Order Coleoptera, family Buprestidae

Further records of jewel beetles, with the description of a new species

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INTRODUCTION

The Buprestid fauna of the UAE was treated in Volume 4 of the 'Arthropod fauna of the UAE' by Bílý et al. (2011). Altogether 41 species of the family Buprestidae representing 5 subfamilies were recorded from this country, 10 of them were described as new species (Bílý & Baioccchi, 2009; Kalashian, 2011; Volkovitsh, 2011).
Recently (2009–2012) we have obtained further 474 specimens and interesting images for our further studies. We have recorded 5 further species new to the territory of the UAE which are treated in the present contribution. One new species is described: *Sphenoptera* (*Chrysoblemma*) *batelkai* Kalashian sp. nov. (mentioned as *Sphenoptera* (*Chrysoblemma*) sp. in the first paper on the Buprestidae of the UAE (Bílý et al., 2011)) which is illustrated and compared with the most closely related species.

MATERIALS AND METHODS

Most of the specimens examined were collected by Tony van Harten by means of water traps (exceptionally light traps) in the course of 2009–2011 and preserved in alcohol. Only a small part was collected by sweeping and individual collecting by other collectors. One species, *Julodis fimbfriata lacunos*a Fairmaire, 1882, was recorded only on the base of images from nature, without the documented specimens.
The following codes are used in the text: FBCR = F. Brechtel collection, Rülzheim, Germany; NMPC = National Museum, Praha, Czech Republic; VKCB = V. Kubáň collection, Brno, Czech Republic; ZIN = Zoological Institute, Russian Academy of Sciences, St. Petersburg, Russia.
Type and non-type specimens are deposited (if not stated otherwise) in NMPC.
If not stated otherwise, the colour photographs were taken by V. Kubáň.
Family-group names and genus-group names of the taxa are given in the systematic order following the most recent system of the family Buprestidae by Bellamy (2008, 2009). information on the distribution of the species was taken from Löbl & Smetana (2006), Bellamy (2008, 2009) and Bílý et al. (2011), if not stated otherwise.

SYSTEMATIC ACCOUNT

Subfamily **Julodinae** Lacordaire, 1857

Genus ***Julodis*** Eschscholtz, 1829

Julodis fimbriata lacunosa Fairmaire, 1882 Plates 1–3
Specimens examined: Green Mubazzarah, Wadi Nahyan, al-Ain, at the lower reaches of Jebel Hafit mountain, 24°05'46.37"N 55°45'03.03"E; more specimens observed and photographed by Huw Roberts. (See also http://www.pbase.com/wildlifeuae/image/137844064)

Plate 1: *Julodis fimbriata lacunosa* Fairmaire, UAE, near al-Ain (photograph by H. Roberts).

Remarks: The ornithologist Huw Roberts took superb images of *Julodis fimbriata lacunosa* in nature (Plates 1–3) in April, 21–28, 2010 and confirmed in this way the occurrence of this species in the UAE (see Bílý et al., 2011: 175–176). Unfortunately, no specimens were taken for the collection.

Plates 2: *Julodis fimbriata lacunosa* Fairmaire, UAE, near al-Ain (photograph by H. Roberts).

Host plant: Larval development is outside plant roots in the soil.
Distribution: Oman, northern Somalia, UAE. New species for the UAE.

Subfamily **Polycestinae** Lacordaire, 1857

Tribe **Acmaeoderini** Kerremans, 1893

Genus ***Acmaeodera*** Eschscholtz, 1829

Acmaeodera* (*Acmaeotethya*) *vanharteni Volkovitsh, 2011
Specimens examined: Jebel Hafit, 24°03'N 55°46'E, 3♂, 8♀, 21.x–16.xi.2009, water trap, leg. A. van Harten. Jebel Jibir, 25°39'N 56°07'E, 162♂, 185♀ (1♂ in ZIN), 6.iii–21.iv.2011, water trap, leg. A. van Harten; 2♂, 4♀, 9–16.v.2011, water trap, leg. A. van Harten. Wadi Maidaq, 25°18'N 56°07'E, 1♂, 2.iii–

Plate 3: *Julodis fimbriata lacunosa* Fairmaire, UAE, near al-Ain (photograph by H. Roberts).

