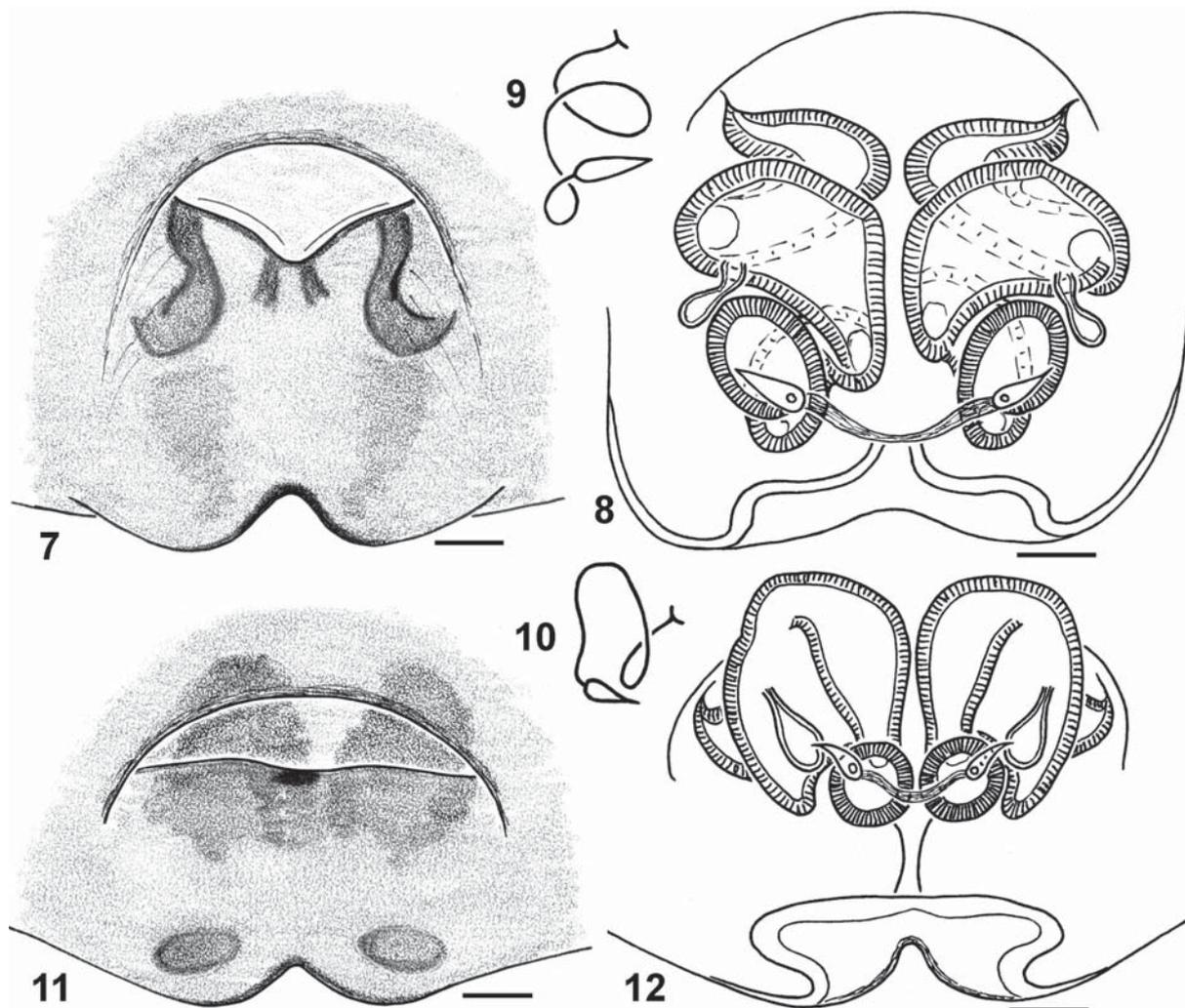


Figs 1–6. Male palps of *Habrocestum latifasciatum* (Simon, 1868) (1–3; Turkey, Antalya, Kemer) and *H. shulovi* Prószyński, 2000 (4–6; Turkey, Namrun): 1, 4 — prolateral view; 2, 5 — ventral view; 3, 6 — retrolateral view. Scale bars: 0.1 mm.

Рис. 1–6. Пальпы самцов *Habrocestum latifasciatum* (Simon, 1868) (1–3; из Турции, Анталия, Кемер) и *H. shulovi* Prószyński, 2000 (4–6; из Турции, Намрун): 1, 4 — вид спереди-латерально; 2, 5 — вид снизу; 3, 6 — вид сзади-латерально. Масштаб 0,1 мм.

ARS; 1 ♀ (LMNM), no exact locality and date; 3 ♂♂ (NHMW), Akşehir, Sültağ, 30.04–7.05.1960, FR; 1 ♀ (NHMW), Finibe, 1.05.1964, FR; 1 ♂ (NHMW), Kaş, 24.04.1964, FR; 1 ♂ (MHNG), Phaselis, nr. Tekirova, 30.05.1993, PH. — SYRIA: 2 ♂♂ (NMPC), NW Syria, castle Qalaat al Kahf nr. Qadmus, 5–7.04.2001, MR.

**DIAGNOSIS.** This species is most similar to *H. shulovi* Prószyński, 2000 known from Levant and Turkey (see below), from which it can readily be distinguished by the different conformation of its copulatory organs (cf. Figs 1–3, 7–8 and 4–5, 11–12): viz., the



Figs 7–12. Female copulatory organs of *Habrocestum latifasciatum* (Simon, 1868) (7–9; Turkey, Antalya, Kemer) and *H. shulovi* Prószyński, 2000 (11–12; Turkey, Namrun): 7, 11 — epigyne, ventral view; 8, 12 — spermathecae, dorsal view; 9, 10 — diagrammatic course of the insemination ducts. Scale bars: 0.1 mm.

Рис. 7–12. Пальпы самцов *Habrocestum latifasciatum* (Simon, 1868) (7–9; Турция, Анталия, Кемер) и *H. shulovi* Prószyński, 2000 (11–12; Турция, Намрун): 7, 11 — эпигина, вид снизу; 8, 12 — сперматека, вид сверху; 9, 10 — схематический ход семенепроводов. Масштаб 0,1 мм.

longer, bending embolus (straight in *H. shulovi*); the V-shaped rear edge of the epyginal atrium (straight in *H. shulovi*); and the much stronger and wider insemination ducts.

**COMMENTS.** Metzner [1999: 61] did not have the samples containing both sexes of this species collected together and therefore mismatched the males from Turkey with the female from Greece. The correct female of *H. latifasciatum* collected together with the male is described here for the first time.

**DISTRIBUTION.** This seems to be an eastern Mediterranean species, recorded from Greece (both mainland and islands) [Metzner, 1999], eastward throughout Turkey [Karol, 1967; Metzner, 1999; Coşar *et al.*, 2014; present data] to the Near East (Israel, Lebanon

and Syria) [Prószyński, 2003; present data]. New record for Syria.

**DESCRIPTION. MALE** (Turkey, Antalya, Kemer). *Measurements.* Carapace 3.20 long, 2.40 wide and 1.85 high at PLE. Ocular area 1.53 long, 2.05 wide anteriorly and 1.88 wide posteriorly. Diameter of AME 0.58. Clypeus height 0.25, chelicera length 1.00. Abdomen 2.55 long, 2.20 wide. Length of leg segments: I: 2.10 + 1.20 + 0.78 + 1.25 + 0.75; II: 1.75 + 0.95 + 1.05 + 0.80 + 0.50; III: 2.60 + 1.10 + 1.45 + 1.30 + 0.60; IV: 1.80 + 0.85 + 1.00 + 1.25 + 0.60. *Leg spination.* Leg I: Fm d 0-1-1-4; Pt pr 0-1-0; Tb pr 1-0, v 1-2-2ap; Mt pr 1-1ap, v 2-2ap. Leg II: Fm d 0-1-2-5; Pt pr 0-1-0; Tb pr 1-1-1, v 1-2-2ap; Mt pr 1-1ap, v 2-2ap. Leg III: Fm d 0-1-2-4; Pt pr ad rt 0-1-0; Tb d 1-0-0, pr and rt 1-1-1, v 1-0-2ap;

Mt pr 1-0-2p, rt and v 2-0-2ap. Leg IV: Fm d 0-1-1; Pt pr and rt 0-1-0; Tb d 1-0-0, pr 0-1-1, rt 1-1-1, v 2-1-2ap; Mt d 2-0, pr 1-1, rt 1-0, v 3-2ap. *Coloration*. Carapace dark brown, densely covered with brown adpressed hairs, with almost black eye field; there is a wide longitudinal stripe widening anteriorly and running across the eye field and over the thorax (see Metzner [1999: table 26]); there are two large patches of white scales on each side of the carapace, beneath PMEs; clypeus orange-brown, with sparse white and black hairs; eyes of the first row surrounded by long and dense sand-coloured scales. Sternum yellow, covered with white hairs. Maxillae and labium yellow, with white apices. Chelicerae red-brown. Abdomen: dorsum brownish, with a wide transverse white band anteriorly and a large white inverted triangular figure in the rear half of the dorsum (see Metzner [1999: table 26]); sides and venter yellow, tinged with grey. Book-lung covers light yellow; spinnerets grey. Leg I: Fm yellow, with a black prolateral longitudinal stripe; Pt, Tb and Mt brownish yellow dorsally and black ventrally and laterally (on both sides); Mt yellow. Legs II–IV yellow, with brownish patches, especially desen on Pt, Tb and Mt. Palps brownish yellow, with dense dorsal bunches of long white hairs on Fm (their tips only), Pt and Tb; palpal structure as in Figs 1–3; tibial apophysis short, cone-shaped; bulbous triangle, with the bent proximal end directed median; embolus long and bending.

**FEMALE** (Turkey, Antalya, Kemer). *Measurements*. Carapace 3.35 long, 2.55 wide and 1.50 high at PLE. Ocular area 1.48 long, 2.00 wide anteriorly and 1.95 wide posteriorly. Diameter of AME 0.58. Clypeus height 0.15, chelicera length 0.95. Abdomen 3.15 long, 2.80 wide. Length of leg segments: I: 1.70 + 0.95 + 1.00 + 0.75 + 0.60; II: 11.65 + 1.00 + 0.90 + 0.80 + 0.55; III: 2.50 + 1.20 + 1.45 + 1.35 + 0.60; IV: 0.75 + 0.80 + 1.20 + 1.15 + 0.70. *Leg spination*. Leg I: Fm d 0-1-1-3; Pt pr and rt 0-1-0; Tb pr 1-1, v 1-2-2ap; Mt pr 1-1ap, v 2-2ap. Leg II: Fm d 0-1-1-5; Pt pr and rt 0-1-0; Tb pr 1-1, v 1-1-2ap; Mt pr 1-1ap, v 2-2ap. Leg III: Fm d 0-1-2-4; Pt pr ad rt 0-1-0; Tb d 1-0-0, pr 1-1-1, v 2ap; Mt pr 1-0-2p, rt and v 2-0-2ap. Leg IV: Fm d 0-1-1-1; Pt pr and rt 0-1-0; Tb d 1-0-0, pr 1-1-1, v 1-0-2ap; Mt pr 1-1-2ap, rt 2-1-2ap, v 2-0-2ap. *Coloration* as in the male, but lighter (mostly yellow to sand-coloured) and also differs as follows: there is no white longitudinal stripe on carapace; colour pattern of the dorsum (anterior transverse stripe and inverse triangular figure) pale yellow and poorly marked; legs I and palps entirely yellow; clypeus yellow, with long white hairs. Epigyne and spermathecae as in Figs 7–9; the wide epigynal pocket presents; the epigynal atrium shallow, with the V-shaped rear edge; the spermathecae with strong and wide insemination ducts making an appearance of multichambered structure; accessory gland well-developed and prominent.

*Habrocestum shulovi* Prószyński, 2000  
Figs 4–6, 10–12.

*Habrocestum shulovi* Prószyński, 2000: 245, figs 48–51 (D♀; holotype ♀ from the Oxford University Museum of Natural History, UK; not examined).

For a complete set of taxonomic references see WSC [2015].

**MATERIAL**. TURKEY: 1 ♂, 2 ♀♀ (NHMW) & 1 ♂ (ZMUM), Namrun, forest, 12.05–5.06.1964, FR; 1 ♀ (NHMW), Eski, Anamuryum, 16.05.(no year), coll.?. 1 ♀ (LMNM), Narlıkuyu (36°26' 04"N, 34°06'44"E), 15.07.1992, CF; 1 ♀ (ZMUM), Nemrut, Dagi, 1.07.2004, LJ.

**DIAGNOSIS**. This species is most similar to *H. latifasciatum* known from the E Mediterranean (see above), from which it can readily be distinguished by the different conformation of its copulatory organs (cf. Figs 4–6, 11–12 and 1–3, 7–8): viz., the shorter, straight embolus (bending in *H. latifasciatum*); the straight, transverse rear edge of the epigynal atrium (V-shaped in *H. latifasciatum*); and the much shorter and narrower insemination ducts.

**DISTRIBUTION**. Israel and Turkey [Prószyński, 2000, 2003; present data]. New record for Turkey.

**DESCRIPTION**. MALE (Turkey, Namrun). *Measurements*. Carapace 2.70 long, 2.10 wide and 1.55 high at PLE. Ocular area 1.35 long, 1.90 wide anteriorly and 1.70 wide posteriorly. Diameter of AME 0.55. Clypeus height 0.33, chelicera length 0.88. Abdomen 2.10 long, 1.00 wide. Length of leg segments: I: 2.00 + 1.10 + 1.50 + 1.15 + 0.85; II: 1.50 + 0.90 + 0.95 + 0.75 + 0.55; III: 2.40 + 1.00 + 1.25 + 1.25 + 0.55; IV: 1.70 + 0.75 + 0.90 + 1.25 + 0.55. *Leg spination*. Leg I: Fm d 0-1-1-4; Pt pr 0-1-0; Tb pr 1-1, v 1-2-2ap; Mt pr 1-0-1ap, v 2-2ap. Leg II: Fm d 0-1-2-4; Pt pr 0-1-0; Tb pr 1-1-1, rt 1-0, v 1-2-2ap; Mt pr 1-1ap, v 2-2ap. Leg III: Fm d 0-1-2-3; Pt pr ad rt 0-1-0; Tb d 1-0-0, pr and rt 1-1-1, v 1-0-2ap; Mt pr 1-0-2p, rt and v 2-0-2ap. Leg IV: Fm d 0-1-1-1; Pt pr and rt 0-1-0; Tb d 1-0-0, pr and rt 1-1-1, v 1-0-2ap; Mt pr 1-0-2ap, rt and v 2-0-2ap. *Coloration*. Carapace red-brown, densely covered with brownish adpressed hairs and with patches of dense brown hairs above ALEs; there is a wide longitudinal stripe widening anteriorly and running across the eye field and over the thorax; clypeus orange, with sparse whitish hairs; eyes of the first row surrounded by long and dense white/yellow scales. Sternum yellow, covered with white hairs. Maxillae and labium yellow, with white apices. Chelicerae red-brown, with yellowish tips. Abdomen: dorsum brownish grey, with a wide transverse white band anteriorly and a large white inverted triangular figure in the rear half of the dorsum; sides and venter yellow, tinged with grey. Book-lung covers light yellow; spinnerets grey. All legs yellow, but Fm, Pt and Tb of the first legs with black ventral longitudinal stripe. Palps brownish yellow, with dense dorsal bunches of long white hairs on Fm (their tips only), Pt and Tb; palpal structure as in Figs 4–6; tibial apophysis short, cone-shaped; bulbous triangle, with the bent proximal end directed mediad; embolus long and straight.

FEMALE (Turkey, Namrun). *Measurements*. Carapace 3.40 long, 2.65 wide and 2.05 high at PLE. Ocular area 1.55 long, 2.13 wide anteriorly and 2.00 wide posteriorly. Diameter of AME 0.63. Clypeus height 0.30, chelicera length 1.25. Abdomen 4.50 long, 3.75 wide. Length of leg segments: I: 1.80 + 1.05 + 1.05 + 0.75 + 0.60; II: 1.75 + 1.10 + 1.00 + 0.90 + 0.60; III: 2.90 + 1.30 + 1.60 + 1.15 + 0.70; IV: 2.05 + 1.00 + 1.15 + 1.45 + 0.65. *Leg spination*. Leg I: Fm d 0-1-1-3; Pt pr and rt 0-1-0; Tb pr 1-1, v 1-2-2ap; Mt pr 1-1ap, v 2-2ap. Leg II: Fm d 0-1-1-5; Pt pr and rt 0-1-0; Tb pr 1-1, v 1-1-2ap; Mt pr 1-1ap, v 2-2ap. Leg III: Fm d 0-1-2-4; Pt pr and rt 0-1-0; Tb d 1-0-0, pr 1-1-1, v 2ap; Mt pr 1-0-2p, rt and v 2-0-2ap. Leg IV: Fm d 0-1-1-1; Pt pr and rt 0-1-0; Tb d 1-0-0, pr 1-1-1, v 1-0-2ap; Mt pr 1-1-2ap, rt 2-1-2ap, v 2-0-2ap. *Coloration* as in the male, but lighter (mostly yellow) and also differs as follows: there is no white longitudinal stripe on carapace; colour pattern of the dorsum (anterior transverse stripe and inverse triangular figure) pale yellow and poorly marked; legs I and palps entirely yellow. Epigyne and spermathecae as in Figs 10–12; the wide epigynal pocket presents; the epigynal atrium shallow, with the straight, transverse rear edge; the insemination ducts  $\Lambda$ -shaped, with round clearly marked receptacles; accessory gland well-developed and prominent.

*Heliophanus fuerteventurae* Schmidt et Krause, 1996  
Figs 13–19.

*Heliophanus fuerteventurae* Schmidt et Krause, 1996: 269, figs 8–9 (D♂; holotype ♂ from Museum für Tierkunde, Dresden, Germany; examined).

TYPE. Holotype ♂ (Museum für Tierkunde, Ch 00355; Fig. 15) from [Spain], 'Kanaren: El Jable/Fuerteventura', 8.12.1993, M. Schmidt; the right palp of the holotype, which was illustrated by Schmidt & Krause [1996: fig. 9], is missing, the right palp and the left first leg are detached.

MATERIAL. SPAIN: 4 ♂♂, 1 ♀ (MHNG), the Canaries, Fuerteventura, below Parque Holandes (entrance to Corralejo et Puerto del Rosario), nr. the sea, small bushes, 20 m a.s.l., 17.11.1998, CL; 1 ♂ (MHNG), the Canaries, Fuerteventura, Vallebrón (S of La Oliva), dry bushes and palm trees, c. 250 m a.s.l., 16.11.1998, CL; 1 ♂ (MHNG), the Canaries, Fuerteventura, nr. Lajares (SW of Corralejo), small bushes, c. 80 m a.s.l., 15.11.1998, CL.

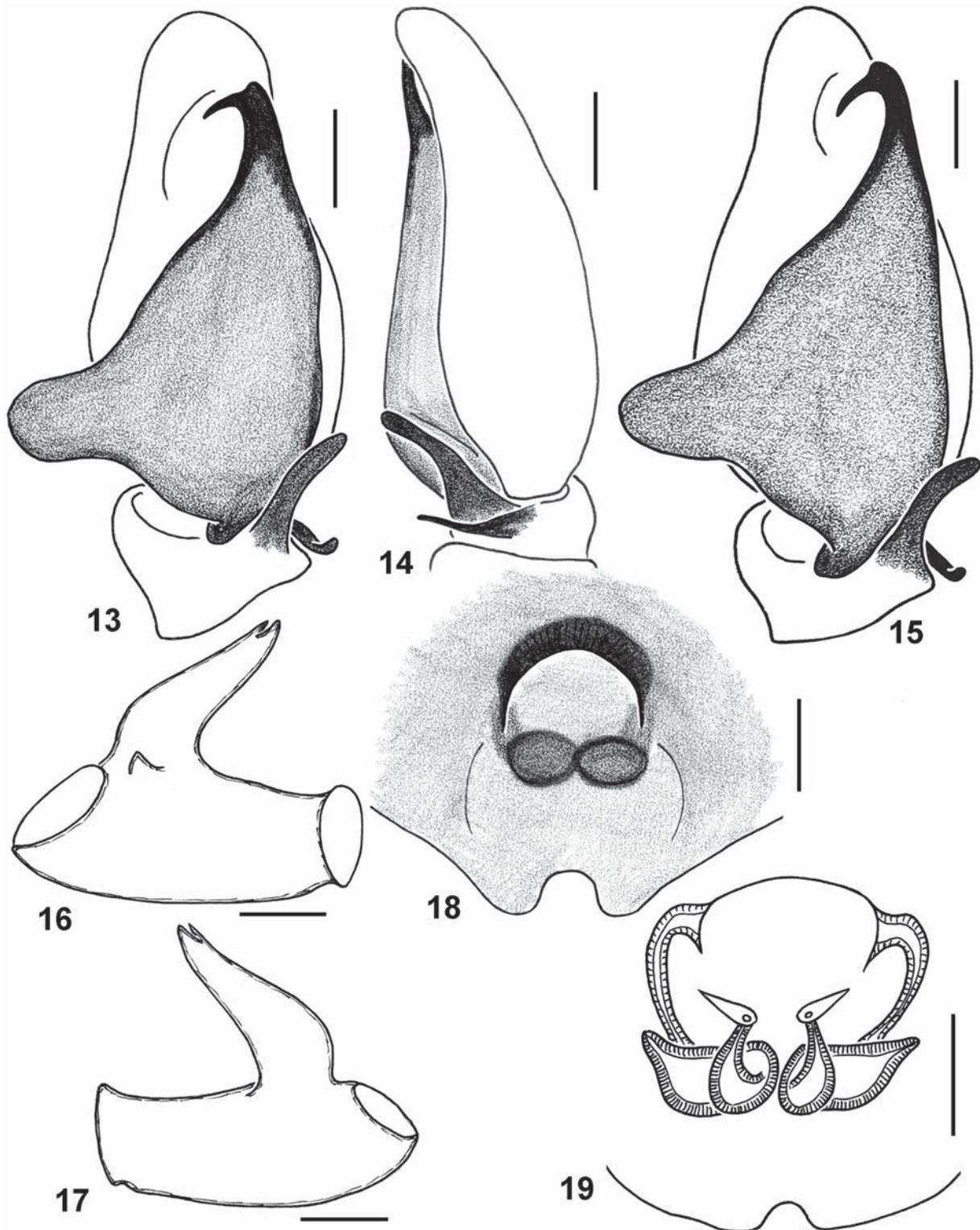
DIAGNOSIS. This species belongs to the *decoratus* group [*sensu* Wesołowska, 1986] and is most similar to *H. ibericus* Wesołowska, 1986 known from the single male from mainland Spain. The males of these species can easily be separated by the shape of the femoral apophysis, which is sharpened in *H. ibericus* and bifurcated in *H. fuerteventurae*, and of the embolus, which is slightly bent at its tip in *H. ibericus* and hook-shaped in *H. fuerteventurae* (cf. Figs 13, 15 with figs 585–588 in Wesołowska [1986]). Of the related species from the *decoratus* group, the female of *H. fuerteventurae* is most similar to that of *H. agricoloides* Wunderlich, 1987 from the Canaries (cf. Figs 102–103), but can be readily distinguished by the shape of the deeper epigynal pocket and by the thinner insemination ducts (Figs 18–19). See also below the 'Comments' under *H. agricoloides*.

COMMENTS. In the original description, Schmidt & Krause [1996: fig. 9] mistakenly illustrated the embolic division of the male palp by showing a bifurcated tip of the embolus, which is not the case (cf. Figs 13, 15).

DISTRIBUTION. Restricted to the Fuerteventura island of the Canaries [Schmidt, Krause, 1996; present data].

DESCRIPTION. MALE (from Fuerteventura, Parque Holandes). *Measurements*. Carapace 1.38 long, 0.98 wide and 0.68 high at PLE. Ocular area 0.69 long, 0.83 wide anteriorly and 0.97 wide posteriorly. Diameter of AME 0.29. Clypeus height 0.04, chelicera length 0.41. Abdomen 1.55 long, 0.95 wide. Length of leg segments: I: 0.69 + 0.38 + 0.43 + 0.38 + 0.30; II: 0.58 + 0.33 + 0.35 + 0.31 + 0.25; III: 0.68 + 0.33 + 0.38 + 0.40 + 0.29; IV: 0.78 + 0.48 + 0.50 + 0.53 + 0.38. *Leg spination*. Legs I and II: Fm d 0-1-1-2; Tb pr 0-1, v 1-1/2; Mt v 2-2ap. Leg III: Fm d 0-1-1-2; Tb pr and rt 0-1-1, v 1ap; Mt pr and rt 1-0-2ap, v 1ap. Leg IV: Fm d 0-1-1-2; Tb pr 1-1, rt 1-1-1, v 2ap; Mt pr, rt and v 1-0-2ap. *Coloration*. Carapace yellowish brown, with darker (brown) eye field and black around eyes; entire carapace covered with white/transparent scales. Strenum yellow, tinged with brown and covered with white hairs. Labium, maxillae and chelicerae light yellow-brown. Abdomen: dorsum yellow-brown, with a wide transverse stripe at its anterior edge and two pairs of large white spots (as illustrated by Schmidt & Krause [1996: fig. 8]); sides yellow-brown; venter yellow. Book-lung covers yellow, spinnerets brown. All legs yellow, but Fm I and Tb I with brown pro- and retrolateral sides. Palps yellow, tinged with brown, their structure as in Figs 13–17; femoral process singular, but bifurcated at its tip and with a sharp knob at its base; ventral tibial apophysis narrow and straight; retrolateral tibial apophysis straight, spine-like; bulbus pear-shaped; embolus hook-shaped, bent mediad.

FEMALE (from Fuerteventura, Parque Holandes). *Measurements*. Carapace 1.80 long, 1.23 wide and 0.80 high at PLE. Ocular area 0.83 long, 1.03 wide anteriorly and 1.18 wide posteriorly. Diameter of AME 0.34. Clypeus height 0.05, chelicera length 0.50. Abdomen 1.73 long, 1.15 wide. Length of leg segments: I: 0.80 + 0.48 + 0.50 + 0.40 + 0.35; II: 0.73 + 0.38 + 0.43 + 0.38 + 0.30; III: 0.83 + 0.48 + 0.50 + 0.53 + 0.35; IV: 1.03 + 0.48 + 0.65 + 0.70 + 0.40. *Leg spination*. Legs I and II: Fm d 0-1-1-1; Tb pr 0-1/2, v 1-1; Mt v 2-2ap. Leg III: Fm d 0-1-1-1; Tb pr 0-1, rt 1-1, v 1ap; Mt pr, rt and v 1-2ap. Leg IV: Fm d 0-1-1-1; Tb pr 1-1, rt 1-1-1, v 1-0-2ap; Mt pr 2-0-2ap, rt 1-1-2p, v 2ap. *Coloration* as in the male but lighter (light yellow); carapace densely covered with white scales; dorsum light sandy-coloured, with the anterior transverse white stripe and two pairs of white spots poorly marked; all legs and palps light yellow. Epigyne and spermathecae as in Figs 18–19; epigynal plate notched at its rear edge; anterior, transverse epigynal pocket procurved; insemination ducts narrow, directed towards the epigastric furrow; receptacles large, transversely-orientated.



Figs 13–19. Copulatory organs of *Heliophanus fuerteventurae* Schmidt et Krause, 1996 (13–14, 16–19 — Fuerteventura, Parque Holandes; 15 — the holotype): 13, 15 — male palp, ventral view; 14 — ditto, retrolateral view; 16 — male palpal femur, prolateral view; 17 — ditto, retrolateral view; 18 — epigyne, ventral view; 19 — spermathecae, dorsal view. Scale bars: 0.1 mm.

Рис. 13–19. Копулятивные органы *Heliophanus fuerteventurae* Schmidt et Krause, 1996 (13–14, 16–19 — Фуертевентура, Голландский парк; 15 — голотип): 13, 15 — пальпа самца, вид снизу; 14 — тоже, сзади-латерально; 16 — бедро пальпы самца, вид спереди-латерально; 17 — тоже, вид сзади-латерально; 18 — эпигина, вид снизу; 19 — сперматека, вид сверху. Масштаб 0,1 мм.

*Heliophanus haymozi* sp.n.

Figs 20–27.

TYPES. Holotype ♂ (MHNG) from Spain, Zamora [Prov.], nr. Sandin of Carballada [c. 42.00728°N, -6.47932°W], 17.07.1975, PH. — Paratypes: PORTUGAL: 1 ♂, 1 ♀ (ZMUM), Mértola (c. 37°38'N, -7°40'W), 27.05.2003, PC.

MATERIAL: SPAIN: 1 ♂ (NMPC), Xávia (=Jávea), NP del Mongú, 29.04.2004, LD; 2 ♂♂ (NMPC), Valencia, Guadalest (c. 38°41'N, 0°11'E), 27.04.2004, LD.

ETYMOLOGY. Dedicated to the collector of the holotype, Mr Pierre-Joseph Haymoz (Geneva, Switzerland).

DIAGNOSIS. The new species is most similar to the Euro-Mediterranean species *H. tribulosus* Simon, 1868 [cf. Wesolowska, 1986: figs 492–497; Metzner, 1999: table 65]. The male can easily be distinguished from it by the presence of the prominent apical projection of the bulbus (arrowed in Fig. 20), the longer embolus and the singular tip of the femoral process (arrowed in Fig. 24; bifurcated in *H. tribulosus*). The female can be distinguished by the significantly wider and stronger insemination ducts directed laterad (Fig. 27; the relatively thin insemination ducts directed anterior in *H. tribulosus*).

DISTRIBUTION. The Iberian Peninsula (Portugal and Spain) [present data]. Some of the earlier records of *H. tribulosus* from Spain mentioned in Wesolowska [1986] and Helsdingen [2014] may actually belong to *H. haymozi* sp.n.

DESCRIPTION. MALE (the holotype). *Measurements*. Carapace 2.08 long, 1.30 wide and 0.80 high at PLE. Ocular area 0.77 long, 1.03 wide anteriorly and 1.07 wide posteriorly. Diameter of AME 0.34. Clypeus height 0.04, chelicera length 0.73. Abdomen 1.85 long, 1.23 wide. Length of leg segments: I: 0.95 + 0.55 + 0.65 + 0.53 + 0.38; II: 0.80 + 0.45 + 0.48 + 0.45 + 0.33; III: 0.90 + 0.40 + 0.50 + 0.58 + 0.35; IV: 1.03 + 0.45 + 0.68 + 0.73 + 0.40. *Leg spination*. Legs I and II: Fm d 0-1-1-1; Tb pr 0-1, v 1-1; Mt v 2-2ap. Leg III: Fm d 0-1-1-1; Tb pr 0-1, rt 1-1, v 1ap; Mt pr and rt 2ap. Leg IV: Fm d 0-1-1-2; Tb pr 0-1-1, rt 1-1-1, v 1-0-1ap; Mt pr 1-0-2ap, rt 1-1-2ap. *Coloration*. Carapace red-brown, with dark brown eye field and black around eyes; eye field sparsely covered with white scales. Sternum, labium, maxillae and chelicerae yellowish brown. Abdomen: dorsum yellow-brown, without colour pattern; sides and venter light brownish yellow. Book-lung covers yellow, spinnerets yellow-brown. All legs: Fm brown; Pt and Tb brown, but with yellow dorsal sides; Mt and Tr yellow. Palps: Fm and Pt brownish yellow; cymbium and bulbus brown; palpal structure as in Figs 20–25; femoral process is bent at its top half, with a sharp short process at its base; ventral tibial apophysis short and hook-shaped (bent ventrad), and with massive base; bulbus almost square; embolus straight, almost as long as the bulbus.

FEMALE. (the paratype). *Measurements*. Carapace 2.03 long, 1.35 wide and 0.83 high at PLE. Ocular area 0.90 long, 1.10 wide anteriorly and 1.23 wide posteriorly. Diameter of AME 0.38. Clypeus not marked, chelicera length 0.60. Abdomen 2.90 long, 2.00 wide.

Length of leg segments: I: 0.89 + 0.58 + 0.55 + 0.48 + 0.38; II: 0.83 + 0.53 + 0.45 + 0.48 + 0.35; III: 0.95 + 0.50 + 0.55 + 0.60 + 0.40; IV: 1.23 + 0.58 + 0.83 + 0.90 + 0.48. *Leg spination*. Legs I: Fm d 0-1-1-1; Tb v 2-2; Mt v 2-2ap. Leg II: Fm d 0-1-1-1, Tb pr 0-1, v 1-1; Mt v 2-2ap. Leg III: Fm d 1-1-2; Tb pr 0-1, rt 1-1, v 1-0-1ap; Mt pr and rt 2ap, v 1-0-1ap. Leg IV: Fm d 1-1-1; Tb pr 1-1, rt 0-0-2, v 1-0-2ap; Mt pr 1-1-2ap, rt 1-0-2ap, v 1ap. *Coloration*. Carapace brown, with black eye field and orange sides, sparsely covered with transparent adpressed scales. Sternum brown, covered with white hairs. Maxillae and labium orange, with white tips. Chelicerae orange. Abdomen entirely turquoise-grey, with a white transverse stripe anteriorly and with no colour pattern on the dorsum. Book-lung covers yellow, tinged with grey; spinnerets turquoise-grey. All legs and palps entirely yellow. Epigyne and spermathecae as in Figs 26–27; deep central atrium present; copulatory openings separated and clearly seen at the rear-bottom of the atrium; insemination ducts as wide and long as receptacula, directed laterad; receptacula bean-shaped.

*Heliophanus ramosus* Wesolowska, 1986  
Figs 28–30, 34–36.

*Heliophanus ramosus* Wesolowska, 1986: 42–43, figs 503–506, 900 (D♂; holotype ♂ from the Muséum National d'Histoire Naturelle, Paris, France; not examined).

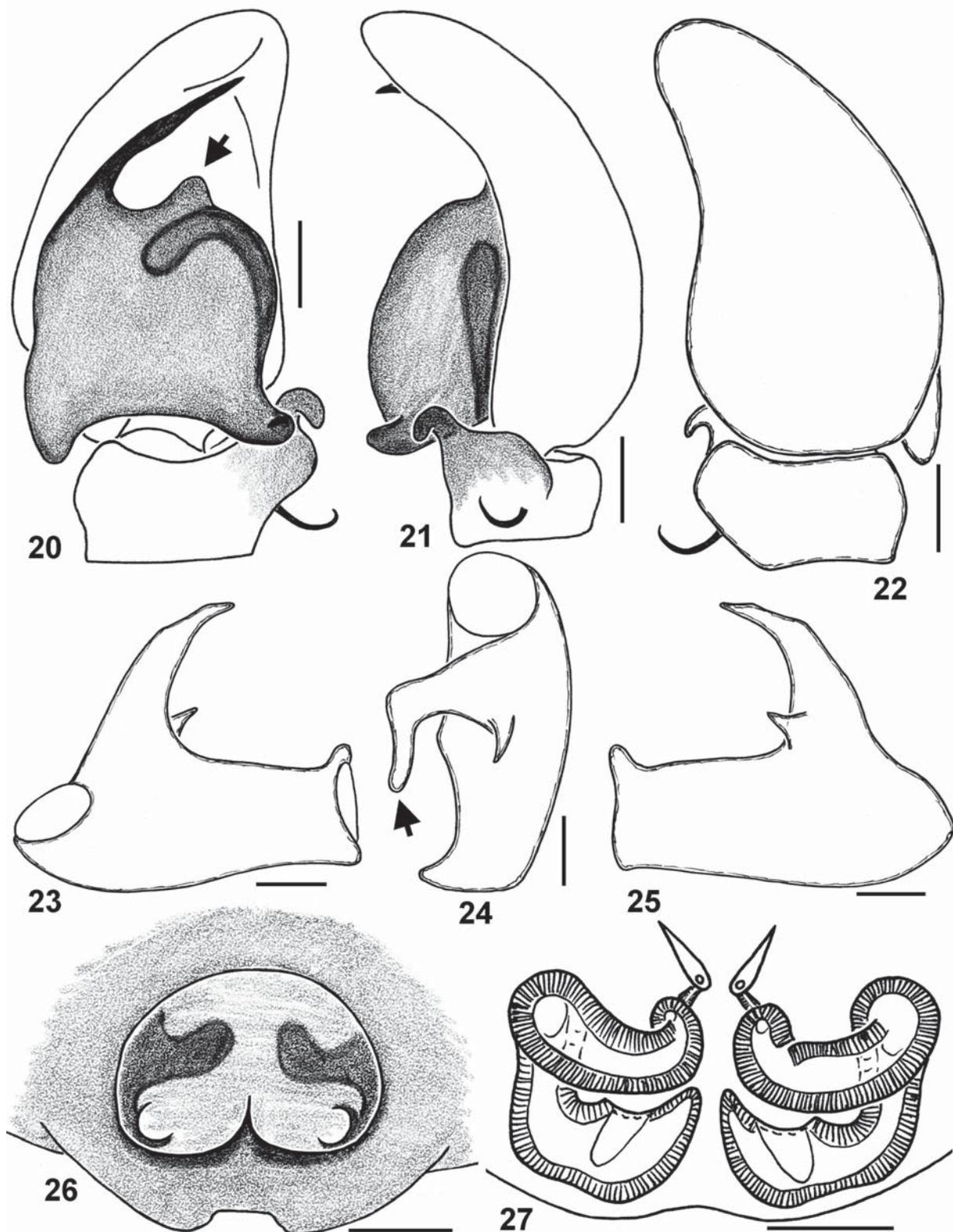
MATERIAL. ALGERIA: 1 ♂ (PCRB), Wilaya Oran, forest Msila, c. 400 m a.s.l., sieving litter in *Quercus suber* and among stones and *Oxalis*, 25.04.1984, RB. — SPAIN: 1 ♂, 1 ♀ (MVHN), Valencia, Devesa del Saler, fixed dunes, 20.05.2004, DD.

DIAGNOSIS. This species is very similar to *H. stylifer* Simon, 1878 known from Morocco and Algeria [Wesolowska, 1986] (see below), but can reliably be distinguished from it by the bi-ramous femoral process in the males (cf. Figs 29 and 32) and the wider epigynal plate (cf. Figs 34 and 37) and the arrangement of the insemination ducts and receptacles in the females (cf. Figs 35–36 and 38–39).

DISTRIBUTION. A few localities in Algeria and Spain [Wesolowska, 1986; present data].

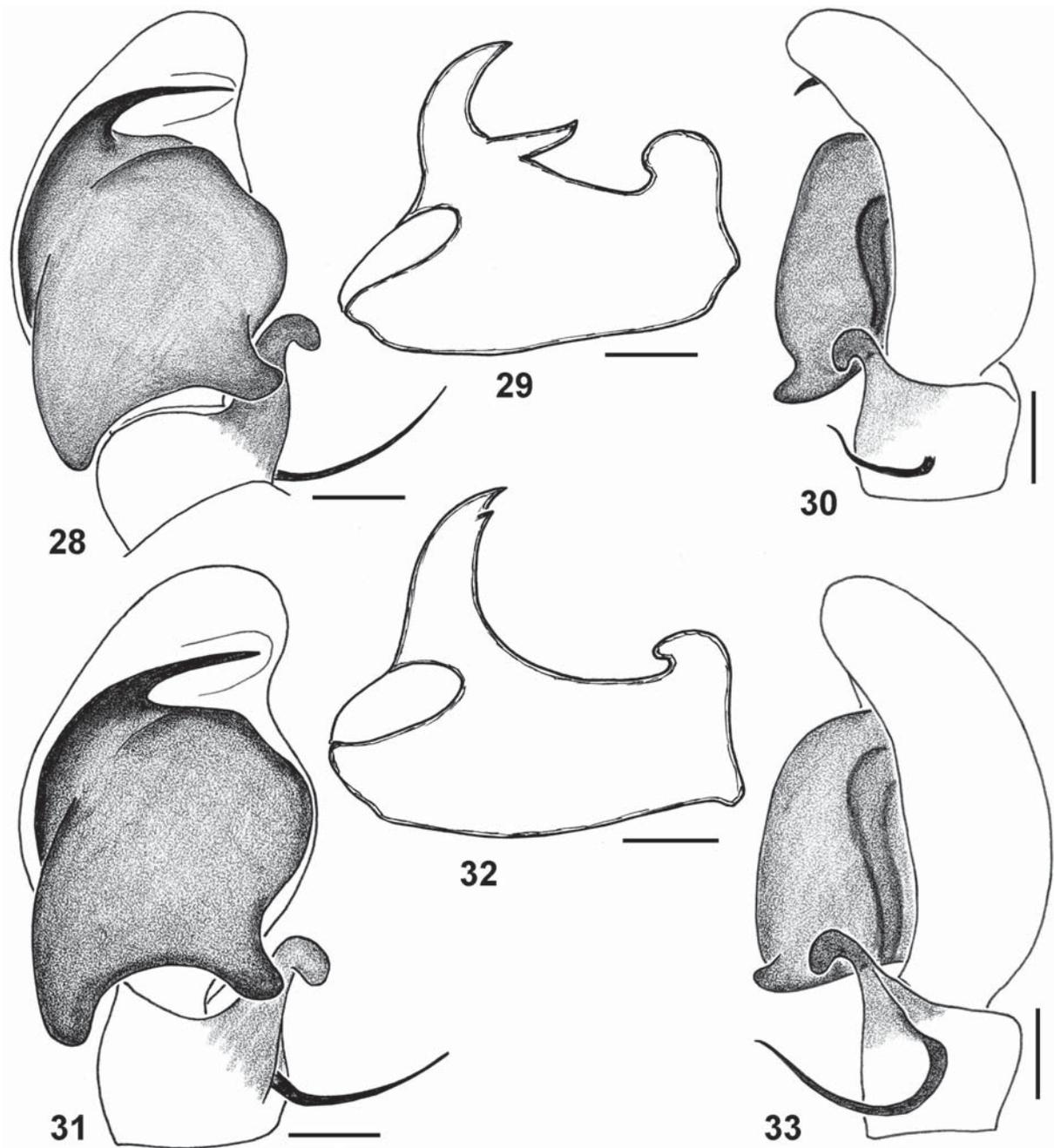
DESCRIPTION. MALE, see in Wesolowska [1986]; Figs 28–30.

FEMALE (from Spain, Valencia). *Measurements*. Carapace 1.95 long, 1.38 wide and 0.80 high at PLE. Ocular area 0.90 long, 1.14 wide anteriorly and 1.27 wide posteriorly. Diameter of AME 0.33. Clypeus height 0.03, chelicera length 0.56. Abdomen 2.95 long, 2.05 wide. Length of leg segments: I: 0.88 + 0.50 + 0.53 + 0.50 + 0.38; II: 0.75 + 0.43 + 0.48 + 0.40 + 0.34; III: 0.88 + 0.43 + 0.50 + 0.53 + 0.35; IV: 1.13 + 0.53 + 0.78 + 0.88 + 0.40. *Leg spination*. Legs I and II: Fm d 0-1-1-1; Tb v 1-1; Mt v 2-2ap. Leg III: Fm d 1-0-1; Tb pr and rt 1-1-1, v 1ap; Mt pr and rt 2ap. Leg IV: Fm d 1-1-2; Tb pr and rt 1-1-1, v 2ap; Mt pr and rt 2ap. *Coloration*. Carapace brownish, with no colour pattern, eye field dark brown (almost black). Sternum brown, covered with white hairs. Maxillae and labium brown, with yellow apexes. Chelicerae red-brown. Ab-



Figs 20–27. Copulatory organs of *Heliophanus haymozi* sp.n. (♂ — the holotype; ♀ — the paratype, Portugal, Mértola): 20 — male palp, ventral view; 21 — ditto, retrolateral view; 22 — ditto, dorsal view; 23 — male palpal femur, retrolateral view; 24 — ditto, dorsal view; 25 — ditto, prolateral view; 26 — epigyne, ventral view; 27 — spermathecae, dorsal view. Scale bars: 0.1 mm.

Рис. 20–27. Копулятивные органы *Heliophanus haymozi* sp.n. (♂ — голотип; ♀ — паратип, Португалия, Мертола): 20 — пальпа самца, вид снизу; 21 — тоже, сзади-латерально; 22 — тоже, вид сверху; 23 — бедро пальпы самца, вид сзади-латерально; 24 — тоже, вид сверху; 25 — тоже, вид спереди-латерально; 26 — эпигина, вид снизу; 27 — сперматека, вид сверху. Масштаб 0,1 мм.

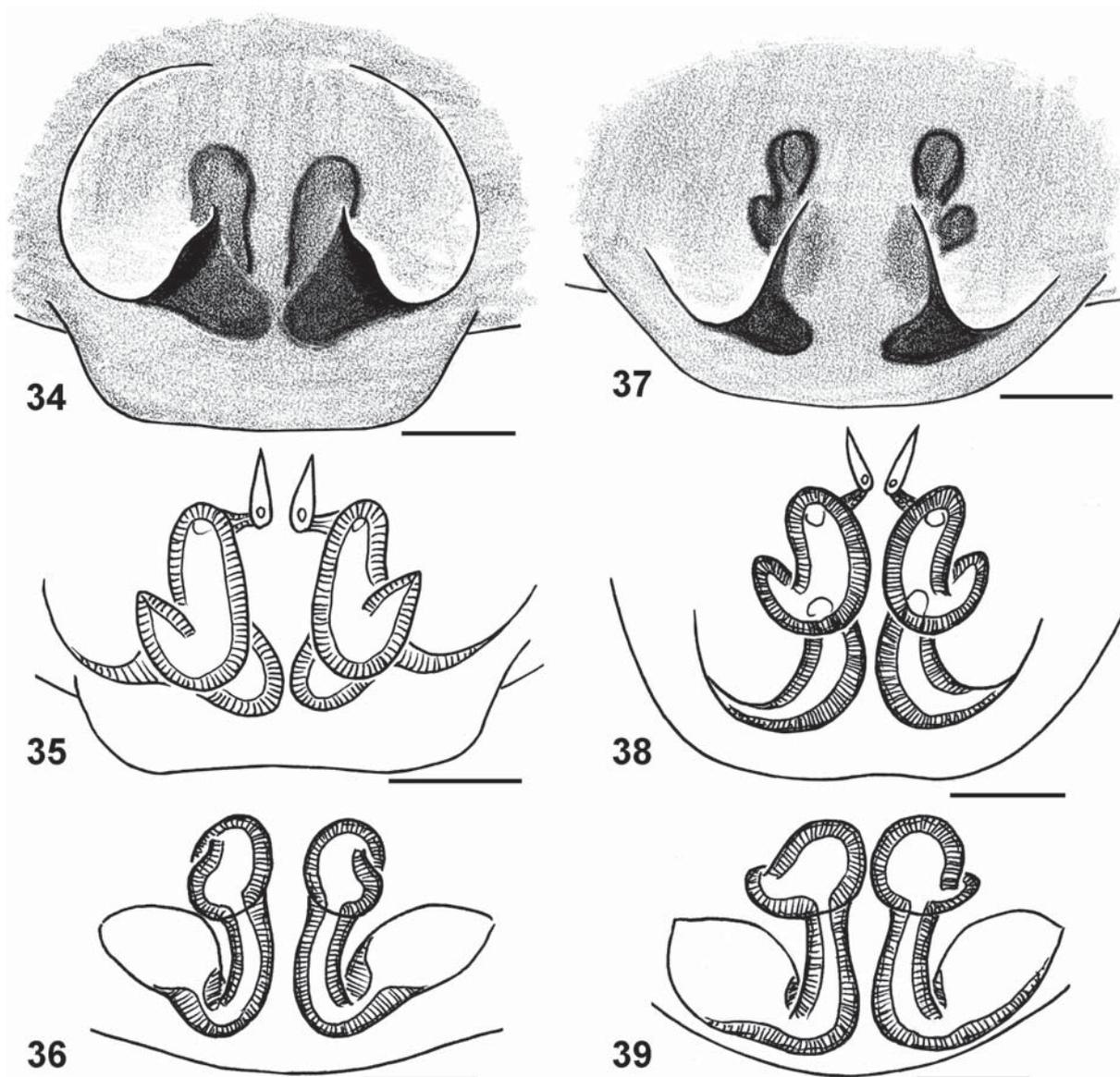


Figs 28–33. Male palps of *Heliophanus ramosus* Wesolowska, 1986 (28–30; Spain, Valencia) and *H. styliifer* Simon, 1878 (31–33; Algeria, Wilaya Bejaia): 28, 31 — bulbus, ventral view; 29, 32 — male palpal femur, prolateral view; 30, 33 — bulbus, retrolateral view. Scale bars: 0.1 mm.

Рис. 28–33. Пальпы самцов *Heliophanus ramosus* Wesolowska, 1986 (28–30; Испания, Валенсия) и *H. styliifer* Simon, 1878 (31–33; Алжир, вилайя Бейха): 28, 31 — вид снизу; 29, 32 — бедро пальпы самца, вид спереди-латерально; 30, 33 — бульбус, вид сзади-латерально. Масштаб 0,1 мм.

domen: dorsum and sides grey-brown, with a narrow transverse white frontal line on dorsum; venter yellowish brown. Book-lung covers and spinnerets light brown. All legs brown with yellow tarsi and darker (dark brown) femora, and with one or two dorsal yellow lines on Tb

and Mt. Palps: coxae, Fm and Pt brown, Tb and Mt contrastingly yellow. Epigyne and spermathecae as in Figs 34–36; epigyne with two wide copulatory orifices facing ahead; short, tube-like insemination ducts and bean-shaped receptacles.



Figs 34–39. Female copulatory organs of *Heliophanus ramosus* Wesolowska, 1986 (34–36; Spain, Valencia) and *H. stylifer* Simon, 1878 (37–39; Algeria, Wilaya Bejaia): 34, 37 — epigyne, ventral view; 35, 38 — spermathecae, dorsal view; 36, 39 — ditto, rear view. Scale bars: 0.1 mm.

Рис. 34–39. Копулятивные органы самок *Heliophanus ramosus* Wesolowska, 1986 (34–36; Испания, Валенсия) и *H. stylifer* Simon, 1878 (37–39; Алжир, вилайет Бяха): 34, 37 — эпигина, вид снизу; 35, 38 — сперматека, вид сверху; 36, 39 — тоже, вид сзади. Масштаб 0,1 мм.

*Heliophanus sinaicus* sp.n.

Figs 40–46.

TYPES: Holotype ♂ (NHMW) from Egypt, Sinai, Pharaoh's Island (c. 29.46333°N, 34.85944°E), 08.1982, N. Shaumer. — Paratypes: 1 ♀ (NHMW) and 1 ♂ (ZMUM), together with the holotype.

