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NOTES ON THE PHILODROMIDAE (ARANEAE) OF THE UNITED ARAB EMIRATES

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ABSTRACT

The paper presents records of ten species of Philodromidae of the United Arab Emirates, all being new to the spider fauna of this country. One species, *Halodromus vanharteni* sp. nov. (male), is described as new to science. A new synonymy, *Thanatus lesserti* (Roewer, 1951) = *T. nitidus* Logunov et Kunt, 2010 syn. nov. is established. The male of *T. setigerus* is described for the first time. Two species – *Thanatus saraevi* Ponomarev, 2007 and *T. lesserti* (Roewer, 1951) – are reported from Iran for the first time.

Key words: United Arab Emirates, Iran, spiders, Araneae, Philodromidae, new species, new findings

ЗАМЕТКИ О PHILODROMIDAE (ARANEAE) ОБЪЕДИНЕННЫХ АРАБСКИХ ЭМИРАТОВ

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РЕЗЮМЕ

В статье обсуждаются находки десяти видов Philodromidae из Объединенных Арабских Эмиратов, все из них новые для фауны этой страны. Один вид, *Halodromus vanharteni* sp. nov. (самец), описан как новый для науки. Установлена новая синонимия, *Thanatus lesserti* (Roewer, 1951) = *T. nitidus* Logunov et Kunt, 2010 syn. nov. Впервые описан самец *T. setigerus*. Два вида – *Thanatus saraevi* Ponomarev, 2007 и *T. lesserti* (Roewer, 1951) – отмечаются впервые для фауны Ирана.

Ключевые слова: Объединенные Арабские Эмираты, Иран, пауки, Aranei, Philodromidae, новые виды, новые находки

INTRODUCTION

The Philodromidae of the Arabian Peninsula have never been the subject of intensive taxonomic studies and therefore the fauna of this huge area remains practically unknown. To date, only five philodromid species of Philodromidae have been recorded/described from the Arabian Peninsula. One species – *Halodromus barbarae* Muster, 2009 – was recorded from Saudi Arabia (Muster 2009b) and four from Yemen: *Halodromus deltshevi* Muster, 2009 and *H. patellides* (Levy, 1977) (Muster 2009b), *Thanatus plumosus* Simon, 1890 and *T. simplipalpis* Simon, 1882 (Simon 1882, 1890). It is worth noting that each of the two mentioned *Thanatus* species are still only known from a single sex and has never been reported or redescribed after its original description. Such state of the knowledge of Philodromidae of the

Arabian Peninsula is indeed unsatisfactory, as, for instance, the philodromid fauna of Israel – the best studied in the Near East – consists of at least 20 species (Levy 1977, 1991, 1999), and that of Lebanon of five species (Assi 1986).

The aim of this paper is to report on ten species of Philodromidae collected from the United Arab Emirates by Anthony van Harten during 2004–2010; one species is described as new to science. All the reported philodromid species are new to the spider fauna of the UAE.

MATERIAL AND METHODS

A study has been made of a total of 261 specimens from the UAE; and further 35 specimens of three species newly collected from Iran and Kazakhstan, including the female holotype of *Thanatus saraevi* Ponomarev, 2007, have been examined as comparative material. The format of description and terminology follows Logunov (1996). Synonymy lists for each species are omitted from the present paper and can be obtained from Platnick (2011). All measurements are in mm.

In the material reported below the name of the collector – Anthony van Harten – was abbreviated as AvH. A few of the studied samples do not have exact locality information and only contain collecting field numbers, such as 12831 UAE, 12733 UAE, etc.; all of them were collected from the UAE.

The study material has been deposited in the following museum collections:

MHNG = Museum d'histoire naturelle, Gèneve, Switzerland (curator: Dr. P. Schwendinger);

OUMNH = Oxford University Museum of Natural History (curator: Ms. Amoret Spoon);

SZMN= Siberian Zoological Museum, Institute for Systematics and Ecology of Animals, Novosibirsk, Russia (curator: Dr. G.N. Azarkina);

ZMUM= Zoological Museum of the Moscow State University, Moscow, Russia (curator: Dr. K.G. Mikhailov).

SYSTEMATICS

Family Philodromidae Thorell, 1870
Genus *Halodromus* Muster, 2009

Halodromus is a small genus, containing five species from northern Africa and the Middle East (Muster 2009; Platnick 2011). Three *Halodromus* species, of which one is new, have been found in the UAE.

Halodromus barbarae Muster, 2009

Material. UNITED ARAB EMIRATES: 1 male (ZMUM), Sharjah Desert Park (25.17°N, 55.42°E), pitfall trap, 30 April–21 May 2007, AvH; 2 males (MHNG), same locality, light trap, 30 April–21 May 2007, AvH.

Comments. This species has been recorded from Spain, Algeria, Israel and Saudi Arabia (Muster 2009b), with its current record in the UAE clarifying the species' distribution in the Arabian Peninsula. This is the first record of *H. barbarae* after its original description.

