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 & Baiocchi, 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 fimbriata lacunosa* 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 & Šmetana (2006), Bellamy (2008, 2009) and Bílý et al. (2011), if not stated otherwise.

SYSTEMATIC ACCOUNT

Subfamily *Julodinae* Lacordaire, 1857

Genus *Julodis* Eschschtoltz, 1829

*Julodis fimbriata lacunosa* Fairmaire, 1882

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)
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 **Polycéstinae** Lacordaire, 1857

Tribe **Acmaeoderini** Kerremans, 1893

Genus **Acmaeodera** Eschscholtz, 1829

**Acmaeodera (Acmaetethya) vanharteni** Volkovitsh, 2011
Plate 3: *Julodis fimbriata lacunosa* Fairmaire, UAE, near al-Ain (photograph by H. Roberts).


*Acmaeodera* (*Acmaeotethya*) *batelkai* Volkovitsh, 2011

Genus *Acmaeoderella* Cobos, 1955

*Acmaeoderella* (*Acmaeoderella*) *pseudonivecta* Volkovitsh, 2011

*Acmaeoderella* (*Euacmaeoderella*) *ballioni* (Ganglbauer, 1888)

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


Host plant: ? *Acacia* (Fabaceae) (Bílý et al., 2011).

Distribution: Southern Iran, Oman, UAE.

**Acmaeoderella (Omphalothorax) longissima longissima** (Abeille de Perrin, 1904) Plate 4


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

1\textsuperscript{st} 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


Host plant: Unknown.

Distribution: UAE.

*Sphenoptera (Hoplistura) khartoumensis* Obenberger, 1927


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


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


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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) kneukeri kneukeri** 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


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


Host plant: Most probably *Acacia* (Fabaceae) (Curletti & van Harten, 2002).

Distribution: UAE, Yemen.

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