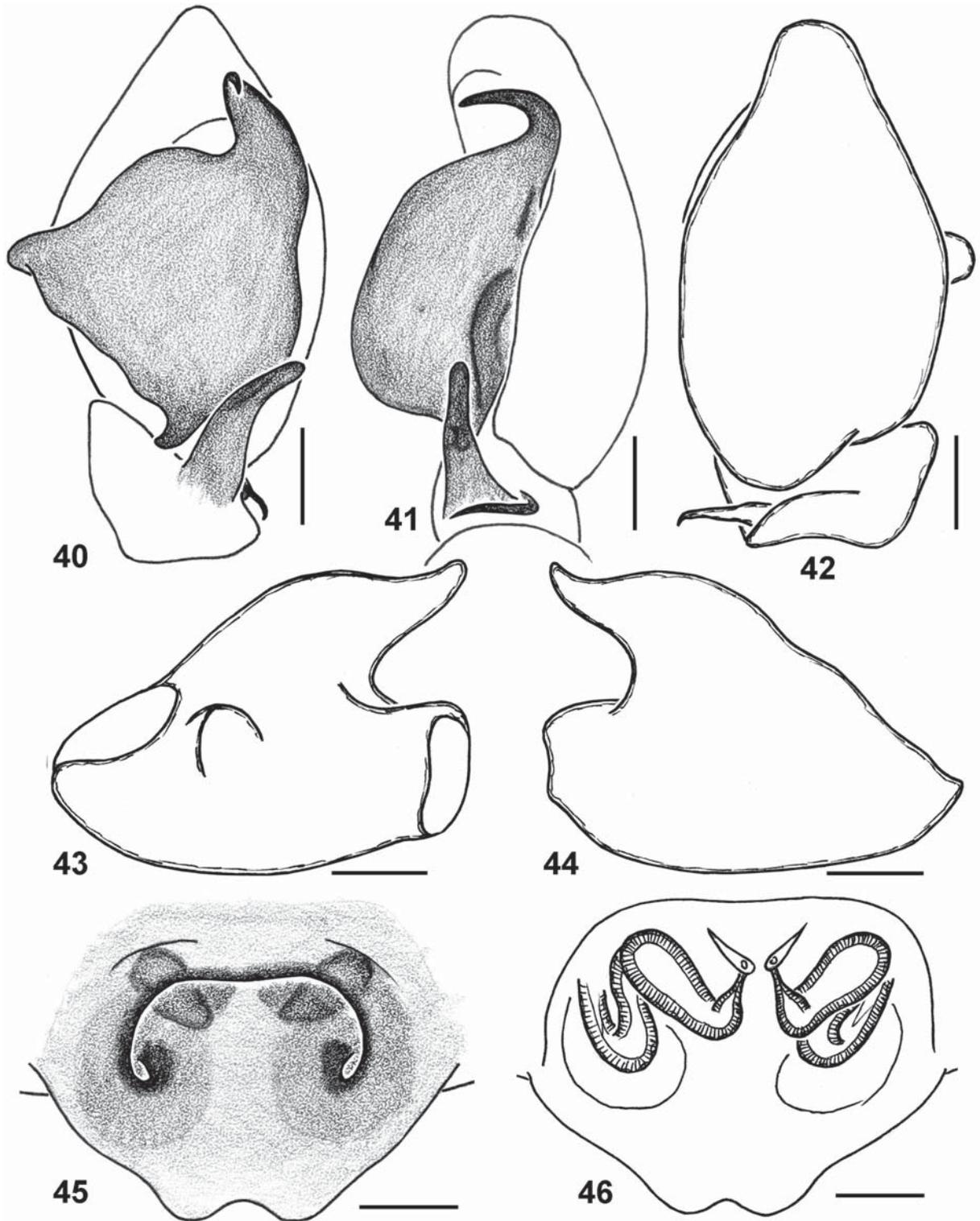
The comparative material on *H. decoratus* is given below under 'New faunistic records'.

ETHYMOLOGY. The species is named after the *terra typica*: Sinai in Egypt.

DIAGNOSIS. *H. sinaicus* sp.n. belongs to the *decoratus* group [*sensu* Wesolowska, 1986] and is most

similar to the Mediterranean species *H. decoratus* L. Koch, 1875 and *H. konradthaleri* Logunov, 2009 from Turkey [see Wesolowska, 1986; Prószyński, 2003; Logunov, 2009b]. It can readily be distinguished from both by the following combination of characters: the hook-shaped embolus and the strong singular femoral apophysis in the males (Figs 41, 43), and the S-shaped spermathecae in the females (Fig. 46).

COMMENTS. One of the females of *H. decoratus* (from Libya) illustrated by Wesolowska [1986: figs 583–584] shows the virtually identical conformation of the spermathecae with those of *H. sinaicus* sp.n. (cf.



Figs 40–46. Copulatory organs of *Heliophanus sinaicus* sp.n. (♂ holotype; ♀ paratype): 40 — male palp, ventral view; 41 — ditto, retrolateral view; 42 — ditto, dorsal view; 43 — male palpal femur, prolateral view; 44 — ditto, retrolateral view; 45 — epigyne, ventral view; 46 — spermathecae, dorsal view. Scale bars: 0.1 mm.

Рис. 40–46. Копулятивные органы *Heliophanus sinaicus* sp.n. (♂ голотип; ♀ паратип): 40 — палпа самца, вид снизу; 41 — то же, сзади-латерально; 42 — то же, вид сверху; 43 — бедро пальпы самца, вид спереди-латерально; 44 — то же, вид сзади-латерально; 45 — эпигина, вид снизу; 46 — сперматека, вид сверху. Масштаб 0,1 мм.

Fig. 46). Yet, Wesołowska [1986: 209] pointed out to the strong variation in the structure of copulatory organs of *H. decoratus* suggesting that the studied series of specimens apparently consisted of a number of closely related species. The discovery of *H. sinicus* sp.n. is in favour of the latter assumption.

**DISTRIBUTION.** The type locality: Egypt (Sinai). However, the record of *H. decoratus* from Libya by Wesołowska [1986: fig. 584] seems to belong to this species as well.

**DESCRIPTION. MALE** (the holotype). *Measurements.* Carapace 1.63 long, 1.23 wide and 0.78 high at PLE. Ocular area 0.84 long, 1.00 wide anteriorly and 1.09 wide posteriorly. Diameter of AME 0.34. Clypeus height 0.04, chelicera length 0.53. Abdomen 1.55 long, 1.05 wide. Length of leg segments: I: 0.78 + 0.50 + 0.55 + 0.45 + 0.38; II: 0.70 + 0.40 + 0.40 + 0.38 + 0.30; III: 0.76 + 0.45 + 0.45 + 0.45 + 0.38; IV: 0.93 + 0.48 + 0.60 + 0.60 + 0.45. *Leg spination.* Leg I: Fm d 0-1-1-2; Tb pr 0-1, v 1-2; Mt v 2-2ap. Leg II: Fm d 0-1-1-2; Tb pr 0-1, v 1-2ap; Mt pr 1ap, v 2-2ap. Leg III: Fm d 0-1-1-3; Pt rt 0-1-0; Tb pr 1-1, rt 1-1-1, v 1-0-2ap; Mt pr, rt and v 1-0-2ap. Leg IV: Fm d 0-1-1-3; Pt rt 0-1-0; Tb pr 1-1, rt 1-1-1, v 1-0-2ap; Mt pr and rt 1-0-2ap, v 2ap. *Coloration.* Carapace yellowish orange, sparsely covered with white scales; eye field brownish, with black around eyes. Sternum light yellow, covered with white scales. Labium, maxillae and chelicerae yellowish orange. Abdomen light yellow, tinged with brownish on dorsum. Book-lung covers light yellow, spinnerets contrastingly brown. All legs light yellow. Femora I with a set of 4 stridulatory bristles situated in their apical parts. Palps yellow, tinged with brown, their structure as in Figs 40–44; femoral process thick and hook-shaped; ventral tibial apophysis finger-shaped; bulbus tringle, with strong hook-shaped embolus.

**FEMALE** (the paratype). *Measurements.* Carapace 1.73 long, 1.25 wide and 0.75 high at PLE. Ocular area 0.84 long, 1.01 wide anteriorly and 1.16 wide posteriorly. Diameter of AME 0.31. Clypeus height 0.04, chelicera length 0.67. Abdomen 2.05 long, 1.60 wide. Length of leg segments: I: 0.80 + 0.48 + 0.45 + 0.45 + 0.33; II: 0.70 + 0.40 + 0.38 + 0.35 + 0.30; III: 0.83 + 0.45 + 0.48 + 0.53 + 0.35; IV: 1.05 + 0.45 + 0.68 + 0.70 + 0.43. *Leg spination.* Legs I and II: Fm d 0-1-1-1/2; Tb pr 0-1, v 1-1; Mt v 2-2ap. Leg III: Fm d 0-1-1-2; Pt pr 0-1-0; Tb pr and rt 1-1, v 1ap; Mt pr, rt and v 1-2ap. Leg IV: Fm d 0-1-1-1; Pt rt 0-1-0; Tb pr 1-1, rt 1-1-1, v 1-0-2ap; Mt pr, rt and v 1-2ap. *Coloration* as in the male, but visibly lighter, with eye field contrastingly brown. Femora I with a set of 4 stridulatory bristles situated in their apical parts. Palps entirely light yellow. Epigyne and spermathecae as in Figs 45–46; epigyne with a transverse, omega-shaped ridge; insemination ducts S-shaped; receptacles elongated.

*Icius crassipes* (Simon, 1868)  
Figs 47–52.

*Attus crassipes* Simon, 1868: 574 (D♂; holotype ♂ from Muséum National d'Histoire Naturelle, Paris, France; not exam-

ined). The type series was re-examined by Alicata & Cantarella [1994].

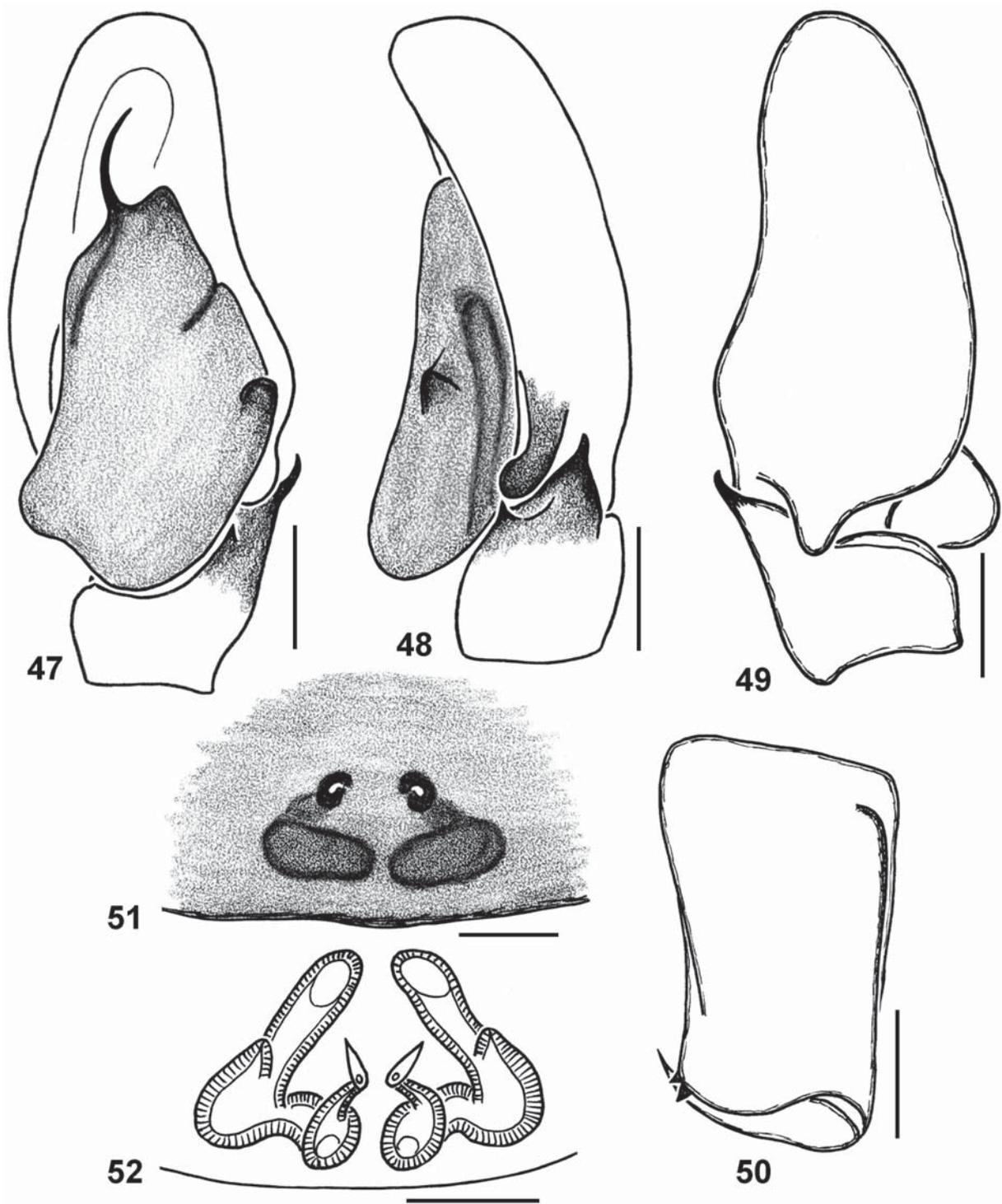
For a complete set of taxonomic references see WSC [2015].

**MATERIAL.** ALGERIA: 1 ♂, 1 ♀ (ZMUM), Wilaya Saida, waterfalls nr. Tifrit on Wadi Tifrit, c. 825 m a.s.l., moist habitat at the foot of the waterfall, between herbs (*Stellaria*, *Geranium*, etc.), 4.05.1984, RB; 1 ♀ (PCRB), Boumerdes, Reghalia, c. 10 m a.s.l., pitfall traps in *Olea europea* orchard, 13.06–30.09.1988, RB; 1 ♂ (PCRB; the specimen is badly damaged), Wilaya Blida, Atlas Blidéen, Chrea E., peak Fertasse, c. 1450 m a.s.l., pitfall traps in *Cedrus* forest, 12.04.1987–9.05.1988, RB; 1 ♂ (PCRB), Wilaya Bouira, Tikjda, c. 1400 m a.s.l., forest and grassland, 11.06.1984, RB; 1 ♂ (ZMUM), Wilaya Tlemcen, SE of Tlemcen, forest Hafir, c. 1350 m a.s.l., sweeping in mixed forest of *Quercus ilex*, *Q. suber*, *Juniperus* sp. and *Erica arborea*, 6.05.1984, RB.

**DIAGNOSIS.** The male of *I. crassipes* can be distinguished by the shape of the medium-sized embolus and the lateral cymbial outgrowth and by the conformation of the tibial apophysis (Figs 48–49); see also Alicata & Cantarella [1994]. The female of *I. crassipes* is most similar to that of *I. simoni* Alicata et Cantarella, 1994 from Algeria [cf. Alicata, Cantarella, 1994: figs 72–73], but can easily be distinguished by the copulatory orifices situated closer to each other (Fig. 51) and the insemination ducts directed mediad (Fig. 52) rather than anteriad as in *I. simoni*.

**DISTRIBUTION.** Spain, Algeria and Tunisia [Alicata, Cantarella, 1994; present data].

**DESCRIPTION. MALE** (from Algeria, Wilaya Saida, waterfalls nr. Tifrit). *Measurements.* Carapace 2.10 long, 1.48 wide and 0.88 high at PLE. Ocular area 1.03 long, 1.28 wide anteriorly and 1.30 wide posteriorly. Diameter of AME 0.43. Clypeus not marked, chelicera length 0.83. Abdomen 2.35 long, 1.50 wide. Length of leg segments: I: 1.13 + 0.60 + 0.80 + 0.58 + 0.40; II: 0.90 + 0.50 + 0.58 + 0.53 + 0.38; III: 1.00 + 0.50 + 0.59 + 0.70 + 0.43; IV: 1.15 + 0.58 + 0.78 + 0.80 + 0.43. *Leg spination.* Leg I: Fm d 0-1-1-2; Tb pr 0-1, v 2-2; Mt v 2-2ap. Leg II: Fm d 0-1-1-2; Tb pr 0-1, v 1-1; Mt v 2-2ap. Leg III: Fm d 0-1-1-2; Tb pr 0-1, rt 1-1, v 1ap; Mt pr and rt 2ap. Leg IV: Fm d 0-1-1; Tb pr 0-1, rt 1-1, v 1ap; Mt pr and rt 2ap. *Coloration.* Carapace reddish brown, with black around eyes, covered with white appressed scales. Sternum yellow, tinged with brown and covered with white hairs. Maxillae, labium and chelicerae pink-yellow; cheliceral crest low and poorly developed (Fig. 50). Abdomen: dorsum and sides yellowish brownish with white specks and a white marginal stripe around the edges of dorsum; venter yellow. Book-lung covers light yellow, spinnerets brownish. Legs I yellowish brownish, darker than other legs and its femora slightly stronger than those of other legs. Legs II–IV entirely yellow, with pro- and retrolateral sides of Fm and Pt tinged with brown. Femora I with a set of stridulatory bristles situated in their apical parts. Palps pink-yellow, covered with white hairs, their structure as in Figs 47–50; tibial apophysis medium-sized, cone-shaped, with a clearly pronounced sharp basal tooth; cymbium with strong, finger-shaped (as seen in lateral view) lateral cymbial process [*sensu* Logunov, 1996]; bulbus ovoid, narrowing towards its



Figs 47–52. Copulatory organs and chelicera of *Icius crassipes* (Simon, 1868) (Algeria, Wilaya Saida, waterfalls nr. Tifrit): 47 — male palp, ventral view; 48 — ditto, retrolateral view; 49 — ditto, dorsal view; 50 — male chelicera, dorsal view; 51 — epigyne, ventral view; 52 — spermathecae, dorsal view. Scale bars: 0.1 mm.

Рис. 47–52. Копулятивные органы и хелицера *Icius crassipes* (Simon, 1868) (Алжир, вилайет Саида, водопад возле Тифрита): 47 — пальпа самца, вид снизу; 48 — тоже, сзади-латерально; 49 — тоже, вид сверху; 50 — хелицера самца, вид сверху; 51 — эпигина, вид снизу; 52 — сперматека, вид сверху. Масштаб 0,1 мм.

apical end; embolus medium-sized (compared to other *Icius* species), spine-shaped.

**FEMALE** (from Algeria, Wilaya Saida, waterfalls nr. Tifrit). *Measurements*. Carapace 2.80 long, 2.03 wide and 1.00 high at PLE. Ocular area 1.23 long, 1.55 wide anteriorly and 1.70 wide posteriorly. Diameter of AME 0.50. Clypeus not marked, chelicera length 1.00. Abdomen 5.10 long, 3.15 wide. Length of leg segments: I: 1.38 + 0.80 + 0.88 + 0.73 + 0.48; II: 1.25 + 0.70 + 0.73 + 0.65 + 0.43; III: 1.35 + 0.65 + 0.75 + 0.90 + 0.53; IV: 1.68 + 0.80 + 1.08 + 1.13 + 0.53. *Leg spination*. Legs I: Fm d 0-1-1-2; Tb v 2-2-1; Mt v 2-2ap. Leg II: Fm d. 0-1-1-2, Tb v 1-1, Mt v 2-2ap. Leg III: Fm d 0-1-1-2; Tb pr and rt 0-1, v 1ap; Mt pr and rt 2ap, v 1ap. Leg IV: Fm d 0-1-1-1; Tb pr and rt 0-1, v 1-0-1ap; Mt pr and rt 2ap, v 1-0-1ap. *Coloration* as in the male, but visibly lighter and differs in the following characters: clypeal edge densely covered with white hairs; dorsum without the marginal white stripe around its edges. Palps entirely yellow. Epigyne and spermathecae as in Figs 51–52; epigyne with two small but clearly visible copulatory openings; insemination ducts run towards the epigastric furrow; proximal and distal sections of the receptacles only slightly wider than the insemination ducts.

*Icius insolitus* Alicata et Cantarella, 1994  
Figs 53–62.

*Icius insolitus* Alicata et Cantarella, 1994: 127, f. 5, 11, 16, 47, 62–68 (D♂; holotype ♂ from Muséum National d'Histoire Naturelle, Paris, France; not examined).

**MATERIAL**. ALGERIA: 3 ♂♂, 1 ♀ (PCRB), Wilaya Gulema, Ain Regada, c. 600 m a.s.l., herbs along Wadi Zenati, 22.11.1989, RB.

**DIAGNOSIS**. The male of *I. insolitus* differs from other *Icius* species in having the strongly-developed cheliceral crest (Figs 57–60), the relatively small embolus (Figs 53–54) and in the shape of tibial apophysis (Fig. 55); see also Alicata & Cantarella [1994: 127] for more diagnostic characters for the male. The female of *I. insolitus* differs from those of all other *Icius* species in having the insemination ducts running dorsad and therefore poorly seen in dorsal view (Fig. 62); the shape of proximal and distal chambers of receptacles are also diagnostic.

**DISTRIBUTION**. Algeria only [Alicata, Cantarella, 1994; present data].

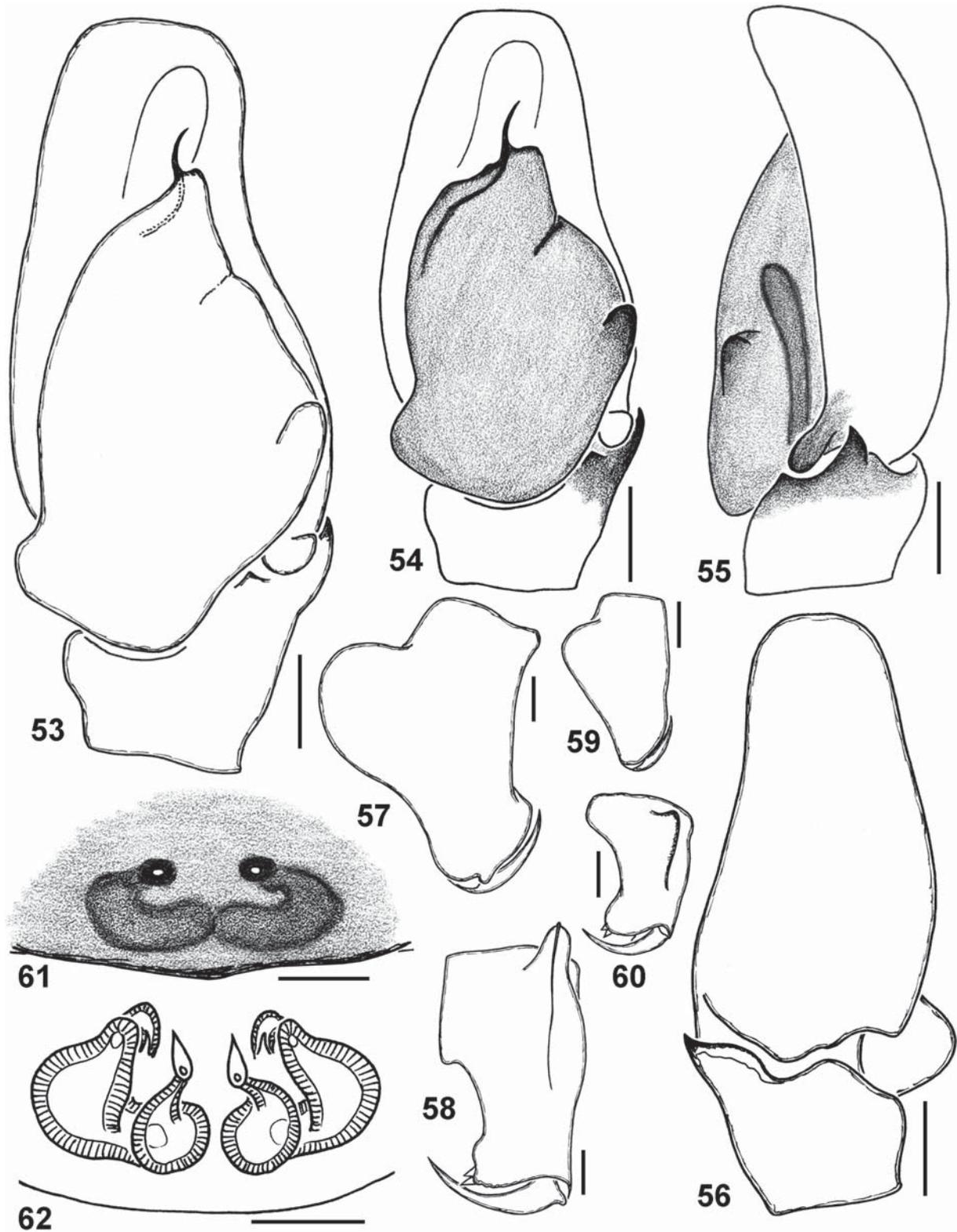
**COMMENTS**. The males of *I. insolitus* demonstrate a very strong variation both in the body size (in more than 1.5 times; see the measurements given below) and in the development of cheliceral crest (Figs 57–60). Yet, the embolus remains of the same size, despite size differences in the bulbus length (Figs 53–54).

Recently, Wunderlich [2011: 329] described a new *Icius* species: *I. lamellatus* Wunderlich, 2011 from Italy and Portugal. The main diagnostic characters from the suggested related species *I. insolitus* were the shape of cheliceral crest and the smaller embolic size. However, *I. lamellatus*, as was illustrated by Wunderlich

[2011: figs 1–9], seems to be identical with the west-Mediterranean – south-European *I. subinermis* Simon, 1937, both in the conformation of its male palp (cf. Alicata, Cantarella [1994: figs 52–53]) and the size and shape of the cheliceral crest (cf. Jäger [1995: fig. 1]). Therefore, the name *I. lamellatus* is likely to be a junior synonym of *I. subinermis*; the matter requires further attention in the future.

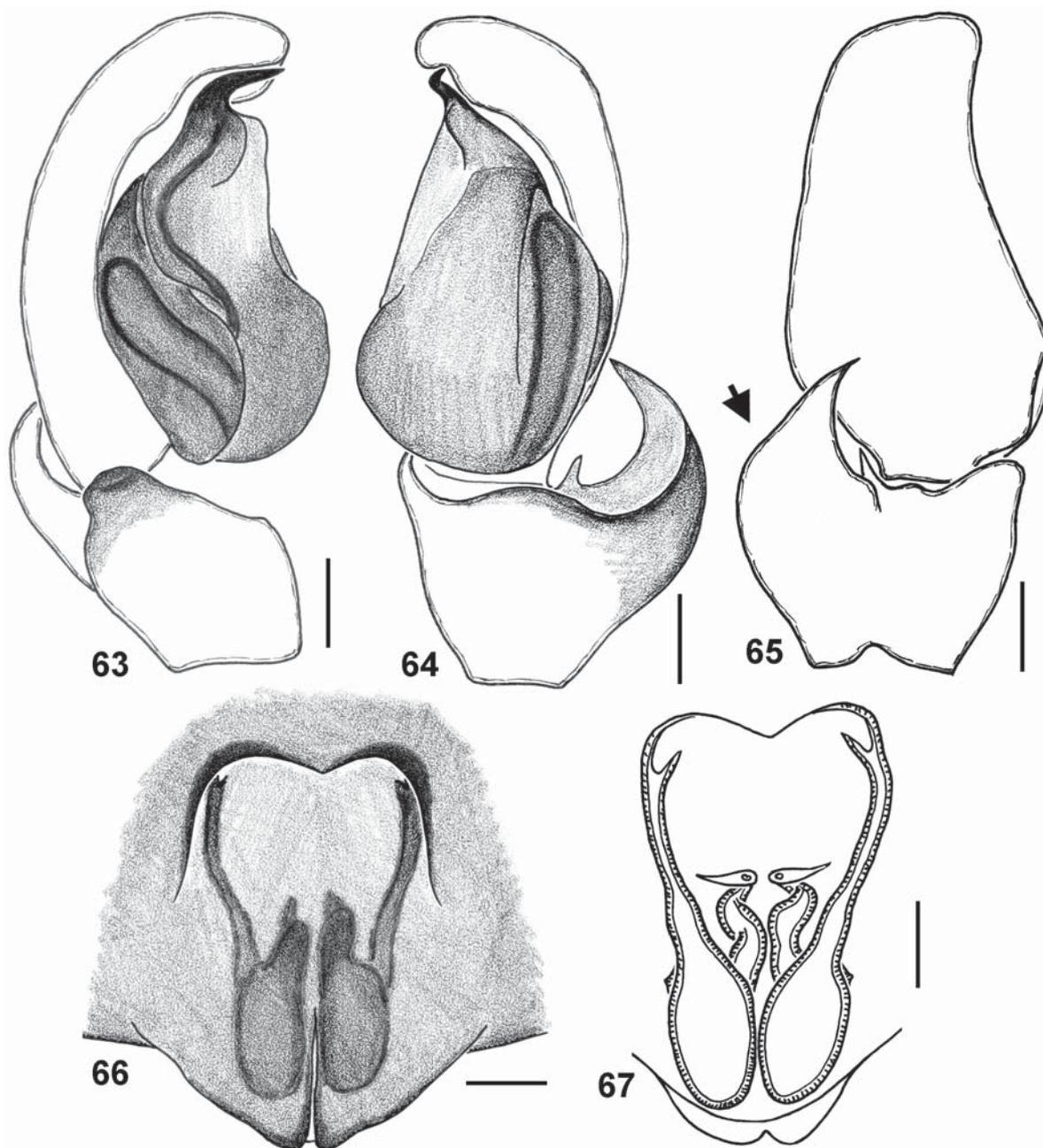
**DESCRIPTION**. **MALE**. *Measurements*. Carapace 2.15–3.00 long, 1.56–2.25 wide and 0.80–1.45 high at PLE. Ocular area 1.05–1.38 long, 1.25–1.63 wide anteriorly and 1.33–1.78 wide posteriorly. Diameter of AME 0.44–0.50. Clypeus not marked, chelicera length 0.88–1.68. Abdomen 2.30–3.75 long, 1.45–2.25 wide. Length of leg segments: I: 1.23–2.13 + 0.75–1.30 + 0.88–1.70 + 0.70–1.28 + 0.45–0.63; II: 0.93–1.38 + 0.50–0.80 + 0.60–0.93 + 0.58–0.88 + 0.38–0.48; III: 1.03–1.40 + 0.53–0.75 + 0.60–0.88 + 0.68–1.00 + 0.43–0.55; IV: 1.20–1.60 + 0.58–0.80 + 0.80–1.13 + 0.80–1.15 + 0.40–0.50. *Leg spination*. Leg I: Fm d 0-1-1-2; Tb v 0-1-1; Mt v 2-2ap. Leg II: Fm d 0-1-1-2; Tb pr 0-1, v 0-1; Mt v 2-2ap. Leg III: Fm d 0-1-1-2; Tb pr and rt 0-1, v 1ap; Mt pr and rt 2ap, v 1ap. Leg IV: Fm d 0-1-1-1; Tb pr 0-1, rt 0-1-1, v 1-0-2ap; Mt pr and rt 2ap, v 1ap. *Coloration*. Carapace yellowish brownish, covered with black hairs, with black around eyes and with white elongated spots of white scales along fovea, behind PLEs and below PME; there are also white marginal piping of scales and white transverse stripe of scales in front of eye field. Sternum yellow, tinged with brown and covered with white hairs. Labium and maxillae pink-yellow. Chelicerae yellowish brown, their dorsal (anterior) sides darker (brown to dark brown), and bear a narrow, elongated cheliceral crest (Figs 57–60). Abdomen: dorsum and sides yellowish brownish, with a white marginal stripe around the edges of dorsum (see Alicata & Cantarella [1994: fig. 47]); venter yellow. Book-lung covers yellow, spinnerets brownish. Legs I stronger and darker than others, brown with yellow Tr. Legs II–IV entirely yellow. Femora I with a set of stridulatory bristles situated in their apical parts. Palps yellow, tinged with brown, with brown bulbus; palp structure as in Figs 53–56; tibial apophysis short, cone-shaped, with a poorly visible sharp basal tooth; cymbium with finger-shaped (as seen in lateral view) lateral cymbial process [*sensu* Logunov, 1996]; bulbus ovoid, narrowing towards its apical end; embolus relatively short, spine-shaped.

**FEMALE**. *Measurements*. Carapace 2.50 long, 1.80 wide and 0.95 high at PLE. Ocular area 1.15 long, 1.45 wide anteriorly and 1.60 wide posteriorly. Diameter of AME 0.50. Clypeus not marked, chelicera length 0.80. Abdomen 2.68 long, 1.75 wide. Length of leg segments: I: 1.25 + 0.78 + 0.85 + 0.58 + 0.43; II: missing; III: 1.20 + 0.58 + 0.63 + 0.80 + 0.45; IV: 1.43 + 0.68 + 1.00 + 1.00 + 0.48. *Leg spination*. Legs I: Fm d 0-1-1-2; Tb pr and v 0-1; Mt v 2-2ap. Leg II: missing. Leg III: Fm d 0-1-1-2; Tb pr 0-1, rt 0-1-1, v 1ap; Mt pr and rt 2p, v 1ap. Leg IV: Fm d 0-1-1-1; Tb pr and rt 0-1, v 1ap; Mt pr and rt 2p, v 1ap. *Coloration* as in the male,



Figs 53–62. Copulatory organs and chelicerae of *Icius insolitus* Alicata et Cantarella, 1994 (Algeria, Wilaya Gulema, Ain Regada): 53, 54 — male palp, ventral view; 55 — ditto, retrolateral view; 56 — ditto, dorsal view; 57, 59 — male chelicera, lateral view; 58, 60 — ditto, dorsal view; 61 — epigyne, ventral view; 62 — spermathecae, dorsal view. Scale bars: 0.1 mm.

Рис. 53–62. Копулятивные органы и хелицеры *Icius insolitus* Alicata et Cantarella, 1994 (Алжир, вилайет Гулема, Айн Регада): 53, 54 — пальпа самца, вид снизу; 55 — тоже, вид сзади-латерально; 56 — тоже, вид сверху; 57, 59 — хелицера самца, вид сбоку; 58, 60 — тоже, вид сверху; 61 — эпигина, вид снизу; 62 — сперматека, вид сверху. Масштаб 0,1 мм.



Figs 63–67. Copulatory organs of *Salticus confusus* Lucas, 1846 (Spain, Valencia, Guadalest): 63 — male palp, prolateral view; 64 — ditto, ventral view; 65 — ditto, dorsal view; 66 — epigyne, ventral view; 67 — spermathecae, dorsal view. Scale bars: 0.1 mm.

Рис. 63–67. Копулятивные органы *Salticus confusus* Lucas, 1846 (Испания, Валенсия, Гуадалест): 63 — палпа самца, вид спереди-латерально; 64 — то же, вид снизу; 65 — то же, вид сверху; 66 — эпигина, вид снизу; 67 — сперматека, вид сверху. Масштаб 0,1 мм.

but visibly lighter (light yellow) and differ in the following aspects: carapace yellow with brown eye field and with no white elongated spots; dorsum yellow, with two wide brown longitudinal stripes; all legs and palps entirely light yellow. Epigyne and spermathecae as in Figs 61–62; epigyne with two small but clearly visible copulatory openings; insemination ducts run dorsally and therefore are not visible in dorsal view;

proximal sections of the receptacles pear-shaped and larger than the distal sections.

*Salticus confusus* Lucas, 1846  
Figs 63–71.

*Salticus confusus* Lucas, 1846: 163, pl. 8, f. 2 (D♂♀; the type series from Muséum National d'Histoire Naturelle, Paris, France; not examined).

For a complete set of taxonomic references see WSC [2015].

**MATERIAL.** ALGERIA: 1 ♂ (PCRB), Wilaya Blida, Atlas Blidéen, Meurdja, c. 950 m a.s.l., pitfall traps in the forest of *Pinus halepensis*, 15.06.1982, RB; 1 ♂ (PCRB), Wilaya Blida, Atlas Blidéen, Djebel Ferroukha, Ghellai, c. 1350 m a.s.l., pitfall traps in the cedrus forest, 20.06.1987–9.05.1988, RB; 1 ♂ (PCRB), Wilaya Blida, Atlas Blidéen, Chrea O., peak E. Abdelkader, c. 1520 m a.s.l., pitfall traps in *Cedrus* forest with *Berberis* bushes, 20.06.1987–9.05.1988, RB; 1 ♀ (PCRB), Wilaya Blida, Atlas Blidéen, Djebel Mouzaia, c. 1250 m a.s.l., under stones along the lake, 14.05.1988, RB; 1 ♂ (PCRB), Wilaya Tipasa, Douaouda, Wadi Mazafran, c. 50 m a.s.l., pitfall traps in *Olea* orchard, 19.12.1986–26.02.1988, RB; 1 ♀ (PCRB), Wilaya Bejaia, E of the mouth of Wadi Daas, c. 5 m a.s.l., under stones and on bushes on the shore, 22.05.1988, RB; 1 ♂, 1 ♀ (PCRB), Wilaya Tipasa, Sidi Fredj, c. 10 m a.s.l., beating off branches in *Pinus halepensis* forest, 12.06.1987, RB; 1 ♂ (PCRB), same locality, pitfall traps in *Olea* stands, 10.12.1986–20.12.1987, RB; 1 ♂ (PCRB), Wilaya Tipasa, Douaouda, Wadi Mazafran, 50 m a.s.l., glades in forest of *Populus alba*, 16.12.1986–26.02.1988, RB. — PORTUGAL: 15 ♂♂, 22 ♀♀ (FMNH), Mértola (c. 37°38'N, -7°40'W), 28.05.2003, PC; 1 ♂ (FMNH), Algodôr (c. 37°45'N, -7°48'W), pitfall traps, 21.05.2003, PC; 2 ♂♂, 1 ♀ (FMNH), Paúl do Boquilobo Biosphere Reserve (c. 39°23'N, -8°32'W), 28.05–5.06.2002, PC. — SPAIN: 12 ♂♂ (NMPC) & 3 ♂♂, 3 ♀♀ (ZMUM), València, Guadalest (c. 38°41'N, 0°11'E), 27.04.2004, LD; 1 ♂ (NMPC), Deltebre, 26.04.2004, LD; 10 ♂♂, 2 ♀♀ (NMPC), NP del'Albufera, 30.04.2004, LD; 2 ♂♂ (NMPC), Guardamar, del Segura, 28.04.2004, LD; 1 ♂ (NMPC), Besalú, 2.05.2004, LD; 1 ♂ (NMPC), Sagunt (=Sagunto), 26.04.2004, LD; 2 ♂♂ (SMNH), Montserrat, 1.05.2004, LD; 4 ♂♂ (SZMN), Xàvia (=Javeá), NP del Mongú, 29.04.2004, LD. — GREECE: 1 ♂ (PCJK), Crete, Imbros Gorge, beating, 9.04.2002, J. Van Keer; 1 ♂ (PCJK), Crete, Fran Gokastell, 10.04.2002, J. Van Keer.

**DIAGNOSIS.** The male of *S. confusus* is most similar to those of two poorly known species: *S. conjunctus* (Simon, 1868) from Italy and France and *S. modicus* (Simon, 1875) from France, illustrated by Simon [1937]. From both species, *S. confusus* can be distinguished by the presence of a sharp tooth at the base of tibial apophysis and by the hook-shaped embolus (Figs 64, 68, 70). The female of *S. confusus* is most similar to that of *S. zebraneus* (C.L. Koch, 1837) [Metzner, 1999: table 82], from which it differs in having the longer and narrower insemination ducts and a different shape of the epigynal plate (Figs 66–67).

**COMMENTS.** As I have been unable to re-examine the type series, the present identification is based on the illustrations provided by Simon [1937: figs 1906–1907] and also on the fact that to date the species has been known from the Iberian Peninsula and Corsica only [Helsdingen, 2014].

The two studied males of *S. confusus* from Crete are characterised by the visibly narrower tibial apophysis, as compared to the Algerian specimens (arrowed in Figs 65, 69). Therefore, it is likely that the Cretan population may belong to a different, closely related species. The matter needs further attention, when more material of both sexes has been collected from Crete.

**DISTRIBUTION.** A Mediterranean species that is more common in the western Mediterranean: from NW Africa (Algeria) and the Iberian Peninsula (Spain and Portugal) in the west, to Corsica and Crete in the east [Simon, 1937; Helsdingen, 2014; present data]. New record for Greece (Crete).

**DESCRIPTION.** MALE (from Spain, València, Guadalest). *Measurements.* Carapace 1.78 long, 1.15 wide and 0.68 high at PLE. Ocular area 0.89 long, 1.00 wide anteriorly and 1.01 wide posteriorly. Diameter of AME 0.34. Clypeus not marked, chelicera length 0.77. Abdomen 1.63 long, 1.00 wide. Length of leg segments: I: 0.85 + 0.50 + 0.53 + 0.48 + 0.30; II: 0.73 + 0.40 + 0.43 + 0.38 + 0.28; III: 0.80 + 0.43 + 0.45 + 0.48 + 0.35; IV: 0.98 + 0.43 + 0.58 + 0.55 + 0.40. *Leg spination.* Leg I: Fm d 0-1-1-2; remaining segments are spineless. Leg II: Fm d 0-1-2; remaining segments are spineless. Leg III: Fm d 1-0; Mt 6ap. Leg IV: Fm d 1-0; Tb rt 0-1, v 2ap; Mt 6ap. *Coloration.* Carapace brown: eye field dark brown, with a wide, white transverse band of white scales in its front (above AMEs); there are two white scaly patches behind PLEs and white marginal band of white scales. Sternum yellowish brown, covered with white hairs. Maxillae, labium and chelicerae yellowish brown. Abdomen: dorsum and sides dark grey-brown, with three transverse white bands of white scales of dorsum; venter lighter, brown yellowish. Book-lung covers and spinnerets yellow brownish. All legs yellowish with brownish sides of Pt, Tb and Mt, with legs I darker than the others. Palps yellow, with brownish bulb, their structure as in Figs 63–65, 68–71; the tibial apophysis strongly bent medially, and with the sharp tooth situated at its base of tibial apophysis; the hook-shaped embolus.

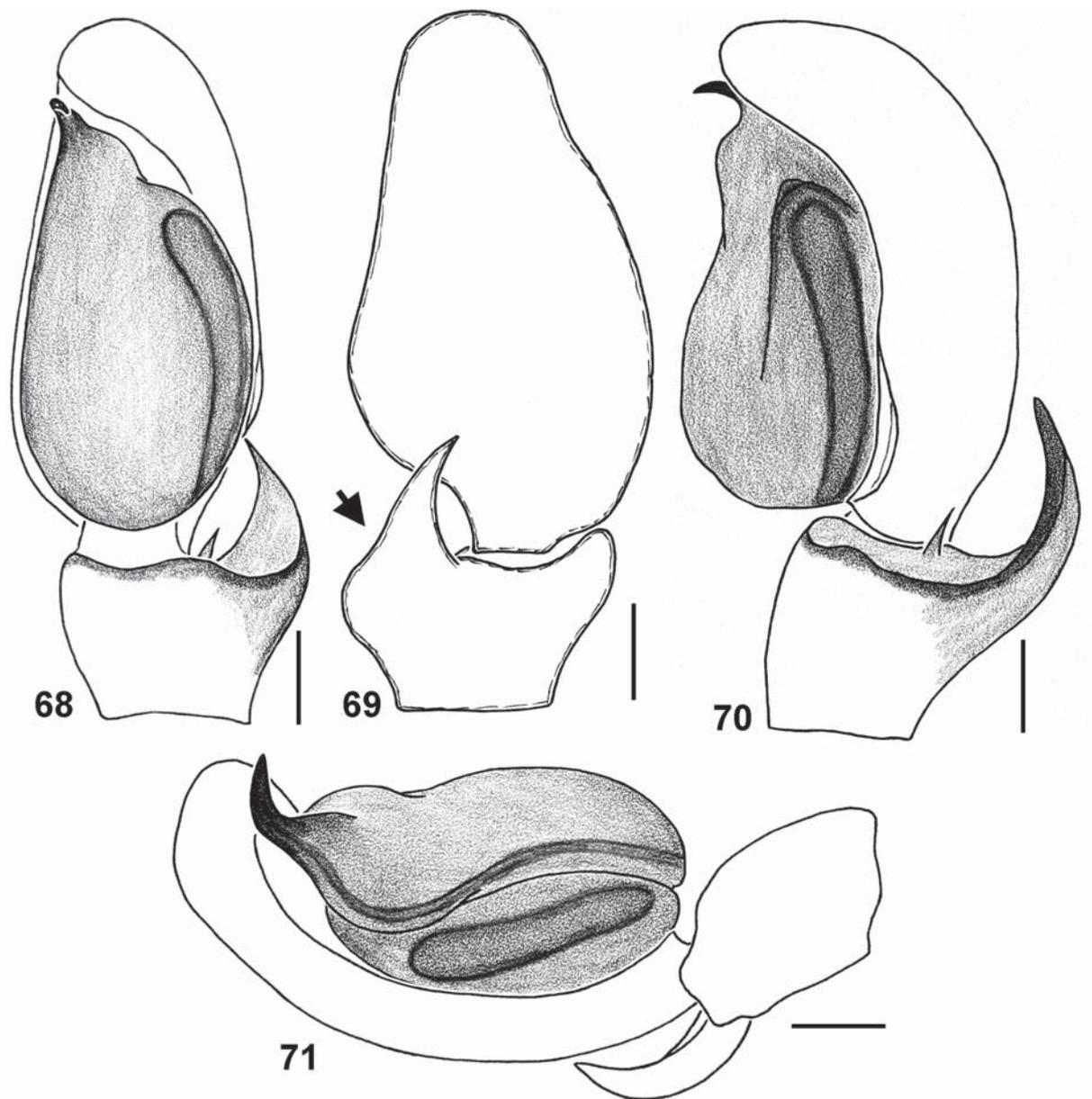
**FEMALE** (from Spain, València, Guadalest). *Measurements.* Carapace 2.15 long, 1.34 wide and 0.88 high at PLE. Ocular area 0.99 long, 1.19 wide anteriorly and 1.24 wide posteriorly. Diameter of AME 0.39. Clypeus not marked, chelicera length 0.57. Abdomen 2.33 long, 1.50 wide. Length of leg segments: I: 0.91 + 0.58 + 0.53 + 0.40 + 0.38; II: 0.83 + 0.35 + 0.45 + 0.40 + 0.30; III: 0.95 + 0.50 + 0.50 + 0.53 + 0.45; IV: 1.15 + 0.60 + 0.68 + 0.70 + 0.43. *Leg spination.* Legs I and II: Fm d 0-1-1-2; Mt v 1ap. Leg III: Fm d 0-1-1-3; Tb rt 0-1; Mt v 6ap. Leg IV: Fm d 0-1-1-1; Tb rt 0-1, v 1ap; Mt v 6ap. *Coloration* as in the male but lighter, especially light grey abdomen and light yellow legs; only apical tips of Fm, Pt, Tb and proximal parts of Mt are tinged with brown. Palps light yellow. Epigyne and spermathecae as in Figs 66–67; the epigynal plate extends over the epigastric furrow, with a narrow, median cut in its rear part and two narrow epigynal wings anteriorly; insemination ducts narrow; receptacles ovoid with tube-like terminal sections.

#### *Salticus ressl* sp.n.

Figs 72–74.

**TYPE.** Holotype ♂ (NHMW, 4185) from Turkey, [Mersin], Namrun (c. 37°10'13"N, 34°36'04"E), pine forest, 12.05–5.06.1964, FR.

**ETHYMOLOGY.** The species is dedicated to Franz Ressler (1924–2011), the zoologist from the Natural History Museum in Vienna (Austria) who collected the holotype.



Figs 68–71. Male palp of *Salticus confusus* Lucas, 1846 (Greece, Crete): 68 — ventral view; 69 — dorsal view; 70 — retrolateral view; 71 — prolateral view. Scale bars: 0.1 mm.

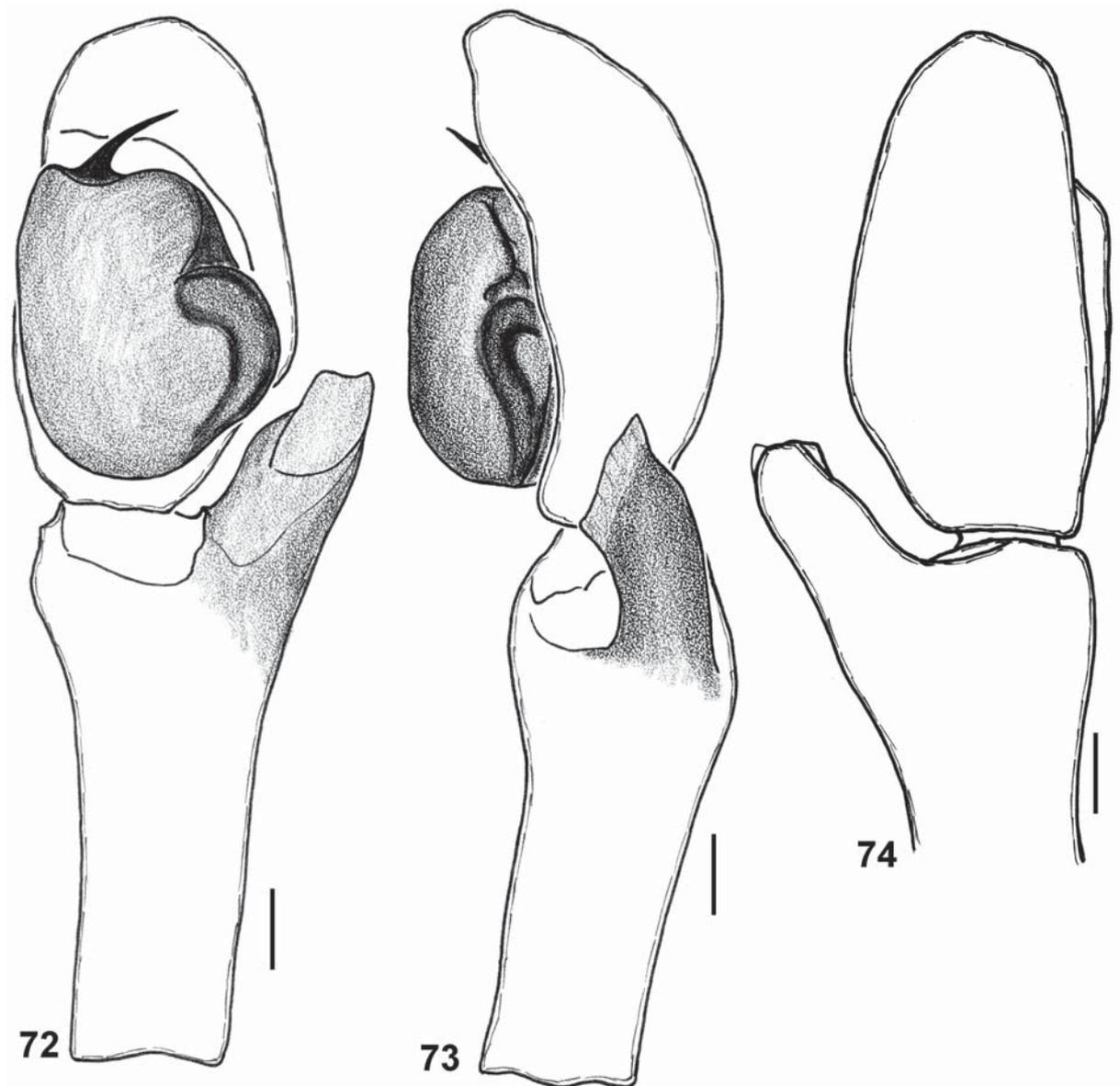
Рис. 68–71. Пальпа самца *Salticus confusus* Lucas, 1846 (Греция, Крит): 68 — вид снизу; 69 — вид сверху; 70 — вид сзади-латерально; 71 — вид спереди-латерально. Масштаб 0,1 мм.

**DIAGNOSIS.** The new species is most similar to the Mediterranean-Central Asian species *S. tricinctus* (C.L. Koch, 1846), but can readily be distinguished by the position of the embolus directed more anteriorly than in *S. tricinctus* (cf. Figs 72 and 109, 111), the shape of tibial apophysis having as if an ‘excavated’ tip and the absence of a small tooth at the base of tibial apophysis (cf. Figs 73 and 110).