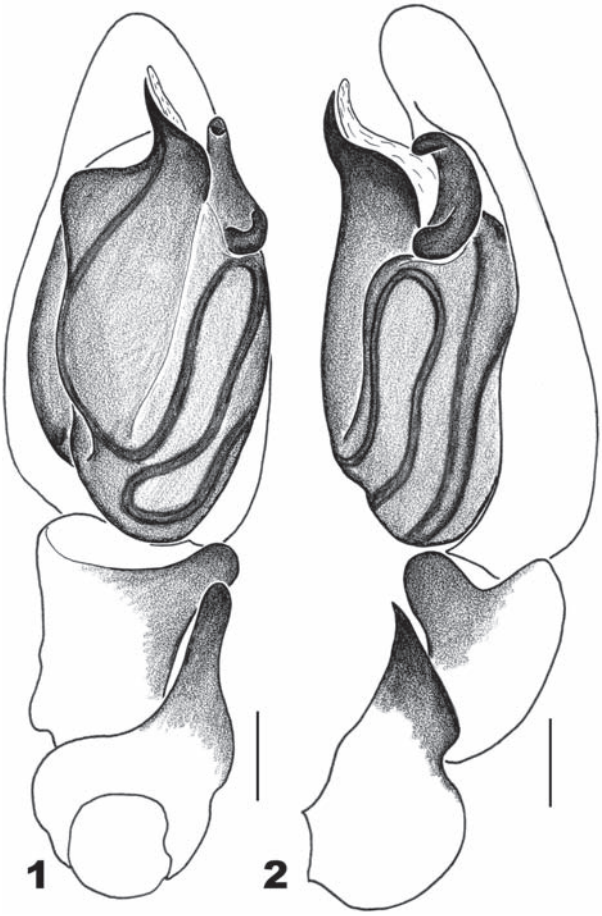
Halodromus patellidens (Levy, 1977)

Material. UNITED ARAB EMIRATES: 1 male (MHNG), Sharjah Desert Park (25.17°N, 55.42°E), light trap, 08–15 April 2007, AvH; 1 male (ZMUM), same locality, light trap, 25 February–25 March 2006, AvH; 1 female (MHNG), S of Ras al-Khaimah (25.43°N, 55.52°E), hand collecting, 08 March 2008, AvH; 1 female (MHNG), c. 7 km S al-Jazirah al-Hamra (25.40°N, 55.45°E), hand collecting, 27 February 2006, AvH; 1 male, 1 female (MHNG), same locality, hand collecting, 16 November 2004, AvH; 1 male, 1 female (ZMUM), same locality, hand collecting, 04 January 2005, AvH; 1 male (MHNG), N of Ajman (25.26°N, 55.29°E), yellow water trap, 27–30 April 2008, AvH; 1 male (SZMN), same locality, yellow water trap, 27 April – 22 May 2008, AvH; 1 male (MHNG), Al-Ajban (24.36°N, 55.01°E), Malaise trap, 27 December 2006–18 February 2007, AvH; 1 male (MHNG), al-Rafah, pitfall trap, 17 November – 14 December 2009, AvH; 3 males (MHNG), Um al-Quwain, pitfall trap, 01–19 January 2010, AvH; 1 female (SZMN), c. 10 km S al-Jazirah al-Hamra (25.39°N, 55.44°E), hand collecting, 27 February 2006, AvH.

Comments. This is the most widespread species of *Halodromus*, occurring from the Cape Verde Islands over the north-African coast in the west to Saudi Arabia (Muster 2009b) and the UAE (present data) in the east.

Halodromus vanharteni sp. nov.
(Figs. 1–2)

Type material. Holotype – male (MHNG) from United Arab Emirates, al-Rafah, pitfall trap, 01–17 November 2009, AvH. Paratypes from United Arab Emirates: 1 male (MHNG), Um al-Quwain, pitfall trap, 01–30 November 2008, AvH; 2 males (ZMUM), N of Ajman (25.26°N,



Figs. 1–2. *Halodromus vanharteni* sp. nov., the holotype: 1 – male palp, ventral view; 2 – ditto, retrolateral view. Scale bars = 0.1 mm.

55.29°E), yellow water trap, 16 September – 12 October 2006, AvH; 1 male (MHNG), N of Ajman (25.26°N, 55.29°E), yellow water trap, 27–30 April 2008, AvH; 1 male (SZMN), c. 7 km S al-Jazirat al-Hamra (25.40°N, 55.45°E), yellow water trap and hand collecting, 01 December 2004, AvH; 1 male (MHNG), same locality, hand collecting, 04 January 2005, AvH; 1 male (SZMN), no exact locality [12831 UAE], AvH.

Etymology. The name is dedicated to Dr. Anthony van Harten (Sharjah, United Arab Emirates), who collected all the material of Philodromidae treated in this paper.

Diagnosis. This new species can be easily distinguished from all the known *Halodromus* species (see Muster 2009b) by its massive embolus and bean-shaped philodromid tegular apophysis (Figs. 1–2).

Distribution. Currently only known from a few localities in the United Arab Emirates (present data); yet it is likely that the distribution of this species includes the entire Arabian Peninsula and neighbouring regions (e.g., SW Iran).

Description. MALE (holotype). *Measurements.* Carapace 1.25 long, 1.35 wide. Ocular area: MOA-WA 0.31, MOA-WP 0.34, MOA-L 0.31. Eyes and interdistances: AME 0.11, ALE 0.07, PME 0.06, PLE 0.07, AME-AME 0.10, AME-ALE 0.04, PME-PME 0.21, PME-PLE 0.12. Abdomen 1.75 long, 1.48 wide. Cheliceral length 0.57. Clypeal height 0.21. Length of leg segments: I 1.68 + 0.65 + 1.53 + 1.23 + 0.75 (5.84); leg II 2.73 + 0.90 + 2.58 + 1.93 + 1.10 (9.24); III 1.58 + 0.59 + 1.18 + 1.05 + 0.63 (5.03); IV 1.63 + 0.55 + 1.23 + 1.05 + 0.60 (5.06). *Leg spination* of leg I: Fm d and pr 0-1-1; Tb d 0-1, pr and rt 1-1, v 0-2-2ap; Mt pr and rt 1-1-1ap, v 2-2-0. *Coloration.* Carapace yellow, with two wide interrupted brownish bands on its sides, reaching the eye area and with a white V-shaped figure in the centre; clypeus yellow. Abdomen light yellow, with a wide brown cardiac mark and two poorly visible, brownish longitudinal interrupted stripes. All legs yellow, with brown rings consisted of brown speckles and patches. Spinnerets yellow, anal tubercle brown. Palps yellow. Male palp as in Figs. 1–2: embolus wide, with a massive base; conductor thin and long; philodromid tegular apohysis (sensu Muster 2009b) massive and bean-shaped; retrolteral tibial apophysis short and convex at its tip; and patellar apophysis long and wide (in ventral view).

