Order Coleoptera, Family Buprestidae

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INTRODUCTION

In surveying the Buprestid fauna of the UAE, altogether 41 species of the family Buprestidae are recorded from this country, 20 of which are new records. All species are illustrated and 10 new species are described and compared with their most closely related species: *Acmaeodera* (*Acmaeotethya*) *vanharteni* Volkovitsh nov. spec., *A.* (*A.*) *batelkai* Volkovitsh nov. spec., *A.* (*Cobosiella*) *holynskii* Volkovitsh nov. spec., *Xantheremia* (*Xantheremia*) *prepsli* Volkovitsh nov. spec., *Acmaeoderella* (*Omphalothorax*) *argentea* Volkovitsh nov. spec., *A.* (*Acmaeoderella*) *pseudonivetecta* Volkovitsh nov. spec., *Sphenoptera* (*Tropeopeltis*) *vanharteni* Kalashian nov. spec., *S.* (*Hoplistura*) *gnezdilovi* Kalashian nov. spec., *S.* (*Chrysoblemma*) *mirabilis* Kalashian nov. spec. and *S.* (*Deudora*) *schmideggeri* Kalashian nov. spec.

The beetle family Buprestidae (jewel beetles) comprises about 15000 species and has a world-wide distribution (Bellamy, 2008). Most of the species are distributed in the humid tropics and semidesert areas of the planet. They are usually xylophagous species developing under the bark or in the sapwood of trees and shrubs, but a large number of species (tribe Trachyini) are leaf-miners developing in the leaf parenchyme of various plants including grasses and ferns. A small part of species (subfamily Julodinae) develops in the soil and their larvae feed on roots of grasses and shrubs.

The following papers on the Buprestid fauna have been published from the countries of the Arabian Peninsula and adjacent countries: SAUDI ARABIA (Blair, 1931 [southern part: great desert Rub'al Khali]; Shalaby, 1961; Beccari, 1971; Bílý, 1979, 1980, 1982, 1985, 1990; Walker & Pittaway, 1987); OMAN (Janikova, [no date]); YEMEN (Curletti & van Harten, 2002, 2004; Bílý et al., 2003; Brechtel, 1998, 2000); and of the adjacent areas: IRAQ [and former Mesopotamia] (Holdhaus, 1920; Knopf, 1971; Cobos, 1972); SINAI, ISRAEL, JORDAN, PALESTINE (Sahlberg, 1913; Andres, 1920; Obenberger, 1946; Katbeh-Bader, 1996; Niehuis, 1989, 1996; Chikatunov et al., 1999; Volkovitsh et al., 2000; Halperin & Argaman, 2000; Chikatunov, 2003; Volkovitsh, 2004); LEBANON, SYRIA (Niehuis, 1989; Levey, 2006); IRAN (Théry, 1925a,b; Salavatian, 1950; Mandl & Pochon, 1957; Adeli, 1972; Radjabi, 1974; Bílý, 1983; Abai, 1984; Modarres Awal, 1997; Borumand, 2002); EGYPT (Walker, 1871; Kerremans, 1908; Théry, 1929b, 1930b, 1935, 1936a, 1938; Lotte, 1943; Alfieri, 1976; Fadl et al., 1991, 1992a,b); SUDAN (Théry, 1910; Bílý, 1971, 1973); ERITREA (Gestro, 1889; Kerremans, 1907a; Obenberger, 1939); DJIBOUTI [and former Obock] (Fairmaire, 1892; Abeille de Perrin, 1907) and SOMALIA (Kerremans, 1896, 1909).