**DISTRIBUTION.** The type locality only.

**DESCRIPTION. MALE** (the holotype). *Measurements.* Carapace 2.90 long, 1.95 wide and 0.90 high at PLE. Ocular area 2.60 long, 3.00 wide anteriorly and

3.15 wide posteriorly. Diameter of AME 0.53. Clypeus not marked, chelicera length 2.30. Abdomen 2.85 long, 1.75 wide. Length of leg segments: I: 1.70 + 1.00 + 1.35 + 1.10 + 0.60; II: 1.25 + 0.75 + 0.80 + 0.75 + 0.48; III: 1.35 + 0.75 + 0.75 + 0.85 + 0.50; IV: 1.50 + 0.78 + 0.98 + 0.90 + 0.58. *Leg spination.* Legs I and II: Fm d 1-1; the rest of segments are spineless. Legs III and IV: Fm d 1-1; Tb rt 0-1, v 2ap; Mt 3ap. *Coloration.* Carapace dark red-brown, with black around eyes. Sternum and labium dark brown, covered with white hairs. Maxilla orange, chelicerae red-brown. Abdomen dark brown, but dorsum with three transverse white stripes



Figs 72–74. Male palp of *Salticus resslī* sp.n. (holotype): 72 — ventral view; 73 — retrolateral view; 74 — dorsal view. Scale bars: 0.1 mm.

Рис. 72–74. Пальпа самца *Salticus resslī* sp.n. (голотип): 72 — вид снизу; 72 — вид сзади-латерально; 73 — вид сверху. Масштаб 0,1 мм.

of scales. Book-lung covers and spinnerets dark brown. All legs brown, with Mt and Tr of all legs visibly lighter (yellow-brown). Palps brown, their structure as in Figs 72–74; embolus stiletto-like, directed anterio-laterad, bulbus pear-shaped, tibial apophysis wide, with the ‘excavated’ tip.

FEMALE unknown.

#### New faunistic records

*Aelurillus blandus* (Simon, 1871)

MATERIAL. GREECE: 1 ♀ (SMFM), Karpaaθος, Pigadia, no date, RK.

COMMENTS. Greece (mainland and Crete) only [Metzner, 1999; Azarkina, 2002; Dobroruka, 2002].

*Aelurillus concolor* Kulczyński, 1901

MATERIAL. TURKEY: 1 ♀ (NHMW), Erdschias area (N-side), nr. Lifos (c. 38°35′30″N, 35°29′E), 25–30.05.1902, A. Pen-ther; 1 ♂ (NHMW), Burdur Gölü (label is illegible), 18.09.1955.

COMMENTS. Greece to Kyrgyzstan, south-eastward to Kerman Province of Iran [Azarkina, Mirshamsi, 2014; present data].

*Aelurillus conveniens* (O. Pickard-Cambridge, 1872).

MATERIAL. EGYPT: 1 ♀ (NHMW), Sinai, Gebel Musa (=Jebel Musa; c. 28°32′N, 33°58′E), 10.04.1982, HEH.

COMMENTS. Restricted to the Near East: Egypt, Israel and Syria [Prószyński, 2003].

*Aelurillus luctuosus* (Lucas, 1846)

MATERIAL. ALGERIA: 2 ♂♂ (PCRB), Wilaya Blida, Atlas Blidéen, Chrea O., peak E. Abdelkader, c. 1520 m a.s.l., pitfall traps in *Cedrus* forest with *Berberis* bushes, 20.06.1987–9.05.1988, RB. — SPAIN: 2 ♂♂ (MVHN), Valencia, Alicante, Vall d'Ebo, Exterior Avenc Ample, 25.05.2005, SM; 1 ♂ (MVHN), Valencia, Devesa del Saler (Polideportivo), 17.05.2004, DD; 11 ♂♂, 11 ♀♀ (NMPC), Xàvia (=Jàvea), NP del Mongü, 29.04.2004, LD; 2 ♂♂, 1 ♀ (NMPC), Valencia, Guadalest (c. 38°41'N, 0°11'E), 27.04.2004, LD; 1 ♂ (MMUM; G7512.5347), Murcia, Sierra da Espuna, under stones above treeline, 19.05.1986, ED; 1 ♂ (SMFM), Castellon Prov., W Atzeneta del Maestrat, Cova Obscura NW Ermita de Sant Joan (40.2000°N, -0.21203°W), 550 m a.s.l., free walking in deeper humid parts of cave, 30.05.2010, SH & AS.

COMMENTS. A Mediterranean species known from Portugal and Morocco, throughout Greece (incl. Crete) and Tunisia [Azarkina, Logunov, 2006], to Turkey [Danişman *et al.*, 2012; Coşar *et al.*, 2014].

*Aelurillus v-insignitus* (Clerck, 1758)

MATERIAL. TURKEY: 1 ♂ (SZMN), Artvyn Prov., Hopa, 17.05.1997, V. Bryja; 4 ♂♂ (NHMW), Akşehir, Sultandag, 24.04–26.05.1960, FR; 1 ♂ (NHMW), Akşehir, 22.05.1960, Rasen; 1 ♂ (PCSD) Kazilibelli pass, S of Denizli, 29.05.1997, RS.

COMMENTS. A trans-Eurasian temperate species [Logunov, Marusik, 2000b].

*Asianellus festivus* (C.L. Koch, 1834)

MATERIAL. SPAIN: 1 ♀ (MHNG), Barcelona, 12.1981, A. Senglet & PH. — TURKEY: 1 ♀ (NMPC), nr. Pazar, c. 24 km W of Tokat (40°16'N, 36°17'E), Ballica, nr. Mağarasi cave, 29.06–1.07.2002, MR. — RUSSIA: 1 ♀ (SZMN), Krasnodar Territory, nr. Adler, c. 6 km upstream of Mzynta river, 28.09.1993, O.V. Lyakhov.

COMMENTS. A trans-Eurasian temperate species, known from Spain [present data] to the Kuril Islands [Logunov, Marusik, 2000b]. New record for Spain.

*Asianellus potanini* (Schenkel, 1963)

MATERIAL. ARMENIA: 1 ♂ (ZISP, A.No. 202-1938), nr. Yerevan, 21.05.1938, A. Rikhter & M. Ter-Minasyan.

COMMENTS. A Caucaso-Siberian subboreal species, known from Armenia [present data] to central China [Logunov, Marusik, 2000b]. New record for Armenia.

*Ballus chalybeius* (Walckenaer, 1802)

MATERIAL. ALGERIA: 1 ♂ (PCRB), Wilaya Tizi Ouzou, Massif Djurdjura, Tala Gulief, c. 1500 m a.s.l., pitfall traps in *Quercus plusieurs* forest, 25.11.1986–29.05.1987, RB; 1 ♂ (PCRB), Wilaya Boumerdes, Reghia, 45 m a.s.l., pitfall pitfall traps in degaraded *Quercus suber* forest, 13.06.1988, RB; 1 ♂ (PCRB), same locality, *Olea europea* orchard, 3.05.1988, RB; 1 ♂ (PCRB), Wilaya Oran, forest nr. Msila, 400 m a.s.l., sieving *Quercus suber* litter, among stones and *Oxalis*, 25.04.1984, RB; 2 ♀♀ (PCRB), Wilaya Tipasa, Bouchaoui, c. 95 m a.s.l., pitfall traps in *Ulmus* forest and *Eucalyptus* plantation, 1.01.1987–12.01.1988, no date, RB; 1 ♀ (PCRB), Wilaya Tipasa, Sidi Fredj, c. 10 m a.s.l., beating off branches in *Pinus halepensis* forest, 12.06.1987, RB; 1 ♀ (PCRB), Wilaya Bejaia, S. Tichi, c. 50 m a.s.l., under shrubs along Wadi Djemaa, 20.05.1988, RB. — PORTUGAL: 4 ♀♀ (FMNH), Mértola (c. 37°38'N, -7°40'W), 27.05.2003, PC. — SPAIN: 1 ♀ (MHNG), Zamora, nr. Sandin de Carballeda, 17.07.1975, PH. — GREECE: 1 ♀ (MHNG), Crete, Lassithi, the road Lassithi-Irakleon nr. junction to Krasi, c. 570 m a.s.l., 7.05.1985,

CL; 1 ♂ (SMFM), NE hillside of Ossa Mts, above Omolion, 500 m a.s.l., 20.04.1968, JMS. — TURKEY: 1 ♀ (LMNM), İsparta, Kova-da Gölü, sparsely vegetated lakeside shingle, 20.06.1993, SJ & CF; 1 ♀ (LMNM), c. 4 km E of Eliceck, Çorum (40°18'38"N, 34°42'51"E), c. 1192 m a.s.l., willow-lined river bank below *Quercus* hillside, 6.07.1995, SJ & CF; 2 ♀♀ (NMPC), nr. Pazar, c. 24 km W of Tokat (40°16'N, 36°17'E), Ballica, nr. Mağarasi cave, 29.06–1.07.2002, MR; 1 ♀ (ZMTU), Izmir Distr., Yamanlar Dağı, litter of deciduous forest (*Platanus-Rubus-Crataegus-Quercus-Pinus*), 25.05.1973, PL; 2 ♀♀ (NHMW), Tekketal, SW Akşehir, 1100–1200 m a.s.l., pine forest with *Quercus coccifera*, *Corylus*, etc., 11.06.1967, JG, FR & AR; 1 ♀ (NHMW), c. 20 km NE of Eskişehir, c. 1000 m a.s.l., oak-pine forest, 13.06.1967, JG, FR & AR; 2 ♀♀ (NHMW), Kizilcahanman, 1000–1200 m a.s.l., thicket of fruit trees, 27–28.05.1967, JG, FR & AR; 1 ♂, 1 ♀ (NHMW), Akşehir, Sultandağ, 5.06.1960, FR; 1 ♂, 2 ♀♀ (NHMW), Namrun, pine forest, 12.05–5.06.1964, FR; 1 ♀ (NHMW), Namrun, S-slope of Taurus, 1200 m a.s.l., 9–11.05.1969, AR. — ABKHAZIA: 1 ♂ (ZMUM), nr. Sukhum, Canyon Esher, ferns and butcher's broom (*Ruscus aculeatus*), 8.06.2004, EM; 1 ♂ (ZMUM), nr. Sukhum, left bank of Kelasuri River (c. 3 km upstream of its mouth), alder thicket, 5.06.2004, EM. — GEORGIA: 1 ♀ (ZISP, A.No. 301-470), Kolkhida, N. Chkhugunetch, 500–650 m a.s.l., 3–10.06.1969, EP; 1 ♂ (SZMN), Kolkhida, Patara Poti, on the ground, 11.04.1988, DL; 2 ♂♂ (ZMUM), E of Poti, Chaladidi, alder-oak forest on swamp, in litter, 13.04.1983, SG. — RUSSIA: 2 ♀♀ (ZMUM), North Ossetia, c. 10 km N of Mozdok, *Acacia* hedge, in litter, 28.05.1982, SG. — AZERBAIJAN: 1 ♀ (ZMUM), Naççivan, nr. Bichenek, 1900 m a.s.l., 13.07.1988, PD. — SYRIA: 1 ♂, 1 ♀ (NMPC), NW Syria, Mashtal Helu nr. Homs, 30.03–3.04.2001, MR; 2 ♂♂ (NMPC), NW Syria, Slunfeh nr. Latakia, oak forest, 9.04.2001, MR.

COMMENTS. A European – Central Asian species, known from Portugal and Algeria [Helsdingen, 2014; present data], throughout the Mediterranean to Kyrgyzstan [Logunov, Rakov, 1998]. New records for Algeria and Syria.

*Ballus rufipes* (Simon, 1868)

MATERIAL. CYPRUS: 1 ♂ (PCDM), house in Dali, in garden, spring 2004, DMC. — TURKEY: 1 ♀ (NMPC), Çağlayan, c. 24 km SE of Erzincan (39°36'N 39°42'E), valley above waterfall, 23–24.06.2002, MR.

COMMENTS. A Mediterranean species, recorded from the Iberian Peninsula to Turkey [Helsdingen, 2014; present data]. New records for Cyprus and Turkey.

*Bianor albobimaculatus* (Lucas, 1846)

MATERIAL. ALGERIA: 3 ♂♂, 6 ♀♀ (PCRB), Wilaya El Tarf, El Kala, N of Lac Tonga, c. 10 m a.s.l., pitfall traps in *P. halepensis* forest on dunes, 27.03.1988, RB; 1 ♂ (PCRB), Wilaya El Tarf, El Kala, coast nr. Cap Rosa, El Wadi in Nhal, c. 2 m a.s.l., in litter of *Quercus suber* and *Chamaerops humilis* along rivulet, 4.04.1982, RB. — SPAIN: 2 ♂♂, 4 ♀♀ (NMPC), Catalonia, Deltrebre (c. 40°44'N, 0°50'W), 26.04.2004, LD; 1 ♀ (NMPC), Catalonia, Riumar, 26.04.2004, LD; 1 ♂ (NMPC), Catalonia, Mataró (c. 41°32'N, 2°27'E), 1.05.2004, LD; 1 ♀ (NHRS), Andalucía, Fuengirola, Rio Fuengirola, among vegetation in moist site, 19.05.1977, TK. — GREECE: 1 ♀ (SMFM), Crete, c. 8 km W of Chania, NW-shore of reservoir nr. Ajia, high grass with Umbellifera and Compositae, 23.04.1958, HK. — TURKEY: 1 ♂ (LMNM), İçel, Silifke, c. 1 km E of Tasucu (36°18'37"N, 33°54'14"E), canalised river marsh with *Phragmites*, *Juncus* and *Mentha*, alongside timber yard, 6.05.1994, SJ & CF. — SYRIA: 1 ♀ (SMFM), Hama Prov., W slope of al-Ghab, karst spring, fish-ponds of Sattqa, 22.03.1979, RK. — AZERBAIJAN: 1 ♂ (SZMN), Lenkoran Area, Vel' (38°38'N, 48°52'E), 22.05.2003, EG; 1 ♂ (ZISP, A.No. 273-1909), same area, Dama-kh, 1.07.1909, A. Kirichenko.

COMMENTS. This species has been recorded under many names from South Africa to the Mediterranean, with Algeria and Portugal being the westernmost

limits of its range, eastward to Central Asia [Logunov, 2001a, 2009a]. New record for Turkey.

*Carrhotus xanthogramma* (Latreille, 1819)

MATERIAL. SPAIN: 2 ♂♂ (NMPC), Besalú, 2.05.2004, LD. — CROATIA: 1 ♀ (SMFM), Primorje-Gorski kotar, Rab Isl., hand collecting, 12–15.05.2008, JA & JM. — SLOVENIA: 1 ♀ (SMFM), S of Komen (45°48'20.61"N, 13°45'52.56"E), Karst, semi-natural meadow with stonewalls, bushes and trees, 27.06–5.07.2001, PJ. — TURKEY: 1 ♀ (LMNM), İçel, Çamlıyayla, Dağ Hotel area (37°10'10"N, 34°36'02"E), c. 1454 m a.s.l., limestone cliff, 1.07.1995, SJ & CF. — RUSSIA: 1 ♂ (SZMN), The Crimea, Bakhchisarai, 24–26.06.1993, SV; 1 ♂ (ZMUM), Daghestan, Kiziyurt Distr., Kakayurt river valley, 20.05.1981, O.V. Voltzit; 1 ♀ (ZMUM), Krasnodar Territory, Goryachiy Klyuch, c. 10 km S of Fanagoriyskoe Vil., mixed forest, 30.10.1981, SG; 1 ♂ (ZISP, A.No. 301), same territory, nr. Essentuki, 4.05.1955, Garnovskii; 1 ♀ (ZISP), Krasnodar Territory, nr. Khosta, 13–31.08.1929, coll.? — GEORGIA: 1 ♀ (ZISP), Batumi, in grass, 14.08.1914, A. Bykov. — AZERBAIJAN: 1 ♂ (ZMUM), Lenkoran Area, nr. Kirovsk (now Istisu), 200 m a.s.l., 8.05.1985, PD; 1 ♀ (ZMUM), same area, Balyabir, 6.05.1985, PD; 1 ♂ (ZISP), Shemakha Area, Pirkuli Reserve, 1000–1100 m a.s.l., 24.05.1984, DL.

COMMENTS. An amphi-Eurasian subboreal-subtropical species, known from Portugal to the S Urals, and then from Transbaikalia to Japan; the species is absent from west and central Siberia [Logunov, Marusik, 2000b].

*Chalcoscirtus infimus* (Simon, 1868)

MATERIAL. ALGERIA: 1 ♀ (PCRB), Wilaya Blida, Meftah, Djebel Zerouela, c. 450 m a.s.l., among stones and Graminea in maquis, 23.05.1985, RB; 1 ♂ (PCRB), Wilaya Blida, Atlas Blidéen, Djebel Mouzaia, c. 1250 m a.s.l., under stones along the lake, 14.05.1988, RB; 1 ♂ (PCRB), Wilaya Blida, Atlas Blidéen, Chrea E., peak Fertasse, c. 1450 m a.s.l., pitfall traps in *Cedrus* forest, 12.04.1987–9.05.1988, RB; 1 ♂, 1 ♀ (SZMN), Wilaya Blida, Chrea, c. 1550 m a.s.l., mountain grassland, 10.06.1985, RB; 1 ♀ (PCRB), Wilaya Aïn Defla, between Bordj Emir Khaled and Tarik Ibn Ziad, c. 700 m a.s.l., border of Wadi Massine, under stones and in litter, 18.05.1988, RB; 1 ♂ (PCRB), Wilaya Bejaia, E of Wadi Daas, c. 5 m a.s.l., under stones and on bushes on the shore, 22.05.1988, RB; 2 ♂♂, 4 ♀♀ (ZMUM), Wilaya Bejaia, Tichi, c. 10 m a.s.l., wasteland in dunes, in litter and beating off *Acacia*, 21.05.1988, RB; 1 ♀ (PCRB), Wilaya Tipasa, Bouchaoui, c. 95 m a.s.l., pitfall traps in *Pinus halepensis* forest, 12.01–24.06.1988, RB; 1 ♂ (PCRB), Wilaya M'Sila, Chott el Hodna, S. Baniou, c. 400 m a.s.l., small dunes, in clumps of vegetation, 13.08.1988, RB; 1 ♂ (PCRB), Wilaya Boumerdes, Le Figuier, c. 5 m a.s.l., dunes nr. the beach, 2.05.1986, RB; 1 ♂ (PCRB), Wilaya Boumerdes, Zemmouri, 0 m a.s.l., litter on the shore, 31.05–7.07.1985, RB; 2 ♂♂ (PCRB), Wilaya Tlemsen, Djebel Ourgla, NE of El Gor, c. 1290 m a.s.l., under stones and sieving litter in *Quercus ilex* forest, 5.05.1984, RB; 1 ♂ (PCRB), Wilaya Oran, Daiet El Bragat along W18, c. 100 m a.s.l., among dry *Salicornia* and other herbs, 25.04.1984, RB; 1 ♂, 1 ♀ (ZMUM), Wilaya Tizi Ouzou, Wadi Youcef, c. 10 m a.s.l., pitfall traps along wadi, 22.05.1988, RB; 1 ♂ (PCRB), Wilaya Tizi Ouzou, forest Akfadou, Lake Agoulmin Aberkane, c. 1750 m a.s.l., among stones in *Quercus faginea* forest, 22.06.1984, RB; 1 ♀ (PCRB), Wilaya Bou Saada, Bou Saada, c. 560 m a.s.l., garden nr. hotel Transatlantique, 12.05.1988, RB. — PORTUGAL: 1 ♂ (FMNH), Ribeira de Limas (c. 37°49'N, -7°37'W), pitfall traps, 21.05.2003, PC; 3 ♂♂ (FMNH), Corredoura (c. 37°45'N, -7°39'W), 21.05–18.06.2003, PC; 1 ♂ (FMNH), Mértola (c. 37°38'N, -7°40'W), 24.05.2003, PC; 1 ♂, 1 ♀ (FMNH), Paúl do Boquilobo Biosphere Reserve (c. 39°23'N, -8°32'W), 28.05–5.07.2002, PC; 1 ♂ (FMNH), Mira d'Aire (c. 39°33'N, -8°43'W), pitfall traps, 4.06.2002, PC. — SPAIN: 2 ♂♂, 1 ♀ (NMPC), Xàvia (=Jàvea), NP del Mongü, 29.04.2004, LD. — GREECE: 1 ♂, 1 ♀ (LMNM), Lesbos, Vatera (39°01'13"N, 26°10'53"E), 20.04.1997,

SJ; 1 ♀ (SMFM, 1986), Crete, Akrotiri plain, 05.1928, CR; 1 ♂ (SMFM), Crete, SW Ajil deka, edge of Messara valley, sands with *Medicago lupulina*, 10.04.1958, HK; 1 ♂ (SMFM), Crete, valley NW of Lake Curna, rocky, dense bushes, *Ficus*, *Quercus coccifera*, on stones, 15.04.1958, HK; 1 ♂ (SMFM), Crete, nr. Ajil Deka, Gortys, E-slope, 85–100 m a.s.l., scree, bramble, *Cirsium*, few grass, 9.04.1958, HK; 1 ♂ (SMFM), Crete, W of Camaris, 600–800 m a.s.l., slope, rocky, *Euphorbia*, Liliacea, 6.04.1958, HK; 2 ♂♂ (SMFM), N Crete, Gouves, 3.05.2008, HE & UK; 2 ♂♂ (SMFM), N Crete, Gouves, 2.05.2008, HE & UK. — CYPRUS: 1 ♂ (MHNG), nr. Tochni (between Lamaca and Limassol), under the bark of Carob tree, c. 100 m a.s.l., 24.03.1997, CL; 1 ♀ (PCMA), Gialia, 25.03.1998, MA. — TURKEY: 1 ♂ (PCRS), Akyaka, on rocks behind Cinan Beach, 30.05.1996, ARS; 1 ♂, 2 ♀♀ (LMNM), Kayseri, c. 31 km S of Duvalli, rocky outcrop with *Euphorbia* and mixed scrub, 15.06.1993, SJ & CF; 1 ♀ (LMNM), İsparta, nr. Uğurlu, 7.07.1992, SJ; 1 ♂ (LMNM), Bağkonak, Sultan Dağları, Konya, under dwarf hillside herbs, 19.09.1993, SJ & CF; 1 ♂ (LMNM), Kayseri, c. 1 km E of Dörtyal, Çol Gölü (38°27'40"N, 35°10'05"E), 11.05.1994, SJ & CF; 1 ♂ (LMNM), Niğde, c. 8 km W of Gözlükuyu, c. 1 km along İlharra road off Askeray-Adana road, herb-rich, very rocky abandoned farmland edge, 10.05.1994, SJ & CF; 2 ♂♂, 1 ♀ (LMNM), Konya, Tuz Gölü (lake), Yavşan Tuslası (38°45'43"N, 33°09'31"E), halophytic marsh, 9.05.1994, SJ & CF; 1 ♀ (NMPC), Sivas Prov., nr. Demiryurt, Tödürge Gölü (lake), c. 13 km W of Zara (39°53'N, 37°37'E), 25–28.06.2002, MR; 1 ♀ (NMPC), nr. Pazar, c. 24 km W of Tokat (40°16'N, 36°17'E), Ballica, nr. Mağarasi cave, 29.06–1.07.2002, MR; 1 ♀ (PCSD), nr. Dalyan, saltmarsh below Caunos, 18.05.1997, RS; 3 ♂♂, 2 ♀♀ (PCSD), S of Denizli, Kanzikbelli pass, 29.05.1997, RS; 1 ♂ (PCLJ), Erdemli, under stone, 2.06.2004, LJ; 1 ♀ (NHMW), Hereke, c. 23 km W of İzmit, 50–100 m a.s.l., olive plantation (under stones and in grass), 25.05.1967, JG. — SYRIA: 2 ♂♂ (NMPC), S Syria, Qastaf Maar, 13.04.2001, MR; 1 ♂ (NMPC), NW Syria, Mashtal Helu nr. Homs, 30.03–3.04.2001, MR.

COMMENTS. A Mediterranean – Central Asian subboreal species, known from the Azores and Iberian Peninsula [Wunderlich, 1992; Helsdingen, 2014], throughout the Mediterranean, Asia Minor and the Caucasus to Kyrgyzstan and Tajikistan [Logunov, Marusik, 1999; Marusik *et al.*, 2004; Danişman *et al.*, 2012; Coşar *et al.*, 2014]. New record for Cyprus.

*Chalcoscirtus nigrinus* (Thorell, 1875)

MATERIAL. TURKEY: 1 ♂ (LMNM), İsparta, Kovada Gölü (lake), sparsely vegetated lakeside shingle, 20.06.1993, CF; 1 ♂ (LMNM), İsparta, Eğridir Gölü (lake), vegetated shingle and lakeside sand, 20.06.1993, SJ & CF; 1 ♂ (LMNM), Kayseri, Demirkazık, 12–13.06.1993, CF; 1 ♂, 1 ♀ (NMPC), Sivas Prov., nr. Demiryurt, Tödürge Gölü (lake), c. 13 km W of Zara (39°53'N, 37°37'E), 25–28.06.2002, MR; 1 ♀ (NMPC), nr. Pazar, c. 24 km W of Tokat (40°16'N, 36°17'E), Ballica, nr. Mağarasi cave, 29.06–1.07.2002, MR; 1 ♂ (NHMW), Araplı gecidi, c. 50 km NE of Niğde, c. 1400 m a.s.l., stony steppe, 8.06.1967, JG.

COMMENTS. A Euro-Siberian subboreal species, known from Germany in the west to NW China (Xinjiang) in the east [Logunov, Marusik, 2000b].

The recent record of *C. tanasevichi* Marusik, 1991 from Turkey [Danişman *et al.*, 2012] may actually belong to *C. nigrinus* and thus requires confirmation upon reference to the pertinent material. Both species are closely related and yet none of the *Chalcoscirtus* samples from Turkey examined by myself to date (see above) and by Coşar *et al.* [2014] belongs to *C. tanasevichi*. The westernmost locality of *C. tanasevichi* known to date is Naxçıvan (Azerbaijan) [Marusik *et al.*, 2004].

*Chalcoscirtus parvulus* Marusik, 1991

*Chalcoscirtus helverseni* Metzner, 1999: (D♀; holotype ♀ from the Staatliches Museum für Naturkunde, Karlsruhe, Germany; examined). **Syn.n.**

For a complete set of taxonomic references see WSC [2015].

**TYPE.** Holotype ♀ of *Chalcoscirtus helverseni* (Staatliches Museum für Naturkunde) from Greece, Peloponnes Peninsula, Erimanthos-Tal, below Voidiaki, 9–12.06.1992, O.V. Helversen.

**MATERIAL.** GREECE: 1 ♂ (LMNM), Lesbos, Skala Polichaitos (39°07'16"N, 26°11'08"E), *Salicornia* sward, *Juncus* and a variety of low-flowering herbs on salt pans, 20.04.1997, SJ. — UZBEKISTAN: 1 ♂, 5 ♀♀ (SZMN), c. 7 km N of Kitab, south foothills of Zeravshansky Mt. Range, c. 800 m a.s.l., 26.04.1993, DL & A.A. Zyuzin. For more material studied see Logunov & Marusik [1999].

**COMMENTS.** An eastern Mediterranean – Central Asian subboreal species, known from Greece [Metzner, 1999: sub. *C. helverseni*; present data] throughout Asia Minor to Tajikistan [Logunov, Marusik, 1999].

As was earlier suggested by Logunov [2001c], *C. helverseni* described from Greece from a single female could be a junior synonym of *C. parvulus*. A re-examination of the ♀ holotype of *C. helverseni* has proved this to be true. The holotype has got the identical epigyne and spermathecae to those of *C. parvulus* [Logunov, Marusik, 1999: figs 89–93]. The only difference between the ♀ holotype of *C. helverseni* and the ♀♀ from Central Asia is the absence of two short white stripes at the rear end of the dorsum (usually present in Central Asian specimens; see Logunov & Marusik [1999: fig. 91]). Such difference is likely to only reflect an intraspecific variation in body coloration. Thus, it is safe to conclude that the name *C. helverseni* is to be considered a junior synonym of *C. parvulus*.

*Chinattus caucasicus* Logunov, 1999

**MATERIAL.** AZERBAIJAN: 1 ♀ (SZMN), Astara Distr., between Motlayatat and Bilyasar, Talysh Mts (38°36'N, 48°40'E), 600–700 m a.s.l., *Carpinus-Acer-Quercus* forest, 20–22.06.2003, AC.

**COMMENTS.** Restricted to the E Caucasus and NW Iran [Logunov, 1999; Logunov *et al.*, 2002].

*Cyrba algerina* (Lucas, 1846)

**MATERIAL.** MOROCCO: 1 ♀ (MHNG), region of Middle Atlas, Taza, in the 'wild garden', Hotel Friouato, c. 460 m a.s.l., 21.06.1990, BH. — ALGERIA: 1 ♂ (PCRB), Wilaya Bejaia, E of the mouth of Wadi Daas, c. 5 m a.s.l., under stones and on bushes on the shore, 22.05.1988, RB; 1 ♂ (PCRB), Wilaya Blida, Atlas Blidéen, Djebel Mouzaia, c. 1250 m a.s.l., under stones along the lake, 14.05.1988, RB; 1 ♂ (PCRB), Wilaya Bejaia, Tichi, c. 10 m a.s.l., wasteland in dunes, 21.05.1988, RB; 1 ♀ (PCRB), Wilaya Aïn Defla, between Bordj Emir Khaled and Tarik Ibn Ziad, c. 700 m a.s.l., border of Wadi Massine, under stones and in litter, 18.05.1988, RB; 1 ♂ (PCRB), Wilaya Blida, Meftah, Djebel Zerouela, c. 450 m a.s.l., among stones and Graminea in maquis, 23.05.1985, RB; 2 ♂♂ (PCRB), Wilaya Oran, Daiet El Bragat along W18, c. 100 m a.s.l., among dry *Salicornia* and other herbs, 25.04.1984, RB. — PORTUGAL: 12 ♂♂, 9 ♀♀ (FMNH), Mértola (c. 37°38'N, -7°40'W), 24.05.2003, PC; 2 ♂♂, 2 ♀♀ (FMNH), Ribeira de Limas (c. 37°49'N, -7°37'W), pitfall traps, 21.05.2003, PC; 1 ♂, 2 ♀♀ (FMNH), Paúl do Boquilobo Biosphere Reserve (c. 39°23'N, -8°32'W), pitfall traps, 16–30.07.2002, PC; 2 ♂♂ (FMNH), Planalto de St António (c. 39°30'N, -8°42'W), pitfall traps, 4.06.2002, PC. — SPAIN: 1 ♀ (MHNG), the Balearic Islands, Mallorca, Val

Ratjada, 11.04.1968, BH; 1 ♀ (MHNG), the Canaries, La Palma (SW part), between Ermita de Santa Cecilia and El Charco, nr. the road, Euphorbiaceae vegetation, various bushes and few *Pinus canariensis*, under rocks, c. 750 m a.s.l., 27.05.2000, CL; 2 ♂♂ (PCJK), Tenerife, Montaña Las Colorados, S of Villafior, 25.04.2004, HDK; 1 ♀ (PCJK), Tenerife, Lomo Oliva, 1.05.2004, HDK; 1 ♂ (PCJK), Tenerife, Santiago Del Teide, 26.04.2004, HDK; 6 ♂♂, 4 ♀♀ (NMPC), Valencia, Guadalest (c. 38°41'N, 0°11'E), 27.04.2004, LD; 10 ♂♂, 5 ♀♀ (NMPC), Xàvia (=Jàvea), NP del Mongú, 29.04.2004, LD; 1 ♂, 4 ♀♀ (NMPC), Calp, 29.04.2004, LD; 2 ♀♀ (SMFM), Murcia Prov., W of Alhama de Murcia, Sierra de Espuna (37.85601°N, 1.49431°W), c. 691 m a.s.l., *Pinus* forest and open pastures, under dry stones, 4.06.2010, SH & AS; 1 ♂, 1 ♀ (SMFM), Castellon Prov., W Atzeneta del Maestrat, Cova Obscura NW Ermita de Sant Joan (40.20002°N, 0.21203°W), 550 m a.s.l., free walking in deeper humid parts of cave, 30.05.2010, SH & AS; 2 ♂♂, 1 ♀ (SMFM), Castellon Prov., E Ain, Cova del Eremita (39.90180°N, 0.33677°W), 460 m a.s.l., at cave entrance in nearby stone ruin, 31.05.2010, SH & AS. — LIBYA: 2 ♀♀ (SMFM, 4150), Tripoli, Vytina, no date and collector name. — GREECE: 1 ♀ (SMFM), S coast of Peloponnes, Foinikous, lime and sanf cliffs at seashore, 4.06.1998, LM; 2 ♂♂, 2 ♀♀ (SMFM), S coast of Peloponnes, Ligia, beach, dunes and adjacent cultural landscape, 1.06.1998, LM; 1 ♀ (SMFM), Island Kos, nr. Zia, 500–800 m a.s.l., forest and macchia, 29.04.1968, JMS; 1 ♂, 4 ♀♀ (SMFM, 4151), Crete, Akrotiri plain, 05.1928, CR; 1 ♂ (SMFM), N Crete, Gouves, 3.05.2008, HE & UK; 1 ♂ (MHNG), Island of Rhodes, Mt. Profitis Ilias, c. 650 m a.s.l., 15.05.2001, CL; 1 ♂ (MHNG), Island of Rhodes, above Arnitha (S part of the isle), c. 200 m a.s.l., 16.05.2001, CL. — CYPRUS: 1 ♂ (MHNG), Protaras, Ayios Elias Vil., 2.04.1995, PH. — TURKEY: 1 ♂, 1 ♀ (PCRS), Akyaka, Sulemin's castle, under stones, 31.05.1996, ARS; 3 ♀♀ (PCRS), Mazi Beach, nr. Bodrum, under stone in olive grove, 7.06.1997, ARS; 1 ♀ (LMNM), Adana (36°59'N, 35°21'E), Rasit Ener Motel, light trap, 27.06.1995, SJ & CF; 1 ♀ (LMNM), İçel, Narlıkuyu (36°26'04"N, 34°06'44"E), garrigue vegetated limestone dominated by *Pinus*, 5.06.1994, MB; 1 ♂, 1 ♀ (LMNM), Niğde, c. 8 km W of Gözükuyu, c. 1 km along Ilhara road off Askeray-Adana road, herb-rich, very rocky abandoned farmland edge, 10.05.1994, SJ & CF; 1 ♂ (LMNM), Zonguldak, Amasra, waste ground by flats, 18.05.1994, SJ & CF; 1 ♀ (NMPC), Camlik, nr. Seydisehir, pastures on limestone, 12.07.2003, MR; 2 ♀♀ (NMPC), Tunceli (39°06'N, 39°33'E), Munsur river, 22.06.2002, MR; 1 ♂ (NHMW), Eskigümüş, NE of Niğde, 1400–1500 m a.s.l., steppe on the edge of orchard, 9.06.1967, JG, FR & AR; 1 ♂ (NHMW), Hisarcik, SE Kayseri, 1500–1600 m a.s.l., sparse oak forest, 7.06.1967, JG, FR & AR; 2 ♂♂ (NHMW), Güvem, under stones, 1962–1964, FR; 1 ♀ (NHMW), Talas, 7.06.1965, FR; 3 ♂♂ (NHMW), Finike/Grolle, 3.05.1964, FR. — TUNISIA: 1 ♀ (MHNG), c. 13 km of Zarzis (S de la Tunisie), nr. De l'Hotel-Club Ornarit, 7.05.1996, PH. — JORDAN: 1 ♂, 1 ♀ (SMFM), Dana Nature Reserve, Wadi Dana (30°41'N, 35°37'E), under stones, 16.04.2004, JA & JM; 1 ♀ (SMFM), Ma'an Prov., NW of Ma'an, Wadi Musa, Petra [Batra'] Valley, 17.03.1977, RK. — AZERBAIJAN: 1 ♀ (ZISP), Lenkoran Area, nr. Alexeevka, 23.06.1983, DL; 4 ♀♀ (SZMN), same area, Hyrcan Reserve, under tops of beehives, 21.06.1983, DL; 4 ♂♂ (ZMUM), c. 60 km SW of Baku, nr. Gobustan, Gobustan Reserve, 7.05.1989, PD; 1 ♀ (ZMUM), nr. Vartashen, 300 m a.s.l., 7.07.1978, PD; 1 ♀ (SZMN), Astara Distr., between Motlayatat and Bilyasar, Talysh Mts (38°36'N, 48°40'E), 600–700 m a.s.l., *Carpinus-Acer-Quercus* forest, 20–22.06.2003, AC.

**COMMENTS.** A Mediterranean – Central Asian subboreal-subtropical species known from the Mediterranean, including the Canary Islands and north Africa, throughout the Near East [e.g., Uyar, Uğurtaş, 2012; Coşar *et al.*, 2014], to India and Tajikistan [Logunov, Rakov, 1998; Logunov, 2013]. New records for Morocco, Libya and Jordan.

*Euophrys frontalis* (Walckenaer, 1802)

**MATERIAL.** SPAIN: 2 ♂♂, 1 ♀ (NMPC), Catalonia, Deltebre (c. 40°44'N, 0°50'W), 26.04.2004, LD. — GREECE: 1 ♂ (SMFM),

Chalkidiki island, Andrea, c. 800 m a.s.l., forest, 1968, JMS; 1 ♂ (SMFM), Dugo Selo, mixed forest, 14.05.1968, JMS. — TURKEY: 1 ♂ (LMNM), Kastamonu, c. 3 km N of Sakiz (41°40'06"N, 34°39'13"E), 1111 m a.s.l., edge of road into conifer plantation over sparse *Rhododendron* and bracken, 8.07.1995, SJ & CF; 2 ♂♂, 1 ♀ (LMNM), Bolu, c. 21 km E of Akçakoca (41°06'27"N, 31°15'54"E), sparse mixed weeds on road slope above snore, wet field with *Juncus* adjacent to stream, 18.05.1994, SJ & CF; 1 ♂, 4 ♀♀ (NMPC), Tunceli (39°06'N, 39°33'E), Munsur river, 22.06.2002, MR; 1 ♂ (NHMW), Tekketal, SW Akşehir, 1100–1200 m a.s.l., pine forest with *Quercus coccifera*, *Corylus*, etc., 11.06.1967, JG, FR & AR; 1 ♂ (NHMW), c. 20 km N of Turhal, 800–1000 m a.s.l., pine forest, 4.06.1967, JG, FR & AR; 1 ♂, 1 ♀ (NHMW), c. 5 km NE of Ulubey, c. 350 m a.s.l., deciduous forest of *Castanea*, *Quercus*, *Robinia*, *Carpinus*, etc., 2.06.1967, JG, FR & AR; 1 ♂ (NHMW), c. 8 km S of Tokat, c. 900 m a.s.l., oak forest with *Carpinus*, *Pinus*, etc., 5.06.1967, JG, FR & AR; 1 ♂ (NHMW), Kizilcahan, 1000–1200 m a.s.l., thicket of fruit trees, 27–28.05.1967, JG. — ABKHAZIA: 1 ♂ (ZMUM; black form), Novyi Afon, valley of river Psyrtskhe, *Carpinus* forest, 6.06.2004, EM; 1 ♂ (ZMUM), nr. Sukhum, left bank of Kelasuri River (2–3 km upstream of its mouth), 5.06.2004, EM. — AZERBAIJAN: 2 ♂♂ (dark form) (SZMN), Lenkoran Area, Lenkoran Reserve (38°38'N, 48°47'E), 23.05.2003, EG; 2 ♀♀ (SZMN), nr. Lenkoran, in rush, 17–19.07.1983, DL; 1 ♂, 2 ♀♀ (dark form) (SZMN), same area, nr. Alexeevka, rush, 6.07.1983, DL; 1 ♀ (ZMUM; earlier identified by PD as *Talavera petrensis*), Lerik Distr., nr. Gosmalyan, 1400 m a.s.l., 19.05.1985, PD; 3 ♀♀ (ZISP), Karabakh, Gadrum, nr. Azokh, 8.08.1986, PD; 1 ♀ (ZISP), Kakh Distr., nr. Illisu, 11.07.1989, S. Dashdamirov; 1 ♀ (SZMN), Ismailly Distr., Ismailly Reserve, nr. Buinus Vil., 700 m a.s.l., 25–26.06.2003, AC.

COMMENTS. A trans-Eurasian temperate species [Logunov, Marusik, 2000b] that exists in two colour morphs, yellow (typical) and black ones (see Logunov [1997] for further details).

#### *Euophrys rufibarbis* (Simon, 1868)

MATERIAL. ITALY: 3 ♂♂ (MMUM), Sicily, R.N.O. Zingaro, nr. Trapani, pitfall traps, 17–31.09.2001, F. di Franco. — CYPRUS: 1 ♂ (LMNM), Tróodos, nr. Kannoures, *Juncus*/grass, 9.09.1997, SJ & CF.

COMMENTS. This species was identified on the basis of the work by Metzner [1999]. However, the taxonomic status and distribution of *E. rufibarbis* is yet poorly understood. It seems that the species has a west-Mediterranean distribution, so far being recorded from the Iberian Peninsula, Corsica, Italy (both mainland and islands) to Greece (both mainland and islands), Macedonia and Croatia [Helsdingen, 2014]. The recent records of this species from Turkey [Coşar *et al.*, 2014] were based on the singular females and need confirmation by the samples containing males. The records of this species from China [Song *et al.*, 1999] were likely to be based on misidentifications. New record for Cyprus.

#### *Euophrys sulphurea* (L. Koch, 1867)

MATERIAL. GREECE: 1 ♂ (LMNM), Lesbos, Angliki Skala, nr. Krioneri (39°11'35"N, 26°18'33"E), pine woodland over mixed scrub alongside river, 24.04.1997, SJ; 1 ♂ (LMNM), Lesbos, Angliki Skala, nr. Krioneri (39°11'35"N, 26°18'33"E), pine woodland over mixed scrub alongside river, 24.04.1997, SJ; 2 ♂♂ (LMNM), Lesbos, Vatera (39°01'13"N, 26°10'53"E), 20.04.1997, CF & SJ; 1 ♂ (LMNM), Lesbos, Skala Kallonis (39°12'25"N, 26°13'13"E), back of beach and along river, 23.04.1997, SJ; 1 ♂ (SMFM), Crete, W of Camaris, S-slope, rocky, *Phrygana*, Liliaceae, 6.04.1958, HK; 1 ♂ (NHRS), Chania Pref., at Amiros river E of Vrisses, on church wall, 15.05.2001, TK; 1 ♂ (NHRS), same pref., Georgiopolis, grassy area close to Almiros river, west side of

the bridge, 6.05.2001, TK; 1 ♂ (NHRS), same locality, grass and *Phragmites* W of harbour, 14.05.2001, TK; 1 ♂ (NHRS), same locality, garrigue on hill slope W of Georgiopolis, 18.05.2001, TK; 2 ♂♂ (NHRS), same pref., at Lakki-Omalos Rd., pass entering Omalos plateau, phrygan (under stones), 11.05.2001, TK; 1 ♂ (PCJK), Crete, Elafronisos, 6.04.2002, J. Van Keer. — TURKEY: 1 ♂ (PCRS), west part of the country, Thomsan Villas, Akyaka, on walls of house, 1.06.1996, ARS; 1 ♀ (LMNM), Konya, c. 10 km along Akşehir-Cetince road, Sultan Dağları, mixed herbs and shrubs among young pine plantation, 19.06.1993, SJ & CF.

COMMENTS. A Mediterranean species, known from Portugal to Turkey and Syria [Helsdingen, 2014; present data]. However, there are two recognizable colour morphs of this species, of which one differs from the other in having the half-brown palps and completely brown chelicerae in males (entirely yellow in the males of the second form) and different proportions of the spermathecae. As it is known that the male colour characters in *Euophrys* (*s.str.*) are reliable in diagnosing closely related species [e.g., Logunov *et al.*, 1993; Logunov, 1997], it is likely that at least two species are currently recorded under the name of *E. sulphurea* from the Mediterranean; see also comments under this species name in Logunov & Chatzaki [2003]. The matter requires special attention in the future.

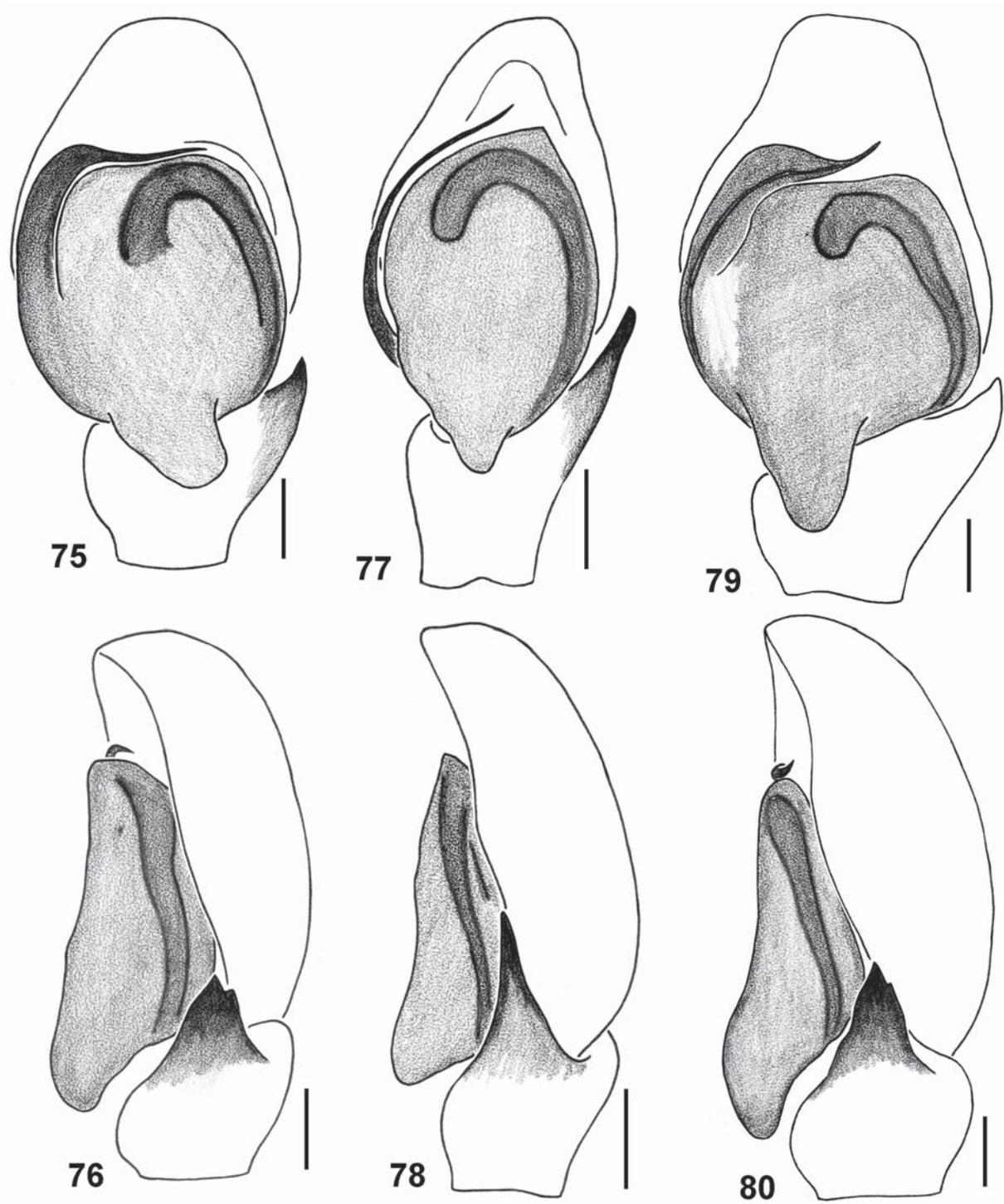
#### *Euophrys terrestris* (Simon, 1876)

MATERIAL. SPAIN: 2 ♀♀ (NMPC), Catalonia, Mataró (c. 41°32'N, 2°27'E), 1.05.2004, LD.

COMMENTS. Reported from the Iberian Peninsula, France (mainland and Corsica), Greece (Crete), Italy and Switzerland [Helsdingen, 2014; present data]. New record for Spain.

#### *Evarcha arcuata* (Clerck, 1758)

MATERIAL. GREECE: 1 ♂ (PCRG), Thasos, Thasos shell valley fen (40°39'N, 24°40'E), 25 m a.s.l., 26.05.2003, AF; 1 ♀ (PCRG), same locality, Thasos shell pastures, 27.09.2001, coll.?. 1 ♀ (SMFM), Kavala, Rentina Valley, 19.08.1971, RK. — CROATIA: 1 ♂ (SMFM), c. 30 km S of Sisak, nr. Muzilovica, meadows nr. residual puddles, 20.04.2003, JA & JM. — SLOVENIA: 1 ♂, 1 ♀ (SMFM), Slioiica, Mt nr. Zirknitz, 800–1000 m a.s.l., 17.07.1974, JMS. — TURKEY: 2 ♂♂, 1 ♀ (PCRS), c. 6 km W of Koycegiz, wet area in *Platanus* woodland, 5.06.1996, ARS; 1 ♀ (LMNM), c. 4 km N of Kambia, flowering herb, 14.09.1996, SJ & CF; 1 ♂ (PCSD), Dalyan, c. 1 km N of Hotel Gol, 20.05.1997, RS; 1 ♂ (NHMW), c. 15 km NE of Abantsee, Abant Mts, 900–1200 m a.s.l., *Pinus silvestris* forest, 26.05.1967, JG, FR & AR; 1 ♀ (BMNH), Trabzon, Hamsiköy, c. 1250 m a.s.l., beaten from low bushherbs on open hillside, 25.08.1958, coll.? — ABKHAZIA: 1 ♂ (ZMUM), Sukhum, orchards, 7–11.06.2004, EM; 1 ♀ (ZMUM), nr. Sukhum, left bank of Kelasuri River (c. 3 km upstream of its mouth), alder thicket, 5.06.2004, EM. — RUSSIA: 2 ♀♀ (SZMN), The Crimea, Bakhchisarai, 24–26.06.1993, SV; 1 ♀ (SZMN), Krasnodar Territory, nr. Adler, c. 6 km upstream of Mzynta river, 28.09.1993, O.V. Lyakhov; 3 ♀♀ (ZISP), Adygea, nr. Maikop, 9.06.1976, V.I. Ovtsharenko; 2 ♂♂, 2 ♀♀ (ZISP), Adygea, Maikop Distr., Caucasian Reserve, Guzerip' Mt., 650 m a.s.l., 12–18.07.1984, V.I. Ovtsharenko; 1 ♀ (ZISP, A.No. 285), Adygea Republic, offset of Mt. Abago, subalpine meadow on the slope of Kholodnaya balka, 2.06.1911, D. Filatov; 1 ♀ (ZMUM), North Ossetia, Alagir Distr., between Zinkar and Shubino, 21–23.06.1981, S.K. Alexeev; 1 ♂, 3 ♀♀ (ZMUM), Karachaevo-Cherkessia, Teberdinsky Reserve, Teberda river valley, 1300 m a.s.l., swamp, 24.05.1986, KM; 2 ♂♂, 1 ♀ (ZISP), same republic, Indysh river, 4–8.08.1935, A. Dyakonov; 3 ♂♂ (ZISP, A.No. 179), Dagestan, Kizlyar, 9–10.05.1925, Kirichenko; 1 ♀ (ZISP, A.No. 359), Stavropol Territory, Essentuki, 27.07.1914, A. Bartenev; 1 ♂ (ZISP,



Figs 75–80. Male palps of *Evarcha jucunda* (Lukas, 1846) (75–76; Italy), *E. patagiata* (O. Pickard-Cambridge, 1872) (77–78; Cyprus) and *E. eriki* Wunderlich, 1987 (79–80; holotype): 75, 77, 79 — ventral view; 76, 78, 80 — retrolateral view. Scale bars: 0.1 mm.  
 Рис. 75–80. Пальпы самцов *Evarcha jucunda* (Lukas, 1846) (75–76; Италия), *E. patagiata* (O. Pickard-Cambridge, 1872) (77–78; Кипр) и *E. eriki* Wunderlich, 1987 (79–80; голотип): 75, 77, 79 — вид снизу; 76, 78, 80 — вид сзади-латерально. Масштаб 0,1 мм.