Genus *Philodromus* Walckenaer, 1826

Philodromus (*s.lat.*) is a large paraphyletic genus, with over 240 species described worldwide (Platnick 2011). Only two species have been collected from the UAE to date.

Philodromus hierosolymitanus Levy, 1977

Material. UNITED ARAB EMIRATES: 1 female (MHNG), Wadi Wurayah farm, Malaise trap, 17 March – 08 April 2009, AvH.

Comments. To date, *P. hierosolymitanus* has been recorded from Israel (type locality; Levy 1977) and from one locality in Iran (Logunov *et al.* 2007). The finding in the UAE is the third record and southernmost locality of this species. The male of *P. hierosolymitanus* remains unknown.

Philodromus latrophagus Levy, 1999

Material. UNITED ARAB EMIRATES: 1 male (MHNG), Wadi Bih dam, Malaise trap, 19 February – 08 March 2009, AvH.

Comments. Hitherto, this species has been known only from its type locality – Israel: Sede Boquer (Levy 1999). The finding in the UAE is the first record of *P. latrophagus* after its original description.

Reasoning from its stout and straight embolus (see Levy 1999: figs. 18–19) and some somatic characters (e.g., carapace longer than wide, AME larger than other eyes, etc.), *P. latrophagus* seems to be another member of the *histrio* species group.

Genus *Thanatus* C. L. Koch, 1837

Thanatus is a large genus, with almost 100 species distributed worldwide, except for Australia (Platnick 2011). In the Arabian Peninsula, two species were described from Yemen (Simon 1882, 1890) and five have been found in the UAE (present data).

Thanatus fabricii (Audouin, 1826)

Material. UNITED ARAB EMIRATES: 11 males, 12 females (MHNG), Um al-Quwain, pitfall trap, 01–30 November 2008, AvH; 5 males, 3 females (SZMN), same locality, pitfall trap, 18–22 October 2009, AvH; 21 males, 7 females (SZMN), same locality, pitfall trap, 01–17 November 2009, AvH; 5 males (MHNG), same locality, 14–31 December 2009, AvH; 1 male (MHNG), same locality, pitfall trap, 14–31 December 2009, AvH; 2 males, 2 females (MHNG), Wadi Bih dam, light trap, 09–26 June 2008, AvH; 2 males (MHNG), Sharjah Desert Park (25.17°N, 55.42°E), light & pitfall traps, 30 April – 21 May 2007, AvH; 1 male (MHNG), same locality, pitfall trap, 30 January – 03 March 2009, AvH; 1 male (MHNG), same locality, light trap, 25 May – 15 July 2008, AvH; 7 males, 1 female (MHNG), Um al-Quwain, pitfall trap, 01–17 November 2009, AvH; 7 males, 1 female (MHNG), same locality, pitfall trap, 01–19January 2010, AvH; 16 males, 4 females (ZMUM), al-Rafah, pitfall trap, 01–17 November 2009, AvH; 1 male (MHNG), al-Rafah, pitfall trap, 01–11 February 2010, AvH; 10 males, 3 females (MHNG), same locality, pitfall trap, 17 November – 14 December 2009, AvH.

Comments. It is a common but rarely recorded Mediterranean species known to date from the Canary Islands in the west (Wunderlich 1992), throughout Sahara, the Near East (Levy 1977; Assi 1986) and the Caucasus (Logunov and Huseynov 2008), to Tajikistan in the east (Lyakhov 2000). The findings in the UAE lie in the southernmost limit of the known species range.

This psammophilous species seems to co-occur with *T. fornicatus* in the same habitats (see below).