The Buprestid fauna of the UAE is, however, little known. There are only three papers dealing with jewel beetles of the UAE: Gillett & Gillett (2005) recorded 18 species, Howarth & Gillett (2008) recorded 19 species and Howarth & Gillett (2009) recorded 22 species. Gillett & Gillett (2005) and Howarth & Gillett (2008, 2009) recorded 4 species of the genus *Julodis* Eschscholtz, 1829, for the territory of the UAE without specification of subspecies and without concrete faunistic data. Their lists were evidently based on the incorrect determinations of some specimens and a simple acceptance of these data is not advisable. The genus *Julodis* has not been revised since 1934 (Obenberger, 1934b); only Kubáň (2006) and

Kubáň & Volkovitsh (2006) published the modern catalogue with comments on the Palaearctic species. Species of the genus *Julodis* from the central Sahara, Sahel and from the Arabian Peninsula have not yet been comprehensively treated. The distribution of these species (namely *J. cailliaudi* (Latreille, 1827) and *J. fimbriata* (Klug, 1829)) in Bellamy (2008) is incomplete and partly incorrect. In the present paper the distribution of all taxa of the genus *Julodis* recorded by Gillett & Gillett (2005) and Howarth & Gillett (2008, 2009) is presented by V. Kubáň in the scope of their complex distribution. Based on the specimens studied and on the data from the literature all mentioned species of the genus *Julodis* are treated on the subspecific level with updated distribution and with their actual or supposed distribution in the UAE, so in some cases it was neccessary to add a short taxonomic paragraph (catalogue) under the headline of certain species.
Due to the analogous situation with taxa recorded by Gillett & Gillett (2005) and Howarth & Gillett (2008, 2009), it was also neccessary to solve problems and comment upon them in the tribe Acmaeoderini (M.G. Volkovitsh), Polycestini (V. Kubáň and M.G. Volkovitsh) and in the genus *Lampetis* Dejean, 1833 (V. Kubáň). A modern taxonomic study of the genus *Lampetis* has not been published, so all species recorded by Gillett & Gillett (2005) and Howarth & Gillett (2008, 2009) for the UAE are treated in the present study accordingly to the catalogues of Kubáň (2006) and Bellamy (2008), together with all accessible information on their distribution.
The genus *Trachys* Fabricius, 1801 is treated (V. Kubáň) according to the Obenberger's collection (NMPC), original descriptions and photogallery of the types deposited in BMNH, HNHM, MNHN, NHMB, NMPC, ZIN (gathered in the electronic form in NMPC and in the files of E. Jendek, Canadian Food Inspection Agency, Ottawa). Also, all other taxa recorded from the UAE were treated in the same way.
If not stated otherwise, the distribution of the treated species follows that given by Kubáň et al. (2006), Löbl & Smetana (2007) and Bellamy (2008, 2009).

MATERIALS AND METHODS

Most of the specimens examined was collected by A. van Harten by means of light traps, water traps and Malaise traps in the course of the last decade and preserved in alcohol. Only a small part was collected by sweeping and individual collecting by other collectors. Small specimens were mounted on cards together with extracted genitalia, large specimens were pinned. Macroslides of genitalia (Acmaeoderini) are kept separately from the beetles in the ZIN collection. If not stated otherwise the colour images were taken by V. Kubáň.
Family-group names of the taxa are given in the systematic order following the most recent system of the family Buprestidae by Bellamy (2003, 2008, 2009). Genus-group names of the taxa in Acmaeoderini (by M.G. Volkovitsh) and Spenopterini (by M.Yu. Kalashian) are given in the systematic order.
Information in ["brackets"] following the type locality indicates the original spelling differs from the present accepted spelling.
The deposition of the type specimens (holotypes and paratypes) is mentioned in the descriptions of the relevant new species, non-type specimens are deposited (if not stated otherwise) in NMPC, UAEIC and ZIN.
The following codens are used in the text: BMNH = The Natural History Museum, London, United Kingdom; DBCR = D. Baiocchi collection, Rome, Italy; EACA = Environment Agency collection, Abu Dhabi, UAE; CCIT = G. Curletti collection, Carmagnola, Italy; GMCC = G. Magnani collection, Cesena, Italy; GNCW = G. Novak collection, Wien, Austria; HMCM = H. Mühle collection, Münich, Germany; HNHM = Hungarian Natural