A.No. 204), North Caucasus, nr. Saprat (uncertain locality), 7.08.1937, AD. — GEORGIA: 1 ♀ (ZISP), Adzharia, Tsoniarisi, 400 m a.s.l., sweeping, 18.06.1969, EP; 2 ♂♂ (ZISP), Lagodekhi Reserve, 7.07.1988, Yu. M. Marusik; 1 ♂ (SZMN), Batumi, 10.08.1981, DL; 1 ♂ (ZISP), same locality, 14.08.1914, A. Bykov; 1 ♂ (ZISP, A.No. 301-470), Kolkhida, N. Chkhugunetch, 500–650 m a.s.l., 3–10.06.1969, EP; 1 ♂ (ZISP), Batumi, sweeping, 27.06.(no year), coll.?.; 5 ♂♂ (ZISP), nr. Bakuriani, 27.07.1917, N. Bartenev. — ARMENIA: 1 ♂ (ZISP, A.No. 510-1931), [Tavush Distr.], nr. Dilizhan, 4.08.1931, EP. — AZERBAIJAN: 1 ♂ (ZISP), Lenkoran Area, nr. Kirovsk (now Istisu), 24.06.1985, coll.?.; 1 ♀ (ZISP), Lenkoran Area, nr. Alexeevka, in rush, 7.07.1983, DL; 1 ♂ (ZISP), same area, nr. AzFilial, in rush, 2.07.1983, DL; 1 ♂ (ZMUM), nr. Khachmas, 22.04.1986, PD; 1 ♀ (ZMUM), Kakhsy Distr., Vandam, 17.06.1986, PD; 1 ♂ (SZMN), Shemakha Distr., Pirkuli Reserve, 15.09.1984, 1100 m a.s.l., DL.

COMMENTS. A trans-Eurasian temperate species [Logunov, Marusik, 2000b; Helsdingen, 2014].

#### *Evarcha armeniaca* Logunov, 1998

MATERIAL. TURKEY: 1 ♂ (PCRS), Mazi Beach, nr. Bodrum, under stone in olive grove, 7.06.1997, ARS. — AZERBAIJAN: 1 ♀ (MMUM), Gobustan Reserve, Beyuk-Dash Mt. (40°07'N, 49°23'E), 17.05.2003, EG.

COMMENTS. Recorded from a few localities in Armenia, Azerbaijan and Turkey only [Logunov, 1998a; Logunov, Guseinov, 2002; present data]. New record for Turkey.

#### *Evarcha eriki* Wunderlich, 1987

Figs 79–80, 85–86, 91–92.

*Evarcha eriki* Wunderlich, 1987: 270, figs 682–684 (D♂♀; holotype ♂ from Naturmuseum und Forschungsinstitut Senckenberg, Frankfurt am Main, Germany; examined).

TYPES. Holotype ♂ (SMFM, 37342) from Spain, the Canaries, Gran Canaria, c. 2 km S of Fataga, VII, J. Wunderlich. — Paratype: SPAIN: 1 ♀ (SMFM, 37306), the Canaries, Gran Canaria, Bco. de Arguineguin, nr. Soria, VII, J. Wunderlich.

MATERIAL. SPAIN: 1 ♀ (OUMNH), The Canaries, Gran Canaria, Chaveo of Maspalomas, beaten palm for sedum, 31.07.1957, GL.

COMMENTS. The Canary Islands only [Wunderlich, 1987; present data].

See also below under the 'Comments' of *E. jucunda*.

#### *Evarcha falcata* (Clerck, 1758)

MATERIAL. CROATIA: 1 ♂ (SMFM), NE Istria, c. 2 km NW of Moscenicka Draga, gorge forest, 2.05.2003, JA & JM. — GEORGIA: 2 ♂♂, 1 ♀ (ZISP), Batumi, sweeping, 27.06.(no year), coll.?. — AZERBAIJAN: 1 ♀ (SZMN), Lenkoran Area, Lenkoran Reserve (38°38'N, 48°47'E), 23.05.2003, EG; 1 ♀ (ZMUM), nr. Lenkoran, 6.10.1984, K. Aliev; 1 ♀ (ZMUM), nr. Bababir Vil., 6.05.1985, PD.

COMMENTS. A Euro-Siberian temperate species [Logunov, Marusik, 2000b].

#### *Evarcha jucunda* (Lukas, 1846)

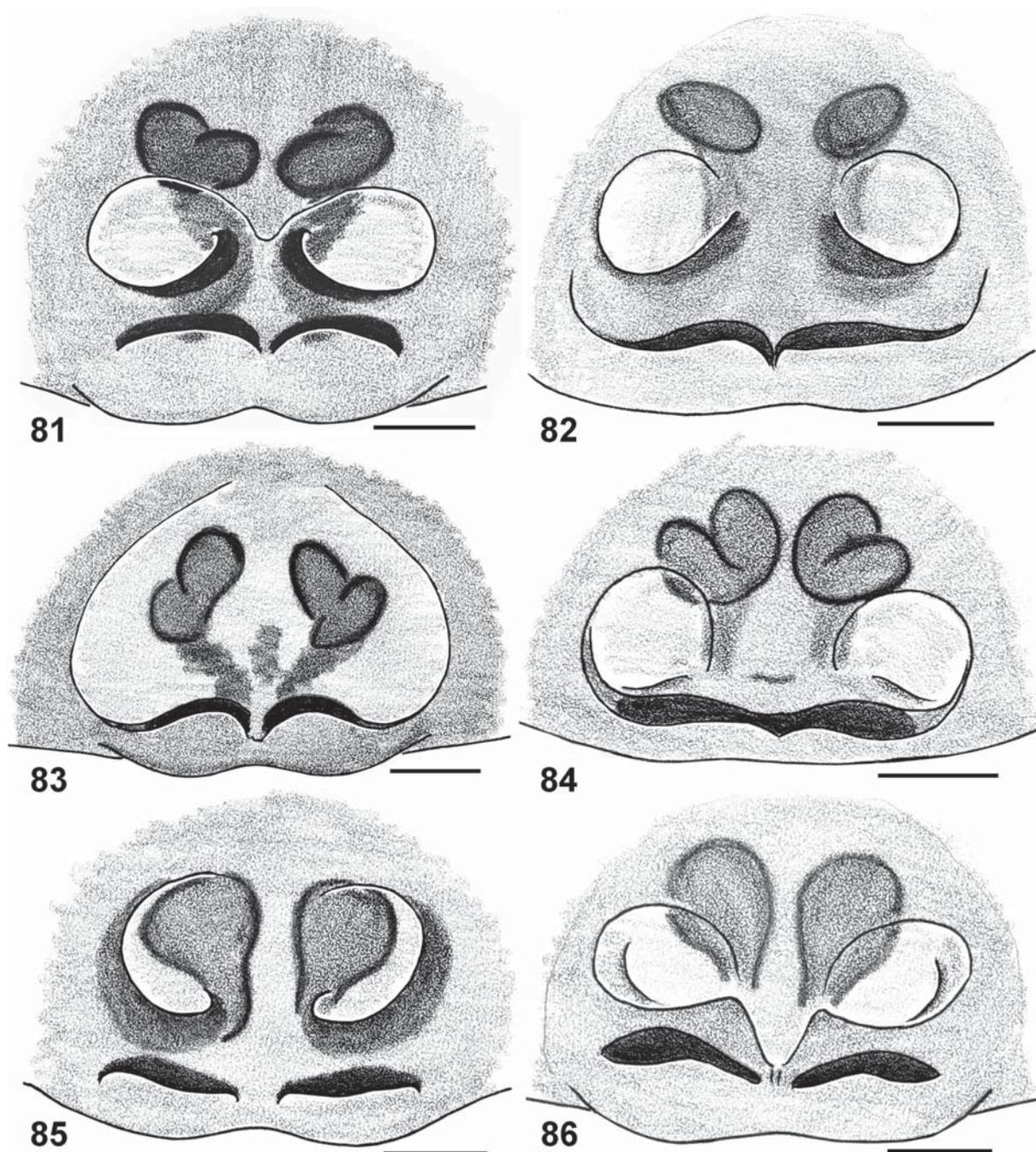
Figs 75–76, 81–82, 87–88.

MATERIAL. ALGERIA: 1 ♀ (MHNG), Djurdjura, Boghni, 11.05.1988, C. Besuchet, I. Löbl & D. H. Burckhardt; 1 ♀ (PCRB), Wilaya Buir, entrance to Aomar et Kadiria, Wadi Isser, c. 200 m a.s.l., small plantation of *Eucalyptus* (in litter), 18.08.1988, RB; 1 ♂ (PCRB), Wilaya Bejaia, E. Adekar, along N34, 800 m a.s.l., *Quercus ilex* forest (in litter), 17.04.1982, RB; 1 ♂ (PCRB), Wilaya Boumerdes, Reghia, 45 m a.s.l., pitfall traps in degraded *Quercus suber* forest, 13.06.1988, RB; 1 ♂ (PCRB), Wilaya Blida, Atlas Blidéen, Meurdja, c. 900 m a.s.l., nr. fountain in forest, 12.09.1985,

1 ♂ (PCRB), Wilaya Blida, Atlas Blidéen, Chrea, c. 1045 m a.s.l., pitfall traps in dense *Quercus ilex* forest, 15.02–21.06.1987, RB; 1 ♂ (PCRB), Wilaya Tipasa, Bouchaoui, c. 95 m a.s.l., pitfall traps in *Ulmus* forest and *Eucalyptus* plantation, 1.01.1987–12.01.1988, no date, RB; 4 ♂♂, 3 ♀♀ (SZMN), Wilaya Tipaza, Sidi Fredj, c. 10 m a.s.l., pitfall traps in *Olea* archard, 10.12.1986–20.12.1987, RB; 1 ♂, 1 ♀ (PCRB), Wilaya Boumerdes, Reghaia, c. 10 m a.s.l., pitfall traps in *Olea europea* orchard, 13.06–30.09.1988, RB; 1 ♂ (PCRB), Wilaya Tipasa, Douaouda, Wadi Mazafran, 50 m a.s.l., glades in forest of *Populus alba*, 16.12.1986–26.02.1988, RB; 2 ♂♂ (ZMUM), Wilaya Oran, Hadjadz, c. 50 m a.s.l., in garden, 07–08.1988, RB. — PORTUGAL: 1 ♂ (FMNH), Algodôr (c. 37°45'N, -7°48'W), 24.05.2003, PC; 1 ♀ (FMNH), Mértola (c. 37°38'N, -7°40'W), 16.05.2003, PC; 1 ♂ (ZMUM) & 2 ♀♀ (FMNH), Paúl do Boquilobo Biosphere Reserve (c. 39°23'N, -8°32'W), 20.05–11.07.2002, PC; 1 ♀ (ZMUM) & 1 ♀ (FMNH), Barrenta (c. 39°34'N, -8°46'W), 7.05–24.09.2002, PC. — SPAIN: 2 ♂♂, 4 ♀♀ (MVNH), Valencia, Devesa del Saler (Estibadores & Polideportivo), 17.05–28.06.2004, DD; 1 ♂, 1 ♀ (SMFM), La Rabida, 05.1959, J. Büddenbrock; 1 ♂, 2 ♀♀ (NMPC), Catalonia, Deltebre (c. 40°44'N, 0°50'W), 26.04.2004, LD; 2 ♂♂, 1 ♀ (NMPC), Calp, 29.04.2004, LD; 1 ♀ (NMPC), Salou, 26.04.2004, LD; 1 ♂, 1 ♀ (NMPC), Valensia, Guadalest (c. 38°41'N, 0°11'E), 27.04.2004, LD; 4 ♂♂, 1 ♀ (NMPC), Guardamar del Segura, 28.04.2004, LD; 3 ♂♂ (NMPC), Catalonia, Deltebre (c. 40°44'N, 0°50'W), 26.04.2004, LD; 1 ♂ (NMPC), Santa Pola, 28.04.2004, LD; 1 ♂ (NMPC), Catalonia, Riumar, 26.04.2004, LD; 1 ♂ (NMPC), Denia, 29.04.2004, LD. — ITALY: 1 ♂, 1 ♀ (OUMNH, bottle 2108), Ospedaletti; 4 ♂♂, 1 ♀ (OUMNH), St. Margarita, stones, 20.08.1958, GL; 2 ♀♀ (SMFM), Sardinia (W part), Camp of Riola Sardo, olive trees with grass, sheep pasture and slightly moist grass, 7.04.1956, HK; 1 ♂ (SMFM, 11/983), Sicily, no date and coll. — GREECE: 1 ♂ (SMFM), S coast of Peloponnes, Foinikous, lime and sanf cliffs at seashore, 4.06.1998, LM; 1 ♂ (LMNM), Lesbos, Skala Kallonis, R Potamia (39°12'42"N, 26°10'13"E), 9.07.1997, M. Hull; 1 ♀ (PCRG), Thasos, Villa Edem (40°39'N, 24°40'E), 10 m a.s.l., 25.05.2003, AF; 2 ♀♀ (SMFM, 4151), Crete, Akrotiri plain, 05.1928, CR; 1 ♀ (SMFM), Crete, c. 3 km SE of Kaluthiana, pasture nr. stream, *Chrysanthemum*, *Cirsium*, *Nerium oleander*, *Myrtus* (under and between stones), 19.04.1958, HK; 2 ♂♂ (SMFM), N Crete, Gouves, 7.05.2007, HE & UK; 1 ♂ (SMFM), Chalkidiki island, Andrea, c. 800 m a.s.l., forest, 1968, JMS; 1 ♂ (SMFM), Korfu, between Acharavi and Portes (39°48'7.5"N, 19°50'33.1"E), c. 30 m a.s.l., *Quercus* forest (sieving, under wood and stones), 25.03.2006, AS. — CROATIA: 1 ♂ (MHNG), Istria, nr. Pula, 9–14.07.1982, S. Heimer; 1 ♂, 1 ♀ (NMPC), Palagruža, 1–9.09.1997, S. Polak; 1 ♀ (ZMTU), Dalmatia, Herzegovina, 13.08.1965, PL. — TURKEY: 1 ♂ (PCRS), Akyaka, Thomsan Villas, on walls of house, 28.05.1996, ARS; 1 ♀ (PCRS), same locality, under stone in pine wood, 1.06.1996, ARS; 1 ♀ (ZMTU), Adapazari Distr., Hendek-Gümüşova, *Quercus-Crataegus* forest, 10.09.1971, PL; 1 ♀ (SMFM), Büyükkada (nr. Istanbul, but the label is illegible), 07–08.1965, coll.?.; 1 ♂ (SMFM), Büyükkada (the rest of label is illegible), 08.1966, coll.?.; 1 ♂, 1 ♀ (PCSD), Gulf of Gorkova (c. 4 km N of shore), 27.05.1997, RS; 1 ♀ (PCLJ), Perge, 27.05.2004, N. Jons-son; 1 ♂ (NHMW), Kuşadası (SE border), 11–26.05.1969, F. Spitzenberger; 1 ♂ (OUMNH), nr. Dalyan, 10–17.08.2008, R. Gabriel & L. Hedicker.

COMMENTS. A Mediterranean species, known from Algeria and Portugal, eastward to Turkey [Logunov, 2012; Uyar, Uğurtaş, 2012; Helsdingen, 2013, 2014; present data].

This species is very similar to *Evarcha eriki* from Gran Canaria and to *E. patagiata* from the east-Mediterranean. The males of all three species are easily distinguishable by the conformation of their tibial apophyses and emboli (Figs 75–80). The females are difficult to separate on the basis of epigyne due to its strong variation (Figs 81–86). The main difference of the female of *E. patagiata* is the presence of the singular

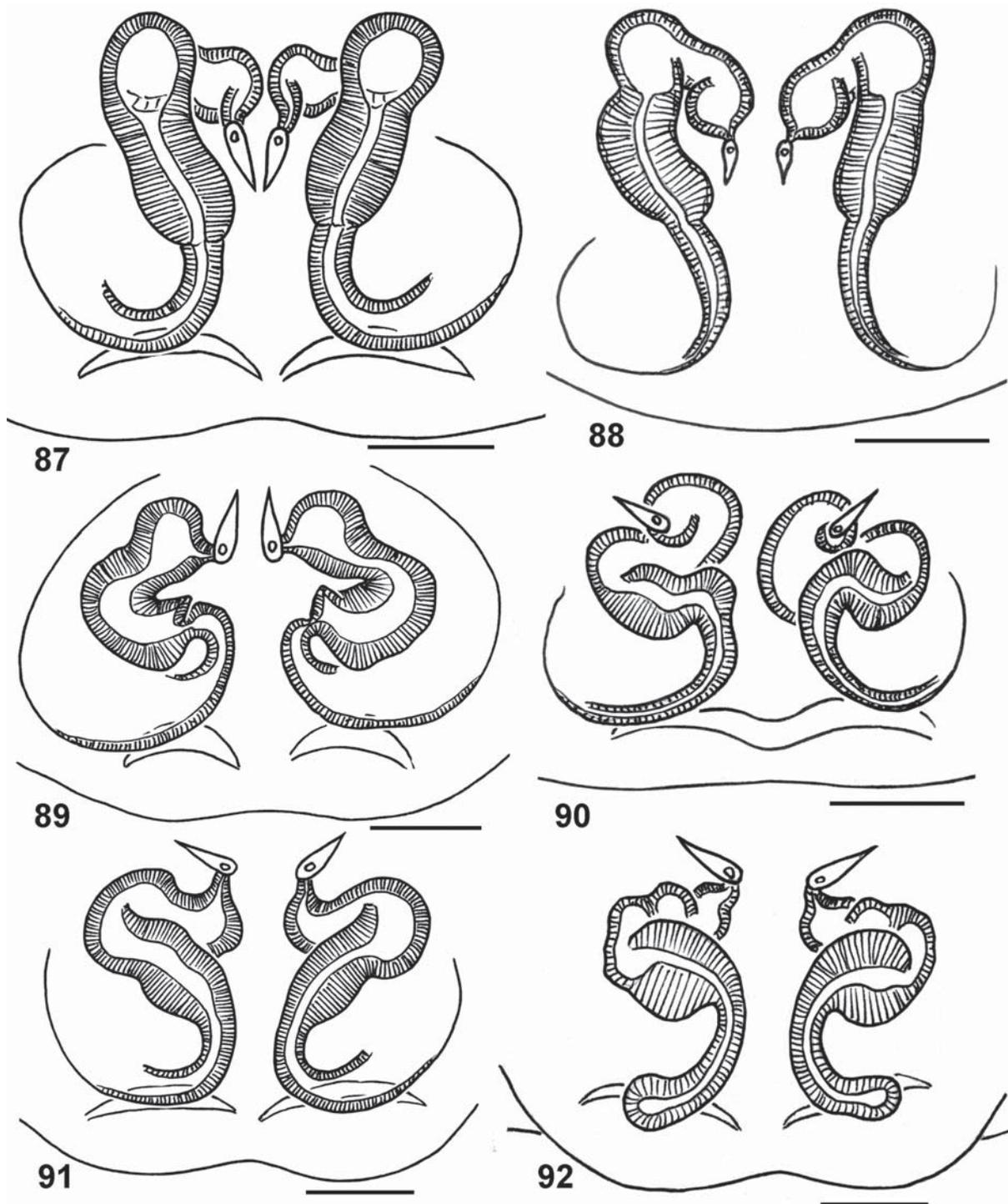


Figs 81–86. Epigynes of *Evarcha jucunda* (Lukas, 1846) (81 — Portugal; 82 — Italy), *E. patagiata* (O. Pickard-Cambridge, 1872) (83 — Syria; 84 — Cyprus) and *E. eriki* Wunderlich, 1987 (85 — Gran Canaria; 86 — paratype), ventral views. Scale bars: 0.1 mm.

Рис. 81–86. Эпигины *Evarcha jucunda* (Lukas, 1846) (81 — Португалия; 82 — Италия), *E. patagiata* (O. Pickard-Cambridge, 1872) (83 — Сирия; 84 — Кипр) и *E. eriki* Wunderlich, 1987 (85 — Гран Канария; 86 — паратип), вид снизу. Масштаб 0,1 мм.

shallow epigynal atrium (=membranous “window” *sensu* Prószyński [2003]), with the epigynal wings usually merged in a singular transverse plate (Fig. 83). The epigynes both of *E. jucunda* and of *E. eriki* possess two separated round shallow atria, with the epigynal wings usually separated from each other as well; by this character these two species seem unseparable.

Yet, some females of *E. patagiata* (Fig. 84; from Cyprus) has got the atrium consisting of two separate “windows” and looking almost identical to those of *E. jucunda*. Some females of *E. jucunda* may have the epigynal wings merged together (Fig. 82) as those of *E. patagiata* (Figs 83–84). In such cases, the spermathecal structure is to be examined for separating the species.



Figs 87–92. Spermathecae of *Evarcha jucunda* (Lukas, 1846) (87 — Portugal; 88 — Italy), *E. patagiata* (O. Pickard-Cambridge, 1872) (89 — Syria; 90 — Cyprus) and *E. eriki* Wunderlich, 1987 (91 — Gran Canaria; 92 — paratype), dorsal views. Scale bars: 0.1 mm.

Рис. 87–92. Сперматеки *Evarcha jucunda* (Лукas, 1846) (87 — Португалия; 88 — Италия), *E. patagiata* (О. Пиккард-Кембридж, 1872) (89 — Сирия; 90 — Кипр) и *E. eriki* Wunderlich, 1987 (91 — Гран Канария; 92 — паратип), вид сверху. Масштаб 0,1 мм.

The shape, comparative size and the arrangement of the insemination ducts seem to provide reliable diagnostic characters (Figs 87–92): viz., the insemination ducts in *E. jucunda* are directed antieriad, forming

1-shaped figure; the spermatheca of *E. patagiata* is S-shaped, with the largest terminal sections (as compared to the related species); the spermathecae of *E. eriki* is most similar to that of *E. patagiata* but with the much

smaller terminal section and with the much stronger sclerotized insemination ducts. Finally, *E. eriki* seems to be strictly confined to Gran Canaria.

*Evarcha laetabunda* (C.L. Koch, 1848)

MATERIAL. CROATIA: 1 ♂ (SMFM), Lika-Senj, e. Karlobag, Velebit Mts, nr. Baske Ostarije, 900–1200 m a.s.l., hand collecting, 10–11.05.2008, JA & JM. — RUSSIA: 1 ♂ (ZISP), Adygeya, nr. Khamyshki, 29.08.1937, AD; 1 ♂ (ZISP, A.No. 204), North Caucasus, nr. Saprat (unknown locality), 7.08.1937, AD.

COMMENTS. A trans-Eurasian temperate species [Logunov, Marusik, 2000b].

*Evarcha michailovi* Logunov, 1992

MATERIAL. TURKEY: 2 ♂♂ (NMPC), Çağlayan, c. 24 km SE of Erzincan (39°36'N, 39°42'E), valley above waterfall, 23–24.06.2002, MR; 1 ♀ (SMNH), Adana Prov., Belemedik Vil., 18.05.2003, KK.

COMMENTS. A Euro-Siberian – Central Asian subboreal species, known from France to SE Transbaikalia and E Mongolia [Logunov, Marusik, 2000b]; the records from Turkey [Yağmur *et al.*, 2009; present data] lie in the southernmost limit of the species' range.

*Evarcha nepos* (O. Pickard-Cambridge, 1872)

MATERIAL. CYPRUS: 1 ♂ (LMNM), Paphos, nr. Nikoieia hotel, 5–6.09.1997, CF; 1 ♀ (LMNM), edge of track by citrus grove N of Paphos, 6.09.1997, CF.

COMMENTS. Recorded from Cyprus, southern Turkey and Israel only [Prószyński, 2003; Logunov, 2012; present data]. New record for Cyprus.

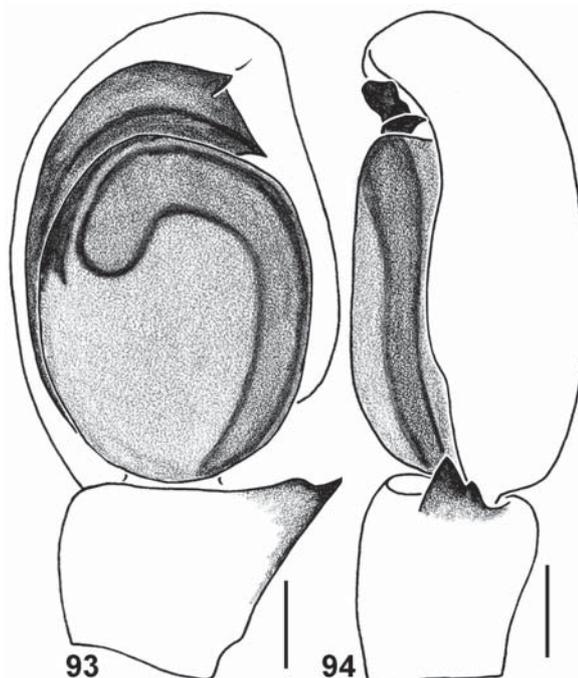
*Evarcha patagiata* (O. Pickard-Cambridge, 1872)

Figs 77–78, 83–84, 89–90.

MATERIAL. CYPRUS: 1 ♀ (LMNM), Tróodos, Ágios Nikólas tis Stéyis, c. 8 km S of Agios, streamline across unpaved road, mixed deciduous and coniferous woodland over braken, bramble and *Mentha*, 9.09.1997, SJ & CF; 1 ♂ (LMNM), in deep gorge, rest house, Paphos forest, 8.09.1997, CF. — TURKEY: 1 ♂ (LMNM), Mersin, Narlıkuyu, 15.07.1992, CF; 2 ♂♂ (LMNM), Narlıkuyu, Mersin, garrigue-type vegetation on limestone outcrop, under pine needles and scattered short herbs, 9.06.1993, SJ & CF; 4 ♀♀ (LMNM), İçel, Narlıkuyu (36°26'35"N, 34°04'44"E), 29.06.1995, SJ & CF; 1 ♀ (LMNM), İçel, c. 2 km S of Çamlidere (36°52'12"N, 34°24'37"E), rocky disused quarry at side of road, dominated by *Euphorbia*, Mullein *Cistus* and *Rubus*, 30.06.1995, SJ & CF; 5 ♂♂ (LMNM), İçel, Çamlıyayla, Dağ Hotel area (37°10'10"N, 34°36'02"E), c. 1454 m a.s.l., limestone cliff, 1.07.1995, SJ & CF; 1 ♂ (LMNM), İçel, c. 17 km N of Anamur, Alaköprü Bridge (36°10'38"N, 32°53'51"E), wet flush on road, downward slope to river bank and rocky outcrop, 7.05.1994, SJ & CF; 1 ♂ (NHMW), Namrun, 30.05.1964, FR. — SYRIA: 1 ♂ (NMPC), NW Syria, Mashtal Helu nr. Homs, 30.03–3.04.2001, MR; 1 ♂ (NMPC), NW Syria, castle Qalaat al Hosn nr. Homs, 3–4.04.2001, MR; 1 ♀ (NMPC), NW Syria, Al Haffeh nr. Latakia, 13.04.2001, MR.

COMMENTS. An eastern Mediterranean species, recorded to date from Greece, Turkey, Cyprus, Israel and Syria [Prószyński, 2003; Russell-Smith *et al.*, 2011; Logunov, 2013; present data]. New record for Turkey.

Having examined numerous males and females of this species from Cyprus, Turkey and Syria, I agree with the opinion of Prószyński [2003: 59] that the name of *E. syriaca* Kulczyński, 1911 should be consid-



Figs 93–94. Male palp of *Evarcha pileckii* Prószyński, 2000 (Syria): 93 — ventral view; 94 — retrolateral view. Scale bars: 0.1 mm.

Рис. 93–94. Пальпа самца *Evarcha pileckii* Prószyński, 2000 (Сирия): 93 — вид снизу; 94 — вид сзади-латерально. Масштаб 0,1 мм.

ered a junior synonym of *E. patagiata*; the formal synonymization was done by Prószyński [2014]. The record of uncertain *Evarcha* species from Syria based on the old male specimen having white setae on its cymbium (see Prószyński [2003: 63, figs 231–232]) should also be referred to *E. patagiata*.

See also above under the 'Comments' of *E. jucunda*.

*Evarcha pileckii* Prószyński, 2000

Figs 93–94.

MATERIAL. SYRIA: 1 ♂ (ZMUM), NW Syria, castle Qalaat al Kahf nr. Qadmus, 5–7.04.2001, MR.

COMMENTS. Recorded from Israel and Syria only [Prószyński, 2003; present data]. New record for Syria.

This species remains poorly studied and is known from the male only.

*Habrocestum egaem* Metzner, 1999

MATERIAL. GREECE: 1 ♀ (ZMTU), Rhodos City, stone wall – sand dune, 27–28.05.1973, PL; 2 ♀♀ (SMFM), Crete, Meskla, 06.1926, CR; 4 ♂♂, 3 ♀♀ (SMFM), Crete, Topolia, 06.1926, CR; 2 ♀♀ (SMFM), Aptera, no date; 1 ♂ (SMFM, 4151), Crete, Akrotiri plain, 05.1928, CR; 1 ♂ (SMFM, 4152), Crete, Aptera, 30.05.1928, CR; 1 ♀ (SMFM), Crete, W of Camaris, 600–800 m a.s.l., slope, rocky, *Phrygana*, some *Quercus coccifera*, *Juniperus*, 6.04.1958, HK; 1 ♀ (SMFM), Crete, S-side of Lake Curna, slope scree, *Cirsium*, reed, yellow Laminacea, 15.04.1958, HK; 1 ♀ (SMFM), Crete, c. 25 km SE of Rethymnon. Archea Eleftherna, 17.05.2008, HE & UK; 1 ♂, 1 ♀ (SMFM), C-Crete, Magarikari, 7.05.2009, KE & HE; 1 ♂ (SMFM), Dadekanes, Karpathos, NE Piles, c. 330 m

a.s.l., dry valley with bushes of *Pistacea* sp., 21.09.1963, JMS; 1 ♂ (SMFM), Kelemppek Mts, summit region, 900 m a.s.l., 8.04.1968, JMS; 1 ♂ (SMFM), Island Kos, Kastell, 28.04.1968, JMS. — TURKEY: 1 ♂ (PCRS), c. 6 km from Torba, road to Yalikavak, in eroded area, 2.06.1997, ARS.

COMMENTS. Recorded from Greece (mainland and Crete) and Turkey only [Metzner, 1999; Logunov, Chatzaki, 2003; present data]. New record for Turkey.

*Habrocestum graecum* Dalmas, 1920

MATERIAL. GREECE: 2 ♂♂, 2 ♀♀ (SMFM), S coast of Peloponnes, Foinikous, lime and sand cliffs at seashore, 4.06.1998, LM; 1 ♂, 1 ♀ (SMFM), S coast of Peloponnes, Ligia, beach, dunes and adjacent cultural landscape, 1.06.1998, LM.

COMMENTS. The mainland Greece only [Metzner, 1999; Bosmans, Chatzaki, 2005; present data].

*Habrocestum papilionaceum* (L. Koch, 1867)

MATERIAL. GREECE: 1 ♂ (SMFM, 11516), 'Tripolitza', no date and collector. — TURKEY: 5 ♂♂, 1 ♀ (PCRS), c. 1 km W of Yalikavak, nr. Bodrum, under stone in meadow and maquis, 28.05–3.06.1997, ARS; 2 ♂♂ (NHMW), Kuşadası (SE-edge), Formol-falla, 11–26.05.1969, F. Spitzenberger.

COMMENTS. Recorded from Greece and Turkey only [Karol, 1967; Metzner, 1999; Russell-Smith *et al.*, 2011; present data].

*Hasarius adansoni* (Audouin, 1826)

MATERIAL. ALGERIA: 1 ♂ (PCRB), Wilaya Alger, Beau-lieu, c. 50 m a.s.l., in garden, no date, RB. — SPAIN: 1 ♀ (NMPC), Barcelona, 25.04.2004, LD. — GREECE: 1 ♂ (SMFM), S Crete, Plakias, 21.07.2009, HE & UK. — EGYPT: 1 ♀ (NHMW), Cairo, 25.04.1983, HEH. — OMAN: 1 ♂ (NHMW), nr. Tawi Ateyr cave, 19.01.2001, Sattmann *et al.* — SYRIA: 1 ♂ (NMPC), NW Syria, Latakia, 16.04.2001, MR.

COMMENTS. A cosmopolitan species (in warm climate and green houses), also recorded from southern Europe and the Mediterranean [Helsdingen, 2014]. New records for Oman, Egypt and Syria.

*Heliophanillus fulgens* (O. Pickard-Cambridge, 1872)

MATERIAL. EGYPT: 1 ♂ (SMFM), Luxor, island on Nile, bamboo, 17.11.1996, PJ. — SYRIA: 1 ♂ (NMPC), NW Syria, Aln al Zara nr. Idlib, canyon of Oronthes, 28.03.2001, MR; 1 ♂ (SMFM), Hama Prov., al-Ghab, street from Saqalbiya to SW valley, road ditches 1 km W of the bridge of al-Hansa, 30.03.1979, RK. — JORDAN: 1 ♂ (MHNG), east part, Wadi Schaib, 6.04.1967, J. & S. Klapperich.

COMMENTS. An eastern Mediterranean species, known from Greece (Crete only) and Egypt [Metzner, 1999; Logunov, Chatzaki, 2003], throughout the Near East [Prószyński, 2003], to central and southern Iran [Logunov *et al.*, 2002, 2007], southward to Yemen and the UAE [Wesołowska, van Harten, 1994, 2007, 2011]. New record for Jordan.

*Heliophanus agricola* Wesołowska, 1986  
Figs 100–101.

MATERIAL. ALGERIA: 1 ♀ (PCRB), Wilaya Oran, Daiet El Bragat along W18, c. 100 m a.s.l., among dry *Salicornia* and other herbs, 25.04.1984, RB. — SPAIN: 1 ♀ (MMUM, G7512.1913), Almeria, under stones in abandoned field near Salinas Viejas, 22.03.1979, ED.

COMMENTS. A west-Mediterranean species, confined to the Iberian Peninsula and northern Algeria [Wesołowska, 1986; present data].

*Heliophanus agricoloides* Wunderlich, 1987  
Figs 95–99, 102–103.

*Heliophanus agricoloides* Wunderlich, 1987: 272, figs 686a–d (D♂♀; holotype ♂ from Naturmuseum und Forschungsinstitut Senckenberg, Frankfurt am Main, Germany; examined).

TYPE: Holotype ♂ (SMFM, 37287) from Spain, the Canaries, Gran Canaria, nr. San Agostin, VII, J. Wunderlich. — Paratypes: 1 ♂, 1 ♀ (SMFM, 37301), together with the holotype.

MATERIAL. SPAIN: 5 ♂♂, 3 ♀♀ (OUMNH), The Canaries, Gran Canaria, Chavco of Maspalomas, beaten palm for sedum, 31.07.1957, GL.

COMMENTS. Restricted to Gran Canaria [Wesołowska, 1986; Wunderlich, 1987; present data].

In the original description, Wunderlich [1987: fig. 686b] did not show the bent tip of the embolus (cf. Fig. 96). *H. agricoloides* is very similar to *H. agricola* (Figs 100–101) and *H. fuerteventurae* (see above; Figs 13–19), especially the females. The conformation of the spermathecae (viz., arrangement and proportions of the inseminations ducts) is a reliable diagnostic character for distinguishing the females of these three species.

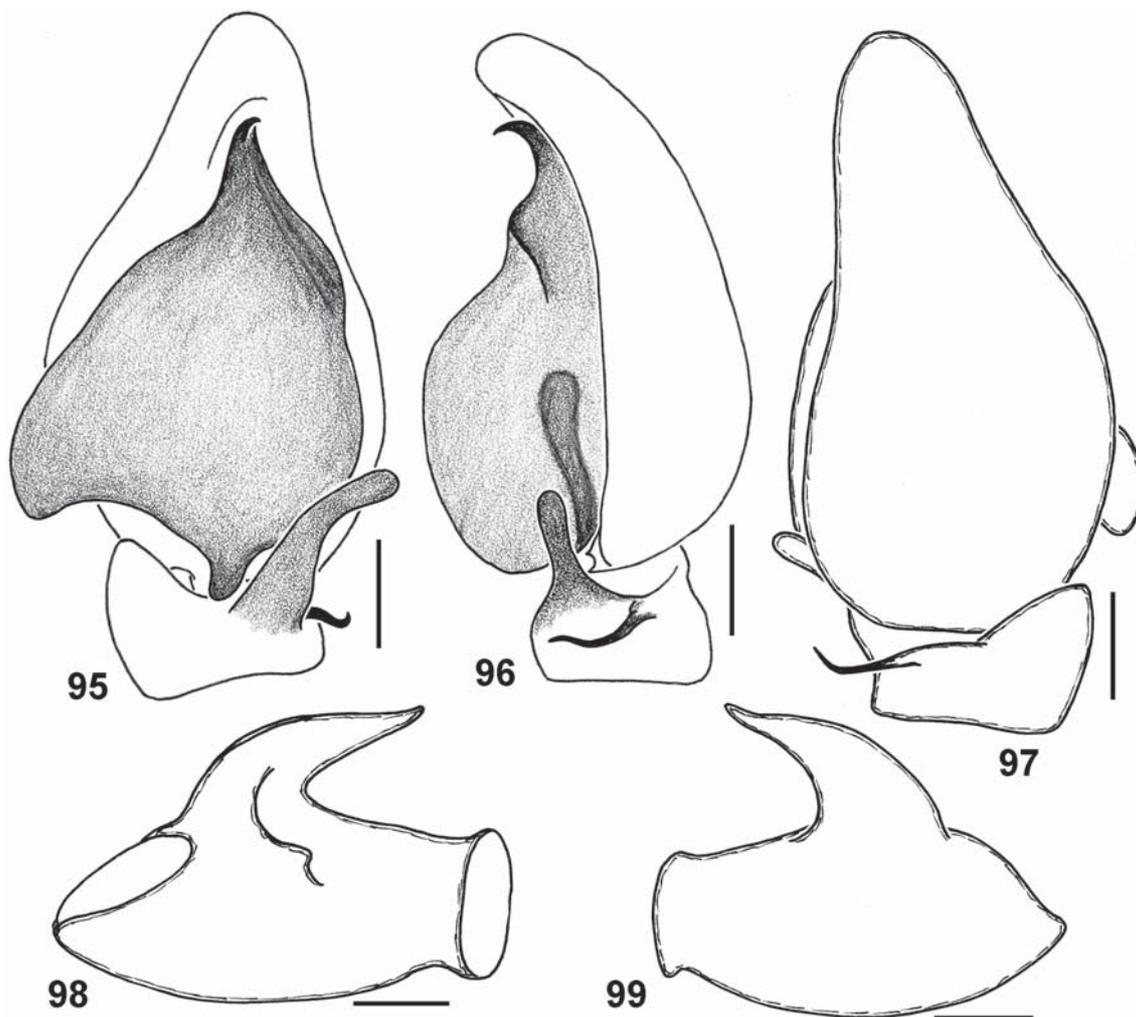
*Heliophanus apiatus* Simon, 1868

MATERIAL. SPAIN: 1 ♂ (MVHN), Valencia, Benimodo, Nacimiento Rio Verde, 12.10.2004, SM; 1 ♂ (NMPC), Guardamar del Segura, 28.04.2004, LD; 1 ♂ (NMPC), Blanes, 1.05.2004, LD; 1 ♂ (NMPC), Valencia, Guadalest (c. 38°41'N, 0°11'E), 27.04.2004, LD; 10 ♂♂, 7 ♀♀ (NMPC), Denia, 29.04.2004, LD. — ITALY: 1 ♂ (SMFM), Sicily, c. 1 km S of Ficuzza, forest of *Pinus piaster*, on clearing with moist grassland and *Asphodelus* (under stones), 700 m a.s.l., 12.04.1957, HK; 1 ♂ (SMFM), Sicily, nr. Ficuzza, N-slope at northern Rocca Busambra, moist grassland with *Crataegus*, *Rubus*, *Prunus*, *Beris perennis* and *Cirsium* (under stones), 800 m a.s.l., 11.04.1957, HK; 1 ♂ (SMFM), Sicily, c. 2 km W of Castelbuono, grainfield at W-slope (under stones), 29.03.1957, HK; 2 ♂♂ (SMFM), Sicily, c. 2 km W of Castelbuono, stony SE-slope, moist grainfields with *Fraxinus ornus* (under stones), 31.03.1957, HK; 1 ♂ (SZMN), Sicily, R.N.O. Zingaro, nr. Trapani, pitfall traps, 17–31.09.2001, F. di Franco; 1 ♀ (SZMN), same locality, 29.05.2003, F. di Franco; 1 ♂ (SMFM), Sardinia (SW part), c. 2 km S of Gonnosfanadiga, steep E-slope, cultivated land, olive trees, with dense grass and clover (under stones), 6.04.1956, HK; 1 ♀ (SMFM), Sardinia (W part), c. 2 km S of Guglieri, hills, 500–580 m a.s.l., N-slope, pastures with stone-walls, *Castanea*, *Euphorbia*, *Rubus fruticosus* (under stones), 14.04.1956, HK.

COMMENTS. Recorded from the Iberian Peninsula to Italy (Sicily) [Wesołowska, 1986: map 897; Ijland, Helsdingen, 2014; present data].

*Heliophanus auratus* (C.L. Koch, 1835)

MATERIAL. ALBANIA: 2 ♂♂, 1 ♀ (SMFM), 'IPEK, Bjelopollie', 06.1921, coll.? — MACEDONIA: 2 ♀♀ (OUMNH), Geugelya, 10.07.1956, GL. — GREECE: 1 ♀ (SMFM), Crete, Knosos, 06.1926, CR; 1 ♀ (SMFM), Kavala, Rentina Valley, 19.08.1971, RK. — CROATIA: 1 ♂ (SMFM), Primorje-Gorski kotar, nr. Delnice, c. 800 m a.s.l., beech forest (hand collecting from limestone), 28.04.2008, JA & JM. — TURKEY: 1 ♂, 2 ♀♀ (LMNM), Antalya, c. 31 km N of Alanya, Akcali Daglari, 19.07.1992, CF; 3 ♂♂, 1 ♀ (LMNM), Niöde (38°19'37"N, 34°14'34"E), c. 33 km E of Aksaray, Selime Bridge, disturbed river bank and herb-rich limestone cliff base, 10.05.1994, SJ & CF; 2 ♂♂ (LMNM), Bolu, c. 21 km E of Akçakoca (41°06'27"N, 31°15'54"E), sparse mixed weeds on road alope above snore, wet field with *Juncus* adjacent to stream, 18.05.1994, SJ & CF; 1 ♂ (OUMNH), Bitlis, Nemsut Dağ, c. 2750 m a.s.l., lake in garden (under stones), 12.08.1956, GL; 3 ♀♀ (NMPC), Yakaavsar nr. Aksu, Dedegöl Mts, *Pinus* forest below Raham Mt., c. 2206 m a.s.l., 10.07.2003, MR; 2 ♂♂, 1 ♀ (NMPC),



Figs 95–99. Male palp of *Heliophanus agricoloides* Wunderlich, 1987 (Gran Canaria, Chavco of Maspalomas): 95 — bulbus, ventral view; 96 — ditto, retrolateral view; 97 — ditto, dorsal view; 98 — male palpal femur, prolateral view; 99 — ditto, retrolateral view. Scale bars: 0.1 mm.

Рис. 95–99. Пальпа самца *Heliophanus agricoloides* Wunderlich, 1987 (Гран Канария, Маспаломас): 95 — бульбус, вид снизу; 96 — то же, сзади-латерально; 97 — то же, вид сверху; 98 — бедро пальпы самца, вид спереди-латерально; 99 — то же, вид сзади-латерально. Масштаб 0,1 мм.

Çağlayan (c. 24 km SE of Erzincan; 39°36'N, 39°42'E), valley above waterfall, 23–24.06.2002, MR; 1 ♂ (ZMTU), Izmir Distr., Yamanlar Dağı, in pine litter, 24.05.1973, PL; 1 ♀ (NHMW), Tekketal, SW Akşehir, 1100–1200 m a.s.l., pine forest with *Quercus coccifera*, *Corylus*, etc., 11.06.1967, JG — RUSSIA: 2 ♂♂, 5 ♀♀ (ZMUM), Astrakhan' Region, Lishansky Distr., E of Basinskaya station (46°07'55"N, 47°13'05"E), 18.05.2012, AG; 1 ♂ (MMUM), Stavropol Territory, Beshpagir Vil., in kitchen garden, 29.08.2013, DL. — ARMENIA: 1 ♂ (ZISP, A.No. 617), Elenovka on Gokcha Lake, 22.07.1922, AD. — AZERBAIJAN: 2 ♀♀ (ZMUM), Evlakh Distr., nr. Karadein Vil., 23.08.1977, PD; 1 ♀ (SZMN), Naxçıvan, Shakhbuz Distr., nr. Kemyur, 1500 m a.s.l., 9.07.1988, PD.

COMMENTS. A Euro-Siberian – Central Asian temperate species [Logunov, Marusik, 2000b].

#### *Heliophanus canariensis* Wesołowska, 1986

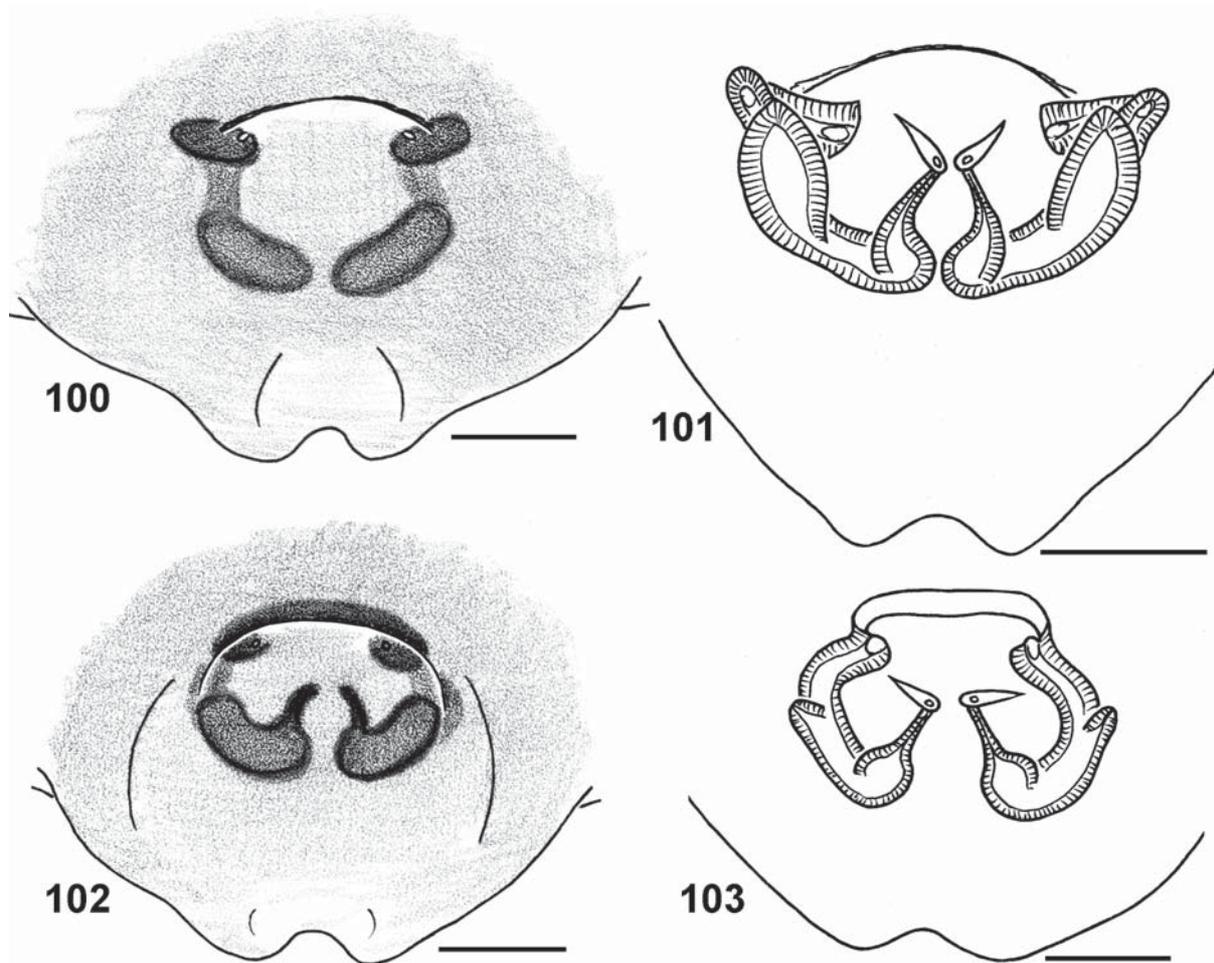
MATERIAL. SPAIN: 1 ♂ (MHNG), the Canaries, El Hierro Island, Maseta de Nisdafe, c. 2 km N of Mirador de Jinama, under rocks making the wall, 1100 m a.s.l., 2.06.2000, CL.

COMMENTS. Restricted to the Canary Islands [Wesołowska, 1986; Wunderlich, 1992; present data].

#### *Heliophanus creticus* Giltay, 1932

MATERIAL. GREECE: 3 ♂♂ (SMFM, 4151 & 1986), Crete, Akrotiri plain, 05.1928, CR; 1 ♀ (SMFM), Crete, c. 3 km SE of Kaluthiana, W-slope, cultivated land with ruin and stonewalls, *Olea europea*, *Quercus ruber*, low grass (under stones), c. 50 m a.s.l., 19.04.1958, HK; 1 ♂ (SMFM), NE Crete, c. 12 km S of Sitia, *Macchia*, *Cistus* stony and dry karts, 22.03.1958, HK; 1 ♂ (SMFM), Crete, S of Zagos, steep SE-slope, stony, dense *Phrygana* (under stones), 5.04.1958, HK; 1 ♀ (SMFM), Crete, c. 3 km SE of Kaluthiana, pasture nr. stream, *Chrysanthemum*, *Cirsium*, *Nerium oleander*, *Myrtus* (under and between stones), 19.04.1958, HK; 1 ♂ (SMFM), Crete, S-side of Lake Curna, slope scree, *Cirsium*, reed, yellow Laminacea, 15.04.1958, HK; 1 ♂ (SMFM), between Monastir Toplou and Vai (35°14'8.5"N, 26°13'27.1"E), 168 m a.s.l., open and dry phrygana, under stones, 21.03.2007, AS.

COMMENTS. Recorded from Crete only [Wesołowska, 1986; Metzner, 1999; Logunov, Chatzaki, 2003; present data].



Figs 100–103. Female copulatory organs of *Heliophanus agricola* Wesolowska, 1986 (100–101; Spain, Almeria) and *H. agricoloides* Wunderlich, 1987 (102–103; Gran Canaria, Chavco of Maspalomas): 100, 101 — epigyne, ventral view; 101, 103 — spermathecae, dorsal view. Scale bars: 0.1 mm.

Рис. 100–103. Копулятивные органы самок *Heliophanus agricola* Wesolowska, 1986 (100–101; Испания, Алмерия) и *H. agricoloides* Wunderlich, 1987 (102–103; Гран Канария, Маспаломас): 100, 102 — эпигина, вид снизу; 101, 103 — сперматека, вид сверху. Масштаб 0,1 мм.