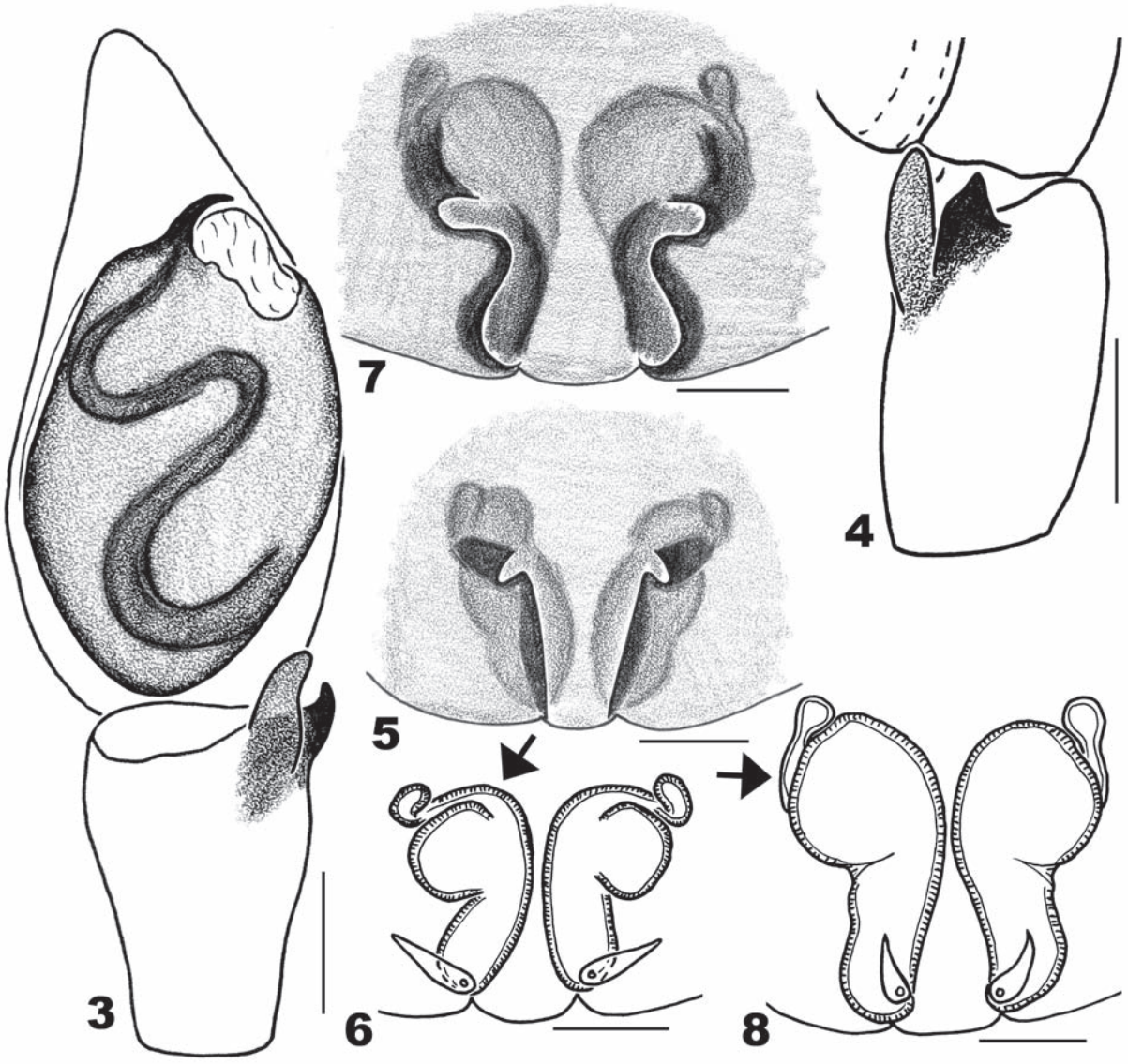
Thanatus fornicatus Simon, 1897
(Figs. 3–8)

Material. UNITED ARAB EMIRATES: 1 male (MHNG), Um al-Quwain, pitfall trap, 18–22 October 2009, AvH; 2 males (ZMUM), same locality, pitfall trap, 01–17 November 2009, AvH; 1 female (ZMUM), same locality, pitfall trap, 14–31 December 2009, AvH; 5 males (SZMN), same locality, pitfall trap, 01–19 January 2010, AvH; 2 males (MHNG), nr. Jebel Hafit, pitfall trap, 21 October – 16 November 2009, AvH; 1 male (MHNG), N of Ajman (25.26°N, 55.29°E), yellow water trap, 01–11 February 2010, AvH; 5 males (MHNG), same locality, yellow water trap, 25 May – 30 July 2009, AvH; 3 males (MHNG), al-Rafah, pitfall trap, 01–17 November 2009, AvH; 1 male (MHNG), no exact locality [12813 UAE], AvH; 1 female (MHNG), no exact locality [12733 UAE], AvH.

Comparative material on *Thanatus saraevi* Ponomarev, 2007. KAZAKHSTAN: 1 female (ZMUM; Ta-6893; the holotype, Figs. 7–8), Atyrau Region, c. 13 km SE of Inder Vil. (=Inderborskiy), shore of Lake Inder with wormwood (*Artemisia lercheana*) and *Anabasis ramosissima* (c. 48.501°N, 51.840°E), 23 May 1984, A.V. Ponomarev. IRAN: 4 females (ZMUM), Tehran Prov., NW of Tehran, Sardor area, c. 10 km N of Karaj (35°50′N, 51°05′E), 13 June 2000, Yu.M. Marusik.

Comments. The females of *T. fornicatus* from the UAE are identical to the female from Israel illustrated by Levy (1977: figs. 59–60), who compared the latter with the female holotype of *T. fornicatus*. The males from the UAE (Figs. 3–4) are identical to that from Israel as well (cf. Levy, 1991: figs. 11–12). Therefore, there is no doubt that the studied material belong to *T. fornicatus*.

The female of *T. fornicatus* is most similar to that of *T. saraevi* (Figs. 7–8), which was recently described from Kazakhstan (Ponomarev 2007), but can easily be distinguished from it by the origin of the bursa copulatrix: medially in *T. fornicatus* and laterally in *T. saraevi* (cf. Figs. 6 and 8, arrowed). Epigynes of both species vary, but the most typical variants are clearly different (cf. Figs. 5 and 7): the lateral guide pocket is straight in *T. fornicatus* and S-shaped in *T. saraevi*. Furthermore, both sexes of *T. fornicatus* possess brightly coloured red eyes, the



Figs. 3–8. *Thanatus fornicatus* Simon, 1897 from the UAE, al-Rafah (male, 3–4) and Um al-Quwain (female, 5–6) and *Thanatus saraevi* Ponomarev, 2007 (the female holotype, 7–8): 3, 7 – male palp, ventral view; 4, 8 – ditto, retrolateral view; 5, 9 – epigyne, ventral view; 6, 10 – spermathecae, dorsal view. Scale bars = 0.1 mm.

unique feature among all the *Thanatus* studied by the author to date (usually, their eyes are black).

To date, *T. fornicatus* has been recorded from southern Israel and Sinai in the west (Levy 1977, 1991) throughout the UAE (present data) to southern Pakistan (Karachi) in the east (Simon 1897). The findings in the UAE lie in the southernmost limit of the species range. It is noteworthy that almost all the studied samples *T. fornicatus* were collected together with the common species *T. fabricii*, and to infer that in the UAE both species seem to co-occur in the same habitats.