History Museum, Budapest, Hungary; JBCP = J. Batelka collection, Praha, Czech Republic; MGCR = M. Gigli collection, Rome, Italy; MJCP = M. Johanides collection, Praha, Czech Republic; MKCY = M. Kalashian collection, Yerevan, Armenia; MMUE = Manchester Museum, University of Manchester, Manchester, United Kingdom; MNCA = M. Niehuis collection, Albersweiler, Germany; MNHN = Muséum national d'Histoire Naturelle, Paris, France; MNMS = Museo Nacional de Ciencias Naturales, Madrid, Spain; MSCB = M. Snížek collection, České Budějovice, Czech Republic; MSCZ = M. Škorpík collection, Znojmo, Czech Republic; MSNM = Museo Civico di Storia Naturale di Milano, Italy; MZHF = Zoological Museum, University of Helsinki, Helsinki, Finland; NMPC = National Museum, Praha, Czech Republic; PKCP = P. Kabátek collection, Praha, Czech Republic; RHCM = R. Hołyński collection, Milanowek, Poland; SECB = C. Schmid-Egger collection, Berlin, Germany; SPCV = S. Prepsl collection, Vyškov, Czech Republic; TCMC = T. MacRae collection, Chesterfield, U.S.A.; VKCB = V. Kubáň collection, Brno, Czech Republic; UAEIC = UAE Invertebrate Collection, UAE; VKCZ = V. Kabourek collection, Zlín, Czech Republic; ZIN = Zoological Institute, Russian Academy of Sciences, St. Petersburg, Russia; ZMHB = Museum für Naturkunde, Berlin, Germany.

SYSTEMATIC ACCOUNT

In the following list all 41 species representing 5 subfamilies known from the territory of the UAE are recorded, including all data available for each species. In addition, all records of the previous authors are commented upon.

Subfamily **Julodinae** Lacordaire, 1857

Genus ***Julodis*** Eschscholtz,1829

Julodis cailliaudi cailliaudi (Latreille, 1827) Plate 1

Buprestis cailliaudi Latreille, 1827: 277. Type locality: Northern Sudan: Dongola ["Dongolah"].
Julodis aethiopica Laporte, 1835: 162. Type locality: Southern Egypt and northern Sudan: Nubia ["Nubie"]. Synonymy by Kerremans (1892).
Julodis cailliaudi var. *caynura* Kerremans, 1914: 244 (*caillaudi* [sic!]; available name, established as a subspecific name). Type locality: Northern Camerron or Northern Nigeria, Bornu Region ["Bornou"]. Synonymy by Théry (1930b).
Julodis obscura Bílý, 1971: 174, figs. 1, 2, 4. Type locality: Northeastern Sudan maritime: Port Sudan ["Sudan, Red Sea Coast, Port Sudan"]. Synonymy by Kubáň (2006).
Julodis cailliaudi cailliaudi: Kubáň & Volkovitsh, 2006: 327 (palaearctic catalogue; synonymy); Bellamy, 2008: 54 (*caillaudi* [sic!], world catalogue).
Specimens examined: ALGERIA: "Algerie 1881 C. Starck" (1 ex., ZIN). "Alzhir" (2 ex., ZIN in coll. V.N. Stepanov). Northern CAMEROON or northern NIGERIA: Mayo Kebbi and Bénoué rivers, 1904, Capt. Lenfant leg. (1 ex., MNHN). Borno Region: "Bornou" [see also Kerremans, 1907b], A. Schultze leg. (2 ♂, syntypes of *Julodis cailliaudi* var. *cyanura*, MNHN); "Bornou" (3 ex., NMPC); "Mupara (Bornu)", 9.i.1904 (1 ex., NMPC). CENTRAL AFRICAN REPUBLIC and northern DEMOCRATIC REPUBLIC OF THE CONGO: Ubangi river banks, 1912, I. Bonnaure leg. (2 ex., MNHN). EGYPT: "Aegypte" (1 ex., MNHN in coll. Oberthür). "Aegyptus" (6 ex., NMPC; 2 ex., ZIN). "Egypt sup[erior = upper]." (4 ex., NMPC). Luxor (1 ex., ZIN). Luxor–Thebes, A.N. Semenov leg. (2 ex., ZIN). ERITREA: "Erythrea", iii.1933, B. Machulka leg. (3 ex., NMPC). Asmara (1 ex., NMPC; 4 ex., ZIN in coll. V.N. Stepanov). Mai Aualid [N16°04′ E38°51′], 1871, O. Antinori leg. (1♂, MNHN in coll. Oberthür). ETHIOPIA: "Abyssinie Voy. 1881", A. Raffray leg. (1♂, MNHN in coll. Oberthür). Ghedid Cali, 201 km by railway to Addis Ababa, N10°16′20″ E42°10′20″, 710 m, Dr. Martin leg. ["Djibouti Dr. Martin, Ch. de fer du Harrar, Kilom. 201"] (1♀, NMPC). GAMBIA and SENEGAL: "Senegambia"