6.vi.2006, light trap, leg. A. van Harten. Wadi Shawkah, 25°06'N 56°01'E, 2♂, 1–15.iii.2011, water trap, leg. A. van Harten. All det. M.G. Volkovitsh.
Host plant: *Acacia* spp. (Fabaceae) (Bílý et al., 2011).
Distribution: Oman, UAE.

Acmaeodera* (*Acmaeotethya*) *batelkai Volkovitsh, 2011
Specimens examined: Jebel Jibir, 25°39'N 56°07'E, 1♂, 1♀ (1♂ in ZIN), 6.iii–21.iv.2011, water trap, leg. A. van Harten, det. M.G. Volkovitsh.
Host plant: *Physorrhynchus chamaerapistrum* (Brassicaceae) (Bílý et al., 2011).
Distribution: UAE.

Genus ***Acmaeoderella*** Cobos, 1955

Acmaeoderella* (*Acmaeoderella*) *pseudonivetecta Volkovitsh, 2011
Specimen examined: Jebel Hafit, 24°03'N 55°46'E, 1♂, 21.x–16.xi.2009, water trap, leg. A. van Harten, det. M.G. Volkovitsh.
Host plant: *Zygophyllum* spp. (Zygophyllaceae) (Bílý et al., 2011).
Distribution: Southern Iran, Oman, UAE.

Acmaeoderella* (*Euacmaeoderella*) *ballioni (Ganglbauer, 1888)
Specimens examined: Jebel Hafit, 24°03'N 55°46'E, 1♂, 2♀, 21.x–16.xi.2009, water trap, leg. A. van Harten. Jebel Jibir, 25°39'N 56°07'E, 29♂, 34♀ (6♂ + 6♀ in ZIN), 6.iii–21.iv.2011, water trap, leg. A.

van Harten; 2♂, 9–16.v.2011, water trap, leg. A. van Harten. Sharjah, al-Wasit protected area, 25°21'57"N 55°27'41"E, 1♂, 2♀, 19.v–2.vi.2011, water trap, leg. A. van Harten. All det. M.G. Volkovitsh.
Host plant: Associated mainly with *Convolvulus* spp. (Convolvulaceae) (Bílý et al., 2011).
Distribution: Afghanistan, Iran, Kazakhstan, Tajikistan, Turkmenistan, UAE, Uzbekistan.

Acmaeoderella* (*Omphalothorax*) *argentea Volkovitsh, 2011
Specimens examined: Jebel Jibir, 25°39'N 56°07'E, 1♀, 6.iii–21.iv.2011, water trap, leg. A. van Harten; 1♂, 1♀ (1♂ in ZIN), 9–16.v.2011, water trap, leg. A. van Harten. Sharjah, al-Wasit protected area, 25°21'57"N 55°27'41"E, 1♀, 19.v–2.vi.2011, water trap, leg. A. van Harten. All det. M.G. Volkovitsh.
Host plant: ?*Acacia* (Fabaceae) (Bílý et al., 2011).
Distribution: Southern Iran, Oman, UAE.

Acmaeoderella* (*Omphalothorax*) *longissima longissima (Abeille de Perrin, 1904) Plate 4
Specimen examined: Jebel Jibir, 25°39'N 56°07'E, 1♂, 6.iii–21.iv.2011, water trap, leg. A. van Harten, det. M.G. Volkovitsh. Additional specimen examined: JORDAN: Southern Jordan, Ma´an (50 km SE of), 29°50´N 35°58´E, 1025 m, 1♀, 27.v.2008, leg. J. Dudař, det. V. Kubáň. SYRIA: Northwestern Syria, Masyaf env. (40 km SWW of Hamáh), 1♂, 9.vi.2000, leg. K. Deneš jun., det. V. Kubáň.
Remark: Krajcik (2012) separated specimens from Cyprus as a new subspecies, *A. longissima cypraea*.
Host plant: Unknown.
Distribution: Greece, Iran, Iraq, Israel, Jordan, Syria, Turkey, UAE. New species for the UAE, Jordan and Syria.