Finally, the female holotype of *T. saraevi* (Figs. 7–8) is identical with the female from Karakoram illustrated by Logunov et al. (2011: figs. 9–11), which was mistakenly identified as *T. fornicatus*. Therefore,

the currently known distribution of *T. saraevi* is limited to Kazakhstan, Uzbekistan, Iran and Pakistan (Karakoram) (Logunov et al. 2011: sub *T. fornicatus*; present data).

Thanatus lesserti (Roewer, 1951)
(Figs. 9–16)

Thanatus nitidus Logunov et Kunt, 2010: 16, figs. 4–5 (D female), **New Synonymy**.

Material. UNITED ARAB EMIRATES: 2 males (ZMUM), Sharjah Desert Park (25.17°N, 55.42°E), light trap, 25 February – 25 March 2006, AvH; 1 male (MHNG), same locality, light trap, 02 March – 01 April 2007, AvH; 1 male (MHNG), Wadi Wurayah (25.24°N, 56.17°E), Malaise and yellow water traps, 12–14 April 2005, AvH; 1 female (MHNG; Figs. 13–14), same locality, yellow water trap, 05–30 November 2008, AvH; 1 male (MHNG), Wadi Wurayah farm, Malaise trap, 17 March – 08 April 2009, AvH; 1 male (MHNG; Figs. 15–16), Wadi Maidaq, light trap, 21 December 2005 – 02 March 2006, AvH.

Comparative material. EGYPT: 1 female holotype (OUMNH, B. 1308, t.18), Cairo; the collection of O. Pickard-Cambridge. – IRAN: 4 males, 7 females (ZMUM; Figs. 9–12), Tehran, Plant-Protection Organization Pk (35.673°N, 51.414°E), 7–22 June 2000, Yu.M. Marusik; 3 males, 4 females (SZMN), Fars Prov., c. 50 km NNE of Shiraz, Bamoo Res. (29°45´N, 52°45´E), 18–28 May 2000, Yu.M. Marusik; 2 females (ZMUM), Fars Prov., Shiraz (29.607°N, 52.533°E), 18–26 May 2000, Yu.M. Marusik.

Comments. *T. lesserti* seems to display a rather strong variation of its copulatory organs, regarding both their size and conformation (Figs. 9–16). Specimens from the UAE possess visibly smaller epigyne and the spermathecae, with the lateral guide pockets making a visibly smaller loop (arrowed in Figs. 11, 15); yet the receptaculum ducts are less visible in ventral view but having the same configuration (Figs. 12, 16). The male palps of UAE specimens have the less swollen ventral tibial apophysis, which is seen in this species as the whitish bulge at the base of the dorsal tibial apophysis (arrowed in Figs. 10, 14). However, the comparative females from Iran are identical with that of *T. nitidus* described recently from southern Turkey (see Logunov and Kunt 2010: figs. 4–5), and all the newly examined females listed above under 'Comparative material' are identical to the female holotype of *Thanatus lineatipes* (re-examined!). Despite such strong variation of the female copulatory organs, males both from the UAE and from Iran are virtually identical to those described from Israel (see Levy 1991: figs. 7–8). Thus, the aforementioned differences in the copulatory organs can be accepted as an intra-species variation, and hence the name *T. nitidus* is here synonymised with *T. lesserti*. This conclusion might have to be re-considered when more specimens have been collected from the Arabian Peninsula.

To date, this species has been recorded from southern Turkey (Logunov and Kunt 2010: sub *T. nitidus*), Egypt, southern Israel (Levy 1991), the UAE and Iran (present data). The findings in the UAE lie in the southernmost limit of the known species range; yet the species is recorded from Iran for the first time.