(1 ex., MNHN in coll. Oberthür). MALI: Hombori (2 km N), N15°17′49.96″ W01°41′55.15″, 290 m, 7.xii.2006, dead specimen, M. Škorpík leg. (1 ex., MSCZ). Tombouctou, G. Vuillet leg. (1 ex., MNHN in coll. Oberthür). NIGER: Aïr Mts., Massif de Tarouadji, 900 m, 8–12.ix.1947, L. Chopard & A. Villiers leg. (1♂, NMPC). Northern NIGERIA: Katsina, xii.1936, S. Škulina leg. (13 ex., NMPC). Lake Chad, S. Škulina leg. (1 ex., NMPC). SENEGAL: (2♂, 1♀, MNHN in coll. Oberthür; 1♂, ZIN). SUDAN: "Sudan" (1 ex., NMPC). "Sudan aegyp." (17 ex., NMPC); near Debeira, 6–13.x.1962, R. Linnavuori leg. (1♀, NMPC). Dongola (1 ex., MNHN in coll. Oberthür; 2 ex., NMPC; 1 ex., ZIN). Juba, iii.1980 (2 ex., VKCB; 2 ex., ZIN). Khartoum: Skála leg. (1♂, NMPC); 2.xi.1959, on *Acacia arabica* flowers, D.M. Steinberg leg. (3 ex., ZIN); 19.xi–29.xii.1972, V. Seichert leg. (2 ex., MSCZ, NMPC); viii.1973, K. Rataj leg. (1♀, VKCB); 5.xi–29.xii.1973, V. Seichert leg. (11 ex., MSCZ, NMPC, VKCB); 14.xii.1974, V. Seichert leg. (1 ex., MSCZ); 20.x.1974, J. Moravec leg. (1♂, VKCB). Khartoum–Tutti Insel, 17.xii.1973, V. Seichert leg. (1 ex., NMPC). Kurdufan (1 ex., ZIN); Port Sudan, Red Sea coast, 6.xii.1965, P. Štys leg. (♀, holotype of *J. obscura*, NMPC). Nubia (1 ex., MNHN in coll. Oberthür; 4 ex., NMPC; 3 ex., ZIN). "Nubie" (1♂, syntype of *J. aethiopica*, MNHN in coll. Oberthür) (Plate 1). Wad Madani ["Uzd-medani"], 9.xi.1959, at light, D.M. Steinberg leg. (1 ex., ZIN).

Important published records: Mali, Tombouctou, 28.ix.1909, on *Balanites aegyptiaca* and on *Combretum aculeatum* (Théry, 1930b). Mauritania, near Oualata, Konou (Théry, 1934).

Remarks: Distribution of *J. c. cailliaudi* in Tunis (Bílý, 1971) and Libya (Bílý, 1971, 1973) is uncertain; neither specimens nor references have been found from these countries. Also the record from Algeria (Biskra: Lucas (1859); specimens from ZIN) is questionable; these specimens were most probably collected in the southern part of Algeria.

The northern border of the distribution goes across central Chad and southern Egypt (northernly to Luxor), southern border nearly reaches the equator (Ubangi river) and southern Sudan (Juba). Osculati (1844) recorded this species from "Persia m." – it is neccessary to check this isolated record.