#### *Heliophanus cupreus* (Walckenaer, 1802)

**MATERIAL.** ALGERIA: 1 ♂ (PCRB), Wilaya El Tarf, El Kala, W bank of Lac Tonga, c. 10 m a.s.l., wet meadows along lake, 27.03.1988, RB. — PORTUGAL: 4 ♂♂, 5 ♀♀ (FMNH), Paúl do Boquilobo Biosphere Reserve (c. 39°23'22" N, -8°32'22" W), 11.06–18.09.2002, PC. — SPAIN: 1 ♂ (MHNG), Zamora, nr. Sandin de Carballeda, 17.07.1975, PH; 1 ♂ (NMPC), Besalú, 2.05.2004, LD. — FRANCE: 1 ♂ (SMFM), Corsica, Col de Verde, c. 1060 m a.s.l., mixed forest, 9.05.1982, JMS. — ITALY: 1 ♀ (SMFM), Sardinia (NW part), camp of Scala di Giocca, marshy stream, with *Rubus fruticosus* at banks (in grass), 18.04.1956, HK. — SLOVENIA: 1 ♀ (SMFM), Slihoica, Mt nr. Zirknitz, 800–1000 m a.s.l., 17.07.1974, JMS. — GREECE: 1 ♀ (SMFM), Chalkidiki, Cholomon, c. 850 m a.s.l., 19.08.1971, RK. — TURKEY: 1 ♀ (PCRS), c. 8 km W of Koycegiz, sycamore woodland, 5.06.1996, ARS; 2 ♂♂, 1 ♀ (NMPC), nr. Pazar, c. 24 km W of Tokat (40°16'N, 36°17'E), Ballica, nr. Mağarasi cave, 29.06–1.07.2002, MR; 2 ♀♀ (NMPC), Çağlayan, c. 24 km SE of Erzincan (39°36'N, 39°42'E), valley above waterfall, 23–24.06.2002, MR; 1 ♂ (NHMW), c. 8 km S of Tokat, c. 900 m a.s.l., oak forest with *Carpinus*, *Pinus*, etc., 5.06.1967, JG, FR & AR; 2 ♀♀ (NHMW), Kizilcahaman, 1000–1200 m a.s.l., thicket of fruit trees, 27–28.05.1967, JG, FR & AR; 1 ♀ (NHMW), Namrun, pine forest, 12.05–5.06.1964, FR;

10 ♀♀ (BMNH), Trabzon, Hamsiköy, c. 1250 m a.s.l., on rocks, herb litter and under stones on open hillside and in forest, 21–25.08.1958, coll.? — RUSSIA: 1 ♂ (ZISP, A.No. 204), North Caucasus, nr. Saprat (unknown locality), 7.08.1937, AD. — ABKHAZIA: 1 ♀ (ZMUM), nr. Sukhum, left bank of Kelasuri River (c. 3 km upstream of its mouth), under stones, 11.06.2004, EM; 1 ♂ (ZMUM), nr. Sukhum, Kelasuri, orchards (hand collecting), 7–11.06.2004, EM. — GEORGIA: 1 ♀ (ZISP, A.No. 301-970), Tsalabana, 1100 m a.s.l., sweeping over *Rhododendron*, 22.06.1969, EP; 1 ♀ (ZISP, A.No. 491), [Adzharia], Batumi, in grass, 20.08.1914, A. Bykova; 1 ♀ (ZISP), same locality, Batumi, sweeping, 27.06.(no year), coll.?.; 1 ♀ (ZISP), same republic, Tsoniarisi, 400 m a.s.l., sweeping, 18.06.1969, EP. — ARMENIA: 1 ♀ (ZISP, A.No. 510-1931), Dilizhan, 4.08.1931, EP. — AZERBAIJAN: 1 ♀ (SZMN), Lenkoran Area, Lenkoran Reserve (38°38'N, 48°47'E), 23.05.2003, EG; 2 ♀♀ (ZMUM), same area, nr. Kirovsk (now Istisu), 24.06.1985, PD.

**COMMENTS.** A European – Central Asian temperate species [Helsdingen, 2014], eastward to the Urals and southward to Iran and Afghanistan [Logunov, Marusik, 2000b].

*Heliophanus decoratus* L. Koch, 1875

MATERIAL. CYPRUS: 1 ♀ (PCRS), Akrotiri Peninsula, salt marsh, under stones, 30.04.2013, coll.?. — EGYPT: 1 ♂, 1 ♀ (NHMW), Ras El-Barr (c. 31°31'N, 31°50'E), 22.04–6.09.1982, HEH. — SYRIA: 2 ♀♀ (SMFM), Dayr az-Zor Prov., 23 km NW of Dayr az-Zor, Nahr al Furat (=Euphrates), road bridge between km 290th and 295th to Aleppo, salt marsh, 15.03.1979, RK.

COMMENTS. A Mediterranean species, known from Algeria [Wesołowska, 1986: map 905], throughout N Africa and the Near East [Prószyński, 2003], to SW Iran [Logunov *et al.*, 2002]. New record for Cyprus.

*Heliophanus dubius* C.L. Koch, 1835

MATERIAL. GEORGIA: 1 ♀ (ZMUM), Surami (=Rikoti) Pass, c. 1000 m a.s.l., *Fagus-Alnus-Castanea-Rhododendron* forest, litter & under stones, 14.04–17.05.1983, SG.

COMMENTS. A trans-Eurasian temperate species [Logunov, Marusik, 2000b].

*Heliophanus dunini* Rakov et Logunov, 1997

MATERIAL. TURKEY: 2 ♂♂ (NHMW), Akşehir, Sültandağ, 23–31.05.1960, FR. — UKRAINE: 1 ♂ (ZMUM), Kherson Region, nr. Stanislav, bay shore, 17.05.2001, V. Martynov. — AZERBAIJAN: 1 ♂, 2 ♀♀ (ZISP, A.No. 186 & 454-1935), c. 50 km S of Yevlakh, nr. Martushevany, 06–11.1935, P.A. Veltishev.

COMMENTS. Recorded from Turkey, Ukraine, Azerbaijan, N Iran and NW Kazakhstan [Rakov, Logunov, 1997; Logunov, Guseinov, 2002; Logunov *et al.*, 2002; present data]. New records for Turkey and Ukraine.

*Heliophanus edentulus* Simon, 1871

MATERIAL. GREECE: 1 ♀ (SMFM), Kelempek Mts, between Avas and Esimi, 05.1968, JMS. — CYPRUS: 1 ♀ (MHNG), Larnaca, 27.07.1977, C. Besuchet. — TURKEY: 1 ♂ (SMFM), c. 6 km SW of Iznik, Iznik Gölü, S shore, no date, coll.?. 1 ♀ (SMFM), Iznik Gölü, N shore, c. 26 km E of Orhangazi, no date, coll.?. — ISRAEL: 2 ♂♂, 1 ♀ (NMPC), Sede Boqer, Negev desert, between Beer Sheva and Mitzpe Ramon, 6–29.05.2003, MR. — SYRIA: 1 ♂ (NMPC), NW Syria, castle Qalaat al Hosn nr. Homs, 3–4.04.2001, MR; 1 ♂ (SMFM), Homs Prov., nr. Qattinah, fields between village and dam., 11.03.1977, RK; 4 ♀♀ (SMFM), Homs Prov., Homs Lake nr. Qattina, lakeside at the western end of the dam, Orintes outflow, seasonally wet floodlands, 26.03.1977, RK; 1 ♂ (SMFM), Halab, NW of Aleppo, Nahr' Afrin, upstream of the bridge nr. Afrin, 19.03.1977, RK; 1 ♀ (SMFM), Hama Prov., al-Ghab, W-slope, 12 km S of Jisr Ash-Shughur, ditches nr. road, 22.03.1979, RK. — IRAN: 1 ♂ (MHNG), Tehran, Moa'lem Kelayeh (36°26'N, 50°27'E), 3.07.1975, A. Senglet; 1 ♂ (MMUM), Sepid dasht, 2.08.2012, SZ.

COMMENTS. A Mediterranean species, known from Algeria [Wesołowska, 1986: map 896], throughout N Africa, Greece [Metzner, 1999] and the Near East [Karol, 1967; Prószyński, 2003; Coşar *et al.*, 2014], to central Iran [Logunov *et al.*, 2002]. New records for Cyprus and Syria.

*Heliophanus encifer* Simon, 1871

MATERIAL. CYPRUS: 2 ♂♂, 1 ♀ (PCMA), Gialia, 25.03.1998, MA; 1 ♂ (PCDM), Dali, Lunboureana, in field, spring 2004, DMC; 1 ♀ (PCDM), house in Dali, in garden, spring 2004, DMC.

COMMENTS. It is the east-Mediterranean species known from Corsica to Israel [Wesołowska, 1986: map 900; Prószyński, 2003; Helsdingen, 2014; present data].

*Heliophanus equester* L. Koch, 1867

MATERIAL. GREECE: 2 ♂♂ (LMNM), Lesbos, Vatera (39°01'13"N, 26°10'53"E), 20.04.1997, CF & SJ; 1 ♀ (PCRG), Thasos, Thasos shell valley fen (40°39'N, 24°40'E), c. 25 m a.s.l., 26.05.2003, AF; 1 ♀ (SMFM), Saloniki, no date and collector name; 1 ♂ (SMFM), Crete, Knosos, 06.1926, CR; 1 ♂ (SMFM, 5152), Saloniki, no date and collector name; 1 ♀ (SMFM), Chalkidiki, Kassandra, N Chanioti, 12–15.08.1971, RK; 1 ♂ (SMFM), Crete, c. 3 km SE of Kaluthiana, pasture nr. stream, *Chrysanthemum. Cirsum, Nerium oleander, Myrtus* (under and between stones), 19.04.1958, HK; 3 ♂♂ (SMFM), N Crete, Gouves, 2–4.05.2008, HE & UK; 1 ♂ (SMFM), S coast of Peloponnes, Ligia, beach, dunes and adjacent cultural landscape, 1.06.1998, LM; 1 ♂ (SMFM), S coast of Peloponnes, Foinikous, cultural lands, 4.06.1998, LM. — TURKEY: 1 ♀ (PCRS), Akyaka, nr. Cinan Beach, under stones in pine wood, 30.05.1996, ARS; 1 ♂ (PCRS), meadow c. 1 km W of Yalikavak, nr. Bodrum, under stone, 28.05.1997, ARS; 1 ♂ (LMNM), Antalya, near Imamli, c. 3 km W of Yesiloz, vegetated upper beach next to Cag Motel, 8.06.1993, CF; 1 ♀ (LMNM), Içel, c. 2 km S of Çamlidere (36°52'12"N, 34°24'37"E), rocky disused quarry at side of road, dominated by *Euphorbia*, Mullein *Cistus* and *Rubus*, 30.06.1995, SJ & CF; 1 ♂ (ZMUM), Antalya, Kemer, pine forest, 50–100 m a.s.l., 28.04.2001, KM; 1 ♀ (NMPC), Tunceli (39°06'N, 39°33'E), Munsur river, 22.06.2002, MR; 1 ♂, 3 ♀♀ (ZMTU), Izmir Distr., Yamanlar Vil., in dry meadow on a slope, 25.05.1973, PL, F. Önder & E. Pehlivan; 1 ♀ (ZMTU), Izmir Distr., Kersiyaka, stone bed along a small river, 24.05–30.07.1973, PL & F. Önder; 1 ♂, 1 ♀ (PCSD), Gulf of Gorkova, behind beach Akyaka, 27.05.1997, RS; 1 ♀ (PCSD), Gulf of Gorkova (c. 4 km N of shore), 27.05.1997, RS. — ARMENIA: 2 ♂♂, 7 ♀♀ (ZISP, A.No. 317-09), Yerevan Area, 'station Negram' (unknown locality), 19.05.1909, N. Bryansky. — AZERBAIJAN: 1 ♀ (SZMN), Khachmas Distr., nr. Mukhtadir Vil., 30.06.1977, PD.

COMMENTS. An eastern Mediterranean species, known from Italy and Libya [Wesołowska, 1986: map 901], throughout north Africa, Greece, Croatia [Metzner, 1999; Logunov, Chatzaki, 2003] and the Near East [e.g., Karol, 1967; Prószyński, 2003; Uyar, Uğurtaş, 2012; Coşar *et al.*, 2014], to central Iran [Logunov *et al.*, 2002] and Azerbaijan [Rakov, Logunov, 1996; Marusik *et al.*, 2004: sub *H. equestior*].

*Heliophanus kochii* Simon, 1868

MATERIAL. PORTUGAL: 2 ♀♀ (OUMNH), Lisbon, "bottle 21612 2". — SPAIN: 1 ♀ (NMPC), Barcelona, 25.04.2004, LD; 3 ♂♂ (NMPC), Xàvia (=Jàvea), NP del Mongú, 29.04.2004, LD; 2 ♂♂ (NMPC), Besalú, 2.05.2004, LD; 5 ♂♂, 1 ♀ (NMPC), Catalonia, Mataró (c. 41°32'N, 2°27'E), 1.05.2004, LD. — ITALY: 5 ♀♀ (SMFM), Sardinia, no exact locality and collector name; 1 ♂ (SMFM), S Italy, Monte Garyano, 09.1951, coll.?. — CROATIA: 1 ♂ (SMFM), Trogiv, c. 20 km N of Split, 18.04.1956, O. Kraus. — GREECE: 1 ♂, 1 ♀ (SMFM), Island Kos, nr. Zia, 500–800 m a.s.l., forest and macchia, 29.04.1968, JMS; 1 ♀ (SMFM), Island Kos, Kastell, 28.04.1968, JMS; 1 ♂ (LMNM), Lesbos, nr. Potamia (39°13'03"N, 26°09'48"E), 23.04.1997, CF; 1 ♀ (LMNM), Lesbos, Stavros (39°02'12"N, 26°16'45"E), c. 158 m a.s.l., damp, rocky and grazed roadside field with low shrubs among grass, 21.04.1997, SJ; 1 ♀ (LMNM), Lesbos, Skala Kallonis (39°12'25"N, 26°13'13"E), back of beach and along river bank, 23.04.1997, SJ; 1 ♂, 1 ♀ (PCRG), Thasos, Ipsarion (40°39'N, 24°40'E), 820 m a.s.l., 27.05.2003, AF; 1 ♀ (SMFM, 5152), Saloniki, no date and collector name; 1 ♂ (MHNG), Nafpaktos, Etoile-Acarnanie, 14.04.1979, S. Vit. — TURKEY: 1 ♂ (PCRS), meadow c. 1 km W of Yalikavak, nr. Bodrum, under stone, 28.05.1997, ARS; 1 ♀ (LMNM), Içel, Tekmen, terraced cultivated slopes above sea, 8.06.1993, CF; 1 ♀ (LMNM), Içel, Çamlıyayla, Dağ Hotel area (37°10'10"N, 34°36'02"E), 1454 m a.s.l., limestone cliff, 1.07.1995, SJ & CF; 2 ♀♀ (LMNM), Içel, Narlıkuyu (36°26'042 2 N, 34°06'44"E), garrigue vegetated limestone dominated by *Pinus*, 5.06.1994, MB; 1 ♀ (LMNM), Içel, c. 2 km S of Çamlidere (36°52'12"N, 34°24'37"E), rocky disused quarry at side of road, dominated by *Euphorbia*,

Mullein *Cistus* and *Rubus*, 30.06.1995, SJ & CF; 4 ♀♀ (ZMUM), Antalya, Kemer, pine forest, 50–100 m a.s.l., 23–28.04.2001, KM; 2 ♀♀ (ZMTU), Izmir Distr., Yamanlar Dağı, under stones on a dry rocky slope, 25.05.1973, PL; 3 ♂♂, 3 ♀♀ (ZMTU), same locality, under stones in the alpine zone (ca 1100 m a.s.l.), 24.05.1973, PL & F. Önder; 1 ♂, 4 ♀♀ (PCSD), nr. Fethiye, above Arpacik, 28.05.1997, RS; 1 ♀ (NHMW), Hereke, c. 23 km W of İzmit, 50–100 m a.s.l., olive plantation (under stones and in grass), 25.05.1967, JG, FR & AR; 1 ♂ (NHMW), c. 12 km SSW of Adapazari, c. 100 m a.s.l., oak forest with *Carpinus*, *Tilia*, *Ligustrum*, *Crataegus*, etc., 14.06.1967, JG, FR & AR; 1 ♀ (NHMW), Hisarcık, SE Kayseri, 1500–1600 m a.s.l., sparse oak forest, 7.06.1967, JG, FR & AR; 1 ♀ (NHMW), Pozante, river valley and on slopes with *Pinus* sp. and shrubs, 8.05.1969, AR; 1 ♂ (NHMW), Akşehir, Sültandağ, 24.04.1960, FR; 1 ♂ (NHMW), Namrun, pine forest, 12.05–5.06.1964, FR; 1 ♂ (NHMW), Namrun, S-slope of Taurus, c. 1200 m a.s.l., 9–11.05.1969, AR; 1 ♂ (NHMW), *Pinus halepensis* forest, 9.06.1977, H. Nemenz; 1 ♀ (SMFM), Manyas Gölü, E lake shore nr. Kuşçenneti, S of national park, no date, coll.? — SYRIA: 8 ♂♂, 3 ♀♀ (NMPC), NW Syria, Mashtal Helu nr. Homs, 30.03–3.04.2001, MR; 1 ♂ (NMPC), NW Syria, Aln al Zara nr. Idlib, canyon of Oronthes, 28.03.2001, MR; 1 ♀ (NMPC), NW Syria, castle Qalaat al Hosn nr. Homs, 3–4.04.2001, MR; 1 ♀ (NMPC), NW Syria, Al Haffeh nr. Latakia, 13.04.2001, MR.

COMMENTS. A European – Mediterranean species, reaching the Crimea in the north-east [Kovblyuk, 2004] and also recorded from Asia Minor and Levant [Kulczyński, 1903; Wesolowska, 1986; Metzner, 1999; Prószyński, 2003; Logunov, 2012; Helsdingen, 2013; Ijland, Helsdingen, 2014; Coşar *et al.*, 2014]. New record for Syria.

#### *Heliophanus lineiventris* Simon, 1868

MATERIAL. SPAIN: 1 ♂ (NMPC), Catalonia, Mataró (c. 41°32'N, 2°27'E), 1.05.2004, LD. — ITALY: 1 ♂ (SMFM), Sicily, E of Ficuzza, edge of a path, thorny, dry (under large stones), c. 900 m a.s.l., 10.04.1957, HK. — ALBANIA: 1 ♀ (SMFM, 1987), 'Korab', no date and collector. — GREECE: 1 ♂ (SMFM), Korfu nr. Limni Antiniotissa (39°46'57.3"N, 19°51'34.8"E), at beach (0 m a.s.l.), *Macchia* and meadows (under stones and wood), 23.03.2006, AS; 1 ♂ (SMFM), Thrakien, Porto Lago, Ewru, 1.04.1977, RK. — TURKEY: 1 ♀ (NMPC), Sivas Prov., nr. Demiryurt, Tödürge Gölü (lake), c. 13 km W of Zara (39°53'N, 37°37'E), 25–28.06.2002, MR; 1 ♀ (NMPC), Çağlayan, c. 24 km SE of Erzincan (39°36'N, 39°42'E), valley above waterfall, 23–24.06.2002, MR; 1 ♀ (NHMW), Burdur, 4.05.1965, FR.

COMMENTS. A trans-Eurasian temperate species [Logunov, Marusik, 2000b].

#### *Heliophanus machaerodus* Simon, 1909

MATERIAL. MOROCCO: 1 ♀ (ZMUM), Ketama Prov., c. 40 km W of Ketama, along P39, c. 1030 m a.s.l., among stones and grasses in short vegetation in degraded *Quercus* forest, 20.04.1984, RB. — ALGERIA: 1 ♂ (PCRB), Wilaya Blida, Atlas Blidéen, Djebel Mouzaia, c. 1250 m a.s.l., under stones along the lake, 14.05.1988, RB; 1 ♀ (PCRB), Wilaya Bejaia, E of the mouth of Wadi Daas, c. 5 m a.s.l., under stones and on bushes on the shore, 22.05.1988, RB; 2 ♀♀ (PCRB), Wilaya Saida, Mts Daia, forestry headquarter in Merdja, c. 750 m a.s.l., among stones in open, dry *Pinus halepensis* forest, 4.05.1984, RB; 1 ♀ (PCRB), Wilaya Bejaia, S. Tichi, c. 50 m a.s.l., under shrubs along Wadi Djemaa, 20.05.1988, RB; 1 ♂ (PCRB), Wilaya Ain Defla, N. Derrag, forest Aghbal, c. 1020 m a.s.l., under stones, 23.04.1989, RB. — TUNISIA: 1 ♂, 1 ♀ (SMFM), Tunis, Karthago, right side of the entry to Roman thermes, dense *Mesembrianthemum*, humus soil, mostly in funnel, 27.03.1959, HK.

COMMENTS. Recorded from Morocco, Algeria and Tunisia only [Wesolowska, 1986; present data]. New record for Tunisia.

#### *Heliophanus melinus* L. Koch, 1867

MATERIAL. GREECE: 1 ♂ (SMFM), Kelemppek Mts, above Neda, 400–500 m a.s.l., *Quercus pubescens*, 4–7.05.1968, O.V. Helversen & AS; 1 ♂ (LMNM), Chios, Giosonas Beach (38°33'32"N, 26°04'53"E), scrub and herbs on stabilized shore, 28.04.1997, CF; 1 ♀ (PCRG), Thasos, Skala Kallirachis (40°39'N, 24°40'E), c. 2 m a.s.l., 27.05.2003, AF; 1 ♂ (SMFM), 'Aegina', no exact locality and date; 1 ♀ (SMFM), 'Ateropolis', no exact locality and date; 1 ♀ (SMFM), Crete, Topolia, 06.1926, CR; 1 ♀ (SMFM), Chalkidiki, Petralona, 20.08.1971, RK; 2 ♀♀ (SMFM), Crete, SW Ajil deka, edge of Messara valley, sands with *Medicago lupulina*, 10.04.1958, HK; 1 ♂ (SMFM), Crete, c. 3 km SE of Kaluthiana, W-slope, cultivated land with ruin and stone walls, *Olea europea*, *Quercus ruber*, low grass (under vstones), c. 50 m a.s.l., 19.04.1958, HK; 1 ♂ (SMFM), Crete, valley NW of Lake Curna, grass, dense bushes, *Ficus*, *Quercus coccifera*, on stones, 15.04.1958, HK; 1 ♂ (SMFM), Crete, nr. Ajil Dekka, Gortys, W-slope, 100–120 m a.s.l., rocky, indet. yellow flowers, *Cirsium*, *Cystus*, 9.04.1958, HK; 2 ♂♂ (SMFM), same locality, 85–100 m a.s.l., stony, grass, *Cirsium*, 9.04.1958, HK; 2 ♂♂ (SMFM), Crete, S-side of Lake Curna, slope scree, *Cirsium*, reed, yellow Laminacea, 15.04.1958, HK; 1 ♂ (MHNG), Crete, Lassithi, Sitia, peninsular Faneromeni, a l2 ouest de la localite, c. 5 m a.s.l., 6.05.1985, BH; 1 ♂ (MHNG), Nafpaktos, Etoile-Acarmanie, 14.04.1979, S. Vit; 2 ♂♂ (MHNG), Naxos, pres de Galini, le long des cheminis campestres, c. 25 m a.s.l., 25.04.1987, BH; 1 ♂ (SMFM), Kelemppek Mts, summit region, c. 900 m a.s.l., *Quercus pubescens* forest, 8.05.1968, JMS. — TURKEY: 1 ♀ (PCRS), Akyaka, nr. Cinan Beach, under stones in pine wood, 30.05.1996, ARS; 4 ♂♂ (NMPC), Sivas Prov., Nr. Demiryurt, Tödürge Gölü (lake) (c. 13 km W of Zara; 39°53'N, 37°37'E), 25–28.06.2002, MR; 2 ♂♂, 13 ♀♀ (ZMTU), Izmir Distr., Yamanlar Dağı, under stones on dry rocky slope, 25.05.1973, PL, F. Önder & E. Pehlivan; 2 ♂♂, 1 ♀ (ZMTU), same locality, under stones in the alpine zone (c. 1100 m a.s.l.), 24.05.1973, PL & F. Önder; 1 ♀ (PCSD), Pamukkale, ruins of Heiropolis, 26.05.1997, RS; 1 ♂ (PCLJ), Irmasan Gec, 27.05.2004, LJ; 2 ♂♂, 4 ♀♀ (MMUM), Adana Prov., Pozanti Distr., Belemidik Vil., 18.05.2003, KK; 3 ♂♂, 7 ♀♀ (MMUM), Adana Prov., Belemidik Vil., 18.05.2003, KK; 1 ♀ (MMUM), Adana Prov., Pozanti Distr., Belemidik Vil., 7.06.2002, KK; 1 ♀ (MMUM), Mersin Prov., Gülek Pass, 8–9.07.2002, KK; 1 ♀ (MMUM), Niğde Prov., Ulukışla Distr., Kolsuz Pass, 14.05.1996, KK; 2 ♀♀ (LMNM), Adana, c. 8 km S of Sambeyli, 13.07.1992, SJ; 1 ♀ (LMNM), İsparta, Kovada Gölü (lake), sparsely vegetated lakeside shingle, 20.06.1993, CF; 2 ♀♀ (LMNM), Konya, Sultan Dağları, c. 7 km NE of Bağkonak, 8.07.1992, CF; 1 ♀ (LMNM), Bağkonak, Sultan Dağları, Konya, under dwarf hillside herbs, 19.09.1993, CF; 1 ♀ (LMNM), İçel, c. 31 km N of Anamur (36°12'11"N, 32°54'01"E), young, goat-grazed, pine plantation on high, rock strewn, mountain slope, 7.05.1994, SJ & CF.

COMMENTS. A European – Mediterranean species, known from Spain [Helsdingen, 2014] to Asia Minor [Kulczyński, 1903; Uyar, Uğurtaş, 2012; Helsdingen, 2013; Coşar *et al.*, 2014]; according to Wesolowska [1996], the records of *H. melinus* from the Caucasus and Central Asia are likely to belong to *H. patagiatus* Thorell, 1875.

#### *Heliophanus mordax* (O. Pickard-Cambridge, 1872)

MATERIAL. GREECE: 1 ♂ (MHNG), Island of Rhodes, montagne Profitis Ilias, c. 650 m a.s.l., 15.05.2001, CL. — CYPRUS: 1 ♂ (PCRS), nr. Souskiok, under stones in grassland, 1.05.2013, coll.?.; 1 ♂ (PCDM), house in Dali, in garden, spring 2004, DMC; 1 ♂ (PCDM), Agridi, house yard, May 2012, DMC. — TURKEY: 2 ♀♀ (PCRS), Mazi Beach, nr. Bodrum, under stone in field, 31.05.1996, ARS; 1 ♂, 1 ♀ (LMNM), Nevşehir, Nevşehir-Urgur, 11.07.1992, CF; 1 ♂ (LMNM), Kayseri, Tahtali Dağları, c. 8 km E of Bakirdagi, 13.07.1992, CF; 1 ♂ (LMNM), Kayseri, c. 31 km SE of Develi (38°15'02"N, 35°45'27"E), 12.05.1994, SJ & CF; 1 ♂ (LMNM), Nevşehir-Ürgüp, Nevşehir, calcareous herb-rich grassland, 16.06.1993, CF; 1 ♂ (LMNM), Bağkonak, Sultan Dağları, Konya, under dwarf hillside herbs, 19.09.1993, CF; 1 ♀ (LMNM),

Konya, Tuz Gölü (lake), Yavşan Tuslası (38°45'43"N, 33°09'31"E), stony railway embankment with sparse halophytic vegetation adjacent to evaporating lagoon, 18.06.1993, CF; 1 ♂ (LMNM), Niğde (38°19'37"N, 34°14'34"E), c. 33 km E of Aksaray, Selime Bridge, disturbed river bank and herb-rich limestone cliff base, 10.05.1994, SJ & CF; 1 ♂ (LMNM), Niğde, c. 8 km W of Gözlükuyu, c. 1 km along İlbara road off Askeray-Adana road, herb-rich, very rocky abandoned farmland edge, 10.05.1994, SJ & CF; 1 ♂ (LMNM), Zonguldak, Amasra, waste ground by flats, 18.05.1994, SJ & CF; 1 ♀ (LMNM), Kayseri, c. 3 km N of Saraycik (38°11'19"N, 35°55'33"E), 4.07.1995, SJ & CF; 1 ♀ (OUMNH), Nevşehir, Kessehis Gulsehır, under stone, 3.08.1956, GL; 1 ♀ (NMPC), Tunceli (39°06'N, 39°33'E), Munsur river, 22.06.2002, MR; 1 ♂, 1 ♀ (PCSD), nr. Fethiye, above Arpacık, 28.05.1997, RS; 1 ♂, 1 ♀ (NHMW), Eskiğümüş, NE of Niğde, 1400–1500 m a.s.l., steppe on the edge of orchard, 9.06.1967, JG, FR & AR; 2 ♂♂, 1 ♀ (NHMW), Akşehir, Sültandağ, 5–27.05.1960, FR; 1 ♀ (NHMW), Namrun, pine forest, 30.05.1964, FR. — AZERBAIJAN: 1 ♀ (ZMUM), Turianchai, 18.05.1983, PD; 1 ♀ (ZMUM), c. 50 W of Baku, nr. Dzheirankhechmez, 2.07.1988, PD; 1 ♀ (SZMN), Astara Distr., between Motlayat and Bilyasar, Talysh Mts (38°36'N, 48°40'E), 600–700 m a.s.l., *Carpinus-Acer-Quercus* forest, 20–22.06.2003, AC. — IRAN: 2 ♂♂ (MMUM), Zaghe, 13.10.2011, SZ.

COMMENTS. An eastern Mediterranean – Central Asian subboreal species, known from Dodecanese islands and Egypt [Metzner, 1999], throughout Asia Minor and the Near East [Prószyński, 2003; Topçu *et al.*, 2006; Coşar *et al.*, 2014], to the Caucasus, eastward to SW Kopetdagh in Turkmenistan [Rakov, Logunov, 1996; Marusik *et al.*, 2004] and Khorasan province of Iran [Logunov *et al.*, 2013]. New record for Cyprus.

#### *Heliophanus patagiatus* Thorell, 1875

MATERIAL. ARMENIA: 6 ♀♀ (ZISP), Razdansky Distr., nr. Ankavan, Marmarik river, 13.08.1979, V.P. Tyshchenko.

COMMENTS. A trans-Eurasian temperate species [Logunov, Marusik, 2000b].

#### *Heliophanus simplex* Simon, 1868

MATERIAL. AUSTRIA: 1 ♂ (OUMNH), Tyrol, Cortina g'Ampezz, 1900, G. Nicholson. — ALBANIA: 1 ♀ (SMFM, 1994), Kula Lums (=Kula Ljums), 4.07.1918, coll.? — TURKEY: 2 ♀♀ (LMNM), Konya, Kizilören, 9.07.1992, CF; 2 ♂♂ (NHMW), c. 20 km N of Turhal, 800–1000 m a.s.l., pine forest, 4.06.1967, JG.

COMMENTS. A central European – eastern Mediterranean species, eastward to Asia Minor and the Crimea [Metzner, 1999; Russell-Smith *et al.*, 2011; Kovblyuk, 2004; present data].

#### *Heliophanus stylifer* Simon, 1878

Figs 31–33, 37–39.

MATERIAL. ALGERIA: 1 ♂ (PCRB), Wilaya Blida, Meftah, Djebel Zerouela, c. 450 m a.s.l., among stones and Graminea in maquis, 23.05.1985, RB; 1 ♀ (PCRB), Wilaya Chleff, Damous, c. 5 m a.s.l., litter on the shore, 8.05.1986, RB; 1 ♀ (PCRB), Wilaya El Tarf, W of El Kala, S of Bou Malek, Lac Melah, c. 3 m a.s.l., in litter of *Quercus suber* forest (very close to the lake), 6.04.1982, RB; 1 ♂, 1 ♀ (ZMUM), Wilaya Bejaia, Tichi, c. 10 m a.s.l., wasteland in dunes, in *Acacia* litter, 21.05.1988, RB; 1 ♂, 2 ♀♀ (MMUM), Wilaya Bejaia, S of Tichi, c. 50 m a.s.l., under shrubs along Wadi Djemaa, 20.05.1988, RB.

COMMENTS. Recorded from Morocco and Algeria only [Wesolowska, 1986; present data].

This species is very similar to *H. ramosus*; the main diagnostic characters for both sexes between two species are given above under the 'Diagnosis' of *H. ramosus*.

#### *Heliophanus tribulosus* Simon, 1868

MATERIAL. CROATIA: 1 ♂ (SMFM, 7701), Dalmatia, 05.1938, coll.? — GREECE: 1 ♀ (PCRG), Profitis Ilias, 1.10.2001, coll.?; 1 ♀ (PCRG), Thasos, Thasos valley plain woodland (c. 40°39'N, 24°40'E), 120 m a.s.l., 25.05.2003, AF; 1 ♂ (SMFM), S coast of Peloponnes, Ligia, beach, dunes and adjacent cultural landscape, 1.06.1998, LM. — TURKEY: 1 ♀ (LMNM), Konya, c. 10 km along Akşehir-Cetince road, Sultan Dağları, mixed herbs and shrubs among young pine plantation, 19.06.1993, SJ & CF; 1 ♂ (LMNM), İçel, Narlıkuyu (36°26'04"N, 34°06'44"E), garrigue vegetated limestone dominated by *Pinus*, 5.06.1994, MB; 1 ♂ (ZMTU), Izmir Distr., Yamanlar Dağı, on wet ground along a mountain brook, 24.05.1973, PL; 1 ♂ (NHMW), c. 80 km SW of Kale, the road Denizli-Muğla, 22.05.1969, AR.

COMMENTS. A European – Mediterranean species, known France [Helsdingen, 2014] to Asia Minor [Kulczyński, 1903; Uyar, Uğurtaş, 2012; Helsdingen, 2013; Coşar *et al.*, 2014; present data]. Some of the earlier records of *H. tribulosus* from the Iberian Peninsula [Wesołowska, 1986; Helsdingen, 2014] actually belong to the closely related *H. haymozi* sp.n. (see above).

#### '*Hyllus*' *insularis* Metzner, 1999

MATERIAL. TURKEY: 1 ♀ (PCRS), Akyaka, Sulemin's castle, under stones, 28.05.1996, ARS; 1 ♀ (PCLJ), Nemrut Dağ, on stony ground, 1.06.2004, LJ; 2 ♂♂ (NHMW), Kaş, 23–24.04.1964, FR. — IRAN: 2 ♂♂ (MMUM), Lorestan Prov., Khorramabad (c. 33°29'N, 48°21'E), 16.09–9.11.2011, SZ.

COMMENTS. Recorded from Lesbos Island, Turkey and Iran (Tehran, Yazd and Mazandaran provinces) [Metzner, 1999; Logunov, 2001b; present data]. New record for Turkey.

#### *Icius congener* (C.L. Koch, 1846)

MATERIAL. ALGERIA: 1 ♂ (PCRB), Wilaya Tizi Ouzou, Massif Djurdjura, Tala Guilef, c. 2000 m a.s.l., mountain grassland, 2.05.1985, RB.

COMMENTS. A west-Mediterranean species, known from the Iberian Peninsula and Algeria to Italy (mainland) [Alicata, Cantarella, 1994; Helsdingen, 2014; present data].

It is very likely that Alicata & Cantarella [1994] mismatched the male and female of *I. congener*, as they had no sample containing both sexes collected together. They studied the sample 25700 from the Natural History Museum in Paris which contained 51 females identified by E. Simon himself as *I. congener*. However, as Alicata & Cantarella [1994: 120] stated only two of these females really belonged to *I. congener*, the rest were those of *I. hamatus*. Besides, no male was available in this sample. As a result, these authors seemed to have illustrated and described two untypical females of *I. hamatus* and misidentified them for those of *I. congener*. In my opinion, the true female of *I. congener* remains unknown yet.

#### *Icius hamatus* (C.L. Koch, 1846)

MATERIAL. ALGERIA: 1 ♂, 2 ♀♀ (PCRB), Wilaya Blida, Atlas Blidéen, Djebel Mouzaia, c. 1250 m a.s.l., under stones along the lake, 14.05.1988, RB; 1 ♂ (PCRB), same locality, in litter of *Quercus faginea* forest, 6.06.1986, RB; 1 ♂ (PCRB), Wilaya Blida, Atlas Blidéen, Chrea, c. 1100 m a.s.l., pitfall traps in *Quercus ilex* forest, 20.06.1987, RB; 1 ♂ (PCRB), same locality, c. 1045 m a.s.l., pitfall traps in dense *Quercus ilex* forest, 15.02–

21.06.1987, RB; 1 ♀ (PCRB), Wilaya Tizi Ouzou, Massif Djurdjura, Tala Guilef, c. 1500 m a.s.l., pitfall traps in *Quercus ilex* forest, 25.11.1986–29.05.1987, RB; 1 ♀ (PCRB), Wilaya Alger, Beaulieu, c. 50 m a.s.l., in garden, no date, RB; 1 ♂, 1 ♀ (PCRB), Wilaya Aïn-Defla, Djebel Zaccar, S. Aïn N'Sour, c. 900 m a.s.l., pitfall traps and litter in *Quercus ilex* forest, 18.05.1988, RB; 1 ♂, 1 ♀ (ZMUM), Wilaya Oran, Hadjadj, c. 50 m a.s.l., in garden, 07–08.1988, RB; 2 ♂♂, 3 ♀♀ (SZMN), Wilaya Bejaia, S. Tichi, c. 50 m a.s.l., under shrubs along Wadi Djema, 20.05.1988, RB; 1 ♀ (PCRB), Wilaya Alger, Beaulieu, c. 50 m a.s.l., in garden, no date, RB; 1 ♂ (PCRB), Wilaya El Tarf, El Kala, Lac Oubeira (N-side), S of Djebel Bou Malek, c. 3 m a.s.l., in litter nr. the lake, 3.04.1982, RB; 1 ♀ (PCRB), Wilaya Aïn Defla, Wadi Djer, c. 240 m a.s.l., nr. water, 4.05.1989, RB; 2 ♀♀ (PCRB), Wilaya Ech Cheliff, S of Tenes, gorges of Wadi Allata, c. 125 m a.s.l., under stones, 6.05.1989, RB; 1 ♀ (PCRB), Wilaya El Tarf, W of El Kala, S of Bou Malek, Lac Melah, c. 3 m a.s.l., in litter of *Quercus suber* forest (very close to the lake), 6.04.1982, RB. — PORTUGAL: 5 ♂♂, 4 ♀♀ (FMNH), Mértola (c. 37°38'N, -7°40'W), 24.05.2003, PC; 5 ♂♂, 8 ♀♀ (FMNH) & 2 ♂♂, 2 ♀♀ (ZMUM), Paúl do Boquilobo Biosphere Reserve (c. 39°23'N, -8°32'W), 9.05–2.08.2002, PC. — SPAIN: 2 ♂♂ (MVHN), Valencia, Devesa del Saler (Estany de Pujol / Dunas Fijas), 18.05–28.06.2004, DD; 2 ♀♀ (SMFM), La Rabida, 05.1959, J. Büddenbrock; 2 ♀♀ (NMPC), Guardamar del Segura, 28.04.2004, LD; 3 ♂♂, 5 ♀♀ (NMPC), the nature reserve of La Albufera, S of the city of Valencia, 30.04.2004, LD; 16 ♂♂, 9 ♀♀ (NMPC), Valensia, Guadalest (c. 38°41'N, 0°11'E), 27.04.2004, LD; 1 ♂ (NMPC), Xàvia (=Jávea), NP del Mongü, 29.04.2004, LD; 3 ♂♂ (NMPC), Besalú, 2.05.2004, LD; 1 ♂ (NMPC), Salou, 26.04.2004, LD. — ITALY: 2 ♀♀ (OUMNH), St. Margarita, stones, 20.08.1958, GL. — TUNISIA: 1 ♀ (SMFM), NE Tindja, olive grove, dense grass with *Lycnis viscaria*, *Cirsium* and *Asphodelus* (under stones and in litter), 9.04.1959, HK. — GREECE: 1 ♀ (SMFM), Crete, c. 8 km W of Chania, camp at reservoir nr. Ajia, meadow with *Aspidium*, *Cirsium*, *Citrus sinensis* and *Platanus*, 22–24.04.1958, HK.

COMMENTS. A European – Mediterranean species, known from the Iberian Peninsula to Asia Minor [Helsdingen, 2014], including the records from northern Africa (Tunisia) [Bosmans, 2003; present data]. The records of *I. hamatus* from China (Tibet; see Song *et al.* [1999]) were likely to be based on a misidentification.

#### *Icius simoni* Alicata et Cantarella, 1994

MATERIAL. ALGERIA: 1 ♂ (PCRB), Wilaya Maghnia, Tafna, along Wadi Tafna, c. 350 m a.s.l., among stones close to water and among *Oxalis*, 23.04.1984, RB.

COMMENTS. The species is known from Algeria only [Alicata, Cantarella, 1994; present data].

#### *Icius subinermis* Simon, 1937

MATERIAL. PORTUGAL: 2 ♂♂, 2 ♀♀ (FMNH), Paúl do Boquilobo Biosphere Reserve (c. 39°23'N, -8°32'W), 28.07–2.09.2002, PC.

COMMENTS. A west-Mediterranean – European species, known from the Iberian Peninsula to Germany and Macedonia [Alicata, Cantarella, 1994; Jäger, 1995; Helsdingen, 2014].

The species *Icius lamellatus* Wunderlich, 2011 described by Wunderlich [2011] from Italy and Portugal seems to be a junior synonym of *I. subinermis*; see also 'Comments' above under *I. insolitus*.

#### *Leptorchestes peresi* (Simon, 1868)

MATERIAL. ALGERIA: 1 ♂ (PCRB), Wilaya Medea, Col de Beni Chicac, c. 1230 m a.s.l., traps in mixed forest of *Quercus ilex* and *Q. suber*, 13.01.1989–20.05.1990, RB; 1 ♂ (PCRB), Wilaya

Tlemcen, SE of Tlemcen, forest d'Hafrir, c. 1350 m a.s.l., mixed forest of *Quercus suber*, *Q. ilex*, *Juniperus* sp. and *Erica arborea*, sweeping in vegetation, 6.05.1984, RB; 1 ♂ (PCRB), Wilaya Tipasa, Douaouda, Wadi Mazafran, 50 m a.s.l., glades in forest of *Populus alba*, 16.12.1986–26.02.1988, RB; 1 ♂, 1 ♀ (ZMUM), Wilaya Tipasa, Sidi Fredj, c. 10 m a.s.l., pitfall traps in *Olea* stands, 10.12.1986–20.12.1987, RB. — PORTUGAL: 1 ♂ (FMNH), Mértola (c. 37°38'N, -7°40'W), 28.05.2003, PC. — SPAIN: 1 ♂ (MMUM, G7512.1669), Sinues, Jaca, in pine wood, 22.06.1972, ED; 4 ♀♀ (MMUM, G7512.1666), San Juan de la Pena, Huesca, on northwest-facing rock slope, 2.06.1975, ED.

COMMENTS. A west-Mediterranean species, known from Algeria [present data] and the Iberian Peninsula, throughout south France to Greece (mainland) [Metzner, 1999; Wesolowska, Szeremeta, 2001; Ijland, Helsdingen, 2014]. New record for Algeria.

#### *Macaroeris flavicomis* (Simon, 1884)

MATERIAL. FRANCE: 3 ♂♂, 2 ♀♀ (PCJM, 14818), Lot, Garonne, Boudy, c. 150 m a.s.l., scrube, oak woods, 7.08.1985, JFM; 1 ♂ (PCJM, 20493), Morbihan, Le Passage, c. 10 m a.s.l., march, scrube, pines, 26.05.1992, JFM; 1 ♀ (PCJM, 20442), Morbihan, Bailleron, c. 10 m a.s.l., stones & shrubs, 24.05.1992, JFM; 4 ♂♂ (PCJM, 11632), Lot, Gignac, c. 300 m a.s.l., stony oak scrube, 13.05.1984, JFM; 1 ♂ (PCJM, 11681), Lot, Cales, c. 300 m a.s.l., stony juniper scrub, 14.05.1984, JFM; 2 ♂♂, 1 ♀ (PCJM, 11720), Lot, Bernades, c. 300 m a.s.l., stony oak scrub, 15.05.1984, JFM; 3 ♂♂ (PCJM, 11777), Aveyron, Vezac, c. 300 m a.s.l., box hedge (litter), 20.05.1984, JFM; 2 ♂♂ (PCJM, 11859), Aveyron, Floirac, c. 300 m a.s.l., stony oak scrub, 23.05.1984, JFM; 1 ♂ (PCMJ), Pyrénées-Orientales, Col d'Quillat, 26–27.05.1987, PP; 1 ♀ (PCMJ), Pyrénées-Orientales, Maureillas, 22–31.05.1987, PP; 1 ♀ (PCMJ), Var, Méounes les M., 21.03–2.06.1989, PP; 1 ♀ (PCMJ), Gard, Quissac, 19–29.10.1989, PP; 1 ♀ (PCMJ), Gard, Le Vigon, 1–8.10.1986, PP; 2 ♂♂ (PCMJ), Vual., Roussillon, 16.05.1989, PP; 1 ♀ (PCRS, 17246), Auvergne, Puy d'Eraigne, 30.06.1974, JFM. — ITALY: 1 ♂ (SMFM), Sardinia, 1986, coll.?.; 1 ♂ (PCJM, 18076), Corsica, Venaco, Col de Belle Granajl, 730 m a.s.l., maquis, 26.05.1989, JFM; 1 ♀ (PCJM, 17941), Corsica, Étang d'Urbino, coastal scrub, 22.05.1989, JFM. — LIBYA: 1 ♀ (SMFM, 4150), Tripoli, Vytina, no date and collector name. — GREECE: 1 ♂ (SMFM), Kelempek Mts, above Neda, 400–500 m a.s.l., *Quercus pubescens*, 4–7.05.1968, O.V. Helversen & AS; 1 ♂ (SMFM), SE part, Kalamafka, 14.05.2009, KE. — CROATIA: 5 ♀♀ (MHNG), Istria, Ump. Pula, 9–14.07.1982, S. Heimer. — SLOVENIA: 1 ♂ (SMFM), S of Komen (45°48'20.61"N, 13°45'52.56"E), Karst, seminatural meadow with stone walls, bushes and trees, 27.06–5.07.2001, PJ. — TURKEY: 4 ♀♀ (MMUM), Konya, Kizilören, 9.07.1992, CF; 1 ♀ (LNMC), Konya, Akşehir, above Dağ Hotel, mixed scrub, herbs and grasses on north-facing limestone slope, 19.09.1993, SJ & CF; 1 ♀ (LNMC), İçel, Çamlıyayla, Dağ Hotel area (37°10'10"N, 34°36'02"E), 1454 m a.s.l., limestone cliff, 1.07.1995, SJ & CF; 1 ♂ (LNMC), Bağkonak, Sultan Dağları, Konya, under dwarf hillside herbs, 19.09.1993, CF; 1 ♀ (LNMC), Çorum, c. 4 km E of Eliceck (40°18'38"N, 34°42'51"E), 1192 m a.s.l., willow-lined river bank below *Quercus* hillside, 6.07.1995, SJ & CF; 1 ♂, 3 ♀♀ (NMPC), Çağlayan, c. 24 km SE of Erzincan (39°36'N, 39°42'E), valley above waterfall, 23–24.06.2002, MR; 1 ♂, 1 ♀ (ZMTU), Izmir Distr., Yamanlar Dağı, on wet ground along a mountain brook and in dry meadow, 24–25.05.1973, PL, F. Önder & E. Pehlivan; 1 ♀ (NHMW), pass N of Silifke, 05.1965, G. Pretzmann. — UKRAINE: 1 ♂, 1 ♀ (ZMUM), Kherson Region, Chernomorski Reserve, 06.1985, N.B. Narolski. — ABKHAZIA: 1 ♀ (ZMUM), nr. Sukhum, left bank of Kelasuri River (c. 3 km upstream of its mouth), under stones, 11.06.2004, EM. — RUSSIA: 1 ♂ (SZMN), Chechen Republic, Grozny, 5–10.07.1988, A.S. Ryabukhin; 1 ♀ (SZMN), Dagestan, Derbent, 20.05.1989, PD; 1 ♀ (ZISP), Krasnodar Territory, nr. Khosta, 17.07.1975, V.I. Ovtsharenko; 1 ♂ (SZMN), The Crimea, Bakhchisarai, 5–15.06.1993, SV; 1 ♀ (ZMUM), The Crimea, nr. Simferopol, 26.08.1997, G.B. Reutov; 1 ♂ (ZMUM), The Crimea, Kanaka, from oak, 25.05.2000, M. On-

churov; 1 ♂ (ZMUM), The Crimea, Karadagh, Lobovoi Mt. Range, from pistachio and almond-trees, 29.05.2003, M.M. Kovblyuk. — ISRAEL: 2 ♂♂, 1 ♀ (HUJI, 15476, 15477), Migwe Yisra'el, on citrus, 15.02–20.03.1938, A. Shulov. — SYRIA: 1 ♂ (NMPC), NW Syria, Mashtal Helu nr. Homs, 30.03–3.04.2001, MR; 2 ♂♂ (NMPC), NW Syria, Slunfeh nr. Latakia, oak forest, 9.04.2001, MR. — AZERBAIJAN: 1 ♀ (MMUM), Gabala Distr., Amirvan, 4.06.2001, EG; 1 ♀ (SZMN), Aghstafa Distr., near Poylu, 6.05.1986, PD; 1 ♀ (SZMN), Khachmaz Distr., Mukhtadir, 30.06.1977, PD; 1 ♀ (ZMUM), Lenkoran, nr. Avrova, 20.05.1985, K. Aliev; 1 ♀ (ZMUM), nr. Kuba, 15.07.1989, PD.

COMMENTS. A Mediterranean species, known from France [present data], throughout the Balkans, south Ukraine and Turkey [present data], to the Near East and Azerbaijan [Prószyński, 2003: sub. *M. nidicolens*; Logunov, Guseinov, 2002: sub. *M. nidicolens*; present data]. Although the aforementioned records are formally new for France, Libya, Turkey, Israel, Syria and Azerbaijan, this species should have been recorded from these countries under the name *M. nidicolens* (see below).