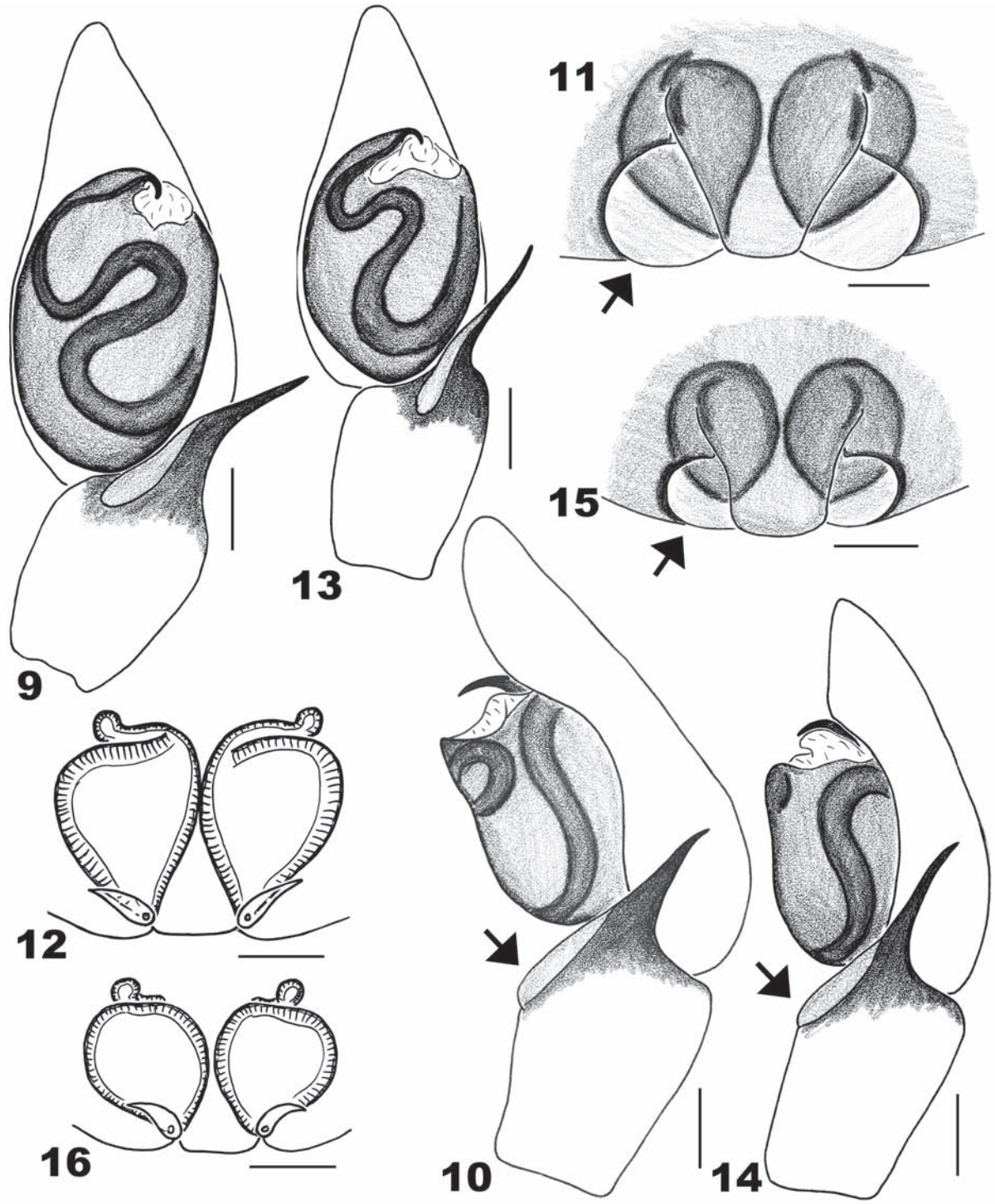
Thanatus sepiacolor Levy, 1999

Material. UNITED ARAB EMIRATES: 2 males (SZMN), Sharjah Desert Park (25.17°N, 55.42°E), pitfall trap, 01–30 November 2008, AvH; 1 male (ZMUM), same locality, pitfall trap, 30 January – 03 March 2009, AvH; 4 males (MHNG), same locality, pitfall trap, 20 January – 17 February 2008, AvH; 1 male (MHNG), Wadi Bih dam, light trap, 13–30 April 2008, AvH; 1 male (ZMUM), same locality, yellow water trap, 01–19 January 2010, AvH; 1 male (MHNG), Wadi Shawkah, yellow water trap, 15 March – 09 April 2007, AvH.

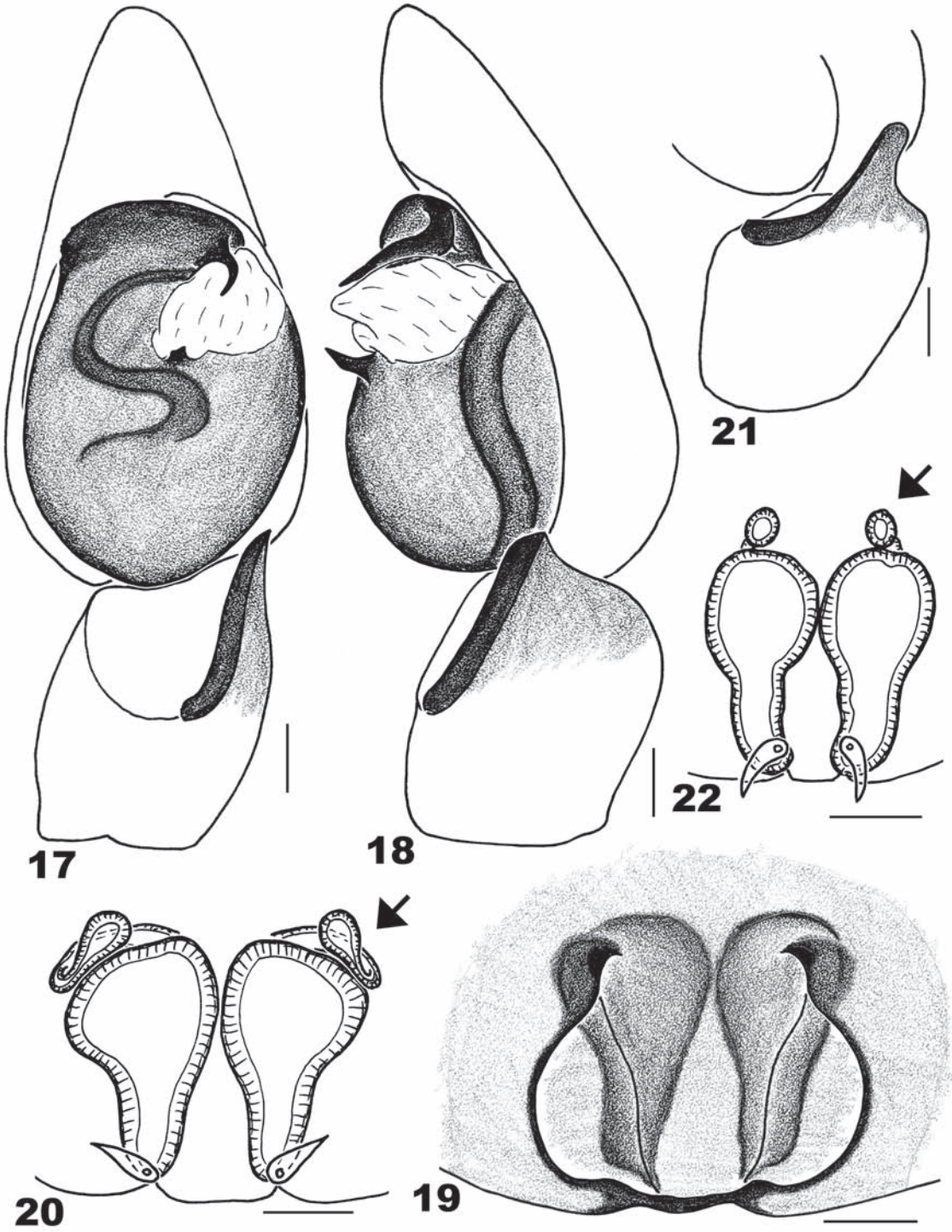
Comments. To date, this species has only been known from southern Israel (Levy 1999). The finding in the UAE is the first record of *T. sepiacolor* after its original description.