Howarth & Gillett (2008, 2009) recorded "*Julodis caillaudi* [sic!]" as a new species for the fauna of UAE but we have not studied their specimens; the occurrence of the nominotypic subspecies (*J. c. cailliaudi*) in the Arabian Peninsula is impossible. Also the subspecies *J. c. mniszechii* Reiche in Thomson, 1860, has not been recorded from Arabian Peninsula so far. This subspecies is distributed in the costal areas of Eritrea, Djibouti and northern Somalia together with *J. fimbriata lacunosa* Fairmaire, 1882, which has been recently recorded from Oman (see below); the occurrence of *J. c. mniszechii* in the southeastern portion of the Arabian Peninsula is not out of the question.

The record of "*Julodis caillaudi* [sic!]" in Saudi Arabia (Bílý, 1985) concerned *J. candida* Hołyński, 1996 (see also Hołyński, 1996, and Howarth & Gillett, 2009); also in the case of Howarth & Gillett (2008, 2009) the record concerned is most probably *J. candida.*

The distribution of *J. c. cailliaudi* in Bellamy (2008) is incomplete and it does not include the published data, so we present herewith the new, complete distribution of this subspecies.

Host plant: Larval development outside plant roots in the soil.

Distribution: ?Algeria (Lucas, 1859; new record), Cameroon (new record), Central African Republic (new record), Chad (Descarpentries & Bruneau de Miré, 1963; Descarpentries & Mateu, 1965), northern Democratic Republic of the Congo (new record), Egypt (Laporte & Gory, 1835; Kerremans, 1908; Lotte, 1943), Eritrea (Obenberger, 1939), Ethiopia (new record), Gambia (Bellamy, 2008; new record), ?southern Iran (Osculati, 1844; Jakobson, 1913), ?Libya (Bílý, 1971, 1973), Mali (Théry, 1930b; new record), Mauritania (Théry, 1934), Niger (Obenberger, 1950; new record), northern Nigeria (new record), Senegal (Kerremans, 1905 [Casamance river]; Descarpentries, 1976), Sudan (Latreille, 1827 [type locality]; Bílý, 1971, 1973), ?Tunis (Bílý, 1971).

Julodis cailliaudi mniszechii Reiche in Thomson, 1860 **stat. restit.** Plates 2–3

Julodis Mniszechii Reiche in Thomson, 1860: 24. Type locality: Ethiopia ["Abyssinie"]. – Bellamy, 2008: 54 ("*mniszechii* Thomson"; world catalogue; synonym of *cailliaudi cailliaudi*). Synonymy by Théry (1930b).

Julodis cailliaudi var. *berberae* Abeille de Perrin, 1900: 4 (available name, esteblished as a subspecific name). Type locality: Coast of the northwestern Somalia: Berbera. – Bellamy, 2008: 54 (world catalogue; erroneously as species name; synonym of *cailliaudi cailliaudi*). Synonymy by Théry (1930b).

Julodis cailliaudi var. *Blairi* Théry, 1930b: 16 (unavailable name; infrasubspecific taxon; "Abyssinie"). – Bellamy, 2008: 54 (world catalogue; as available name and new synonym of *cailliaudi cailliaudi*).

"*Julodis caillaudi* [sic!] var. *lacunosa* Fairm." *sensu* Obenberger, 1934a: 51 (not Fairmaire, 1882; new locality in Somalia).