#### *Macaroeris nidicolens* (Walckenaer, 1802)

MATERIAL. SPAIN: 3 ♂♂ (SMFM, 2599), Prov. Tarragona, Flix, 05.1915, F. Haas; 1 ♂ (PCJK), S of Apostoli, 12.05.2003, HDK. — ITALY: 1 ♀ (MNHN, 764, identified by E. Simon), 'Ital. (Can) (sub Nasdoi)'; 2 ♀♀ (MMUM), Lombardia, Bergamo, Dalmine, in wasp's nest, 20.VI.2000, Bugada; 1 ♂ (MMUM), Lombardia, Bergamo, Valgoglio, source in wood, 800 m a.s.l., 2.VI.1994, Parella, M. Valle. — BOSNIA AND HERCEGOVINA: 2 ♂♂ (PCMJ), Neum, 4.05.1988, PP; 1 ♀ (PCMJ), Ston, 7.05.1988, PP; 1 ♂ (PCJM, 5416), Hercegovina, Dubrovnik, Petka, Od Gorice, 16.04.1976, JFM; 1 ♂ (PCRS), headland N of Lucia, beach nr. Petrovac, 21.05.1984, coll.? — CZECH REPUBLIC: 2 ♀♀ (MMUM), southern Moravia, Bzenec, Váté Pisky (sand dunes) National Monument, 4.06.1996, V. Růžička. — HUNGARY: 1 ♂ (SMFM, 2039), 'Sienortorniza' [apparently, Simontornya; label is illegible], 1930 (Roewer's coll.); 1 ♂, 1 ♀ (MMUM), Szombathely, beating off *Pinus nigra* twigs, 28.06.1994, C. Szinétár; 5 ♀♀ (MMUM), Budapest, Sas-hegy, beating off *Pinus nigra* twigs, 25.05–25.06.1995, C. Szinétár. — GREECE: 1 ♀ (PCJW), Crete, 'Malrikyks', no date and collector name; 1 ♂ (SMFM, 33426), Samos island, 1984, Malicky; 1 ♂ (SMFM, 2041; palpless male), Crete, Mt. Governeto, 1.05.1926, CR; 1 ♀ (SMFM, 2040), Athens, Akropolis, 05.1926, CR; 1 ♂ (PCJM, 10905), Corfu, Korission, reed beds and sand dunes, 1–12.04.1983, JFM; 1 ♂ (PCJM, 6730), Halkidiki, Gerakina, 6–8.04.1978, JFM; 3 ♂♂ (PCJM, 6730, 6749, 6831), Halkidiki, Gerakina, 6–14.04.1978, JFM; 5 ♂♂, 2 ♀♀ (PCJM, 14818, 16218), Kefallinia (=Kefalonia), Sami, stones and shrubs on roadside, 24–31.05.1987, JFM; 1 ♂ (PCJM, 14906), Kefallinia (=Kefalonia), Svoronataa, damp area, 30.05.1987, JFM; 1 ♀ (PCJM, 16154), Kefallinia (=Kefalonia), Sisia, 30.05.1987, JFM; 1 ♂ (PCJM, 14876), Kefallinia (=Kefalonia), Assos, Spiridon, stony, grassy area, 27.05.1987, JFM; 1 ♂ (PCJM, 14711), Kefallinia (=Kefalonia), Pastra, shrubs on trackside, 21.05.1987, JFM; 2 ♂♂, 1 ♀ (PCJM, 16387), Kefallinia (=Kefalonia), Atsoupades, gorge, 24–22.05.1987, JFM; 1 ♂ (PCJM, 14757), Kefallinia (=Kefalonia), Atsoupades, stones and shrubs by gully, 22.05.1987, JFM. — CYPRUS: 3 ♂♂ (PCJM, 12627), Pano Panayia, 2.05.1982, JFM; 1 ♂ (SMFM), S Crete, Arvi, 12.05.2007, HE & UK. — TURKEY: 2 ♂♂, 1 ♀ 5 juv. (LNMC), 2 ♂♂, 1 ♀ (MMUM), c. 10 km E of Çamlıyayla, grazed ruderal alpine pasture, 11.06.1993, SJ & CF; 1 ♀ (MMUM), İçel, Tarsus-Çamlıyayla, c. 3 km S of Sarıkavak, herb-rich limestone hillside, 11.06.1993, SJ & CF; 1 ♀ (ZMUM), Antalya, Kemer, 50–100 m a.s.l., pine forest edge, 28–29.04.2001, K.G. Mikhailov & E.A. Mikhailova; 1 ♂ (SMFM), Büyükađa (the rest of label is illegible), 07.1966, coll.?; 1 ♀ (NHMW), c. 25 km S of Izmir, road Selçuk-Izmir, 28.05.1969, AR; 5 ♂♂ (NHMW), Namrun, pine forest, 12.05–5.06.1964, FR; 1 ♀ (NHMW), Alihoca, 11.06.1965, FR.

COMMENTS. A European – Mediterranean sub-boreal species, known from the Iberian Peninsula [Helsdingen, 2014] to Cyprus and Turkey [Helsdingen, 2013; present data]. The records of this species from Azerbaijan [Logunov, Guseinov, 2002] were mistaken and should actually be referred to *M. flavicomis* (see above). New record for Cyprus.

#### *Marpissa muscosa* (Clerck, 1758)

MATERIAL. SPAIN: 1 ♂ (SMFM), Madrid, no date and collector name. — GREECE: 1 ♂ (SMFM, 4160), Crete, Knosos, 06.1926, CR; 1 ♂ (SMFM), Kelemppek Mts, summit region, c. 900 m a.s.l., *Quercus pubescens* forest, 8.05.1968, JMS.

COMMENTS. A European temperate species, known from France to the Urals [Logunov, Marusik, 2000b].

#### *Marpissa nivoyi* (Lucas, 1846)

MATERIAL. MOROCCO: 1 ♂ (MHNG), Cap Negro, 1–3.08.1973, Y.G. Billaud. — ALGERIA: 1 ♂ (PCRB), Wilaya Tipasa, Douaouda, Wadi Mazafran, c. 50 m a.s.l., pitfall traps in *Populus alba* forest, 16.12.1986–26.02.1988, RB; 1 ♀ (PCRB), Wilaya Boumerdes, Thenia E., c. 150 m a.s.l., in litter of *Eucalyptus* plantation, 18.03.1988, RB; 1 ♂ (PCRB), Wilaya Blida, Atlas Blidéen, Meftha, Djebel Zerouela, c. 480 m a.s.l., pitfall traps in *Quercus suber* forest, 11.12.1986–23.06.1987, RB. — FRANCE: 1 ♂ (SMFM), Dep. Alpes-Maritimes, Col de Turini, c. 50 km NNE of Nice, 1500–1650 m a.s.l., 18–19.09.1982, JMS. — GREECE: 1 ♂ (SMFM), NW coast of Peloponnes, thermal spring of Loutra Killini, 8.06.1998, LM. — RUSSIA: 1 ♀ (ZMUM), Astrakhan' Region, Lishansky Distr., E of Basinskaya station (46°07'55"N, 47°13'05"E), 18.05.2012, AG.

COMMENTS. A European – Central Asian temperate species [Helsdingen, 2014], known from Morocco and Algeria [present data], eastward to S Kazakhstan and Kyrgyzstan [Logunov, Rakov, 1998]. New records for Algeria and Morocco.

#### *Marpissa pomatia* (Walckenaer, 1802)

MATERIAL. TURKEY: 1 ♂, 3 ♀♀ (OUMNH), Istanbul, 150 m a.s.l., beaten off *Rhododendron*, 20.07.1956, GL. — GEORGIA: 1 ♂ (ZISP, A.No. 301-470), Kolkhida, N. Chkhugunetch, 500–650 m a.s.l., 3–10.06.1969, EP.

COMMENTS. A trans-Eurasian temperate species, known from France to the Russian Far East and South Korea [Logunov, Marusik, 2000b]. New record for Turkey.

#### *Mendoza canestrinii* (Ninni in Canestrini et Pavesi, 1868)

MATERIAL. ALGERIA: 1 ♂ (PCRB), Wilaya Boumerdes, Reghia, 45 m a.s.l., *Olea europea* orchard, 3.05.1988, RB. — SPAIN: 2 ♂♂, 1 ♀ (MVHN), Valencia, Confrentes, Cerro Agrás, 6.03.2005, M.A. Ibañez-Orrico. — TURKEY: 1 ♂ (LMNM), Adana, c. 5.5 km E of Yenice (36°58'01"N, 35°07'17"E), ruderal plants and grasses on road verge, 4.05.1994, SJ & CF.

COMMENTS. A trans-Eurasian subboreal-subtropical species, known from Spain to Japan (Hokkaido) [Logunov, Marusik, 2000b]. New record for Algeria.

#### *Menemerus animatus* Pickard-Cambridge, 1876

MATERIAL. ALGERIA: 2 ♂♂, 1 ♀ (PCRB), Wilaya Adrar, Timimoun, palm grove and garden, 1.04.1989, RB. — EGYPT: 1 ♀ (SMFM), Cairo, no date and collector name; 2 ♂♂, 2 ♀♀ (NHMW), Ras El-Barr (c. 31°31'N, 31°50'E), 1.08.1982, HEH.

COMMENTS. A north-African species (from Algeria to Sudan), known also from the eastern Mediterranean (from Greece to Egypt) [Metzner, 1999; Wesolowska, 1999].

*Menemerus davidi* Prószyński et Wesolowska, 1999

MATERIAL. JORDAN: 1 ♂ (SMFM), Wadi Azab, N Amman, 04.2002, J. Hoenung.

COMMENTS. A north-African species, known from Libya, Algeria, Egypt, Israel and Jordan [Wesolowska, 1999; Prószyński, 2003; present data]. New record for Jordan.

*Menemerus errabundus* Logunov, 2010

MATERIAL. ISRAEL: 2 ♂♂ (NMPC), Sede Boqer, Negev desert, between Beer Sheva and Mitzpe Ramon, 6–29.05.2003, MR.

COMMENTS. Recorded from Iran (Khūzestān: Shush) and Israel only [Logunov, 2010; present data]; it is the first record outside the type locality. New record for Israel.

*Menemerus fagei* Berland et Millot, 1941

MATERIAL. EGYPT: 1 ♀ (NHMW), Asyut (=Assiut; c. 27° 11'N, 31°10'E), 23.12.1981, HEH; 2 ♀♀ (NHMW), El Mansoura (c. 31°04'N, 31°41'E), 8.01–19.11.1981, HEH; 1 ♀ (NHMW), Cairo (c. 30°3'N, 31°14'E), no date, HEH; 1 ♀ (NHMW), Ras El-Barr (c. 31°31'N, 31°50'E), 1.08.1982, HEH; 1 ♀ (NHMW), Zagazig (c. 30°34'N, 31°30'E), 11.11.1981, HEH.

COMMENTS. A north-African species, reaching the Near East [Wesolowska, 1999; Prószyński, 2003].

*Menemerus semilimbatus* (Hahn, 1827)

MATERIAL. MOROCCO: 1 ♀ (SMFM), 'Fez. Wez. z...' (label illegible), 27.05.1930, coll.?.; 1 ♂ (SMFM), Taza, c. 5 km S of Sebti-des-Beni-Frassèn, c. 30 km NW of Taza (34.20°N, 4.22°W), 300 m a.s.l., fallow land with damming wetness, clay, under stones, 22.02.2004, D.W. Wrase. — ALGERIA: 1 ♂ (PCRB), Wilaya Alfer, Ben Aknoun, c. 100 m a.s.l., terrain vague, 18.05.1988, RB; 2 ♂♂ (PCRB), Wilaya Iherir, Effeni, c. 100 m a.s.l., *Typha* march, 7.02.1986, RB; 1 ♂ (PCRB), Wilaya El Tarf, El Kala, W bank of Lac Tonga, c. 10 m a.s.l., wet meadows along lake, 27.03.1988, RB; 1 ♂ (PCRB), Wilaya Illizi, c. 60 km S of Illizi, Fadnoun, Wadi Djerat, among stones in litter of *Acacia* bark, 10.02.1982, RB; 1 ♀ (PCRB), Wilaya Tiz Ouzou, Taguemount Azouz, c. 800 m a.s.l., pitfall traps in *Quercus ilex* forest, 1.02.1989, RB; 1 ♂ (PCRB), Wilaya Bejaia, Wadi Daas, c. 15 m a.s.l., beach nr. the mouth, 22.05.1988, RB; 1 ♀ (PCRB), Wilaya Alger, Beaulieu, c. 50 m a.s.l., in garden, no date, RB; 1 ♂ (PCRB), Wilaya Ain Defla, between Bordj Emir Khaled and Tarik Ibn Ziad, c. 700 m a.s.l., border of Wadi Massine, under stones and in litter, 18.05.1988, RB. — PORTUGAL: 1 ♀ (FMNH), Mértola (c. 37°38'N, -7°40'W), 15.04.2003, PC. — SPAIN: 1 ♂ (MHNG), Alicante, Castillo de Santa Barbara, 24.03.1978, PH; 1 ♂, 2 ♀♀ (SMFM), La Rabida, 05.1959, J. Büddenbrock; 1 ♀ (SMFM), Aljenciras, 05.1959, Büddenbrock; 1 ♀ (NMPC), Valencia, Sagunt (=Sagunto) (c. 39°41'N, -0°16'W), 26.04.2004, LD; 6 ♂♂ (NMPC), Denia, 29.04.2004, LD; 1 ♂, 2 ♀♀ (NMPC), Calp, 29.04.2004, LD; 1 ♂, 3 ♀♀ (NMPC), Xàvia (=Jàvea), NP del Mongú, 29.04.2004, LD; 2 ♂♂ (NMPC), Guardamar del Segura, 28.04.2004, LD; 1 ♂ (NMPC), Besalú, 2.05.2004, LD; 2 ♂♂ (NMPC), Valensia, Guadalest (c. 38°41'N, 0°11'E), 27.04.2004, LD; 1 ♂ (NMPC), Catalonia, Mataró (c. 41°32'N, 2°27'E), 1.05.2004, LD. — ITALY: 1 ♂, 1 ♀ (SMFM), 9388, Sardinia, 1936, coll.?.; 1 ♀ (SMFM), Pantelleria, no date and collector name. — LIBYA: 1 ♀ (SMFM, 4150), Tripoli, Vytina, no date and collector name. — GREECE: 1 ♂ (SMFM), Island Kos, Kastell, 28.04.1968, JMS; 1 ♂ (LMNM), Lesbos, Parakila (39°102'N, 26°08'35'E), 12.07.1997, M. Hull; 2 ♂♂ (SMFM, 5152),

Saloniki, no date and collector name; 1 ♂, 1 ♀ (SMFM), Peloponnes, Nauplia, pine forest by the sea, 17.09.1964, M. Eitz; 1 ♂, 1 ♀ (SMFM), S Crete, Keratokompos, 7.05.2008, HE & UK; 1 ♂ (SMFM), N Crete, Gouves, 2.05.2008, HE & UK; 1 ♀ (SMFM), N Crete, Malia, 11.05.2008, HE & UK; 1 ♂ (MHNG), Crete, Lassithi, E of Sitia, hill nr. the sea, c. 30 m a.s.l., 6.05.1985, BH; 1 ♂, 1 ♀ (SMFM), C-Crete, Magarikari, 7.05.2009, KE & HE; 1 ♂, 1 ♀ (SMFM), S coast of Peloponnes, Ligia, beach, dunes and adjacent cultural landscape, 1.06.1998, LM; 1 ♂ (SMFM), S coast of Peloponnes, Foinikous, lime and sand cliffs at seashore, 4.06.1998, LM. — TURKEY: 1 ♂ (PCRS), Akyaka, on rocks behind Cinan Beach, 30.05.1996, ARS; 1 ♂ (PCRS), Akyaka, Thomsan Villas, on walls of house, 1.06.1996, ARS; 1 ♀ (SMFM), Büyükkada (nr. Istanbul, label is illegible), 07–08.1965, coll.?.; 1 ♀ (PCSD), among ruins of Ephesus, 25.05.1997, RS; 1 ♀ (OUMNH), Cavnos, nr. Dalyan, 12.08.2008, R. Gabriel & L. Hedicker. — AZERBAIJAN: 1 ♀ (SZMN), Astara Distr., between Motlayatay and Bilyasar, Talysh Mts (38°36'N, 48°40'E), 600–700 m a.s.l., *Carpinus-Acer-Quercus* forest, 20–22.06.2003, AC; 1 ♀ (SZMN), Ismailly Distr., Ismailly reserve, nr. Buinus Vil. 700 m a.s.l., 25–26.06.2003, AC.

COMMENTS. A Mediterranean species, known from the Canary islands and Morocco to Azerbaijan and N Iran [Rakov, Logunov, 1997; Wesolowska, 1999; Logunov *et al.*, 2002; present data].

*Menemerus taeniatus* (L. Koch, 1867)

MATERIAL. ALGERIA: 1 ♀ (PCRB), Wilaya Skikda, E. Collo, Tamanart, 0–30 m a.s.l., in litter of *Quercus suber* forest, 20.06.1985, RB. — SPAIN: 1 ♂ (NMPC), Salou, 26.04.2004, LD. — TUNISIA: 2 ♀♀ (PCJK), North of Beja, under bark of *Eucalyptus* tree, 8.03.2005, J. Van Keer. — GREECE: 1 ♂ (SMFM, 5152), Saloniki, no date and collector name. — MACEDONIA: 1 ♂, 1 ♀ (OUMNH), River Vargar, Geogelya wood hut, 11.07.1956, GL. — ABKHAZIA: 2 ♀♀ (ZMUM), nr. Sukhum, the left bank of Kelasuri River (2–3 km upstream of the mouth), under stones, 6.06.2004, EM. — AZERBAIJAN: 1 ♀ (SZMN), Khyzy Distr., c. 12 km W of Kilyazi (40°52'N, 49°12'E), 7.06.2003, H. Aliev.

COMMENTS. A Mediterranean species, known from Algeria and Portugal to Azerbaijan [Rakov, Logunov, 1997; Wesolowska, 1999; Helsdingen, 2014].

*Mogrus logunovi* Prószyński, 2000

MATERIAL. EGYPT: 10 ♀♀ (NHMW), Ras El-Barr (c. 31° 31'N, 31°50'E), 22.04.1982, HEH.

COMMENTS. Recorded from Egypt, the Near East, the UAE and Yemen [Prószyński, 2003; Wesolowska, van Harten, 2007, 2010; present data].

*Mogrus mirabilis* Wesolowska et van Harten, 1994

MATERIAL. EGYPT: 1 ♀ (NHMW), Sinai (no exact locality), 08.1982, HEH. — JORDAN: 1 ♂ (SMFM), Wadi Rum (=Wadi Ramm; 29°41'N, 35°27'E), Felsnische, HF, 9.04.2004, JA. — IRAQ: 1 ♂ (SMFM), Baiji, flower meadow, 2.04.1986, M. Larl.

COMMENTS. Recorded from Sudan, Yemen, Saudi Arabia, north-eastward to Egypt, Jordan and Iraq [Wesolowska, van Harten, 1994; Logunov, 2004b; present data]. New records for Egypt, Jordan and Iraq.

*Mogrus neglectus* (Simon, 1868)

MATERIAL. CYPRUS: 2 ♂♂ (PCMA), Akrotiri, 27.04.2007, MA; 1 ♀ (PCDM), Profitis Ulas, 2003, DMC; 2 ♀♀ (PCRS), Akrotiri Peninsula, salt marsh, in vegetation, 30.04.2013, coll.?. — TURKEY: 2 ♀♀ (SMFM), pass c. 9 km SE of Madanya, no date, coll.?. — ARMENIA: 1 ♂ (ZISP, A.No. 317-09), Yerevan Area, 'station Negram' (unknown locality), 19.05.1909, N. Bryansky. — AZERBAIJAN: 1 ♂, 4 ♀♀ (ZISP, A.No. 186-1935), c. 50 km S of Yevlakh, nr. Martushevany, 1935, P.A. Veltishev.

COMMENTS. An eastern Mediterranean – Central Asian subboreal-subtropical species, known from

Greece and Macedonia [Metzner, 1999; Helsdingen, 2014], through Asia Minor [Karol, 1967], to Iran and south Kazakhstan [Logunov *et al.*, 2002]. New record for Cyprus.

*Myrmarachne formicaria* (De Geer, 1778)

MATERIAL. GREECE: 1 ♀ (PCRG), Makiamos pastures, 27.09.2001, coll.?.; 2 ♂♂, 3 ♀♀ (NHRS), Chania Pref., Gerani, Ksekilomenes River, close to sea, under red debris on ground, 4.05.2000, TK. — TURKEY: 2 ♂♂ (PCRS), “Mavi kus”, Yalika-vak, nr. Bodrum, in garden, 27.05.1997, ARS; 1 ♀ (OUMNH), Van (?), Hahori Bashale, 50 k stream into Zap, among seeds, 30.08.1956, GL; 1 ♀ (NHMW), Yeşilyurt, 2.06.1965, FR; 1 ♂ (NHMW), Köyc-egiz, 14.04.1964, FR. — RUSSIA: 1 ♀ (ZISP), Krasnodar Territory, nr. Adler, 29.07.1976, V.I. Ovtsharenko. — ABKHAZIA: 1 ♀ (ZMUM), nr. Sukhum, left bank of Kelasuri River (3 km upstream of its mouth), under stones, 11.06.2004, EM; 1 ♀ (ZMUM), nr. N. Yashtukha, 29.03.1985, A. Markosyan. — GEORGIA: 1 ♂ (SZMN), Kolchida Reserve, alder forest, in litter, 14.04.1988, DL. — AZERBAIJAN: 1 ♀ (ZISP), Lenkoran Area, nr. Alexeevka, rush thicket, 7.07.1983, DL; 1 ♀ (ZISP), same area, nr. Dashdatuk, Bashary river valley, 28.06.1983, DL; 1 ♂ (ZISP), same area, nr. AzFilial, rush thicket, 2.07.1983, DL; 1 ♀ (ZMUM), same area, nr. Gaftoni, 9.05.1985, PD.

COMMENTS. An amphi-Eurasian subboreal species, known from Portugal, eastward to the Caucasus, and then from Cisamuria to Japan [Logunov, Marusik, 2000b].

*Neaetha absheronica* Logunov et Guseinov, 2002

MATERIAL. GREECE: 1 ♂ (PCJK), Macedonia, Strymon F-Plain, c. 55 m a.s.l., 21.05.2009, J. Van Keer; 1 ♀ (PCJW), Kaime-ni, Plaea, Santoria, 28.05.<no year>, J. Wunderlich. — ABKHAZIA: 1 ♂ (ZMUM), nr. Sukhum, left bank of Kelasuri River (2–3 km upstream of its mouth), 5.06.2004, EM. — AZERBAIJAN: 1 ♂ (MMUM), Lenkoran Area, Liman (c. 38°50'N, 48°49'E), 22.05.2003, EG.

COMMENTS. An eastern Mediterranean species, known from Greece and Macedonia [Fiser, Azarkina, 2005; present data], through Turkey [Coşar *et al.*, 2014], to Azerbaijan [Logunov, Guseinov, 2002; Marusik *et al.*, 2004]. New records for the NW Caucasus and formally for Greece; yet, some of the earlier records of *Neaetha membrosa* from Greece [see Bosmans, Chatzaki, 2005] may actually belong to *N. absheronica*.

The ♀ illustrated by Metzner [1999] seems to also belong to *N. absheronica*, as it is identical to the ♀ from Greece (Santoria) listed above.

*Neaetha membrosa* (Simon, 1868)

MATERIAL. SPAIN: 1 ♂ (NMPC), Denia, 29.04.2004, LD. — ITALY: 1 ♂ (SMFM), Sicily, c. 2 km W of Castelbuono, stony SE-slope, moist grass beneath grainfields with *Fraxinus ornus* (under stones), 31.03.1957, HK.

COMMENTS. It is a west-Mediterranean species, known from the Iberian Peninsula to Germany and Greece [Helsdingen, 2014].

*Neon convolutus* Denis, 1937

MATERIAL. ALGERIA: 3 ♂♂, 1 ♀ (PCRB), Wilaya Oran, forest nr. Msila, 400 m a.s.l., sieving *Quercus suber* litter and among stones and *Oxalis*, 25.04.1984, RB. — SPAIN: 1 ♂ (NMPC), Valencia, Guadalest (c. 38°41'N, 0°11'E), 27.04.2004, LD.

COMMENTS. A west-Mediterranean species, restricted to Algeria, the Iberian Peninsula and France [Logunov, 2004a; Helsdingen, 2014; present data]. The male of *N. convolutus* from Spain is identical to the

holotype from Algeria illustrated by Logunov [2004a: figs 7–8]. As was already assumed by the latter author, the name of *N. convolutus* could be synonymous with *N. rayi* (Simon, 1875). New record for Spain.

*Neon levis* (Simon, 1871)

MATERIAL. MONTENEGRO: 1 ♂, 1 ♀ (SMFM), Rumija Mts, *Castanea sativa* forest nr. Ostros (42°5'20.9"N, 19°17'25.4"E), sieving, 5.05.2006, AS. — TURKEY: 1 ♂, 1 ♀ (NHMW), Tekket-al, SW Akşehir, 1100–1200 m a.s.l., pine forest with *Quercus coccifera*, *Corylus*, etc., 11.06.1967, JG, FR & AR; 1 ♂ (NHMW), Namrun, pine forest, 12.05–5.06.1964, FR. — SYRIA: 2 ♂♂ (NMPC), NW Syria, castle Qalaat al Kahf nr. Qadmus, 5–7.04.2001, MR. — GEORGIA: 1 ♀ (ZMUM), c. 14 km E of Tkibuli, Mukhura, *Fagus* & *Quercus* forest, in litter, 23.05.1981, SG.

COMMENTS. A Euro-Siberian – Cenral Asian sub-boreal species, known from Portugal to Transbaikalia, southward to Tajikistan and Iran [Logunov, Rakov, 1998; Logunov *et al.*, 2002]. New record for Syria.

*Neon rayi* (Simon, 1875)

MATERIAL. PORTUGAL: 1 ♂ (FMNH), Vale Garcia (c. 39°33'N, 8°35'W), 21.05.2002, PC. — TURKEY: 1 ♀ (ZMUM), Aksu, valley next to Zindan cave, 6.07.2003, MR.

COMMENTS. A Euro-Siberian subboreal species, known from Portugal [Helsdingen, 2014] to the mountains of S Siberia [Logunov, Marusik, 2000b], but records of this species are rare elsewhere. New record for Turkey.

The studied female from Turkey is identical to that illustrated by Metzner [1999: table 31], but differs in the conformation of its copulatory organs (*viz.*, the arrangement of spermathecal loops) from the females of *N. rayi* illustrated by other authors [cf. Nentwig *et al.*, 2014]. The conspecificity and taxonomic status of *N. rayi* from Greece and Turkey require a special attention in the future.

*Neon reticulatus* (Blackwall, 1853)

MATERIAL. FRANCE: 1 ♀ (SMFM), Dep. Alpes-Maritimes, Col de Turini, c. 50 km NNE of Nice, 1500–1650 m a.s.l., 18–19.09.1982, JMS; 1 ♀ (SMFM), Corsica, Col de Verde, c. 1060 m a.s.l., mixed forest, 9.05.1982, JMS. — ITALY: Trentino, Molina di Ledro, 670–680 m a.s.l., 6–21.09.1990, JMS. — SLOVENIA: 3 ♀♀ (SMFM), Rakov Skačjen (?), 18.07.1974, JMS; 1 ♀ (SMFM), Slioica, Mt nr. Zirknitz, 800–1000 m a.s.l., 17.07.1974, JMS. — ROMANIA: 1 ♂ (NMPC), Bihor-zona Padiş, 15–21.07.2001, MR. — TURKEY: 2 ♂♂ (NHMW), c. 5 km NE of Ulubey, c. 350 m a.s.l., deciduous forest of *Castanea*, *Quercus*, *Robinia*, *Carpinus*, etc., 2.06.1967, JG, FR & AR; 1 ♀ (MHNG), Sinop, Lala près de Sinop, 20.05.1976, C. Besuchet & I. Löbl. — RUSSIA: 1 ♀ (ZMUM), Chechnya, c. 5 km W of Shaami-Yurt, c. 25 km W of Grozny, *Acer* forest, in litter, 6.06.1982, SG. — GEORGIA: 1 ♀ (ZMUM), S of Gudauri, Krestovyi Pass, 1800 m a.s.l., *Rhododendron* litter, 4.06.1982, SG. — AZERBAIJAN: 2 ♀♀ (SZMN), Lenkoran Area, Lenkoran Reserve and Apo (c. 38°38'N, 48°47'E), 23–28.05.2003, E.F. Guseinov; 1 ♀ (SZMN), same area, Lenkoran Reserve, in forest litter, 3.07.1983, DL; 1 ♂, 1 ♀ (ZMUM), Zakataly Reserve, SE slope of Rochigel Mt., upper forest margin, 2000–2300 m a.s.l., 13–14.06.1986, KM; 1 ♀ (ZMUM), same reserve, nr. Dzhar, along Terik-chai, 1000 m a.s.l., *Fagus* forest, in litter, 8.06.1986, KM.

COMMENTS. A Holarctic temperate species, known from the Iberian Peninsula [Helsdingen, 2014] to the Kuril Islands and Japan [Logunov, Marusik, 2000b]; in Nearctic, from Alaska and Yukon, southward to Oregon [Dondale *et al.*, 1997].

*Pellenes brevis* (Simon, 1868)

MATERIAL. CYPRUS: 1 ♂ (LMNM), c. 8 km NE of Stavros tis Psokias, Paphos forest, 8.09.1997, CF; 1 ♂ (SZMN), N of Paphos, Lara, dry *Juniperus* meadow, 14.04.1997, V. Rinne.

COMMENTS. A Mediterranean species, known from Spain [Helsdingen, 2014] to the Crimea [Logunov *et al.*, 1999]. New record for Cyprus.

*Pellenes geniculatus* (Simon, 1868)

MATERIAL. SPAIN: 1 ♂, 2 ♀♀ (NMPC), Xàvia (=Jàvea), NP del Mongú, 29.04.2004, LD. — TURKEY: 3 ♂♂, 2 ♀♀ (PCSD), S of Denizli, Kenzikkelli pass, 29.05.1997, RS; 1 ♀ (PCLJ), Irmasan Gec, 27.05.2004, LJ; 2 ♂♂, 3 ♀♀ (NHMW), Akşehir, Sültandağ, 5–26.05.1960, FR. — CYPRUS: 1 ♂ (LMNM), Trodos, Trout farm Agios Nikolads Steyis, River bank, 4.09.1997, CF. — SYRIA: 1 ♂ (NMPC), NW Syria, castle Qalaat al Hosn nr. Homs, 3-4.04.2001, MR.

COMMENTS. A European – Central Asian subboreal species, known from the Iberian Peninsula [Helsdingen, 2014] to Tajikistan [Logunov *et al.*, 1999]. New record for Cyprus.

*Pellenes moreanus* Metzner, 1999

MATERIAL. GREECE: 1 ♀ (PCRG), Thasos, Ipsarion (40°39'N, 24°40'E), c. 820 m a.s.l., 27.05.2003, AF.

COMMENTS. Continental Greece only [Metzner, 1999; Bosmans, Chatzaki, 2005].

*Pellenes ostrinus* (Simon, 1868)

MATERIAL. GREECE: 2 ♀♀ (MMUM), Lesbos, Stavros (39°02'12"N, 26°16'45"E), c. 158 m a.s.l., damp, rocky and grazed roadside field with low shrubs among grass, 21.04.1997, SJ; 1 ♀ (LMNM), Lesbos, Angliki Skala, nr. Krioneri (39°11'35"N, 26°18'33"E), pine woodland over mixed scrub alongside river, 24.04.1997, SJ; 1 ♂ (MMUM), Lesbos, Vatera (39°01'13"N, 26°10'53"E), 20.04.1997, SJ. — TURKEY: 1 ♀ (NMPC), Çağlayan, c. 24 km SE of Erzinçan (39°36'N, 39°42'E), valley above waterfall, 23–24.06.2002, MR; 1 ♀ (ZMTU), Izmir Distr., Yamanlar Vil., in dry meadow on a slope, 25.05.1973, PL, F. Önder & E. Pehlivan. — AZERBAIJAN: 1 ♂ (MMUM), Lenkoran Area, Mamusta (c. 38°38'N, 48°47'E), 27.05.2003, N. Snegovaya; 1 ♂ (ZMUM), Lerik, Amburdara, 12.05.1985, PD; 1 ♂ (ZISP, A.No. 273), Lerik, 12.05.1909, coll.?.; 1 ♀ (ZISP, A.No. 360-1933), Nakhichevan' Area, dry valley 3 km of Ordubat, 15.07.1933, D. Znoiko.

COMMENTS. An eastern Mediterranean species, known from Greece (both mainland and islands) to Israel and Azerbaijan [Metzner, 1999; Prószyński, 2003; present data]. The records of *Pellenes diagonalis* (Simon, 1868) based on the females from Greece [Metzner, 1999], Turkey [Topçu *et al.*, 2006] and Syria [Prószyński, 2003] are likely to actually belong to *P. ostrinus* as well.

*Pellenes seriatus* (Thorell, 1875)

MATERIAL. RUSSIA: 1 ♂ (ZISP, A.No.179), Daghestan, Kizlyar, 9–10.05.1925, Kirichenko.

COMMENTS. A European – Central Asian subboreal species, known from Greece to Iran and south-east Kazakhstan [Logunov *et al.*, 1999; Logunov, Marusik, 2000b].

*Philaeus chrysops* (Poda, 1776)

MATERIAL. MOROCCO: 1 ♀ (SMFM), Azrou (c. 33°27'N, -5°13'W), 29.05.1930, coll.? — ALGERIA: 2 ♂♂, 1 ♀ (PCRB), Wilaya Ain Defla, between Bordj Emir Khaled and Tarik Ibn Ziad, c. 700 m a.s.l., border of Wadi Massine, under stones and in litter,

18.05.1988, RB; 2 ♂♂, 1 ♀ (PCRB), Wilaya Tizi Ouzou, Massiff Djurdjura, Tala Guilef, c. 1800 m a.s.l., among stones in mixed *Cedrus* and *Quercus ilex* forest, 25.11.1985, RB. — SPAIN: 1 ♂ (MVHN), Valencia, Alicante, Vall d'Ebo, Exterior Avenc Ample, 25.05.2005, SM; 1 ♀ (MHNG), Barcelona, 12.1981, A. Senglet & PH. — LIBYA: 1 ♂ (SMFM, 4150), Tripoli, Vytina, no date and collector name. — GREECE: 1 ♀ (SMFM), Island Kos, Kastell, 28.04.1968, JMS; 1 ♀ (SMFM), Kelempék Mts, above Neda, 400–500 m a.s.l., *Quercus pubescens*, 4–7.05.1968, O.V. Helversen & AS; 1 ♂ immature (PCRG), Thasos, Ipsarion (40°39'N, 24°40'E), 820 m a.s.l., 27.05.2003, AF; 1 ♂, 2 juv. (SMFM, 4151), Crete, Akrotiri plain, 05.1928, CR; 1 ♀ (SMFM, 4152), Crete, Apera, 30.05.1928, CR; 2 ♂♂ (SMFM, 6303), Crete, Omalos, 06.1926, CR; 2 ♀♀ (SMFM, 5152), Saloniki, no date and collector name; 2 ♂♂ (SMFM), Crete, valley NW of Curna lake, rocky, dense bushes, *Ficus*, *Quercus coccifera*, on stones, 15.04.1958, HK; 1 ♂ (SMFM), Crete, c. 8 km W of Chania, E-shore of reservoir nr. Ajia, *Cistus* and *Lavandula*, 23.04.1958, HK; 4 ♂♂ (SMFM), N Crete, Gouves, 1–4.05.2008, HE & UK; 1 ♂ (SMFM), S Crete, Keratoka-mpos, 7.05.2008, HE & UK; 1 ♀ (SMFM), S Crete, Arvi, 12.05.2007, HE & UK; 1 ♀ (SMFM), S Crete, Miliaradon, 11.05.2007, HE & UK; 1 ♂ (MHNG), Naxos, au pied du mont Zeus, 420–490 m a.s.l., 14.05.1985, CL. — CROATIA: 1 ♀ (SMFM), Primorije-Gorski kotar, Rab Isl., hand collecting, 12–15.05.2008, JA & JM. — TURKEY: 4 ♂♂ (PCRS), Akyaka, Sulemin's castle, under stones, 28.05.1996, ARS; 1 ♂ (LMNM), Antalya, c. 31 km N of Alanya, Aksali Dağları, 19.07.1992, CF; 1 ♂ (LMNM), İsparta, c. 4 km E of Eğridir, 8.07.1992, SJ; 1 ♂ (LMNM), Kayseri, c. 31 km S of Duvallı, rocky outcrop with *Euphorbia* sp and mixed scrub, 15.06.1993, SJ & CF; 1 ♀ subadult (LMNM), Konya, Sultan Dağları, c. 7 km NE of Bağkonak, 8.07.1992, CF; 3 ♂♂ (LMNM), Kayseri, Demirkazık, 12–13.06.1993, CF; 1 ♂, 1 ♀ (LMNM), Narlıkuyu, Mersin, garigue-type vegetation on limestone outcrop, under pine needles and scattered short herbs, 9.06.1993, SJ & CF; 1 ♂ (LMNM), İçel, Çamlıyayla, Dağ Hotel area (37°10'10"N, 34°36'02"E), 1454 m a.s.l., limestone cliff, 1.07.1995, SJ & CF; 1 ♂ (LMNM), Bağkonak, Sultan Dağları, Konya, under dwarf hillside herbs, 19.09.1993, CF; 1 ♂ (LMNM), İçel, c. 2 km S of Çamlidere (36°52'12"N, 34°24'37"E), rocky disused quarry at side of road, dominated by *Euphorbia*, Mullein, *Cistus* and *Rubus*, 30.06.1995, SJ & CF; 4 ♂♂, 2 ♀♀ (LMNM), İçel, Narlıkuyu (36°26'04"N, 34°06'44"E), garrigue vegetated limestone dominated by *Pinus*, 5.06.1994, MB; 1 ♀ (LMNM), Kayseri, c. 1 km E of Dörtalyal, Çol Gölü (38°27'40"N, 35°10'05"E), 11.05.1994, SJ & CF; 2 ♂♂ (LMNM), Çorum, c. 4 km E of Eliceç (40°18'38"N, 34°42'51"E), 1192 m a.s.l., willow-lined river bank below *Quercus* hillside, 6.07.1995, SJ & CF; 1 ♀ (OUMNH), Van, 15k Boşkaile Hakari on grass slope, 21.08.1956, GL; 2 ♀♀ (OUMNH), Bitlis, Nemsut Dağ, ca 2750 m a.s.l., lake in garden (under stones), 12.08.1956, GL; 3 ♀♀ (OUMNH), Van, 30 km of Van Tatvan, at 7500 ft on hillside of Artor Dağ, under stones, 2.09.1956, GL; 1 ♀ (OUMNH), Van, c. 75 km Van Tatvan, under stones and rocks, Pelli Dağ, 7400 ft., 4.09.1956, GL; 1 ♀ (ZMUM), Antalya, Kemer, pine forest, 50–100 m a.s.l., 23–24.04.2001, KM; 1 ♀ (NMPC), Aksu, Dedegol Mts E of Zindan, pastures, 8.07.2003, MR; 1 ♀ (NMPC), Camlik, nr. Seydisehir, pastures on limestone, 12.07.2003, MR; 1 ♀ (NMPC), Yakaavsar nr. Aksu, Dedegol Mts, *Pinus* forest below Raham Mt., 2206 m a.s.l., 9.07.2003, MR; 2 ♂♂, 1 ♀ (NMPC), Nr. Pazar, c. 24 km W of Tokat (40°16'N, 36°17'E), Ballica, Nr. Mağarasi cave, 29.06-1.07.2002, MR; 1 ♀ (NMPC), Tunceli (39°06'N, 39°33'E), Munsur river, 22.06.2002, MR; 2 juv. (ZMTU), Erzinçan Distr., Gatalarmut, stone bed at small river, 12.09.1971, PL; 1 ♀ (SMFM), Tal zum Coruh Nehri, c. 4 km WNW of Ispir, on the road Iyidere-Ispir (40°29'N, 40°57'E), 1320 m a.s.l., 26–27.07.1988, coll. Zoologie THD; 1 ♂ (SMFM), Kaymaz, mouth of the left tributary of Coruh Nehri, c. 18 km SW of Yusufeli (40°43'N, 41°24'E), 28–29.07.1988, coll. Zoologie THD; 1 ♀ (PCLJ), Irmasan Gec, 27.06.2004, LJ; 2 ♀♀ (PCLJ), Yarpuz, 27.05.2004, LJ; 1 ♀ (NHMW), Hereke, c. 23 km W of İzmit, 50–100 m a.s.l., olive plantation (under stones and in grass), 25.05.1967, JG, FR & AR; 2 ♀♀ (NHMW), Yozgat, 1300–1600 m a.s.l., 28–29.05.1967, Y. Eiselt; 1 ♂ (NHMW), Tekketal, SW Akşehir, 1100–1200 m a.s.l., pine forest with *Quercus coccifera*, *Corylus*, etc., 11.06.1967, JG, FR &

AR; 1 ♀ (NHMW), Niğde, c. 125 m a.s.l., in park, 8.06.1967, JG, FR & AR; 1 ♂, 1 ♀ (NHMW), c. 20 km N of Turhal, 800–1000 m a.s.l., pine forest, 4.06.1967, JG, FR & AR; 1 ♀ (NHMW), northern slope S of Amasya, c. 800 m a.s.l., orchard with dense vegetation, 30.05.1967, JG, FR & AR; 1 ♂, 1 ♀ (NHMW), c. 30 km SW of Samsun, Samsun-Merzifon Rd, c. 500 m a.s.l., deciduous forest of *Quercus*, *Cotinus*, *Ligustrum*, *Prunus*, *Rosa*, etc., 3.06.1967, JG, FR & AR; 1 ♀ (NHMW), c. 20 km NW of Ankara, c. 900 m a.s.l., steppe, 29.05.1967, JG, FR & AR; 1 ♀ (NHMW), road between Eskischir and Ankara, c. 1050 m a.s.l., 27.05.1972, K. Bilek & FR; 1 ♀ (NHMW), c. 40 km on the road to Beyşehir, hill area, 18.05.1969, AR; 1 ♂ (NHMW), c. 20 km of the road Anamur-Alanya, along the road to Ermenek, in lush vegetation, 16.05.1969, AR; 1 juv. (NHMW), Pozante, river valley on slopes with *Pinus* sp. and bushes, 8.05.1969, AR; 1 ♂ (NHMW), c. 10 km of the road Mersin-Silifke, 13.05.1969, AR; 4 ♂♂ (NHMW), Akşehir, Sültan-dağ, 27.04–14.05.1960, FR; 1 ♂, 1 ♀ (NHMW), Namrun, pine forest, 12.05–5.06.1964, FR; 1 ♂, 2 ♀♀ (NHMW), Bülgamaden, 12–14.06.1965, FR; 1 ♀ (NHMW), c. 30 km N of Bilecik, 7.05.1965, FR; 1 ♂ (NHMW), Alihoca, 11.06.1965, FR; 1 ♂ (MHNG), nr. Kemer, 22–30.05.1993, PH. — SYRIA: 1 ♂ (NMPC), NW Syria, castle Qalaat al Hoss nr. Homs, 3–4.04.2001, MR. — JORDAN: 1 ♀ (SMFM), Dana Nature Reserve, Wadi Dana (30°41'N, 35°37'E), under stones, 16.04.2004, JA & JM. — GEORGIA: 3 ♂♂, 3 ♀♀ (SZMN), nr. Dzegvi, 17.06.1982, E. Budris; 1 ♂, 1 ♀ (ZISP, A.No. 253), Tbilisi, 1910, K. Satulin. — RUSSIA: 1 ♂ (SZMN), the Crimea, Bakhchisarai, 24–26.06.1993, SV; 1 ♂ (ZMUM), Daghestan, Kiziyurt Distr., Kakayurt river valley, 20.05.1981, O.V. Voltzit; 2 ♀♀ (ZISP, A.No. 179), Daghestan, Kizlyar, 9–10.05.1925, Kirichenko. — ARMENIA: 1 ♂, 2 ♀♀ (ZISP, A.No. 202-1938), Megri, 28.04.1938, A. Rikhter; 2 ♀♀ (SZMN), nr. Sevan town, under stones, 31.07.1983, DL; 1 ♂ (ZISP, A.No. 617), Elenovka on Gokcha Lake, 22.07.1922, AD. — AZERBAIJAN: 1 ♂ (ZMUM), Lenkoran Area, Hyrkan Reserve, 21.06.1985, PD; 1 ♂ (ZISP, A.No. 237-932), same area, nr. Alexeevka, 28.06.1932, D.V. Znoiko; 1 ♀ (ZISP, A.No. 360-1933), Nakhichevan' Area, nr. Ordubat, 6.07.1933, D.V. Znoiko; 1 ♀ (ZISP, A.No. 237-1932), Talysh, Zuvand, nr. Kyzyl-Yurda, 9.08.1932, D.V. Znoiko; 1 ♂, 1 ♀ (ZISP), Khachmas Distr., nr. Nabran', 26.07.1986, PD; 1 ♀ (ZISP, A.No. 349-09), nr. 'Elizavetopol' (now Gyandzha), 05.1909, B. Volchansky.

COMMENTS. A trans-Palaeartic subboreal-subtropical species [Logunov, Marusik, 2000b].

#### *Phintella castrisiana* (Grube, 1861)

MATERIAL. RUSSIA: 1 ♂ (ZISP), Krasnodar Territory, nr. Maikop, 17.06.1975, V.I. Ovtsharenko; 5 ♀♀ (ZISP), same territory, nr. Khomuty, 15.08.1982, E. Prokofieva. — GEORGIA: 1 ♀ (ZMUM), E of Poti, Chaladidi, alder-oak forest, on swamp in litter, 13.04.1983, SG; 1 ♂, 1 ♀ (ZISP, A.No. 301-470), Kolkhida, N. Chkhugunetch, 500–650 m a.s.l., 3–10.06.1969, EP. — TURKEY: 1 ♂ (LMNM), İçel, c. 3 km E of Darıpinarı, beating overhanging heather, 12.06.1993, SJ & CF; 1 ♂ (NHMW), c. 5 km NE of Ulubey, c. 350 m a.s.l., deciduous forest of *Castanea*, *Quercus*, *Robinia*, *Carpinus*, etc., 2.06.1967, JG, FR & AR; 1 ♂ (NHMW), Namrun, pine forest, 12.05–5.06.1964, FR. — AZERBAIJAN: 1 ♀ (SZMN), Lenkoran Area, nr. Osakudzha, under bark of logs, 14.07.1983, DL; 1 ♂ (ZISP), same area, nr. Alexeevka, on brambery, 27.06.1983, DL; 2 ♂♂ (ZISP), same area, nr. Dashdatuk, Bashary river valley, 28.06.1983, DL; 1 ♀ (ZMUM), Kakhsky Distr., Vandam, 17.06.1986, PD.

COMMENTS. An amph-Eurasian subboreal species, known from Spain, throughout the Mediterranean, including Asia Minor [e.g., Özşen, Türkeş, 2009; Coşar *et al.*, 2014], to the Caucasus and NW Iran, and then appearing again in Manchuria and Japan [Logunov, Marusik, 2000b].

#### *Phlegra bresnieri* (Lucas, 1846)

MATERIAL. MOROCCO: 1 ♀ (PCRB), Ifrane Prov., Azrou, c. 1250 m a.s.l., wet meadow along an Wadi S of the town, among stones, *Juncus* and *Scirpus* and sweeping vegetation, 11.05.1984,

RB; 1 ♂ (PCRB), same prov., Dayet (Lake) Iffrah, c. 1780 m a.s.l., among stones at the border of the lake with no vegetation due to cattle grazing, 11.05.1984, RB; 1 ♂ (PCRB), Tetouan Prov., c. 10 km E of Chechaouen, c. 500 m a.s.l., in litter of open *Quercus sober* forest, 15.05.1984, RB. — ALGERIA: 1 ♀ (PCRB), Wilaya El Tarf, El Kala, N of Lac Tonga, c. 10 m a.s.l., pitfall traps in *Pinus halepensis* forest in dunes, 27.03.1988, RB; 1 ♂ (PCRB), Wilaya Alger, El Harrach, I.N.A., c. 25 m a.s.l., pitfall in rough grassland in park, 31.12.1985, RB; 3 ♂♂ (PCRB), same locality, 4.04.1983, RB; 2 ♂♂ (PCRB) & 2 ♂♂ (ZMUM), same locality, 16.06.1985, RB; 1 ♂ (PCRB), Wilaya Blida, Chrea, c. 1550 m a.s.l., mountain grassland, 10.06.1985, RB; 1 ♂ (PCRB), same locality, c. 650 m a.s.l., in litter of *Pinus halepensis* forest, 18.04.1985, RB; 1 ♀ (PCRB), Wilaya Mascara, Col Ain Guergom along N14, c. 700 m a.s.l., among stones, 25.04.1984, RB; 1 ♂ (PCRB), Wilaya Tlemcen, pass Zarifète, c. 1150 m a.s.l., young (2 m high) *Quercus ilex* forest, 24.04–6.05.1984, RB; 1 ♀ (PCRB), Wilaya Tlemcen, c. 5 km W of Tlemcen, along N7, c. 850 m a.s.l., among stones and in grass along very small rivulet, 23.04.1984, RB; 1 ♂ (PCRB), Wilaya Boumerdes, Zemmouri, c. 10 m a.s.l., pitfall traps in dunes, 26.10.1984, RB; 1 ♀ (PCRB), Wilaya Ain Defla, between Bordj Emir Khaled and Tarik Ibn Ziad, c. 700 m a.s.l., border of Wadi Massine, under stones and in litter, 18.05.1988, RB; 1 ♂ (SZMN), Wilaya Saida, c. 40 km SE of Saida, forestry headquarter in Oum Djerane, c. 1300 m a.s.l., pitfall traps in maquis of *Quercus forest*, 1.10.1984, RB; 2 ♂♂ (SZMN), Wilaya Boumerdes, Zemmouri, c. 5 m a.s.l., dunes, 22.03.1985, RB. — PORTUGAL: 4 ♂♂, 3 ♀♀ (FMNH), Mértola (c. 37°38'N, -7°40'W), on the ground, 3.03–13.08.2003, PC; 1 ♂ (FMNH), Braciais (c. 37°38'N, -7°34'W), pitfall traps, 9.04.2003, PC; 6 ♂♂ (FMNH), Corredoura (c. 37°45'N, -7°39'W), pitfall traps, 4.06–2.07.2003, PC; 2 ♀♀ (FMNH), Algodór (c. 37°45'N, -7°48'W), pitfall traps, 30.07–10.09.2003, PC. — SPAIN: 2 ♀♀ (NMPC), Catalonia, Deltebre (c. 40°44'N, -0°50'W), 26.04.2004, LD; 1 ♀ (NMPC), Guardamar del Segura, 28.04.2004, LD; 1 ♂, 1 ♀ (NMPC), Besalú, 2.05.2004, LD; 1 ♂ (NMPC), Catalonia, Riumar, 26.04.2004, LD; 1 ♂ (NMPC), Valencia, Guadalest (c. 38°41'N, 0°11'E), 27.04.2004, LD; 1 ♂ (NMPC), La Albufera nature reserve, S of Valencia, 30.04.2004, LD; 1 ♀ (SMFM), Murcia Prov., W of Alhama de Murcia, Sierra de Espuna (37.85601°N, -1.49431°W), c. 691 m a.s.l., *Pinus* forest and open pastures, under dry stones, 4.06.2010, SH & AS. — FRANCE: 1 ♂ (SMFM), Corsica, Col de Verde, c. 1060 m a.s.l., mixed forest, 9.05.1982, JMS. — ITALY: 2 ♂♂ (SMFM), Sicily, c. 2 km W of Castelbuono, stony SE-slope, moist grass beneath grainfields with *Fraxinus ornus* (under stones), 31.03.1957, HK; 1 ♂ (SMFM), Sicily, Liparian Island, Ustica Isl., SE-coast, rocky, very dry, a bit grass, stonewalls with hedges of *Opuntia* (under stones), 6.04.1957, HK; 1 ♂ (SMFM), Sicily, same locality, NE-soast, rocky, cultivated lands, vineyard, grainfields, stonewalls with *Euphorbia* and hedges of *Opuntia* (under stones), 6.04.1957, HK; 1 ♀ (SMFM), Sicily, same locality, South slope Mt. Guardia, rocks, dry grass, *Pteridium aquilinum*, *Cystus*, *Cyisus* (under stones), c. 370 m a.s.l., 18.04.1957, HK. — GREECE: 1 ♂ (SMFM), Crete, nr. Ajil Deka, Gortys, E-slope, 85–100 m a.s.l., scree, bramble, *Cirsium*, few grass, 9.04.1958, HK.