Thanatus setigerus (O. Pickard-Cambridge, 1872)
(Figs. 17–20)

Material. UNITED ARAB EMIRATES: 18 males, 5 females (ZMUM; Figs. 11–14), Wadi Shawkah, yellow water trap, 05 May – 24 June 2007, AvH; 1 female (MHNG), Sharjah Desert Park (25.17°N, 55.42°E), light trap, 30 April – 25 May 2008, AvH; 1 female (SZMN), same locality, light trap, 25 May – 16 June 2008, AvH; 1 male (MHNG), same locality, light trap, 02 March – 01 April 2007, AvH; 1 male, 1 female (SZMN), same locality, light trap, 25 May – 15 July 2008, AvH; 1 male (MHNG), same locality, light trap, 30 April – 21 May 2007, AvH; 4 males (MHNG), Wadi Maidaq (25.18°N, 56.07°E), yellow water trap, 24 September – 22 October 2006, AvH; 4 males, 4 females (SZMN), Al-Ajban, Malaise trap, 25 July – 09 September 2006, AvH; 1 female (MHNG), same locality, Malaise trap, 01 April – 02 May 2006, AvH; 1 female subadult (MHNG), NARC, near Sweihan (24.24°N, 55.26°E), light trap, 16 November – 21 December 2005, AvH; 1 male, 1 female subadult (MHNG), same locality, light trap, 26



Figs. 9–16. *Thanatus lesserti* (Roewer, 1951) from Iran, Tehran (9–12) and the UAE, Wadi Maidaq (male, 13–14) and Wadi Wurayah (female, 15–16): 9, 13 – male palp, ventral view; 10, 14 – ditto, retrolateral view; 11, 15 – epigyne, ventral view; 12, 16 – spermathecae, dorsal view. Scale bars = 0.1 mm.



Figs. 17–22. *Thanatus setigerus* (O. Pickard-Cambridge, 1872) from the UAE, Wadi Shawkah (17–20) and *Thanatus vulgaris* Simon, 1870 from Iran, Ghara-Aghatch River (male, 21) and Aroo Vil. (female, 22): 17 – male palp, ventral view; 18 – ditto, retrolateral view; 19 – epigyne, ventral view; 20, 22 – spermathecae, dorsal view; 21 – dorsal tibial apophysis, retrolateral view. Scale bars = 0.1 mm.

February – 02 April 2006, AvH; 1 male (MHNG), Fujairah (25.08°N, 56.21°E), light trap, 15–22 April 2006, AvH; 2 males (MHNG), Wadi Maidaq (25.18°N, 56.07°E), light trap, 01–08 July 2006, AvH; 1 male, 1 female (MHNG), Wadi Bih dam, yellow water trap, 16–31 December 2009, AvH; 1 female (MHNG), same locality, light trap, 09–26 June 2008, AvH; 3 males (MHNG), same locality, yellow water trap, 01–19 January 2010, AvH; 2 males (MHNG), same locality, Malaise trap, 19 February – 08 March 2009, AvH; 2 males, 1 female (MHNG), same locality, yellow water trap, 01–11 February 2010, AvH; 2 males (MHNG), no exact locality [12831 UAE]; 1 female (MHNG), no exact locality [12805 UAE]; 1 female (MHNG), no exact locality [12725 UAE]; 1 male (MHNG), N of Ajman (25.26°N, 55.29°E), yellow water trap, 25 May – 30 June 2009, AvH; 2 females (MHNG), Wadi Bih dam/Wadi Shawkah, light and yellow water traps, 19 February – 29 March 2007/05 May – 24 June 2007, AvH; 1 male (MHNG), Wadi Wurayah farm, Malaise trap, 13 January – 02 March 2009, AvH; 1 male (MHNG), Wadi Shawkah, yellow water trap, 02–18 February 2009, AvH; 1 male (MHNG), Wadi Maidaq, yellow water trap, 27 April – 14 May 2009, AvH; 1 male (MHNG), al-Rafah, pitfall trap, 01–11 February 2010, AvH; 1 female (MHNG), al-Ain, hand collecting, 15 October 2009, AvH.

Comparative material on *Thanatus vulgaris* Simon, 1870 (Figs. 21–22): IRAN: 1 male, 2 females (SZMN; Fig. 16), Tehran Prov., c. 80 km E of Tehran, Damavand area, Aroo Vil. (35°40′N, 52°27′E), 15 May 2000, Yu.M. Marusik & F. Mozaffarian; 2 males, 1 female (ZMUM), Fars Prov., c. 40 km SEE of Shiraz, Barm-e-shoor Ck on Maharloo Lake (29°29′N, 52°42′E), 23–28 May 2000, Yu.M. Marusik; 3 females (ZMUM), Fars Prov., c. 40 km NE of Shiraz, 0–2 km E of Band-e-Amir Vil. (29°52′N, 52°47′E), 25 May 2000, Yu.M. Marusik; 1 male (SZMN; Fig. 15), Fars Prov., bridge on Ghara-Aghatch River (29°41′N, 52°13′E), 24 May 2000, Yu.M. Marusik.