Subfamily **Chrysochroinae** Laporte, 1835

Tribe **Sphenopterini** Lacordaire, 1857

Genus ***Sphenoptera*** Dejean, 1833

Sphenoptera* (*Chrysoblemma*) *batelkai Kalashian **sp. nov.** Plate 5, Figure 1
Sphenoptera (*Chrysoblemma*) cf. *artemisiae* Reitter, 1889: Bílý et al., 2011: 199, Pl. 49.
Specimen examined: Holotype: ♀, United Arab Emirates, Wadi Wurayah, 25°23'N 56°16'E, 210m, 25.iii.2007, J. Batelka leg.
Description: Body (Plate 7) elongate, 2.9 times as long as wide, strongly convex, reddish-cupreous with very slight green reflection, elytra darker, bronze with red reflection. Surface lustrous, not shagreened. Body dorsally nearly completely asetose, only frons with few short white setae anteriorly and laterally, ventral surface with rather dense white setae, laterally with traces of wax cover. Body length 10.5 mm, width 3.6 mm.
Head large, scarcely narrower than anterior margin of pronotum, eyes large, convex, slightly projecting beyond outline of head. Vertex about 2.25 times as wide as transverse diameter of eye. Frons with sides slightly diverging posteriorly, nearly regularly, moderately convex with pair of very weakly pronounced, oval reliefs medially, with distinct supraantennal keels laterally smoothed, not reaching inner margins of eyes. Clypeus short, narrowly semicircular. Frons with rather coarse and dense macropunctures, becoming slightly smaller and sparser posteriorly. Micropunctures moderately dense, indistinct. Antennae serrate from antennomere 4, 2.0 times as long as height of eye, antennomere 3 long, slightly enlarged distally, antennomere 4 prolonged, following antennomeres nearly equilateral.
Pronotum 1.35 times as wide as long, maximum width near posterior angles, sides nearly regularly, slightly arcuately diverging posteriorly, very weakly emarginate before posterior

Plates 4–5. 4: *Acmaeoderella* (*Omphalothorax*) *longissima longissima* (Abeille de Perrin), ♀, 7.2 mm, UAE, Jebel Jibir; 5: *Sphenoptera* (*Chrysoblemma*) *batelkai* Kalashian sp. nov. , holotype ♀, 10.5 mm, UAE, Wadi Wurayah.

angles. Anterior margin slightly biarcuate, bordered with medially widely interrupted, thin sulcus. Posterior margin biarcuate, median projection of moderate width, with almost truncate apex. Lateral carinae slightly S-shaped, anteriorly reaching nearly anterior 2/5 of pronotum, from above visible up to approximately posterior 1/4 of pronotum. Pronotum moderately, nearly regularly convex. Macropunctures on disk rather large and moderately dense, becoming slightly smaller and sparser medially, laterally fused into long sinuous, irregular, longitudinal rugae. Micropunctures moderately dense, denser and more distinct than those on frons. Scutellum transversely pentagonal, flattened with few indistinct micropuntures and small, sparse, very shallow macropunctures.

Elytra 1.95 times as long as wide, humeral portion slightly wider than pronotum, sides weakly sinuately very slightly converging in basal 3/5, then more steeply, slightly arcuately converging to tridentate apices, with lateral and sutural teeth sharp and narrow and medial tooth rather wide, irregularly sharp-angled. Interstries nearly flat, odd interstries posteriorly rather convex, 9th interstria in posterior half nearly costate. Striae consisting of short hyphen-like punctures, laterally situated inside rounded punctures, each interstria with irregular single row of small macropunctures. Micropunctures less distinct than those on pronotum but slightly more distinct than those on frons.