COMMENTS. A Mediterranean species, known from the Morocco and Iberian Peninsula [Helsdingen, 2014; present data] to Azerbaijan [Logunov, Guseinov, 2002; Marusik *et al.*, 2004], southward to Ivory Coast [Logunov, Azarkina, 2006] and Yemen [Wesołowska, van Harten, 2007].

#### *Phlegra cinereofasciata* (Simon, 1868)

MATERIAL. TURKEY: 1 ♂ (OUMNH), Tüz Gölü (slopes on NE corner), under stones, 28.07.1956, GL; 1 ♂, 2 ♀♀ (OUMNH), Van, c. 30 km of Van Tatvan, at 7500 ft on hillside of Artor Dağ, under stones, 2.09.1956, GL; 7 ♂♂, 3 ♀♀ (OUMNH), Van, c. 75 km Van Tatvan, under stones and rocks, Pelli Dağ, 7400 ft., 4.09.1956, GL; 1 ♀ (NMPC), Çağlayan, c. 24 km SE of Erzincan (39°36'N, 39°42'E), valley above waterfall, 23–24.06.2002, MR; 1 ♂, 2 ♀♀ (BMNH), Bazergum, under stones and grass-herb litter,

23.09.1958, coll.? — CYPRUS: 1 ♀ (LMNM), Tróodos, Olympus Mt., c. 1951 m a.s.l., *Juniperus*, pine and Whitebeam over, low, scattered herbs, among rocks, 8.09.1997, SJ & CF.

COMMENTS. A Mediterranean species, known from the Iberian Peninsula [Helsdingen, 2014] to the E Caucasus (Azerbaijan) [Azarkina, 2004; Marusik *et al.*, 2004]; the records from Cyprus [present data] lie at the southernmost limit of the species' range. New record for Cyprus.

*Phlegra fasciata* (Hahn, 1826)

MATERIAL. SPAIN: 1 ♂ (NMPC), Catalonia, Mataró (c. 41°32' N, 2°27' E), 1.05.2004, LD; 3 ♂♂ (NMPC), Besalú, 2.05.2004, LD. — ITALY: 1 ♀ (SMFM), Torre del, Lago Puccini n. Piza, sand plots, 05.1959, O. Kraus. — GREECE: 1 ♂ (LMNM), Lesbos, Stavros (39°02'12"N, 26°16'45"E), 158 m a.s.l., damp, rocky and grazed roadside field with low shrubs among grass, 21.04.1997, SJ; 1 ♂ (LMNM), Lesbos, Angliki Skala, nr. Krioneri (39°11'35"N, 26°18'33"E), pine woodland over mixed scrub alongside river, 24.04.1997, SJ; 1 ♀ (LMNM), Lesbos, Skala Kallonis (39°12'23"N, 26°12'58"E), 15.07.1997, M. Hull; 1 ♂ (SMFM), Kelemppek Mts, between Avas and Esimi, 05.1968, JMS; 1 ♂ (SMFM), S coast of Peloponnes, Ligia, beach, dunes and adjacent cultural landscape, 1.06.1998, LM. — CYPRUS: 1 ♀ (SMFM), no date and collector. — TURKEY: 1 ♀ (LMNM), Konya, c. 10 km along Akaşehir-Cetince road, Sultan Dağları, mixed herbs and shrubs among young pine plantation, 19.09.1993, SJ & CF; 1 ♀ (LMNM), Antalya, Aksali Dağları, c. 31 km N of Alanya, 19.07.1992, SJ; 1 ♂ (LMNM), Kayseri, Demirkazık, 12–13.06.1993, CF; 1 ♀ (LMNM), İsparta, Kovada Gölü, sparsely vegetated lakeside shingle, 20.06.1993, CF; 1 ♂ (PCSD), S-shore of Lake Salda, 29.05.1997, RS; 1 ♂ (NHMW), Namrun, pine forest, 12.05–5.06.1964, FR; 1 ♂ (SMFM), W affluent of Sapanca Gölü N of Kurtköy at the road, no date, coll.? — ABKHAZIA: 1 ♀ (ZMUM), nr. Sukhum, left bank of Kelasuri River (c. 3 km upstream of its mouth), under stones, 5.06.2004, EM; 1 ♂ (ZMUM), Sukhum, hand collecting in orchard, 7–9.06.2004, EM.

COMMENTS. A Euro-Siberian temperate-subboreal species, known from the Iberian Peninsula [Helsdingen, 2014] to NW China (Xinjiang), southwards to Afghanistan and N India [Logunov, Marusik, 2000b]. New record for Cyprus.

*Phlegra nitidiventris* (Lucas, 1846)

MATERIAL. ALGERIA: 1 ♂ (PCRB), Wilaya Tizi Ouzou, Massif Djurdjura, Tala Gulief, c. 1500 m a.s.l., pitfall traps in *Quercus plusieurs* forest, 25.11.1986–29.05.1987, RB; 1 ♂ (PCRB), same locality, c. 1350 m a.s.l., in open *Quercus ilex* forest, 1.05.1982, RB; 1 ♂ (ZMUM), Wilaya Blida, Chrea, c. 1500 m a.s.l., mountain grassland, 23.02.1986, RB; 1 ♂ (PCRB), Wilaya Blida, Atlas Blidéen, Chrea E., peak Fertasse, c. 1450 m a.s.l., pitfall traps in *Cedrus* forest, 12.04.1987–9.05.1988, RB; 1 ♀ (ZMUM), Wilaya Blida, Atlas Blidéen, Meurdja, c. 955 m a.s.l., among stones in recent *Cedrus* plantation, 1.04.1982, RB; 1 ♀ (ZMUM), Wilaya Tissemsilt, Massif Ouarsenis, Theniet el Had, Djebel Meddad, top, c. 1780 m a.s.l., meadow, 4.05.1989, RB; 1 ♂ (PCRB), Wilaya Bouira, entrance to Aomar et Kadiria, Wadi Isser, c. 200 m a.s.l., small plantation of *Eucalyptus* (in litter), 18.08.1988, RB; 1 ♂ (ZMUM), Wilaya Bouira, Massif Djurdjura, Tikjda, c. 1450 m a.s.l., pitfall traps in *Ampelodesma* grassland, 2–24.04.1982, RB; 2 ♂♂ (PCRB), same locality, c. 1500 m a.s.l., among stones in grassland around hotel, 12.10.1982, RB; 1 ♀ (PCRB), Wilaya El Tarf, W of El Kala, S of Bou Malek, Lac Melah, c. 3 m a.s.l., in litter of *Quercus suber* forest (very close to the lake), 6.04.1982, RB; 1 ♂, 1 ♀ (SZMN), Wilaya Tizi Ouzou, forest Akfadou, Lac Agoulmin Abernane, c. 1250 m a.s.l., among stones along the lake and in litter of the bordering *Quercus faginea* forest, 22.04.1982, RB; 2 ♀♀ (PCRB), Wilaya Tissemsilt, Bou-Caid, N-side of Djebel Ouarsenis, c. 1400 m a.s.l., in litter of *Cedrus* forest, 24.03.1988, RB. — PORTUGAL: 2 ♀♀ (OUMNH, bottle 2161), Lisbon. — TUNISIA: 1 ♂ (SMFM), El Houaria, Macchie with *Cistus*, *Pista-*

*cia* and *Colycotome*, slightly moist sand (under stones), 29.03.1959, HK; 1 ♂ (SMFM), nr. Tunis, 2.03.1961, K.J. Walch; 2 ♂♂ (SMFM), c. 2 km of El Houaria, SW valley, clover, *Hieracium*, *Ulex* (sandy soil), 30.03.1959, HK; 1 ♀ (SMFM), S of Tunis, S-slope, *Cirisium* and *Cistus*, stones with sand (under stones), 29.03.1959, HK.

COMMENTS. A west-Mediterranean species, known from Portugal, Algeria and Tunisia [present data]. The present identification is based on S. Heçiak's illustrations of the types reproduced by Prószyński [2003: figs 562–563]. New record for Portugal.

*Phlegra sierrana* (Simon, 1868)

MATERIAL. PORTUGAL: 1 ♂ (FMNH), Braciais (c. 37°38' N, -7°34' W), pitfall traps, 24.09.2003, PC.

COMMENTS. The Iberian Peninsula only [Helsdingen, 2014; present data]. New record for Portugal.

*Plexippoides gestroi* (Dalmas, 1920)

MATERIAL. GREECE: 2 ♀♀ (SMFM), Island Kos, nr. Zia, 500–800 m a.s.l., forest and macchia, 29.04.1968, JMS. — TURKEY: 1 ♀ (PCRS), Mazi Beach, nr. Bodrum, under stone in olive grove, 7.06.1997, ARS; 1 ♀ (PCRS), Turbuklu, nr. Bodrum, under stone in dry hillside, 4.06.1997, ARS; 1 ♀ (LMNM), İçel, c. 2 km S of Çamlidere (36°52'12"N, 34°24'37"E), rocky disused quarry at side of road, dominated by *Euphorbia*, Mullein *Cistus* and *Rubus*, 30.06.1995, SJ & CF; 2 ♂♂, 3 ♀♀ (OUMNH), Urfa, c. 15 km of Urfa Gayiontep, under stones, 12.09.1956, GL; 2 ♀♀ (ZMUM), Antalya, Kemer, pine forest, 50–400 m a.s.l., 23–27.04.2001, KM; 1 ♀ (PCSD), Pamukkale, ruins of Heiropolis, 20.05.1997, RS; 1 ♀ (NHMW), Kazan, 27.04.1963, FR; 1 ♀ (NHMW), *Pinus halepensis* forest, 9.06.1977, H. Nemenz. — CYPRUS: 1 ♀ (ZMUM), E of Limassol, Mt. Amathus, 5.01.2004, K.G. & Ya.K. Mikhailov. — AZERBAIJAN: 2 ♀♀ (MMUM), Naxçıvan, Sharur Distr., Akhura (39°34' N, 45°11' E), 2.06.2003, EG.

COMMENTS. An eastern Mediterranean subboreal species, known from Greece (both mainland and islands) [Helsdingen, 2014] to Azerbaijan [Logunov, Guseinov, 2002; Marusik *et al.*, 2004; present data]. New record for Cyprus.

*Plexippoides flavescens* (O. Pickard-Cambridge, 1872)

MATERIAL. ISRAEL: 2 ♂♂ (NMPC), Sede Boqer, Negev desert, between Beer Sheva and Mitzpe Ramon, 6–29.05.2003, MR. — IRAN: 1 ♀ (MMUM), Isfahan (c. 32°38' N, 51°39' E), 11.2005, H. Ghahari; 1 ♂ (MMUM), Lorestan Prov., Kuhdasht (c. 33°32' N, 47°36' E), 29.07.2011, SZ; 1 ♀ (MMUM), same prov., Khorramabad (c. 33°29' N, 48°21' E), 27.10.2011, SZ; 1 ♀ (MMUM), same prov., Azna (c. 33°37' N, 48°56' E), 9.11.2011, SZ; 1 ♀ (MMUM), Zaghe, 13.10.2012, SZ.

COMMENTS. An eastern Mediterranean – Central Asian subboreal species, known from the Arabian Peninsula and Sinai [Wesołowska, van Harten 2007, 2011] to Turkmenistan and Afghanistan [Logunov, Zamanpoore, 2005].

*Plexippus clemens* (O. Pickard-Cambridge, 1872)

MATERIAL. ISRAEL: 1 ♂ (NMPC), Sede Boqer, Negev desert, between Beer Sheva and Mitzpe Ramon, 6–29.05.2003, MR.

COMMENTS. Recorded from Libya, Yemen [Wesołowska, van Harten 2007], Israel [Prószyński, 2003; present data], Turkey [Coşar *et al.*, 2014] and Iran [Logunov, 2010].

*Plexippus devorans* (O. Pickard-Cambridge, 1872)

MATERIAL. ALGERIA: 1 ♂, 5 ♀♀ (PCRB), Wilaya Laghouat, c. 20 km S of Laghouat, c. 740 m a.s.l., pitfall traps in *Zizyphus* stand, 13.01–3.11.1989, RB; 2 ♀♀ (PCRB), Wilaya Gardaia, Beni Isguen, c. 525 m a.s.l., pitfall traps in palm stand, 13.01–3.11.1989, RB. — AZERBAIJAN: 1 ♂ (ZISP, A.No. 83-1909), between Petropavlovka and Nikolaevka, 09.1909, N. Shavrov.

COMMENTS. A Mediterranean – Central Asian sub-boreal species, known from Algeria [present data], eastward to Tajikistan and Afghanistan [Logunov, Rakov, 1998: sub *P. coccineus*; Logunov, Zamanpoore, 2005], and southward to Yemen [Wesołowska, van Harten, 1994: sub *P. paykulli*]. New record for Algeria.

*Plexippus paykulli* (Audouin, 1826)

MATERIAL. ALGERIA: 2 ♂♂ (PCRB), Wilaya Tissemsilt, Theniet el Had, Djebel Meddad, c. 1450 m a.s.l., under stones in the mixed forest of *Cedrus atlanticus* and *Quercus faginea*, 18.05.1989, RB; 1 ♂ (PCRB), Wilaya Bejaia, E. Adekar, along N34, 800 m a.s.l., *Quercus ilex* forest (in litter), 17.04.1982, RB; 1 ♂ (PCRB), Wilaya Blida, Chrea, c. 1200 m a.s.l., among stones in *Cedrus* forest, 1.11.1985, RB; 4 ♂♂, 2 ♀♀ (PCRB), Wilaya Alger, Beaulieu, c. 50 m a.s.l., in garden, no date, RB; 1 ♀ (PCRB), Wilaya Biskra, Tolga, c. 125 m a.s.l., in litter and between Graminea in palm grove, 10.02.1982, RB. — SPAIN: 1 ♂ (NMPC), Xàvia (=Jàvea), NP del Mongú, 29.04.2004, LD; 3 ♂♂, 3 ♀♀ (NMPC), Guardamar del Segura, 28.04.2004, LD. — GREECE: 1 ♀ (LMNM), Vrontados (38°24.95'N, 26°07.88'E), 15.09.1996, M.J. Taylor; 1 ♀ (SMFM), Crete, nr. Canea, 06.1926, CR; 1 ♂ (LMNM), Crete, 09.2002, CF; 3 ♂♂, 2 ♀♀ (SMFM), N Crete, Gouves, 3–4.05.2008, HE & UK; 1 ♂ (SMFM), N Crete, Analipsi, 5.05.2008, HE & UK; 2 ♂♂, 1 ♀ (SMFM), S Crete, Keratokampos, 7.05.2008, HE & UK; 1 ♂ (SMFM), Crete, Sarhos, nr. Honos Cave, 11.07.2007, HE & UK; 1 ♀ (SMFM), E Crete, Skopi, 14.05.2007, HE & UK; 1 ♂, 1 ♀ (SMFM), NE Crete, Mochlos, S Stalis, 6–9.07.2007, HE & UK; 1 ♀ (SMFM), S Crete, Arvi, 12.05.2007, HE & UK; 1 ♂ (SMFM), N Crete, Malia, 11.05.2008, HE & UK; 1 ♂ (NHRS), Crete, Chania Pref., Aghia Marina, indoor, 29.04.1997, TK. — TURKEY: 2 ♂♂, 1 ♀ (PCRS), Akyaka, Thomsan Villas, on walls of house, 31.05.1996, ARS; 1 ♂ (PCSD), Dalyan, c. 1 km N of Hotel Gol, 20.05.1997, RS; 1 ♂, Antalya, Kemer, inside house, 26–26.04.2001, KM; 1 ♂ (NHMW), Antalya, 15.05.1965, FR. — TUNISIA: 1 ♀ (SMFM), Djerba, centre of island, sandy fields, running over ground, 15.04.1959, HK; 1 ♀ (MHNG), c. 13 km of Zarzis (S de la Tunisie), nr. De l2 Hotel-Club Ornarit, 5.05.1996, PH. — EGYPT: 1 ♀ (NHMW), El Mansoura (c. 31°04'N, 31°41'E), 8.01.1981, HEH; 1 ♂, 1 ♀ (NHMW), Ras El-Barr (c. 31°31'N, 31°50'E), 08.1982, HEH; 1 ♂, 1 ♀ (NHMW), Kafr-El-Sheikh (c. 31°07'N, 30°57'E), 1.12.1981, HEH. — ISRAEL: 2 ♂♂ (NMPC), Sede Boqer, Negev desert, between Beer Sheva and Mitzpe Ramon, 6–29.05.2003, MR; 1 ♂ (SZMN), Even-Tehuda, 2–15.08.1996, I.I. Lyubchansky; 1 ♂, 2 ♀♀ (ZMUM), Tel-Aviv, Ramatgan, Naupori, 19.04.1995, A. Rasnitsyn.

COMMENTS. A pantropical species, also recorded from the Mediterranean and the Canary Islands [Helding, 2014].

*Pseudeophrys erratica* (Walckenaer, 1826)

MATERIAL. ALGERIA: 1 ♂, 1 ♀ (MHNG), Gde Kabylie, Yakouren, c. 730 m a.s.l., 12.05.1988, C. Besuchet, I. Löbl & D.H. Burckhardt. — SLOVENIA: 1 ♀ (SMFM), Rakov Skacjen (?), 18.07.1974, JMS. — TURKEY: 2 ♂♂, 3 juv. (BMNH), Trabzon, Hamsiköy, c. 1250 m a.s.l., beaten from low bushherbs on open hillside, 25.08.1958, coll.?.; 1 ♂ (MHNG), Artvin, sieving of leaf and moss-litter in oak & hornbeam forest, c. 800 m a.s.l., 7.06.1986, C. Besuchet, I. Löbl & D.H. Burckhardt. — RUSSIA: 1 ♂ (ZISP, A.No. 285), Krasnodar Territory, sloping forest on Dzhubga Mt., 24.05.1911, D. Filatov. — ABKHAZIA: 1 ♂ (ZMUM), Novyi Afon, valley of river Psyrtskhe, *Carpinus* forest, 6.06.2004, EM. — GEORGIA: 1 ♂, 2 juv. (SZMN), Kolchida Reserve, alder for-

est, in litter, 14.04.1988, DL; 1 ♂, 1 ♀ (ZISP, A.No. 301-470), Kolkhida, N. Chkhugunetch, 500–650 m a.s.l., 3–10.06.1969, EP; 2 ♀♀ (ZISP, A.No. 138-915), nr. Batumi, 07–08.1914, K.V. Sukhodolsky; 1 ♀ (SZMN), nr. Tskhaltubo, Satapliisky Reserve, 500–600 m a.s.l., *Quercus-Carpinus* forest, 15–17.04.1988, DL. — AZERBAIJAN: 1 ♀ (SZMN), Lenkoran Area, nr. Osakudza, under bark of logs, 14.07.1983, DL; 1 ♀ (ZMUM), Zakataly reserve (nr. administrative centre), 560 m a.s.l., KM; 1 ♂ (SZMN), Astara Distr., between Motlayatat and Bilyasary, Talysh Mts (38°36'N, 48°40'E), 600–700 m a.s.l., *Carpinus-Acer-Quercus* forest, 20–22.06.2003, AC.

COMMENTS. A trans-Eurasian temperate species [Logunov, Marusik, 2000b], southwards to N Iran [Logunov *et al.*, 2002].

*Pseudeophrys lanigera* (Simon, 1871)

MATERIAL. SPAIN: 2 ♂♂ (SMFM), SSW of Barcelona, 8.10.1953, O. Kraus; 1 ♂ (NMPC), Barcelona, 25.04.2004, LD; 1 ♀ (NMPC), Valencia, Monserrat (c. 39°22'N, 0°36'W), 1.05.2004, LD; 2 ♂♂, 1 ♀ (NMPC), Valencia, Guadalest (c. 38°41'N, 0°11'E), 27.04.2004, LD; 1 ♂, 1 ♀ (NMPC), Xàvia (=Jàvea), NP del Mongú, 29.04.2004, LD; 4 ♀♀ (NMPC), Besalú, 2.05.2004, LD; 1 ♀ (NMPC), Blanes, 1.05.2004, LD; 1 ♂, 2 ♀♀ (NMPC), Catalonia, Mataró (c. 41°32'N, 2°27'E), 1.05.2004, LD; 1 ♀ (SMFM), Tarragona Prov., N Reus, road from La Ribera to Farema (41.31547°N, 1.10444°E), 545 m a.s.l., under stones in pine forest with evergreen undrestorey, 28.05.2010, SH & AS. — CROATIA: 1 ♀ (ZMTU), Dalmatia, Dubrovnik, 12.08.1965, PL. — RUSSIA: 1 ♀ (ZISP), The Crimea (no exact locality), under stones, 20–24.08.1928, K. Min'kova.

COMMENTS. A European – Mediterranean sub-boreal species, known from the Iberian Peninsula [Helding, 2014] to the E Caucasus (Azerbaijan) [Logunov, Guseinov, 2002].

*Pseudeophrys obsoleta* (Simon, 1868)

MATERIAL. SPAIN: 1 ♂ (NMPC), Montserrat, 1.05.2004, LD. — SLOVENIA: 4 ♂♂ (ZMTU), Vipava, 11.04.1964, PL. — GREECE: 4 ♂♂, 1 ♀ (SMFM), Kelemppek Mts, between Avas and Esimi, 05.1968, JMS; 1 ♂ (SMFM), Crete, W of Camaris, S-slope, rocky, *Phrygana*, Liliacea, 6.04.1958, HK. — TURKEY: 1 ♀ (LMNM), İçel, Çamlıyayla, sparsely vegetated river-bed, 11.06.1993, SJ & CF; 1 ♂ (LMNM), İçel, Tarsus-Çamlıyayla, c. 3 km S of Sarıkavak, herb-rich limestone hillside, 11.06.1993, SJ & CF; 1 ♀ (LMNM), Konya, Kizilören, 9.07.1992, CF; 1 ♀ (LMNM), Bağkonak, Sultan Dağları, under dwarf hillside herbs, 19.09.1993, CF; 10 ♀♀ (ZMUM), Antalya, Kemer, pine forest, 50–400 m a.s.l., 23–27.04.2001, KM; 2 ♀♀ (NMPC), Yakaavsar near Aksu, Dedeğol Mts, *Pinus* forest below Raham Mt., c. 2200 m a.s.l., 9.07.2003, MR; 1 ♂ (NMPC), nr. Pazar, c. 24 km W of Tokat (40°16'N, 36°17'E), Ballica, nr. Mağarasi cave, 29.06–1.07.2002, MR; 1 ♀ (NMPC), Aksu, valley next to Zindan cave, 6.07.2003, MR; 1 ♀ (NMPC), Yenisarbademli, shore of Beyşehir lake, forest steppe with *Quercus* sp. on corroded limestone, 11.07.2003, MR; 2 ♀♀ (ZMTU), Izmir Distr., Yamanlar Dağı, c. 1100 m a.s.l., under stones in the alpine zone, 24.05–30.07.1973, PL & F. Önder; 1 ♂ (PCSD), nr. Fethiye, above Arpacik, 28.05.1997, RS; 2 ♀♀ (PCSD), pool by road above Sultaniye, 22.05.1997, RS; 1 ♂ (NHMW), c. 7 km E of İzmit, c. 50 m a.s.l., bushes on pastures, 25.05.1967, JG, FR & AR; 1 ♀ (NHMW), c. 30 km SW of Samsun, Samsun-Merzifon Rd, c. 500 m a.s.l., deciduous forest of *Quercus*, *Cotinus*, *Ligustrum*, *Prunus*, *Rosa*, etc., 3.06.1967, JG, FR & AR; 1 ♀ (NHMW), Uludağ b. Bursa, c. 950 m a.s.l., 25.05.1968, coll.?.; 1 ♂ (NHMW), Konya, 21.05.1960, FR; 1 ♂ (NHMW), Akşehir, Sültandağ, 5.05.1960, FR; 1 ♂ (NHMW), Namrun, pine forest, 12.05–5.06.1964, FR; 1 ♂ (NHMW), Thetiye, 1964–1965, FR; 1 ♂ (SMFM), Mugla, c. 7 km W of Fethiye, bridge nr. Yanikla, slope, 6.03.1977, RK. — CYPRUS: 3 ♀♀ (PCSD), nr. Cedar valley, on rocks, 29.04.2007, RS. — AZERBAIJAN: 1 ♂ (SZMN), Lenkoran Area, Apo (c. 38°38'N, 48°47'E), 28.05.2003, N. Snegovaya.

COMMENTS. A European – Central Asian subboreal species [Logunov, Marusik, 2000b]. New record for Cyprus.

*Pseudeuophrys vafra* (Blackwall, 1867)

MATERIAL. ALGERIA: 2 ♀♀ (PCRB), Wilaya Alger, Ben Aknoun, 100 m a.s.l., terrain vague, 18.05.1988, RB; 1 ♂ (PCRB), Wilaya Setif, Djebel Babor, c. 1800 m a.s.l., pitfall traps in *Cedrus* forest, 29.06.1988, RB. — SPAIN: 1 ♀ (NMPC), Salou, 26.04.2004, LD. — ITALY: 1 ♂ (SMFM), Sardinia, Arzachena, 19.04.1959, Kalimann. — CROATIA: 1 ♂, 1 ♀ (SMFM, 7701), Dalmatia (no exact locality), 05.1938, coll.? — RUSSIA: 1 ♀ (SZMN), The Crimea, Bakhchisarai, 24–26.06.1993, SV.

COMMENTS. A Mediterranean species, known from the Azores, Iberian Peninsula and Algeria [Helsdingen, 2014; present data] to the Crimea [Kovblyuk, 2004]. New record for Algeria.

*Pseudicius arabicus* (Wesołowska et van Harten, 1994)

MATERIAL. EGYPT: 1 ♀ (NHMW), El Mansoura (c. 31°04'N, 31°41'E), 8.01.1981, HEH.

COMMENTS. The taxonomic status of this species remains poorly resolved. The epigyne and spermathecae of the studied female are identical to those illustrated by Wesołowska & van Harten [2007: figs 174–177] under the name *Pseudicius braunsi* Peckham et Peckham, 1903. More importantly, Wesołowska & van Harten considered the name *P. braunsi* a senior synonym of *P. arabicus* (contra Logunov, Zamanpoore [2005]). However, I am still of the opinion that true *P. braunsi* [*sensu* Logunov, 1995] and the species reported by Wesołowska & van Harten [2007] under this name from Yemen are not conspecific. The Yemeni species may belong either to *Pseudicius asoroticus* Simon, 1908 described from Yemen or to *P. tripunctatus* Prószyński, 1989 from Saudi Arabia. If the latter assumption is correct, to date *P. arabicus* is known from NE Africa (Egypt and Yemen) and Afghanistan only [Wesołowska, van Harten, 1994; Logunov, Zamanpoore, 2005; present data]. New record for Egypt.

*Pseudicius badius* (Simon, 1868)

Figs 104–105.

MATERIAL. IRAN: 1 ♂ (NHMW), [Mazandaran Region], c. 35 km S of Chalus, 1970, K. Bilek.

COMMENTS. A Mediterranean – Central Asian subboreal species, known from Spain [Metzner, 1999; Helsdingen, 2014] to NW Iran [present data]. New record for Iran.

*Pseudicius encarpatus* (Walckenaer, 1802)

MATERIAL. PORTUGAL: 1 ♂ (FMNH), Paúl do Boquilobo Biosphere Reserve (c. 39°23'N, -8°32'W), 11.06.2002, PC. — TURKEY: 27 ♂♂, 24 ♀♀ (MMUM), Oren (Prov.), cherry orchards, 03.2000, S. Tezcan; 1 ♂ (MMUM), Armutlu, cherry orchards, 03.2000, S. Tezcan.

COMMENTS. A European – Central Asian temperate species, known from the Iberian Peninsula to the S Urals (Orenburg region) and W Turkmenistan [Logunov, Rakov, 1998; Logunov, Marusik, 2000b].

*Pseudicius kulczyinskii* Nosek, 1905

MATERIAL. GREECE: 1 ♂ (MHNG), Island of Rhodes, Lindos, c. 150 m a.s.l., 17.05.2001, CL. — TURKEY: 1 ♂ (LMNM), Kayseri, c. 31 km S of Duvalli, rocky outcrop with *Euphorbia* sp. and mixed scrub, 13.07.1992, SJ & CF; 1 ♂ (LMNM), Kayseri, Demirkazık, c. 7000' a.s.l., herb-rich alpine pasture, 12–13.06.1993, CF; 1 ♀ (LMNM), İsparta, c. 4 km E of Egridir, inside hotel on window, 8.07.1992, CF; 2 ♀♀ (LMNM), Yozgat (40°01'43"N, 34°37'21"E), Bogazkale, Bashkent Motel, grassy hillside, *Populus* coppice with *Ranunculus* dominant, 14.05.1994, SJ & CF; 1 ♂, 1 ♀ (ZMTU), Izmir Distr., Yamanlar Dağı, c. 1100 m a.s.l., under stones in the alpine zone, 24.05–30.07.1973, PL & F. Önder; 3 ♂♂ (NHMW), Akşehir, Sültandağ, 23–31.05.1960, FR.

COMMENTS. An eastern Mediterranean species, recorded from the North Aegean islands, Turkey and Syria only [Helsdingen, 2014; Prószyński, 2003; Coşar *et al.*, 2014; present data].

*Pseudicius picaceus* (Simon, 1868)

MATERIAL. GREECE: 1 ♂ (SMFM), Crete, nr. Canea, 06.1926, CR; 1 ♂ (SMFM), Crete, Topolia, 06.1926, CR; 3 ♀♀ (SMFM), 'Ateropolis', no exact locality and date; 3 ♂♂, 1 ♀ (SMFM, 4151), Crete, Akrotiri plain, 05.1928, CR; 1 ♀ (SMFM, 1991), Crete, Lakkos, 06.1926, CR; 4 ♂♂ (SMFM, 9301), Crete, Topolia, 06.1926, CR; 4 ♂♂ (SMFM), N Crete, Gouves, 1–4.05.2008, HE & UK; 2 ♂♂ (SMFM), S Crete, Arvi, 12.05.2007, HE & UK; 2 ♂♂ (SMFM), S Crete, Miliaradon, 11.05.2007, HE & UK; 1 ♂ (SMFM), SE part, Kalamafka, 14.05.2009, KE; 1 ♂ (SMFM), N Crete, Analipsi, 12.05.2009, KE. — TURKEY: 2 ♂♂ (PCRS), Akyaka, on rocks behind Cinan Beach, 30.05.1996, ARS; 1 ♂ (PCSD), pool by road above Sultaniye, 22.05.1997, RS; 1 ♂ (SMFM), TR Kidirak S of Fethiye (Muğla) (36°31'N, 29°08'E), 24–28.05.1988, RK. — AZERBAIJAN: 1 ♂ (MMUM), Lenkoran Area, Pirasora (c. 38°43'N, 48°23'E), c. 2000 m a.s.l., 26.05.2003, N.Yu. Snegovaya.

COMMENTS. An eastern Mediterranean species, known from Italy, throughout Greece and Turkey, to Azerbaijan [Marusik *et al.*, 2004; Helsdingen, 2014; Danişman *et al.*, 2012; present data].

*Pseudicius spasskyi* (Andreeva, Heçiak et Prószyński, 1984)

MATERIAL. AZERBAIJAN: 1 ♂ (ZISP), nr. Baku, 5.10.1989, PD.

COMMENTS. A Central Asian (Turanian) species, known from Azerbaijan to Tajikistan [Logunov, Rakov, 1998; Logunov, Guseinov, 2002].

*Pseudicius spinifer* (O. Pickard-Cambridge, 1872)

MATERIAL. EGYPT: 2 ♀♀ (SMFM), Luxor, island on Nile, bamboo, 17.11.1996, PJ.

COMMENTS. A few localities from Sudan to Syria [WSC, 2015].

*Pseudicius tamaricis* Simon, 1885

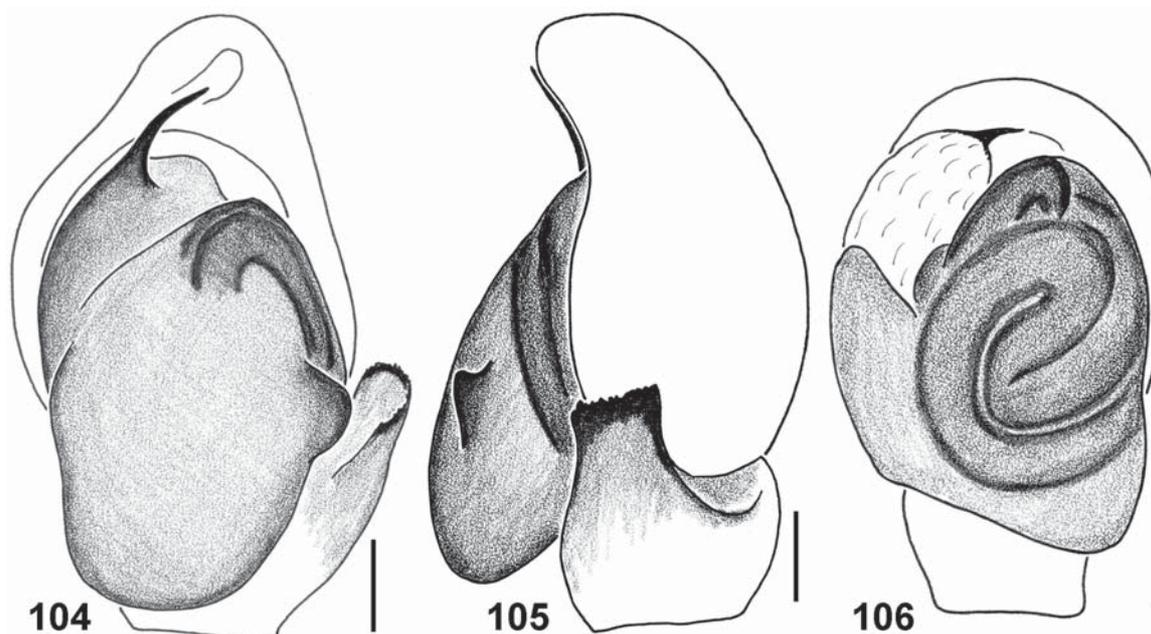
MATERIAL. TUNISIA: 2 ♂♂, 1 ♀ (ZMUM), Beja, Oued Zarga, 12.09.1985, coll.? — EGYPT: 2 ♂♂ (SMFM), Luxor, nr. the airport, on bark of trees, 15.11.1996, PJ.

COMMENTS. A Mediterranean species, known from Morocco and the Iberian Peninsula to Israel, southward to Saudi Arabia [Prószyński, 2003].

*Pseudicius vankeeri* Metzner, 1999

MATERIAL. CYPRUS: 1 ♀ (PCDM), Agridi nr. Dali, in garden, April 2010, DMC; 1 ♂ (PCDM), same locality, bank of dried out river, 28.04.2013, DMC.

COMMENTS. An eastern Mediterranean species, known from the Dodecanese islands (Greece), Cyprus,



Figs 104–106. Male palps of *Pseudicius badius* (Simon, 1868) (104–105; Iran, Chalus) and *Talavera milleri* (Brignoli, 1983) (106; Portugal, Planalto de S. Mamede): 104, 106 — ventral view; 105 — ditto, retrolateral view. Scale bars: 0.1 mm.

Рис. 104–106. Пальпы самцов *Pseudicius badius* (Simon, 1868) (104–105; Иран, Чалус) и *Talavera milleri* (Brignoli, 1983) (106; Португалия, Планаalto де С. Мамеде): 104, 106 — вид снизу; 105 — тоже, сзади-латерально. Масштаб 0,1 мм.

Turkey and Israel [Logunov, 2009b; present data]. New record for Cyprus.

*Saitis ariadneae* Logunov, 2001

MATERIAL. GREECE: 1 ♀ (SMFM), Crete (W part), E of Kissamos Castelli, seashore, sandy, thin vegetation with *Hordeum murinum*, small *Euphorbia*, 18.04.1958, HK.

COMMENTS. Restricted to Crete [Helsdingen, 2014].

*Saitis barbipes* (Simon, 1868)

MATERIAL. SPAIN: 1 ♀ (NMPC), Cataluna, Besalú (c. 42° 12'N, 2°42'E), 25.04.2004, LD; 1 ♀ (NMPC), Montserrat, 1.05.2004, LD. — FRANCE: 1 ♂, 4 ♀♀ (SMFM), Dep. Alpes-Maritimes, Col de Turini, c. 50 km NNE of Nice, 1500–1650 m a.s.l., 18–19.09.1982, JMS; 1 ♀ (SMFM), Corsica, Col de Verde, c. 1060 m a.s.l., mixed forest, 9.05.1982, JMS.

COMMENTS. A European species, common in the northern half of the Mediterranean, eastward to the Balkans [Helsdingen, 2014].

*Saitis graeca* Kulczyński, 1905

MATERIAL. GREECE: 1 ♀ (SMFM), Epirus, Pindos Mts, street between Karpenisi and Agrinio (38°48'3.8"N, 21°29' 55.5"E), c. 746 m a.s.l., coniferous forest (sieving and from under stones), 28.03.2006, AS; 1 ♀ (SMFM), Leukas Island, waterfalls c. 3 km W of Nidri, valley before canyon (38°43'27.8"N, 20°41'13.1"E), c. 200 m a.s.l., sieved out of evergreen oak's leaves, 27.03.2006, AS; 2 ♀♀ (SMFM), Leukas, W of Frini (=Phryni, W of Levkada) (38° 49'55.8"N, 20°39'59.7"E), c. 10 m a.s.l., coniferous, sieved out of wet leaf litter nr. rock, 27.03.2006, AS; 1 ♂, 1 ♀ (SMFM), Korfu SW Gouvia, Danilia W Kontokali (39°37'44.3"N, 19°50'32.4"E), c. 80 m a.s.l., oak forest with many open cogs, under stones caught at night, 23.03.2006, AS; 8 ♂♂, 8 ♀♀ (SMFM), Korfu, between Acharavi and Portes (39°48'7.5"N, 19°50'33.1"E), c. 30 m a.s.l., *Quercus* forest (sieving, under wood and stones), 25.03.2006, AS.

COMMENTS. Recorded from Greece (mainland) and Bulgaria only [Helsdingen, 2014].

*Saitis sengleti* (Metzner, 1999)

MATERIAL. GREECE: 2 ♀♀ (SMFM), Crete, Topolia, 06.1926, CR; 2 ♀♀ (SMFM), Crete, nr. Canea, 06.1926, CR; 1 ♀ (SMFM), Crete, nr. Caripas (35°27'26.0"N, 23°59'36.5"E), 123 m a.s.l., bed of a stream with plane trees, under stones, 27.03.2007, AS; 1 ♀ (SMFM), Crete, Hrissos Kalitissas (35°19'11.6"N, 23°32'56"E), 24 m a.s.l., macchia in pine forest, under stones, 24.03.2007, AS; 2 ♂♂ (LMNM), Chios, Kallimasia (38°18'01"N, 26°05'38"E), c. 318 m a.s.l., flower meadow, 25.04.1997, SJ & CF; ♀ (SMFM), Crete, Lassithi plateau, Plati, 15.05.2011, UK & HE.

COMMENTS. Recorded from Greece (mainland, Chios and Crete) only [Helsdingen, 2014; present data].

*Saitis taurica* Kulczyński, 1905

MATERIAL. GREECE: 2 ♂♂ (SMFM), Delfi, under Castalic Source, 23.04.1968, JMS; 1 ♂, 2 ♀♀ (SMFM), NE hillside of Ossa Mts, above Omolion, 500 m a.s.l., 20.04.1968, JMS; 3 ♀♀ (SMFM), Crete, Topolia, 06.1926, CR; 2 ♀♀ (PCRG), Thasos, Ipsarion (c. 40°39'N, 24°40'E), c. 820 m a.s.l., 27.05.2003, AF; 1 ♀ (PCRG), Thasos, Thasos valley plain woodland (c. 40°39'N, 24°40'E), c. 120 m a.s.l., 25.05.2003, AF; 1 ♂, 2 ♀♀ (ZMTU), Rhodos, Petaloudes, in litter of deciduous forest, 22.05.1973, PL. — TURKEY: 1 ♂, 1 ♀ (PCRS), Old Yalikavak, nr. Bodrum, under stone in grassland, 30.05.1997, ARS; 2 ♀♀ (PCRS), W. Turkey, Selale waterfalls, under stone along stream, 6.06.1996, ARS; 1 ♀ (PCRS), Akyaka, rocks on grass edge of river Akyaka, 3.06.1996, ARS; 2 ♂♂, 2 ♀♀ (NHMW), Hereke, c. 23 km W of İzmit, 50–100 m a.s.l., olive plantation (under stones and in grass), 25.05.1967, JG, FR & AR; 1 ♂ (NHMW), Kuşadası (SE border), 11–26.05.1969, F. Spitzenberger; 3 ♂♂, 6 ♀♀ (ZMTU), Izmir Distr., Yamanlar Dağı, grassy slope by a mountain brook in forest, 4.05–30.07.1973, PL & F. Önder.

COMMENTS. An eastern Mediterranean species, known from Greece (both mainland and islands),

throughout Bulgaria and Turkey [e.g., Uyar, Uğurtaş, 2012; Helsdingen, 2014], to the Crimea [Kovblyuk, 2004; present data].

*Salticus iteacus* Metzner, 1999

MATERIAL. GREECE: 1 ♀ (SMFM), Delfi, under Castalic Source, 23.04.1968, JMS.

COMMENTS. Two localities in Greece only [Metzner, 1999; present data].

*Salticus mutabilis* Lucas, 1846

MATERIAL. MOROCCO: 1 ♀ (SMFM, 4138), Casablanca, no date and coll. — SPAIN: 3 ♂♂ (NMPC), Barcelona, 25.04.2004, LD; 1 ♂ (NMPC), Denia, 29.04.2004, LD. — ALGERIA: 1 ♂ (PCRB), Wilaya Boumerdes, Bordj el Bari, 20 m a.s.l., garden, in litter of *Casuarina equisetifolia*, 25.04.1982, RB. — MALTA: 3 ♂♂ (MHNG), Island of Malta, Buskett Gardens, Verdala Palace, on the bark of *Pinus halepensis*, 17.05.1974, V. Mahnert. — GREECE: 1 ♀ (SMFM), Crete, nr. Canea, 06.1926, CR. — TURKEY: 1 ♀ (SMFM), Uluabta Gölü nr. Apolyont/Apollonia, no date, coll.? — EGYPT: 1 ♀ (NHMW), Ras El-Barr (c. 31°31'N, 31°50'E), 1.08.1981, A. Shehala. — ABKHAZIA: 1 ♂ (ZMUM), nr. Sukhum, left bank of Kelasuri River (2–3 km upstream of its mouth), 5.06.2004, EM. — GEORGIA: 1 ♂ (SZMN), c. 20 km E of Poti, Kolkhida Reserve, 13.04.1988, DL.

COMMENTS. A European – Mediterranean sub-boreal species, known from the Azores and Morocco [Helsdingem 2012; present data] to Azerbaijan [Logunov, Guseinov, 2002]. The record from Argentina [Mello-Leitão, 1944] was likely based on a misidentification. New records for Morocco and Egypt.

*Salticus noordami* Metzner, 1999

MATERIAL. CYPRUS: 1 ♀ (PCSD), Akamas Peninsula, nr. Agios Minas, 3.05.2007, R.G. Snazell; 2 ♀♀ (PCMA), Akamas, 3.05.2007, MA; 1 ♀ (PCRS), Troodos Mts, Panaghia Tow as in on church, picnic site, on wall 7.05.2007, coll.?; 1 ♀ (PCRS), Lumpia, Lumpia Dah, on wall, 9.05.2013, coll.?; 1 ♂ (PCRS), Troodos Mts, Pano Platres, on stone wall, 6.05.2007, coll.?.

COMMENTS. An eastern Mediterranean species, known from North Aegean islands (Lesbos) to central Iran [Logunov, 2009b; present data]. New record for Cyprus.

*Salticus propinquus* Lukas, 1846

MATERIAL. ALGERIA: 1 ♂ (PCRB), Wilaya El Tarf, El Kala, W bank of Lac Tonga, c. 10 m a.s.l., wet meadows along lake, 27.03.1988, RB; 1 ♀ (PCRB), Wilaya Bejaia, E of the mouth of Wadi Daas, c. 5 m a.s.l., under stones and on bushes on the shore, 22.05.1988, RB. — ITALY: 1 ♀ (SMFM), Sicily, E of Ficuzza, edge of a path, thorny, dry (under large stones), c. 900 m a.s.l., 10.04.1957, HK. — GREECE: 1 ♀ (SMFM), Crete, W of Camaris, 600–800 m a.s.l., slope, rocky, *Euphorbia*, Liliacea, 6.04.1958, HK. — CYPRUS: 1 ♀ (PCMA), Pissouri, 24.03.1998, MA. — JORDAN: 1 ♀ (MHNG), E Jordan, Dehbeen b. Jerash, 11.03.1968, J. & S. Klapperich. — SYRIA: 2 ♂♂, 2 ♀♀ (NMPC), NW Syria, Mashtal Helu nr. Homs, 30.03–3.04.2001, MR; 1 ♂ (NMPC), NW Syria, Aln al Zara nr. Idlib, canyon of Oronthes, 28.03.2001, MR.

COMMENTS. A Mediterranean species, known from the Iberian Peninsula [Helsdingen, 2014] to the Near East [Prószyński, 2003; present data]. New records for Syria and Cyprus.

*Salticus scenicus* (Clerck, 1757)

MATERIAL. SPAIN: 2 ♀♀ (MHNG), Zamora, nr. Sandin de Carballeda, 17.07.1975, PH. — RUSSIA: 2 ♂♂ (ZMUM), North

Ossetia, Tchei Vil., Tchei forestry, 1600–2500 m a.s.l., 7.06–20.07.1981, S.K. Alexeev.

COMMENTS. A Holarctic temperate species [Logunov, Marusik, 2000b].

*Salticus tricinctus* (C.L. Koch, 1846)

Figs 107–113.

*Calliethera tricincta* C.L. Koch, 1846: 50, fig. 1117 (D♂; holotype ♂ from the Museum für Naturkunde, Berlin, Germany; examined, Figs 107–108).

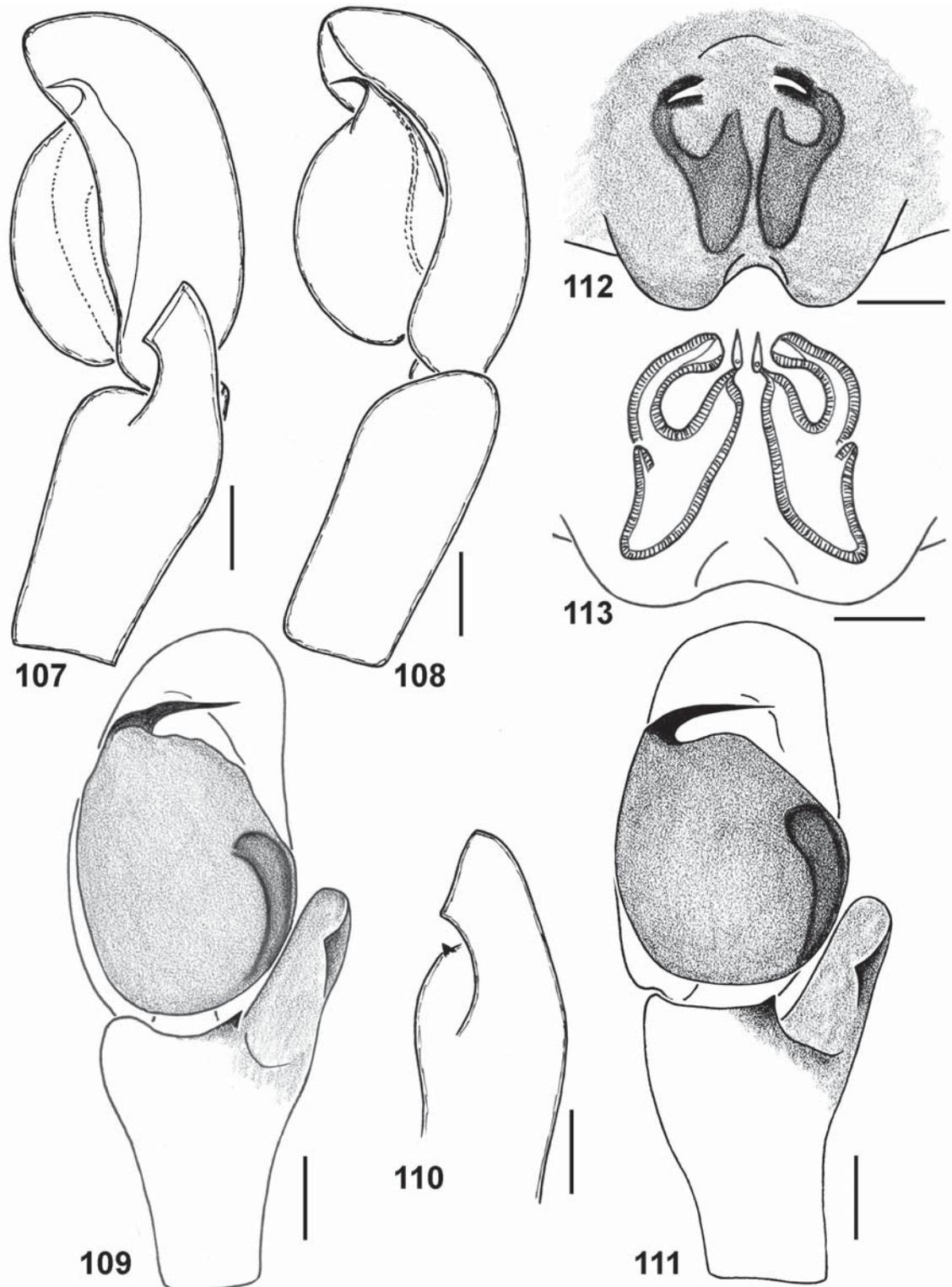
*Salticus marenzelleri* Nosek, 1905: 143, fig. 25 (D♂♀; lectotype ♂ from Naturhistorisches Museum, Wien, Austria; examined, Figs 109–110). **Syn.n.**

TYPES: Holotype ♂ of *Calliethera tricincta* (Museum für Naturkunde; ZMB 1550, side preparation; Figs 107–108) from [Uzbekistan], Buchara. — Lectotype ♂ and paralectotype ♀ of *Salticus marenzelleri* (NHMW, 13825-I; Figs 109–110, 112–113) from Turkey; no data label is enclosed, but according to Nosek [1905: p. 119 & 145] the type series (1 ♂, 1 ♀) was collected from near Ilgün in 9–10 May [1902, A. Penther col.].