Diagnosis. This species is most similar to the well-known Holarctic *T. vulgaris* (see Logunov 1996: figs. 195–197, 204–206), but can be easily distinguished from it by the shape of the ventral tibial apophysis (cf. Figs. 18 and 21) in males and by the anteriorly wider spermathecae and the course of the receptaculum ducts (arrowed in Figs. 20 and 22) in females. The epigynes of *T. setigerus* and *T. vulgaris* are similar and an examination of the spermathecae is the only reliable way to separate females of both species. The male of *T. setigerus* is described here for the first time.

Distribution. To date, *T. setigerus* has been recorded from Libya and Israel only (Levy 1977). The findings in the UAE lie in the southernmost limit of the known species range.

Description. MALE (from Wadi Shawkah). *Measurements.* Carapace 2.35 long, 2.15 wide. Ocular area: MOA-WA 0.29, MOA-WP 0.41, MOA-L 0.37. Eyes and interdistances: AME 0.09, ALE 0.09, PME 0.09, PLE 0.09, AME-AME 0.14, AME-ALE 0.08, PME-PME 0.26, PME-PLE 0.24. Abdomen 2.95 long, 1.75 wide. Chelicera length 0.83. Clypeus height 0.33. Length of leg segments: I 2.70 + 1.10 + 2.35 + 2.10 + 1.45 (9.70); leg II 3.25 + 1.25 + 3.05 + 3.05 + 1.70 (12.30); III 2.80 + 1.00 + 2.30 + 2.15 + 1.30 (9.55); IV 3.05 + 1.03 + 2.65 + 2.55 + 1.45 (10.73). *Leg spination* of leg I: Fm d, pr and rt 0-1-1-1; Pt pr 1-1, rt 1-0; Tb d 0-1, pr 1-1-1, rt 1-1, v 2-2-2ap; Mt pr 1-1-0, v 2-2-0. *Coloration* typical for the genus *Thanatus.* Carapace yellow (sand-coloured), with two wide brownish lateral bands. Sternum, maxillae, labium and chelicerae yellow (sand-coloured). Abdomen: dorsum and sides sand-coloured, tinged with brown; dorsum with a wide brownish cardiac mark bordered with white line; venter yellow. Book-lung covers and spinnerets yellow. All legs yellow, covered with thin black hairs, and with a tiny speckle at the basis of each hair, giving an impression that the legs are gently speckled. Palps yellow. Male palp as in Figs. 17–18; embolar base wide and strong; embolus protruding ventrad; tegular apophysis short, directed ventrad; ventral tibial apophysis poorly developed, looking like a sclerotized ridge of the dorsal tibial apophysis.

FEMALE (from Wadi Shawkah). *Measurements.* Carapace 3.00 long, 2.80 wide. Ocular area: MOA-WA 0.41, MOA-WP 0.53, MOA-L 0.47. Eyes and interdistances: AME 0.11, ALE 0.11, PME 0.09, PLE 0.10, AME-AME 0.21, AME-ALE 0.11, PME-PME 0.36, PME-PLE 0.34. Abdomen 4.75 long, 3.45 wide. Chelicera length 1.15. Clypeus height 0.48. Length of leg segments: I 2.90 + 1.30 + 2.30 + 1.90 + 1.40 (9.80); leg II 3.50 + 1.55 + 2.85 + 2.35 + 1.50 (11.75); III 2.90 + 1.25 + 2.30 + 1.90 + 1.25 (9.60); IV 3.25 + 1.25 + 2.70 + 2.40 + 1.35 (10.95). *Leg spination* of leg I: Fm d 0-1-1, pr and rt 0-1-1-1; Tb d 0-1, pr and rt 1-1-1, v 2-2-2ap; Mt pr and rt 1-0-0, v 2-2-0. *Coloration* as in the male. Epigyne and spermathecae as in Figs. 19–20; epigyne wide, with a well-developed central depression; spermathecae pear-shaped, widened anteriorly; each receptaculum duct makes a lateral loop.

DISCUSSION

The current state of knowledge of Philodromidae of the UAE (10 species; present data), as well as that of Arabian Peninsula, can hardly be considered satisfactory. For instance, philodromid faunas of the some smaller neighbouring territories of the Middle East, Minor Asia or the Caucasus consist of 2–4 times the number of species: viz., Israel – 20 species (Levy 1977, 1991, 1999); Iran – 21 species (Logunov et al. 2006; present data); Turkey – 38 species (Logunov and Kunt 2010; Uyar et al. 2010); or Azerbaijan – 22 species (Logunov and Huseynov 2008).

To date, only two *Philodromus* species have been recorded from the UAE (and from Arabian Peninsula), both belonging to the *histrio* species group (*sensu* Szita and Logunov 2008), which according to Muster (2009b) is to be considered a separated genus *Rhyzodromus* Schick, 1965. However, no representatives of the *pulchellus* species group of the 11 known species from the Mediterranean (Muster et al. 2007) or those of the *aureolus* species group of the 13 known species in the western Palaearctic Region (Muster and Thaler 2004) have been collected. Yet, no representatives of the genus *Artanes* Thorell, 1870 of the 14 known species from the Mediterranean and Minor Asia (Muster 2009a; Logunov and Kunt 2010; Muster and van Keer 2010), or those of *Tibellus* Simon, 1875, of which one or two species can be expected to occur in Arabian Peninsula, have been collected from the UAE. To my opinion, a very conservative estimate of the philodromid diversity of Arabian Peninsula could be at least 30 species.

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