Prosternal process slightly convex, laterally margined by rows of deep punctures partially fused, medially with few large irregular punctures; lateral portions of sternum and

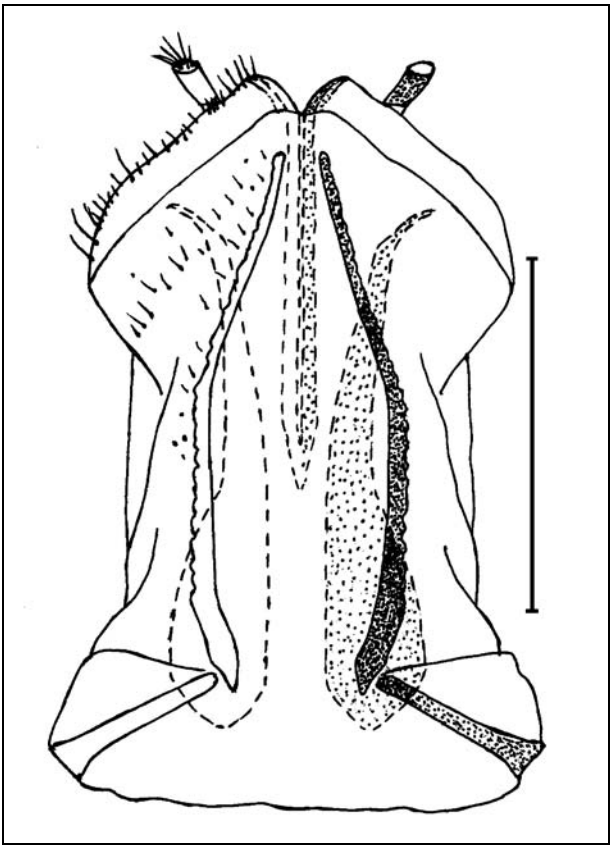


Figure 1: *Sphenoptera batelkai* Kalashian sp. nov., holotype, ovipositor. Scale bar = 1 mm. (Illustration by M. Kalashian)

1st abdominal ventrite with thin oblique rugae bearing punctures of moderate size, remaining part of ventral surface with rather dense and rough punctures slightly smoothed and sparser posteriorly. Anal ventrite slightly irregularly arcuate distally. Protibiae very slightly curved, meso- and metatibiae nearly straight with slightly sinuous inner margin. Ovipositor as in Figure 1.

Male unknown.

Differential diagnosis: *Sphenoptera batelkai* sp. nov. is similar and probably related to *S. artemisiae* Reitter, 1889, from western Asia and *S. staneki* Obenberger, 1952, from Turkey. Both species differ from *S. batelkai* sp. nov. by indistinct supraantennal keels, by denser and less regular macropuncturation of frons and pronotum; lateral rugae of pronotum in *S. artemisiae* coarser than in the new species and in *S. staneki* divided into rather short irregular fragments. Elytra in *S. artemisiae* and *S. staneki* with flat interstries not convexed posteriorly, and with denser interstrial macropuncturation. Ovipositor in *S. artemisiae* and *S. staneki* long and narrow with narrow sclerotized hemisternites.

Host plant: Unknown.

Distribution: UAE.

Etymology: The new species is dedicated to the collector, Jan Batelka (Prague, Czech Republic).

Sphenoptera* (*Hoplistura*) *gnezdilovi Kalashian, 2011 Plates 6–7
Specimen examined: Sameih, 24°43'40''N 54°49'33''E, 1♀, 19.x.2012, 10 m, leg. R. Breithaupt, det. M. Yu. Kalashian.
Host plant: Unknown.
Distribution: UAE.

Sphenoptera* (*Hoplistura*) *khartoumensis Obenberger, 1927 Plate 8
Specimen examined: Wadi Hayl, 25°08'N 56°21'E, 1♀, 11–19.iii.2009, leg. C. Schmid-Egger, det. M. Yu. Kalashian and V. Kubáň.
Additional specimens examined (not from the UAE): Southwestern YEMEN: Dhawran (20 km NW of), 14°40'N 44°13'E, 1794 m, 1♂, 29.x.2005, leg. P. Kabátek. Manakhah (12 km NW of), 15°10'N 43°49'20''E, 1190 m, 1♀, 4.viii–15.ix.2003, Malaise trap. leg. A. van Harten, det. M. Yu. Kalashian and V. Kubáň.
Host plant: *Gossypium* sp. (Malvaceae), cotton pest (Obenberger, 1927; Descarpentries & Bruneau de Miré, 1963), adults also on *Hibiscus micranthus* (Malvaceae) (Descarpentries & Bruneau de Miré, 1963).
Distribution: Chad, Egypt, Sudan, UAE, Yemen. New species for the UAE and Yemen.