MATERIAL. TURKEY: 1 ♂ (NMPC), Çağlayan (39°36'N, 39°42'E), c. 24 km SE of Erzincan, valley above waterfall, 23–24.06.2002, MR. — ARMENIA: 2 ♂♂, 8 ♀♀ (ZISP, A.No. 317–09), Yerevan Area, 'station Negram' (unknown locality), 19.05.1909, N. Bryansky; 1 ♀ (SZMN), nr. Sevan town, under stones, 31.07.1983, DL. — AZERBAIJAN: 1 ♀ (ZISP, A.No. 273-1909), Lerik, 17.05.1909, A. Kirichenko; 1 ♂ (ZMUM), c. 60 km SW of Baku, nr. Gobustan, Gobustan Reserve, 7.05.1989, PD; 2 ♀♀ (ZMUM; earlier identified by PD as *S. scenicus*), Lerik Area, nr. Gosmalyan, 1300 m a.s.l., 18.06.1985, PD; 2 ♀♀ (ZMUM), Gyandzha, nr. Khalar, 600 m a.s.l., 4.07.1988, PD; 1 ♂ (ZMUM; earlier identified by PD as *S. scenicus*), Lerik Area, nr. Digyakh, 1600 m a.s.l., 15.05.1985, PD; 1 ♂ (SZMN), c. 6 km W of Divichi, 28.05.1988, PD; 1 ♀ (ZMUM; earlier identified by PD as *S. scenicus*), Khanlar, near water, 19.08.1986, PD. — RUSSIA: 1 ♂ (ZMUM), Daghestan, nr. Derbent, 20.05.1989, PD; 2 ♂♂ (ZMUM), Astrakhan' Region, Lishansk Distr., E of Basinskaya (c. 46°07'55"N, 47°13'05"E), 18.05.2012, AG. — UZBEKISTAN: 1 ♀ (MMUM), Surkhandariya Region, Termez Distr., W of shore of Uchkyzyl Reservoir, c. 1.5 km E of Kaltarkhama (137°20'52"N, 67°12'30"E), 325 m a.s.l., 28.04.2002, A.V. Gromov; 1 ♀ (MMUM), Surkhandariya Region, Termez Distr., Kattakum sands, c. 1.5 km E of Echkyzyl (137°20'35"N, 67°12'29"E), 315 m a.s.l., 29.04.2002, A.V. Gromov. See also in Logunov & Rakov [1998].

COMMENTS. An eastern Mediterranean – Central Asian species, known from Turkey [Nosek, 1905: sub *S. marenzelleri*; present data], throughout the Caucasus, Turkmenistan and southern Kazakhstan [Logunov, Rakov, 1998: map 10; Logunov *et al.*, 2002; Marusik *et al.*, 2004; present data] to Afghanistan [Logunov, Zamanpoore, 2005].

Re-examination of the type series (♂♀) of *Salticus marenzelleri* (Figs 107–108) and the ♂ holotype of *Calliethera tricincta* (Figs 109–110, 112–113) in comparison with numerous voucher specimens from Turkey (Fig. 111) and Central Asia has shown that all the examined specimens have got the identical copulatory organs in both sexes. The angle of the lateral bend of the embolus in *S. tricinctus* is the only slightly variable character; cf. Figs 109, 111 and fig. 4a in Logunov [1992]. Therefore it is safe to conclude that *S. marenzelleri* is to be considered a junior synonym of *S. tricinctus* described originally from Bukhara, Uzbekistan [Koch, 1846: sub *Calliethera t.*; Logunov, 1992].



Figs 107–113. Copulatory organs of *Salticus tricinctus* (C.L. Koch, 1846) (107–108 — ♂ holotype of *Calliethera tricincta*; 109–110, 112–113 — ♂ lectotype and ♀ paralectotype of *Salticus marenzelleri* Nosek, 1905; 111 — Turkey, Çağlayan): 107 — male palp, retrolateral view; 108 — ditto, prolateral view; 109, 111 — ditto, ventral view; 110 — male palpal tibial apophysis, retrolateral view; 112 — epigyne, ventral view; 113 — spermathecae, dorsal view. Scale bars: 0.1 mm.

Рис. 107–113. Копулятивные органы *Salticus tricinctus* (C.L. Koch, 1846) (107–108 — ♂ голотип *Calliethera tricincta*; 109–110, 112–113 — ♂ лектотип и ♀ паралектотип *Salticus marenzelleri* Nosek, 1905; 111 — Турция, Чаглаян): 107 — палпа самца, вид сзади-латерально; 108 — тоже, вид спереди-латерально; 109, 111 — тоже, вид снизу; 110 — тибильный отросток пальпы самца; 112 — эпигина, вид снизу; 113 — сперматека, вид сверху. Масштаб 0,1 мм.

*Salticus zebraneus* (C.L. Koch, 1837)

MATERIAL. PORTUGAL: 1 ♀ (FMNH), Paúl do Boquilobo Biosphere Reserve (c. 39°23'N, -8°32'W), 28.08.2002, PC. — SPAIN: 3 ♂♂ (MVHN), Valencia, Devesa del Saler, dunes with *Pinus halepensis*, 20.05.2004, DD; 10 ♂♂ (NMPC), the nature reserve of La Albufera, S of the city of Valencia, 30.04.2004, LD; 1 ♀ (NMPC), Barcelona, 25.04.2004, LD; 1 ♂ (NMPC), Catalonia, Mataró (c. 41°32'N, 2°27'E), 1.05.2004, LD. — GREECE: 2 ♂♂ (SMFM), N Crete, Gouves, 1.05.2008, HE & UK; 1 ♂ (SMFM), C Crete, Magarikari, 7.05.2009, KE & HE; 1 ♂ (MHNG), Crete, Lassithi, W of Sitia, Faneromeni Peninsula, c. 5 m a.s.l., 6.05.1985, BH; 1 ♀ (MHNG), Crete, Lassithi, along the road Lasithi-Irakleon, junction to Krasi, c. 570 m a.s.l., 7.05.1985, CL; 1 ♂ (MHNG), Cyclades, Iraklia (island S of Naxos), Aghio Georgios, rocks on the shore covered 'phrygana' vegetation, 15–20 m a.s.l., 10.05.1985, CL; 1 ♀ (MHNG), Naxos, above Filoti, foothill of Mt. Zeus, c. 600 m a.s.l., 14.05.1985, CL; 1 ♀ (SMFM), NW coast of Peloponnes, thermal spring of Loutra Killini, 8.06.1998, LM; 1 ♀ (SMFM), S coast of Peloponnes, Foinikous, cultural lands, 4.06.1998, LM. — RUSSIA: 1 ♀ (ZISP), Krasnodar, sweeping over trees, 25.07.1982, coll.?

COMMENTS. A European temperate species [Logunov, Marusik, 2000b].

*Sitticus ammophilus* (Thorell, 1875)

MATERIAL. TURKEY: 1 ♀ (NMPC), Tunceli (c. 39°06'N, 39°33'E), Munsur river, 22.06.2002, MR. — AZERBAIJAN: 1 ♂ (MMUM), Lenkoran Area, Apo (c. 38°38'N, 48°47'E), 8.05.2003, EG; 1 ♂, 1 ♀ (MMUM), 1 ♂ (SZMN), Absheron, nr. Qanlı göl (lake) (c. 40°22'N, 49°49'E), 20.05.2003, EG.

COMMENTS. An eastern Mediterranean – Central Asian species recorded to date from Turkey and southern Ukraine [Kovblyuk, 2004; Topçu *et al.*, 2009; Coşar *et al.*, 2014; present data], throughout northern Iran [Logunov *et al.*, 2002] and the Caucasus (Naxçivan) [Marusik *et al.*, 2004] to Turkmenistan [Wesołowska, 1996].

*Sitticus atricapillus* (Simon, 1882)

MATERIAL. AUSTRIA: 1 ♂, 1 ♀ (OUMNH), Tyrol, Cortina g'Ampezz, 1900, G. Nicholson. — TURKEY: 1 ♀ (OUMNH), Bitlis, Nemsut Dağ, c. 2750 m a.s.l., lake in garden (under stones), 12.08.1956, GL.

COMMENTS. A south-European species restricted to mountainous regions, known from France to Turkey [Kronstedt, Logunov, 2003; present data]. New record for Turkey.

*Sitticus damini* (Chyzer, 1891)

MATERIAL. ABKHAZIA: 1 ♀ (ZMUM), nr. Sukhum, beach nr. the mouth of Kelasuri River, under stones, 7–9.06.2004, EM.

COMMENTS. An eastern Mediterranean species, recorded from Croatia [Helsdingen, 2014] to Abkhazia [present data].

*Sitticus distinguendus* (Simon, 1868)

MATERIAL. GREECE: 1 ♂ (LMNM), Lesbos, Vatera (39°01'13"N, 26°10'53"E), 20.04.1997, SJ. — TURKEY: 1 ♀ (ZMTU), Izmir Distr., Yozgat Distr., Galatli, wet grassy limestone slope, 11.09.1971, PL; 1 ♂ (PCSD), nr. Dalyan, by river at Caunos, 23.05.1997, RS; 1 ♂ (NHMW), c. 30 km SW of Sivas, gypsum landscape, 6.06.1967, JG, FR & AR; 1 ♂ (NHMW), Akşehir, Siltandağ, 5–27.05.1960, FR; 1 ♀ (LMNM), Silifke dunes, Mersin, sand dune system with scattered scrub up to 400 m from sea, 17.07.1992, SJ & CF; 1 ♀ (LMNM), İsparta, c. 4 km E of Egridir, inside hotel on window, 8.07.1992, CF; 1 ♀ (LNMC), Konya, Akşehir, above Dağ Otel, mixed scrub, herbs and grasses on north-facing limestone slope, 19.09.1993, SJ & CF; 2 ♂♂ (LMNM),

Kayseri, Sultansazligi (38°14'36"N, 35°12'08"E), degraded edge of marsh, 11.05.1994, SJ & CF. — AZERBAIJAN: 1 ♀ (ZISP, A.No. 360-1933), Naxçivan, Ordubad Distr., nr. Bilav, sandy beach of Gelyan-chai, 27.06.1933, D. Znoiko.

COMMENTS. A trans-Eurasian temperate species [Logunov, Marusik, 2000b].

The recent record of *Sitticus avocator* (O. Pickard-Cambridge, 1885) from Turkey [Danışman *et al.*, 2012] is mistaken and should be referred to *S. distinguendus*, as the former species is known to be restricted to the SE montane region of Central Asia only (see Logunov & Marusik [2000a] for the discussion and justification).

*Sitticus dzieduszyckii* (L. Koch, 1870)

MATERIAL. RUSSIA: 1 ♀ (ZISP), Krasnodar Territory, hills nr. Armavir, under stones, 21.04.1911, D. Volmukhin; 1 ♂ (ZISP, A.No. 38), same territory, Peredovaya station, sweeping on the bank of Urup river, 14.07.1920, K. Korol'kova.

COMMENTS. A Euro-Siberian Asian subboreal species, known from France to the Middle Urals [Logunov, Marusik, 2000b].

*Sitticus floricola* (C.L. Koch, 1837)

MATERIAL. GEORGIA: 1 ♂ (ZISP), Kolkhida, Danimarauli, meadow, 1700 m a.s.l., 26.06.1969, EP.

COMMENTS. A trans-Eurasian temperate species [Logunov, Marusik, 2000b].

*Sitticus inexpectus* Logunov et Kronstedt, 1997

MATERIAL. GREECE: 1 ♂ (ZMTU), Lagos, wet shore meadow with *Juncus*, *Tamarindus*, *Rubus*, etc., 26.09.1971, PL; 1 ♀ (SMFM), Thrakien, Porto Lago, Ewru, 1.04.1977, RK. — TURKEY: 2 ♀♀ (NMPC), Sivas Prov., Nr. Demiryurt, Tödürge Gölü (lake), c. 13 km W of Zara (39°53'N, 37°37'E), 25–28.06.2002, MR; 1 ♀ (NHMW), c. 8 km SW of Ulubey, 950 m a.s.l., nr. Ordü, 5.06.1972, coll.? — AZERBAIJAN: 3 ♀♀ (SZMN), Lenkoran Area, Liman (c. 38°50'N, 48°49'E), 22.05.2003, EG; 1 ♂ (SZMN), Khyzy Distr., c. 12 km W of Kilyazi (c. 40°52'N, 49°12'E), 7.06.2003, EG.

COMMENTS. A European – Central Asian temperate species, known from Italy and the UK to Kyrgyzstan [Logunov, Kronstedt, 1997; Helsdingen, 2014; Ijland, Helsdingen, 2014]. Some of the European records of *S. rupicola* may actually belong to this species; see Logunov & Kronstedt [1997] for the diagnoses of both species. New record for Turkey.

*Sitticus pubescens* (Fabricius, 1775)

MATERIAL. MOROCCO: 1 ♂ (SMFM, 4141; ♂ palp only), Tez, 23.05.1930, coll.? — SPAIN: 2 ♂♂ (MVHN), Valencia, Alicante, Vall d'Ebo, Exterior Avenc Ample, 25.05.2005, SM.

COMMENTS. A European – Central Asian temperate species [Logunov, Marusik, 2000b]. New record for Morocco.

*Sitticus relictarius* Logunov, 1998

MATERIAL. GEORGIA: 1 ♂ (ZISP), Kolkhida, Danimarauli, on wooden wall, 1700 m a.s.l., 26.06.1969, EP.

COMMENTS. A Caucasian species, known from the northern Caucasus, Georgia, Azerbaijan and NW Iran [Logunov, 1998b; present data].

*Sitticus rupicola* (C.L. Koch, 1837)

MATERIAL. ROMANIA: 1 ♂, 1 ♀ (NMPC), Bihor-zona Pa-diş, 15–21.07.2001, MR.

COMMENTS. A European species [Helsdingen, 2014], of which distribution requires further clarification, as some of the earlier records could actually belong to the closely related species, *S. inexpectus*: viz., the records from Central Asia (see Logunov & Kronstedt [1997] for further discussion).

*Sitticus saltator* (O. Pickard-Cambridge in Simon, 1868)

MATERIAL. TURKEY: 1 ♀ (NHMW), [Bursa Prov.], Uludağ, 5.10.1955, H. Nemenz.

COMMENTS. A Euro-Siberian temperate species, known from the Iberian Peninsula [Helsdingen, 2014] to Transbaikalia [Logunov, Marusik, 2000b]. New record for Turkey.

*Sitticus zimmermanni* (Simon, 1877)

MATERIAL. TURKEY: 1 ♂, 1 ♀ (NMPC), nr. Pazar, c. 24 km W of Tokat (40°16'N, 36°17'E), Ballica, nr. Mağarasi cave, 29.06–1.07.2002, MR; 1 ♀ (NHMW), Kizilcahaman, 1000–1200 m a.s.l., thicket of fruit trees, 27–28.05.1967, JG, FR & AR; 1 ♂ (MHNG), Kars, c. 16 km SW of GÖle, sieving of leaf- and moss-litter in oak and hornbeam forest, c. 1600 m a.s.l., 16.06.1986, C. Besuchet, I. Löbl & D.H. Burckhardt.

COMMENTS. A Euro-Siberian subboreal species, known from central Europe [Helsdingen, 2014] to NW China (Xinjiang) [Logunov, Marusik, 2000b]. New record for Turkey.

*Synageles albotrimaculatus* (Lucas, 1846)

MATERIAL. SPAIN: 1 ♂ (MMUM; G7512.1992), Sierra de Cazorla, in grassland on rocky hills at 1800 m a.s.l., 23.05.1968, ED.

COMMENTS. A Mediterranean subboreal species, known from Spain and Algeria to Turkey [Jiménez-Valverde, Wesolowska, 2005; Coşar *et al.*, 2014].

*Synageles dalmaticus* (Keyserling, 1863)

MATERIAL. GREECE: 2 ♀♀ (MHNG), Cyclades, Iraklia (island S of Naxos), Aghio Georgios, rocks on the shore covered 'phrygana' vegetation, 15–20 m a.s.l., 10.05.1985, CL; 1 ♂ (MHNG), Naxos, foothill of Mt. Zeus, 420–490 m a.s.l., 14.05.1985, CL; 1 ♀ (SMFM), S coast of Peloponnes, Ligia, beach, dunes and adjacent cultural landscape, 1.06.1998, LM. — TURKEY: 2 ♀♀ (LMNM), Silifke, Mersin, sand dune system with scattered scrub up to 400 m from sea, 10.06.1993, SJ & CF; 1 ♀ (LMNM), Içel, Narlıkuyu (36°26'35"N, 34°04'44"E), 26.06.1995, SJ & CF; 1 ♀ (LMNM), Adana (36°33'N, 35°19'E), Burnu, Karataş, mixed vegetation between sea channel and sand dunes, 28.06.1995, SJ & CF; 1 ♀ (LMNM), Içel, c. 2 km S of Çamlidere (36°52'12"N, 34°24'37"E), rocky disused quarry at side of road, dominated by *Euphorbia*, Mullein *Cistus* and *Rubus*, 30.06.1995, SJ & CF; 1 ♂ (NHMW), Namrun, pine forest, 12.05–5.06.1964, FR; 1 ♂ (NHMW), Demre, 30.04.1964, FR; 1 ♂ (NHMW), Kaş, 23.04.1964, FR; 1 ♂, 1 ♀ (NUAM), Antalya Prov., Alanya Distr., Cebireis Mt., c. 900 m a.s.l., 16.05.2006, D. Hakan. — EGYPT: 1 ♂ (SMFM, 4776), Cairo, no date and collector name. — ISRAEL: 1 ♀ (NMPC), Sede Boqer, Negev desert, between Beer Sheva and Mitzpe Ramon, 6–29.05.2003, MR.

COMMENTS. A Mediterranean subboreal species, known from the Iberian Peninsula [Helsdingen, 2014], throughout Asia Minor and the Near East [Karol, 1967; Prószyński, 2003; present data] to Azerbaijan [Logunov, Guseinov, 2002].

*Synageles hilarulus* (C.L. Koch, 1846)

MATERIAL. SPAIN: 1 ♂ (MVHN), Valencia, Devesa del Saler (Polideportivo), 17.05.2004, DD. — CYPRUS: 1 ♀ (PCSD),

Akrotiri, Fassouri reedbeds, rank grasses, 4.05.2007, R.G. Snazell; 2 ♀♀ (PCRS), Akrotiri, edge of Fassouri reedbeds, swept herbs & grass, 4.05.2007, coll.?

COMMENTS. A trans-Eurasian subboreal species [Logunov, Marusik, 2000b]. New record for Cyprus.

*Synageles persianus* Logunov, 2004

MATERIAL. ARMENIA: 2 ♀♀ (ZMUM), nr. Megri, 3.06.1988, V.A. Zakharyan.

COMMENTS. Recorded from the Caucasus (Armenia and Azerbaijan) and NW Iran only [Logunov, 2004a; Marusik *et al.*, 2004; present data]. New record for Armenia.

*Talavera aequipes* (O. Pickard-Cambridge, 1871)

MATERIAL. ISRAEL: 1 ♂ (ZTAU), Upper Galilee, Mt. Meron, Ziv'on (c. 33°1'5.84"N, 35°24'32.04"E), 4–11.04.2007, T. Levanony; 1 ♀ (ZTAU), Upper Galilee, Mt. Meron (c. 33°00'N, 35°24'E), 800 m a.s.l., 12–19.05.2007, T. Levanony. — AZERBAIJAN: 1 ♀ (SZMN), Lenkoran Area, Lenkoran Reserve (c. 38°38'N, 48°47'E), 23.05.2003, EG.

COMMENTS. A Euro-Siberian – Central Asian temperate species, known from Spain, throughout Europe and the Mediterranean to Transbaikalia [Helsdingen, 2014; Logunov, Marusik, 2000b], southward to Israel [present data].

*Talavera aperta* (Miller, 1971)

MATERIAL. TURKEY: 1 ♀ (LMNM), Kayseri, Sultansazligi, degraded edge of marsh with *Atriplex*, *Suaeda*, *Scirpus*, *Carex* and various grasses, 14.06.1993, SJ & CF.

COMMENTS. A Euro-Siberian subboreal species, known from Belgium to Transbaikalia and S Kazakhstan [Logunov, Kronstedt, 2003]. New record for Turkey.

*Talavera milleri* (Brignoli, 1983)

Fig. 106.

MATERIAL. PORTUGAL: 1 ♂ (FMNH), Planalto de S. Mamede, pitfall traps, 4.06.2002, PC. — CZECH REPUBLIC: 1 ♂ (NMPC), North Bohemia, Louny, Oblík Hill, rocky steppe 480 m altitude, 29.05.1962 J. Buchar.

COMMENTS. Recorded from Portugal, Czech Republic, Germany and Slovakia only [Chvátalová, Buchar, 2002; WSC, 2015; present data]. New record for Portugal.

*Talavera petrensis* (C.L. Koch, 1837)

MATERIAL. PORTUGAL: 1 ♂, 1 ♀ (FMNH), Vale Garcia (c. 39°33'N, 8°35'W), 2–21.07.2002, PC.

COMMENTS. A European – Central Asian species, recorded from Ireland and Portugal to E Kazakhstan, southward to Kyrgyzstan [Logunov, Kronstedt, 2003; present data].

*Thyene imperialis* (Rossi, 1846)

MATERIAL. ALGERIA: 1 ♂ (PCRB), Wilaya Biskra, Biskra, c. 130 m a.s.l., flooded park, between Graminea, 10.04.1982, RB; 1 ♂ (PCRB), Wilaya Biskra, Biskra, nr. hotel Hamman Saline, c. 125 m a.s.l., under stones, 3.11.1987, RB. — TUNISIA: 3 ♂♂, 1 ♀ (PCRB), Gouvernorat Beja, Wadi Zarga, c. 300 m a.s.l., in *Olea* orchard (on trees), 12.09.1985, V. Bouters; 1 ♂ (OUMNH), Sfax Distr., Qued Mealn el Jem (35°09'02"N, 10°43'50"E), 34 m a.s.l., beaten from *Tamarix*, 30.04.2005, D. Mann. — ITALY: 1 ♀ (SMFM, 11/986), Sicily, no exact locality and collector name. — GREECE:

1 ♂ (SMFM), S Crete, Keratokampos, 7.05.2008, HE & UK; 1 ♂ (SMFM), S Crete, Plakias, 21.07.2009, HE & UK; 1 ♂ (SMFM), NE Greece, Kavousi, 10.05.2009, KE & UK; 1 ♂ (SMFM), N Crete, Gourmes, 3.05.2011, S. Krips. — TURKEY: 1 ♀ (PCRS), road between Akyaka and Gogovia, in weeds, etc. edge of road, 4.06.1996, ARS; 1 ♀ (LMNM), Silifke, Mersin, sand dune system with scattered scrub up to 400 m from sea, 10.06.1993, SJ & CF; 4 ♂♂, 2 ♀♀ (LMNM), İçel, Silifke Sand Dunes (36°17'05"N, 33°56'08"E), inner dunes with damp, *Salicornia* dominated, halophytic vegetation and red bed, 5.05.1994, SJ & CF; 1 ♂ (LMNM), İçel, Narlıkuyu (36°26'04"N, 34°06'44"E), garrigue vegetated limestone dominated by *Pinus*, 5.06.1994, MB; 1 ♂ (LMNM), İçel, c. 17 km N of Anamur, Alaköprü Bridge (36°10'38"N, 32°53'51"E), wet flush on road, downward slope to river bank and rocky outcrop, 7.05.1994, SJ & CF; 1 ♀ (LMNM), İçel, c. 2 km S of Çamlidere (36°52'12"N, 34°24'37"E), rocky disused quarry at side of road, dominated by *Euphorbia*, Mullein *Cistus* and *Rubus*, 30.06.1995, SJ & CF; 1 ♀ (SMFM), Killis, Ortsbereich (36°43'N, 37°07'E), 7–8.08.1988, coll. Zoologie THD; 1 ♀ (NHMW), Finibe, 1.05.1964, FR. — EGYPT: 1 ♀ (NHMW), El-Fayem [apparently Faiyum, 29°27'N, 30°35'E], 12.1981, HEH. — ISRAEL: 1 ♀ (SMFM), Rehoboth-Jaffa [Rehovot], 18.04.1913, J. Aharoni. — SAUDI ARABIA: 1 ♂ (SMFM), c. 150 km SSE of El Riyadh, 13.06.1959, E. Diehl.

COMMENTS. A trans-Eurasian subboreal-subtropical species, known from the Canaries [Helsdingen, 2014], throughout the Mediterranean and northern Africa, to China and India [Logunov, Zamanpoore, 2005]. In Africa, this species was hitherto recorded from Sudan (Jebel Marra) [Logunov, 2004b], Mali (Bamako), Guinea (Kindia), Côte d'Ivoire (as Batié, apparently it is now Beuna) and Burkina (Ouagadougou) [Berland, Millot, 1941]. All the African localities by Berland & Millot [1941] represent the south-westernmost records for *T. imperialis*.

*Yllenus albocinctus* (Kroneberg, 1875)

MATERIAL. RUSSIA: 1 ♀ (ZMUM), Astrakhan' Region, Lishansky Distr., E of Basinskaya station (46°07'55"N, 47°13'05"E), 18.05.2012, AG.

COMMENTS. An eastern Mediterranean – Central Asian subboreal species, known from Turkey to W Mongolia [Logunov, Marusik, 2003].

*Yllenus gavdos* Logunov et Marusik, 2003

MATERIAL. ITALY: 1 ♂ (PCMS, Sa31), Sardinia, 20.06.2013, M. Schäfer.

COMMENTS. Recorded the Canaries, Italy, Greece (Crete) and Algeria only [Logunov, Marusik, 2003; present data]. New record for Italy (Sardinia).

*Yllenus saliens* O. Pickard-Cambridge, 1876

MATERIAL. EGYPT: 2 ♂♂, 3 ♀♀ (SMFM, 5523), 'Pharo' (label illegible), 2.10.1933, coll.?

COMMENTS. Recorded from NE Africa, including the Arabian Peninsula, only [Logunov, Marusik, 2003; Wesołowska, van Harten, 2007; present data].

*Yllenus univittatus* (Simon, 1871)

MATERIAL. TURKEY: 1 ♂ (LMNM), Konya, Sakyatan, 10.07.1992, SJ.

COMMENTS. Recorded from France and Turkey only [Logunov, Marusik, 2003; present data]. New record for Turkey.

## Discussion

The Mediterranean fauna of Salticidae remains studied insufficiently, considering both the regional state of knowledge (i.e., regional faunistic lists) and distribution of particular species over the Mediterranean and beyond. At present, the best studied regions are the Iberian Peninsula (124 species; both Portugal and Spain) [Cardoso, Morano, 2010], Italy (135 species) [Pantini, Isaia, 2014], Greece (c. 140 species; both mainland and such large islands as Crete, Lesbos and Chios) [Bosmans, Chatzaki, 2005; Bosmans *et al.*, 2009, 2013; Russell-Smith *et al.*, 2011], Bulgaria (91 species) [Deltshiev, 2005], Egypt (72 species) [El-Hennawy, 2006], Romania (83 species) [Weiss, István, 2009], Turkey (110 species) [Bayram *et al.*, 2014; Coşar, 2014], Israel (108 species) [Zonstein, Marusik, 2013], and the Crimea (68 species) [Kovblyuk, 2004; Kovblyuk, pers. comm.]. The least studied Mediterranean regions are those of northern Africa (Algeria, Tunisia, Libya). For instance, the salticid fauna of Tunisia currently consists of 37 species only [Bosmans, 2003], which is hardly more than 15% of its real regional diversity. Yet, some of the regional lists, e.g. that of the Lebanese fauna [El-Hennawy, 2013], are largely based on old records originating from 19th century and thus are in need of revision.

The most problematic Mediterranean genera of Salticidae requiring thorough taxonomic revisions are as follows: *Euophrys* C.L. Koch, 1834 (*s.str.*), *Habrocestum* Simon, 1876, *Pellenes* Simon, 1876 and *Salticus* Latreille, 1804. Some obscure earlier records of *Philaeus* — e.g., *P. albovariegatus* (Simon, 1868), *P. jugatus* (L. Koch, 1876) and others (listed in Cardoso & Morano [2010]) — need a critical revision and/or modern confirmation.

With the current state of the knowledge of the Mediterranean Salticidae, it is hardly surprising that the present faunistic survey has resulted in numerous additional records to regional faunistic lists (in alphabetic order): Armenia (2 new species records), Cyprus (19), Egypt (4), Greece (1), Israel (1), Italy (1), Jordan (2), Libya (1), Morocco (4), Oman (1), Portugal (3), Spain (3), Syria (8), Tunisia (1), Turkey (17), Ukraine (1). The ranges of some unrecorded species turned out to be much larger than it was originally known: for instance, *Talavera milleri* has been found in Portugal (earlier known from Germany, Czech Republic and Slovakia only [Chvátalová, Buchar, 2002]), and *Yllenus univittatus* has been recorded from Turkey (earlier known from France only [Logunov, Marusik, 2003]). Unknown sexes have been described for seven species, of which some have been known from the single sex from the 19th century: *Habrocestum latifasciatum* (♀), *H. shulovi* (♂), *Heliophanus fuerteventurae* (♀), *H. ramosus* (♀), *Icius crassipes* (♀), *I. insolitus* (♀) and *Salticus confusus* (♀). Currently, it is impossible to provide a correct estimate of real diversity of the Mediterranean Salticidae; in my opinion, there should be at least 300–350 species, but it is likely to be more than that.

ACKNOWLEDGEMENTS. The author wishes to express his warmest thanks to all the curators and private collectors mentioned above under 'Material and Methods' for giving access to their collections of Salticidae. G.N. Azarkina (the SZMN) is thanked for the help in identification of difficult *Aelurillus* species and providing me with additional records of Salticidae from Azerbaijan. Anna Logunova (Manchester, UK) is thanked for the translation of locality labels from German and French. Yu.M. Marusik (Magadan, Russia) is obliged for his critical comments on the earlier draft helping to improve it.

## References

- Alicata P., Cantarella T. 1994. The Euro-mediterranean species of *Icius* (Araneae, Salticidae): a critical revision and description of two new species // *Animalia*. Vol.20 (for 1993). No.1/3. P.111–131.
- Azarkina G.N. 2002. New and poorly known species of the genus *Aelurillus* Simon, 1884 from central Asia, Asia Minor and the eastern Mediterranean (Araneae: Salticidae) // *Bull. Br. arachnol. Soc.* Vol.12. Pt.6. P.249–263.
- Azarkina G.N. 2004 (for 2003). New and poorly known species of the genus *Phlegra* Simon, 1876 (Araneae, Salticidae) // *Revue Arachnologique*. T.14. Fasc.6. P.73–108.
- Azarkina G.N., Logunov D.V. 2006. Taxonomic notes on nine *Aelurillus* species of the western Mediterranean (Araneae: Salticidae) // *Bull. Br. arachnol. Soc.* Vol.13. Pt.7. P.233–248.
- Azarkina G.N., Mirshamsi O. 2014. Description of a new *Aelurillus* species from Khorasan province of Iran, with comments on *A. concolor* Kulczyński, 1901 (Araneae: Salticidae) // *Zoology in the Middle East*. Vol.60. No.1. P.82–91. doi:10.1080/09397140.2014.892353
- Bayram A., Kunt K.B., Danişman T. 2015. The checklist of the spiders of Turkey (Araneae; Arachnida), version 2014; online at: <http://www.kazimcapaci.com/spidersofturkey.htm> (accessed on January 22, 2015).
- Berland L., Millot J. 1941. Les araignées de l'Afrique Occidentale Française I.-Les salticides // *Mém. Mus. natn. Hist. nat. Paris (N.S.)*. Vol.12. P.297–423.
- Bosmans R. 2003. A checklist of the spiders of Tunisia, with description of a new species of *Palliduphantes* Saaristo & Tanasevitch (Araneae: Linyphiidae). // *Kaupia - Darmstädter Beiträge zur Naturgeschichte*. Bd.12. S.89–109.
- Bosmans R., Chatzaki M. 2005. A catalogue of the spiders of Greece, a critical review of all spider species cited from Greece with their localities // *Newsletters Belg. Arachnol. Soc.* Vol.20. No.2(suppl.). P.1–124.
- Bosmans R., Baert L., Bosselaers J., De Koninck H., Maelfait J.P., van Keer J. 2009. Spiders of Lesbos (Greece) // *Nieuwsbrief van de Belgische Arachnologische Vereniging* Vol.24. P.1–70.
- Bosmans R., Van Keer J., Russell-Smith A., Kronstedt T., Alderweireldt M., Bosselaers J., De Koninck H. 2013. Spiders of Crete (Araneae). A catalogue of all currently known species from the Greek island of Crete // *Newsletter Belg. Arachnol. Soc. Supplement 1*. Vol.28. P.1–147.
- Canard A. 2005. Catalogue of spider species from Europe and the Mediterranean basin, parts I & II // *Revue Arachnologique*. Vol.15. Fasc.3. P.1–255.
- Chvátalová I., Buchar J. 2002. Distribution and habitat of *Talavera aperta*, *T. milleri* and *T. thorelli* in the Czech Republic (Araneae: Salticidae) // *Acta Societatis Zoologicae Bohemicae*. Vol.66. P.3–11.
- Coşar İ. 2014. Four new records for the spider fauna of Turkey (Araneae: Salticidae) // *Turkish J. Zool.* Vol.38. P.1–4.
- Coşar İ., Danişman T., Yildiran F.A.B. 2014. The jumping spiders' fauna of Kirikkale Province (Araneae, Salticidae) // *Serket*. Vol.14. No.2. P.83–94.
- Danişman T., Coşar İ., Erdek M., Sansak Z. 2012. A contribution to the knowledge of Turkish jumping spider fauna (Araneae: Salticidae) // *Acta Zool. Bulg.* Vol.64. No.2. P.215–216.
- Deltshev C. 2005. Fauna and zoogeography of spiders (Araneae) in Bulgaria // *J. Arachnol.* Vol.33. P.306–312.
- Dobroruka L.J. 2002. Notes on a collection of jumping spiders from Greece, mainly from Crete (Araneae: Salticidae) // *Biologia Gallo-hellenica*. Vol.28. P.5–26.
- Dondale C.D., Redner J.H., Marusik Yu.M. 1997. Spiders (Araneae) of the Yukon // Danks H.V., Downes J.A. (eds.). *Insects of the Yukon*. Ottawa: Biological Survey of Canada (Terrestrial Arthropods). P.73–113.
- Dunin P.M. 1984. [Fauna and ecology of the spiders of the Apsheron Peninsula, Azerbadjan SSR] // Utochkin A.S. (ed.). *Fauna i ekologiya paukoobraznykh*. Perm: University of Perm. P.45–60 [in Russian].
- El-Hennawy H.K. 2006. A list of Egyptian spiders (revised in 2006) // *Serket*. Vol.10. No.2. P.65–76.
- El-Hennawy H.K. 2013. Preliminary list of Lebanese spiders and other arachnids (except ticks and mites) // *Serket*. Vol.13. No.3/4. P.228–275.
- Fiser C., Azarkina G.N. 2005. A contribution to the knowledge of the jumping spiders (Salticidae: Araneae) of the Macedonia // *Acta Zool. Bulg.* Vol.57. No.3. P.299–304.
- Hęciak S., Prószynski J. 1984. Redescriptions of one *Aelurillus* and two *Phlegra* species (Araneae, Salticidae) from Spain // *Ann. zool. Warszawa*. T.37. No.14. P.377–390.
- Helsdingen van P. 2013. A quick scan of the spider fauna of the European part of Turkey // *Nieuwsbrief SPINED*. No.33. P.29–38.
- Helsdingen van P. 2014. Fauna Europaea: Araneae. Fauna Europaea version 2.6.2; online at: <http://www.faunaeur.org/> (accessed on December 22, 2014).
- Jäger P. 1995. Erstnachweise von *Macaroeris nidicolens* und *Icius subinermis* für Deutschland in Köln (Araneae: Salticidae) // *Arachnologische Mitteilungen*. H.9. S.38–39.
- Jiménez-Valverde A., Wesolowska W. 2005. *Synageles albotrimaculatus* (Lucas, 1846) (Araneae, Salticidae), a spider species new to Spain // *Bull. Br. Arachnol. Soc.* Vol.13. P.122–124.
- Ijlnad S., van Helsdingen P. 2014. On some spiders (Arachnida, Araneae) from the surroundings of Castellabate, Italy // *Nieuwsbrief SPINED*. No.34. P.16–33.
- Karol S. 1967. Türkiye örümcekleri I. Ön liste // *Ankara Üniv. Fak. Yayınları*. Vol.109. No.7. P.1–34. [in Turkish]
- Koch C.L. 1846. Die Arachniden. Nürnberg. Dreizehnter Band. S.1–234; Vierzehnter Band. S.1–88.
- Kovblyuk M.M. 2004. [Catalogue of the spiders (Arachnida, Aranei) of the Crimea] // *Voprosy razvitiya Kryma. Nauchno-prakticheskiy i diskussionno-analiticheskiy sbornik*. Vyp.15. Problemy inventarizatsii krymskoi bioty. Simferopol: Tavriya-Plus. P.211–262 [in Russian, with English and Ukrainian summaries].
- Kulczyński W. 1903. Arachnoidea in Asia Minore et ad Constantinopolim a Dre F. Werner collecta // *Sitz.-ber. Akad. Wiss. Wien*. Bd.112. S.627–680.
- Logunov D.V. 1992. Salticidae of Middle Asia (Araneae). I. New species from the genera *Heliophanus*, *Salticus* and *Sitticus*, with notes on new faunistic records of the family // *Arthropoda Selecta*. Vol.1. No.1. P.51–67.
- Logunov D.V. 1995. New and little known species of the jumping spiders from Central Asia (Araneae: Salticidae) // *Zoosystematica Rossica*. Vol.3. No.2. P.237–246.
- Logunov D.V. 1996. A review of the genus *Phlegra* Simon, 1876 in the fauna of Russia and adjacent countries (Araneae: Salticidae: Aelurillinae) // *Genus*. Vol.7. No.3. P.533–567.
- Logunov D.V. 1997. Salticidae of Middle Asia. 4. A review of the genus *Euophrys* (s. str.) C.L. Koch (Araneae, Salticidae) // *Bull. Br. arachnol. Soc.* Vol.10. Pt.9. P.344–352.
- Logunov D.V. 1998a. Two new jumping spider species from the Caucasus (Aranei: Salticidae) // *Arthropoda Selecta*. Vol.7. No.4. P.301–303.
- Logunov D.V. 1998b. New species and new records of Palearctic *Sitticus* (Araneae: Salticidae) // *Zoosystematica Rossica*. Vol.7. No.1. P.77–83.

- Logunov D.V. 1999. Redefinition of the genus *Habrocestoides* Prószyński, 1992, with establishment of a new genus, *Chinatatus* gen.n. (Araneae: Salticidae) // Bull. Br. arachnol. Soc. Vol.11. Pt.4. P.139–149.
- Logunov D.V. 2001a (for 2000). A redefinition of the genera *Bianor* Peckham & Peckham, 1885 and *Harmochirus* Simon, 1885, with the establishment of a new genus *Sibianor* gen. n. (Araneae: Salticidae) // Arthropoda Selecta. Vol.9. No.4. P.221–286.
- Logunov D.V. 2001b. New and poorly known species of the jumping spiders (Araneae: Salticidae) from Afghanistan, Iran and Crete // Arthropoda Selecta. Vol.10. No.1. P.59–66.
- Logunov D.V. 2001c. Literature review: Die Springspinnen (Araneae, Salticidae) Griechenlands (by H. Metzner) // Newsl. Br. arachnol. Soc. No.92. P.6–7.
- Logunov D.V. 2004a. Notes on new and poorly known Palaearctic species of the genera *Neon*, *Sitticus* and *Synageles* (Araneae: Salticidae) // Bull. Br. arachnol. Soc. Vol.13. Pt.2. P.33–40.
- Logunov D.V. 2004b. Taxonomic notes on a collection of jumping spiders from Sudan (Araneae, Salticidae) // Bull. Br. arachnol. Soc. Vol.13. Pt.3. P.86–90.
- Logunov D.V. 2009a. Further notes on the Harmochireae of Africa (Araneae, Salticidae, Pelleninae) // Stoev P., Dunlop J., Lazarov S. (eds.). A life caught in a spider's web. Papers in arachnology in honour of Christo Deltchev. ZooKeys. Vol.16. P.265–290.
- Logunov D.V. 2009b. New and poorly known species of Salticidae (Araneae) from Turkey and Iran // Kropf C., Horak P. (eds), Towards a natural history of arthropods and other organisms. In memoriam Konrad Thaler. Contributions to Natural History. Vol.12. P.899–919.
- Logunov D.V. 2010. Taxonomic notes on a collection of jumping spiders from Iran (Araneae, Salticidae) // Bull. Br. arachnol. Soc. Vol.15. Pt.3. P.85–90.
- Logunov D.V. 2012. Notes on a small spider collection from Turkey (Arachnida: Aranei) // Arthropoda Selecta. Vol.21. No.4. P.375–377.
- Logunov D.V. 2013. On a small spider collection from Cyprus (Arachnida: Araneae) // Newsl. Br. Arachnol. Soc. No.127. P.4–5.
- Logunov D.V., Azarkina G.N. 2006. New species and records of *Phlegra* from Africa (Araneae, Salticidae) // Revue suisse de Zoologie. T.113. Fasc.4. P.727–746.
- Logunov D.V., Chatzaki M. 2003. An annotated check-list of the Salticidae (Araneae) of Crete, Greece // Revista Ibérica de Arachnologia. Vol.7. P.95–100.
- Logunov D.V., Guseinov E.F. 2002. Faunistic review of the jumping spiders of Azerbaijan (Aranei: Salticidae), with additional faunistic records from neighbouring Caucasian countries // Arthropoda Selecta. Vol.10 (for 2001). No.3. P.243–260.
- Logunov D.V., Kronstedt T. 2003. A review of the genus *Talavera* Peckham & Peckham, 1909 (Araneae, Salticidae) // Journal of Natural History. Vol.37. No.9. P.1091–1154.
- Logunov D.V., Marusik Yu.M. 1999. A brief review of the genus *Chalcoscirtus* Bertkau, 1880 in the faunas of Central Asia and the Caucasus (Aranei: Salticidae) // Arthropoda Selecta. Vol.7 (for 1998). No.3. P.205–226.
- Logunov D.V., Marusik Yu.M. 2000a. Miscellaneous notes on Palaearctic Salticidae (Arachnida: Aranei). Arthropoda Selecta. Vol.8 (for 1999). No.4. P.263–292.
- Logunov D.V., Marusik Yu.M. 2000b. Catalogue of the jumping spiders of northern Asia (Arachnida, Araneae, Salticidae). Moscow: KMK Scientific Press. 299 pp.
- Logunov D.V., Marusik Yu.M. 2003. A revision of the genus *Yllenus* Simon, 1868 (Arachnida, Araneae, Salticidae). Moscow: KMK Scientific Press. 167 pp.
- Logunov D.V., Marusik Yu.M., Mozaffarian F. 2002. Faunistic review of the jumping spiders of Iran (Aranei: Salticidae) // Arthropoda Selecta. Vol.10 (for 2001). No.2. P.155–167.
- Logunov D.V., Marusik Yu.M., Rakov S.Yu. 1999. A review of the genus *Pellenes* in the fauna of Central Asia and the Caucasus // Journal of Natural History. Vol.33. P.89–148.
- Logunov D.V., Mirshamsi O., Musavi S., Shayestehfar A. 2013. New faunistic records of Salticidae (Aranei) from Khorasan Province of Iran // Arthropoda Selecta. Vol.22. No.4. P.379–381.
- Logunov D.V., Rakov S.Yu. 1998. Miscellaneous notes on Middle Asian jumping spiders (Aranei: Salticidae) // Arthropoda Selecta. Vol.7. No.2. P.117–144.
- Logunov D.V., Vazirianzadeh B., Moravvej S.A., Navidpour S. 2007. New faunistic records of the jumping and crab spiders (Araneae: Salticidae, Thomisidae and Philodromidae) from Iran // Arthropoda Selecta. Vol.15 (for 2006). No.3. P.225–228.
- Logunov D.V., Zamanpoore M. 2005. Salticidae (Araneae) of Afghanistan: an annotated check-list, with descriptions of four new species and three new synonyms // Bull. Br. arachnol. Soc. Vol.13. Pt.6. P.217–232.
- Lucas H. 1846. Histoire naturelle des animaux articulés // Exploration scientifique de l'Algérie pendant les années 1840, 1841, 1842 publiée par ordre du Gouvernement et avec le concours d'une commission académique. Paris, Sciences physiques, Zoologie. Vol.1. P.89–271.
- Marusik Yu.M., Guseinov E.F., Aliev H.A. 2004. Spiders (Arachnida: Aranei) of Azerbaijan 4. Fauna of Naxçıvan // Arthropoda Selecta. Vol.13. No.3. P.135–149.
- Mello-Leitão C.F. de. 1944. Arañas de la provincia de Buenos Aires // Revta Mus. La Plata (N.S., Zool.). Vol.3. P.311–393.
- Metzner H. 1999. Die Springspinnen (Araneae, Salticidae) Griechenlands // Andrias. Bd.14. S.1–279.
- Nentwig W., Blick T., Gloor D., Hänggi A., Kropf C. 2014. Spiders of Europe (version 12.2014), online at: [www.araneae.uibk.ac.at](http://www.araneae.uibk.ac.at) (accessed on December 21, 2014).
- Nosek A. 1905. Araneiden, Oplionen und Chernetiden // Penther A., Zederbauer E., Ergebnisse einer naturwissenschaftlichen Reise zum Erdschias-Dagh (Kleinasien). Annalen des Kaiserlich-Königlichen Naturhistorischen Hofmuseums in Wien. Bd.20. S.114–154.
- Ono H. 1988. A revisional study of the spider family Thomisidae (Arachnida, Araneae) of Japan. Tokyo: National Science Museum. 252 pp.
- Özgen Ö., Türkeş T. 2009. The first record of genus *Phintella* (Araneae: Salticidae) in the Turkish spider fauna // Serket. Vol.11. No.3/4. P.79–81.
- Pantini P., Isaia M. 2014. La checklist dei ragni italiani (version December 2014); online at: [http://www.museoscienzebergamo.it/web/index.php?option=com\\_content&view=category&layout=blog&id=96&Itemid=94](http://www.museoscienzebergamo.it/web/index.php?option=com_content&view=category&layout=blog&id=96&Itemid=94) (assessed on January 25, 2015).
- Prószyński J. 2000. On mostly new species of Salticidae (Aranei) from Levant // Arthropoda Selecta. Vol.8 (for 1999). No.4. P.231–262.
- Prószyński J. 2003. Salticidae (Araneae) of the Levant // Ann. zool. Warszawa. T.53. P.1–180.
- Prószyński J. 2014. Monograph of the Salticidae (Araneae) of the World 1995–2012. Global Species Database of Salticidae (Araneae) (version December 31, 2014), online at: <http://www.peckhamia.com/salticidae/index.html> (accessed on January 22, 2015).
- Rakov S.Yu., Logunov D.V. 1996. A critical review of the genus *Heliophanus* C.L. Koch, 1933, of Middle Asia and the Caucasus (Aranei: Salticidae) // Arthropoda Selecta. Vol.5. No.3/4. P.67–104.
- Rakov S.Yu., Logunov D.V. 1997. Taxonomic notes on the genus *Menemerus* Simon, 1868 in the fauna of Middle Asia (Araneae, Salticidae) // Żabka M. (ed.). Proc. 16th Europ. Coll. Arachnol. P.271–279.
- Russell-Smith A., Allison R., Askins M., Blumsom W., Snazell R., Spilling C. 2011. A provisional checklist and gazetteer of the spiders of Chios, Greece (Arachnida: Araneae) // Bull. Br. Arachnol. Soc. Vol.15. Pt.5. P.133–167.
- Schmidt G., Krause R.H. 1996. Weitere Spinnenfunde von den Kanarischen Inseln, hauptsächlich von Fuerteventura und Lobos (Arachnida: Araneae) // Faunist. Abhandl. staatl. Mus. Tierk. Dresden. Bd.20. S.259–273.
- Simon E. 1868. Monographie des espèces européennes de la famille des attides (Attidae Sundewall. - Saltigradae Latreille) // Annales de la Société Entomologique de France. Ser.4. T.8. P.11–72, 529–726.

- Song D.X., Zhu M.S., Chen J. 1999. The Spiders of China. Shijiazhuang: Hebei Sci. Technol. Publ. House. 640 pp.
- Topçu A., Demir H., Seyyar O., Türkeş T. 2006. The spider fauna of the Gülek Pass (Turkey) and its environs (Araneae) // Deltshv C., Stoev P. (eds.). European Arachnology 2005, Acta Zool. Bulg. Suppl. No.1. P.287–295.
- Topçu A., Demir H., Seyyar O. 2009. Contribution to the jumping spider fauna of Turkey (Araneae: Salticidae) // Zoology in the Middle East. Vol.47. P.112–113.
- Trotta A. 2005. Introduzione ai Ragni italiani (Arachnida Araneae) // Mem. Soc. Entomol. ital. Vol.83. P.3–178.
- Uyar Z., Uğurtaş İ.H. 2012. Jumping Spiders (Araneae: Salticidae) of Northwest Anatolia (Turkey) // Acta Zool. Bulg. Vol.64. No.3. P. 235–240.
- Weiss I., István U. 2009. Faunenliste der Spinnen Rumäniens (Arachnida: Araneae); online at: <http://www.arachnologie.info/fauna.htm> (accessed on January 22, 2015).
- Wesołowska W. 1986. A revision of the genus *Heliophanus* C.L. Koch, 1833 (Aranei: Salticidae) // Ann. zool. Warszawa. T.40. P.1–254.
- Wesołowska W. 1996. New data on the jumping spiders of Turkmenistan (Aranei Salticidae) // Arthropoda Selecta. Vol.5. No.1/2. P.17–53.
- Wesołowska W. 1999. A revision of the spider genus *Menemerus* in Africa (Araneae: Salticidae) // Genus. Vol.10. No.2. P.251–353.
- Wesołowska W., van Harten A. 1994. The jumping spiders (Salticidae, Araneae) of Yemen. Sana'a: Yemeni-German Plant Protection Project. 86 pp.
- Wesołowska W., van Harten A. 2007. Additions to the knowledge of jumping spiders (Araneae: Salticidae) of Yemen // Fauna of Saudi Arabia. Vol.23. P.189–269.
- Wesołowska W., van Harten A. 2010. Order Araneae, family Salticidae // van Harten A. (ed.). Arthropod Fauna of the UAE. Dar Al Ummah, Abu Dhabi. Vol.3. P.27–69.
- Wesołowska W., van Harten A. 2011. Order Araneae, family Salticidae: Additions and the descriptions of a new species // van Harten A. (ed.). Arthropod Fauna of the UAE. Dar Al Ummah, Abu Dhabi. Vol.4. P.23–28.
- Wesołowska W., Szeremeta M. 2001. A revision of the ant-like salticid genera *Enoplomischus* Giltay, 1931, *Kima* Peckham & Peckham, 1902 and *Leptorchestes* Thorell, 1870 (Araneae: Salticidae) // Insect Systematics & Evolution. Vol.32. P.217–240.
- WSC. 2015. World Spider Catalog. Natural History Museum Bern, online at: <http://wsc.nmbe.ch>, version 15.5 (accessed on January 21, 2015).
- Wunderlich J. 1987. Die Spinnen der Kanarischen Inseln und Madeiras: Adaptive Radiation, Biogeographie, Revisionen und Neubeschreibungen. Langen, West Germany: Triops Verlag. 435 S.
- Wunderlich J. 1992. Die Spinnen-Fauna der Makaronesischen Inseln: Taxonomie, Ökologie, Biogeographie und Evolution // Beitr. Araneol. Bd.1. S.1–619.
- Wunderlich J. 2011. Extant and fossil spiders (Araneae) // Beitr. Araneol. Bd.6. S.1–640.
- Yağmir E.A., Kunt K.B., Ulupınar E. 2009. A new species for the araneofauna of Turkey, *Evarcha michailovi* Logunov, 1992 (Araneae: Salticidae) // Munis Ent. Zool. Vol.4. No.1. P.230–232.
- Zonstein S.L., Marusik Yu.M. 2013. Checklist of the spiders (Araneae) of Israel // Zootaxa. Vol.3671. No.1. P.1–127.

Responsible editor K.G. Mikhailov