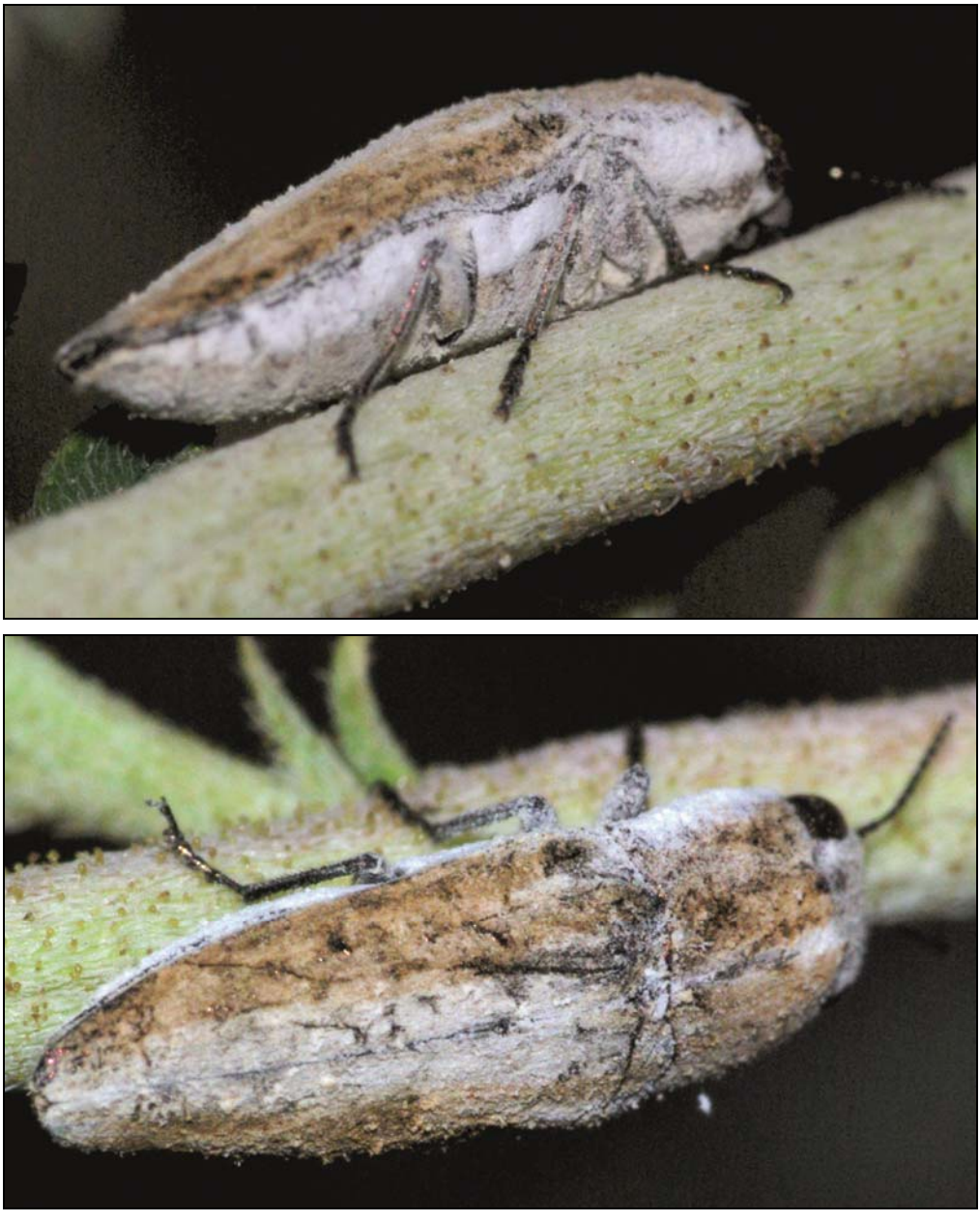
Subfamily **Buprestinae** Leach, 1815

Tribe **Anthaxiini** Gory & Laporte, 1938

Genus ***Anthaxia*** Eschscholtz, 1829

Anthaxia* (*Haplanthaxia*) *abdita Bílý, 1982
Specimen examined: Jebel Hafit, 24°03'N 55°46'E, 1♂, 21.x–16.xi.2009, water trap, leg. A. van Harten; 4♂, 2♀, 27.ii–3.iii.2011, water trap, leg. A. van Harten.
Host plant: *Acacia*, *Prosopis farcta* (Fabaceae), *Ficus carica* (Moraceae) (Halperin & Argaman, 2000; Volkovitsh, 2004).
Distribution: Israel, Jordan, Oman, Saudi Arabia, Sinai, UAE, Yemen.

Anthaxia* (*Haplanthaxia*) *kneuckeri kneuckeri Obenberger, 1920 Plate 9
Specimen examined: Jebel Hafit, 24°03'N 55°46'E, 1♀, 21.x–16.xi.2009, water trap, leg. A. van Harten.
Additional specimens examined (not from the UAE): EGYPT: "Aegypt", 1♀. Northern Egypt, Suez env., 1♀, 16.vi.1961, leg. R. Linnavuori. Southeastern Egypt, Abu Gusun, 2♂, 1♀, 24°25'40''N 35°08'40''E, 60 m, 8.ii.2005, leg. D. Baiocchi. South Sinai, Sharm el Sheik (70 km N of), 1♂, 14.iv.2008, on *Acacia* sp., leg. F. Brechtel; 1♂, the same but ex larva, v–viii.2010. ISRAEL: Wadi Fukra, 1♂, 3.vii.1942, leg. H. Bytinski-Salz. JORDAN: Northern Jordan, Zubia, NW of Irbid, 1♂, 2♀, 30.v.2008, leg. S. Kadlec. Southern Jordan, Al Aqabah (5 km S of), 29°24'N 34°59'E, 1♂, 3.iv.1994, leg. S. Bečvář sen. & jun. Al Aqabah (16 km NE of), 1♂,19.iii.1998, ex larva, *Acacia* sp., 16.vii.1998, leg. D. Baiocchi. Al Aqabah (35 km N of), S of Rahma, 29°50'N 35°06'E, 71 m, 1♂, 22–23.v.2008, leg. S. Kadlec. Al Aqabah (126 km N of), Wadi Araba, 100 m, 1♂, 21.iii.1998, ex larva, *Acacia* sp., 29.ix.1998, leg. D. Baiocchi. Ma'an (50 km SE of), 29°59'N 35°56'E, 1100 m, 3♂, 1♀, ex larvae, *Acacia* sp., vii–x.1994, leg. S. Bečvář sen. & jun. Ma'an (50 km SE of), 29°50'N 35°58'E, 1025 m, 1♂, 3♀, 27.v.2008, leg. S. Kadlec. OMAN: Muskat, Madinat Qabooz, 23°36'N 58°26'E, 1♂, 2.iv.1985, leg. C. Holzschuh. Northern SUDAN: Ambikol (W of Korti), 1♂, 1♀. Central YEMEN: Kushun al Ain (50



Plates 6–7: *Sphenoptera* (*Hoplistura*) *gnezdilovi* Kalashian, UAE, Sameih (photograph by R. Breithaupt).

km SE of Hisn al Abr), 15°52'N 47°40'E, 745 m, 2♂, 1♀, ex larvae, 5.iv.2007, leg. S. Kadlec; the same but 1♀, *Acacia* sp., leg. P. Kabátek; the same but 1♀, 9.x.2005, *Acacia* sp., leg. P. Kabátek.
Host plant: *Acacia tortilis* (Fabaceae) (Obenberger, 1920; Alfieri, 1976); *Acacia* spp. (Fabaceae) (see also Halperin & Argaman, 2000).

Plates 8–10. 8: *Sphenoptera* (*Hoplistura*) *khartoumensis* Obenberger, ♀, 8.1 mm, UAE, Wadi Hayl; 9: *Anthaxia* (*Haplanthaxia*) *kneuckeri kneuckeri* Obenberger, ♀, 4.7 mm, UAE, Jebel Hafit; 10: *Meliboeus* (*Meliboeus*) *margotanus* (Novak), ♀, 5.9 mm, UAE, Jebel Jibir.

Distribution: Egypt (Alfieri, 1976), Israel, Jordan, Oman, Saudi Arabia, Sinai, Sudan, UAE, Yemen. New species for the UAE, Sudan and Yemen.

Subfamily **Agrilinae** Laporte, 1835

Tribe **Coraebini** Bedel, 1921

Genus ***Meliboeus*** Deyrolle, 1864

Meliboeus* (*Meliboeus*) *margotanus (Novak, 2010) **comb. nov.** Plate 10

Kamosia margotana Novak, 2010: 111. Type locality: Oman, Dhofar province, Taqah env., 20 m.

Specimen examined: Jebel Jibir, 25°39'N 56°07'E, 1200 m, 1♀, 6.iii–21.iv.2011, water trap, leg. A. van Harten.

Additional specimens examined (not from the UAE): Southern IRAN: Sistan and Baluchestan Province, Tis – Chabahar, ~25°19'43''N 60°37'21''E, 50 m, 6–8.iv.1973, 1♂, 3♀ (in VKCB), leg. Saf & Broum. Southern PAKISTAN: Baluchistan Province, Khuzdar District, Awaran, ~25°45'N 67°44'E, 200 m, 1♀ (in VKCB), 4–7.iv.1993, leg. S. Bečvář. Sind Province, Karachi, 1♂, 20.iv.1979, leg. E. Kwietoň. Karchat, Kirthar National Park, 1♂ (in VKCB), 25.ii–4.iii.1995, leg. D. Hauck & L. Čížek. OMAN: Northern Oman, Batinah Province, Wadi Al Ajal, Al Ajal vill. env., 23°31'N 57°55'E [GPS], 138 m, 5♂, 6♀, 6.vi.2012, on flowering *Echinops* sp., leg. A. Reiter. Southern Oman, Dhofar Province, Al Mughsayl env., ~16°54'N 53°49'E, 0–100 m, 1♂, 5♀ (in VKCB), viii.1999, leg. S. Jákl & R. Červenka; the same but 20 m, 3♀, leg. S. Jákl. Al Mughsayl (5–10 km SW of), ~16°53'N 53°44'E, 150–280 m, 2♂, 5♀ (in VKCB), 8–9.viii.1999, leg. R. Červenka. Southwestern YEMEN: Abyan Governorate, Zinjibar (10 km SW of), 13°03'N 45°20'E, 1♀ (in VKCB), 2 ex. (in FBCR), 22–22.v.1998, *Acacia* forest, leg. F. Brechtel, C. Wurst & R. Ehrmann.

Host plant: Unknown. Adults on flowering *Echinops* sp. (Asteraceae).
Remark: Novak (2010) described this species erroneously in the genus *Kamosia* Kerremans, 1898. *M. margotanus* is the typical representative of the genus *Meliboeus* Deyrolle, 1864, from the *M. notatus* (Thunberg, 1789) circle from the Ethiopian Region. It represents the distinct transmission to the Oriental species *M. aurofasciatus* (Saunders, 1866) and *M. cupreosplendens* (Saunders, 1866).
Distribution: Oman (Batinah, Dhofar), southeastern Iran (Sistan va Baluchestan), southern Pakistan (Baluchistan, Sind), UAE, southwestern Yemen (Abyan). New species for the UAE, Iran, Pakistan and Yemen.

Tribe **Agrilini** Laporte, 1835

Genus ***Agrilus*** Curtis, 1825

Agrilus* (*Agrilus*) *yemenita Curletti & van Harten, 2002
Specimen examined: Hatta, 24°49'N 56°07'E, 1♂, 25.ii–10.v.2006, light trap leg., A. van Harten, det. V. Kubáň.
Host plant: Most probably *Acacia* (Fabaceae) (Curletti & van Harten, 2002).
Distribution: UAE, Yemen.

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