Specimens examined: DJIBOUTI: "Djibuti Afr. or." [or Ethiopia] (3 ex., ZIN in coll. V.N. Stepanov). "Djibutti" [or Ethiopia] (1 ex., NMPC). Obock: ["Obock V.M. Duchon"] (1 ex., ZIN); ["Obok N. M. 92"] (1 ex., ZIN); ["Obock 1890 (ex Aubert)"] (1 ex., NMPC); Red Sea coast ["Obocht Rot. Meer"] (1 ex., NMPC); ["Abyssinie Obock Coll. Schramm"] (1 ex., NMPC); ["Coll. Meyer-Darcis Obock"] (2 ex., NMPC). DJIBOUTI and SOMALIA: "Djibuti Somali" (12 ex., NMPC). EGYPT: "Aegyptus" (4 ex., NMPC); "Egypte" (1 ex., ZIN). Southeastern EGYPT or northeasten SUDAN: Nubia: "Nubien" (4 ex., NMPC). ERITREA: "Erythrea" (6 ex., NMPC). Arafali (1 ex., NMPC). ETHIOPIA: [without locality label] (1♂, syntype of *Julodis mniszechii*, 32 mm, NMPC) (Plate 2). "Mniszechi Reiche Kordofan Type" (1♀, ?syntype of *J. mniszechii*, 36 mm, MNHN). "Abyssinia" (3 ex., ZIN). Somali Province: "S. & SE. Abyssinia.", 1909, R.E. Drake-Brockman leg. (1♂, "type" of *J. cailliaudi* var. *blairi*, 24 mm, MNHN). Jaldessa ["Djildessa–Djibuti, Galla + Obock"] N09°43′20″ E42°07′, 1090 m, Dmitriev leg. (2 ex., ZIN). "Djibouti kil[omètre] 110 Daouannlé Dr. Martin" [probably railway km 110: Ferate (7 km NE), N10°54′ E42°38′20″, 720 m, wadi with *Acacia* trees] (1 ex., NMPC). SOMALIA: Berbera: ["Berberah"], A.A. Argod-Vallon leg. (1♀, syntype of *J. c.* var. *berberae*, MNHN) (Plate 3); (8 ex., NMPC). "Berbera Chech" (5 ex., NMPC).

Important published records: Northeastern SOMALIA: Bari Province: Monti Carcar [N09°55′ E19°23′18″], viii.1931, G. Scortecci leg. (MSNM) (Obenberger, 1934a, as "*J. caillaudi* [sic!] var. *lacunosa*").

Remarks: Described as a species from Ethiopia ("Abyssinie"). Precise locality data and the number of the type specimens unknown. The authorship was erroneously attributed to J. Thomson with the type locality "Sudan". The specimen designated as the "type" from "Kordofan" in the collection of Oberthür (MNHN) does not correspond with the original description; on the countrary the specimen in the Obenberger's collection (NMPC) fully corresponds with the description incl. the size and it is supposingly one of the syntypes of *Julodis mniszechii*. The specimens treated above (namely these from Eritrea, Djibouti and Somalia) strongly differ from the nominotypic subspecies distributed in the whole Sahel; transitionary forms between *J. cailliaudi cailliaudi* and *J. c. mniszechii* can be found in the eastern parts of Nubia and Ethiopia. The occurrence of *J. c. mniszechii* in the southeastern portion of the Arabian Peninsula is not out of the question.

Host plant: Larval development outside plant roots in the soil.

Distribution (new): Djibouti, southeastern Egypt, Eritrea, Ethiopia, northern Somalia, northeastern Sudan.

Julodis cailliaudi spectabilis Gory, 1840 Plate 4

Julodis spectabilis Gory, 1840: 23, pl. 4, fig. 21. Type locality: Saudi Arabia, Jiddah ["Djeidda"].

Julodis cailliaudi spectabilis: Kubáň & Volkovitsh, 2006: 327 (palaearctic catalogue); Bellamy, 2008: 54 (*caillaudi* [sic!], world catalogue).

Specimens examined: [without locality data] (2 ex., NMPC) (Plate 4). "Algerie 1881 C. Starck" (1 ex., ZIN; incorrect locality). ARABIA (Red Sea coast of Saudi Arabia or Yemen): "Arabie" (1♂, MNHN in coll. Oberthür). "Arabia" (1 ex., VKCB; 3 ex., ZIN). SAUDI ARABIA: "Arabie" (5♂, syntypes of *Julodis spectabilis*, MNHN in coll. Oberthür). YEMEN: Tihamah coastal region: "Plaine de Tihama"

(1 ex., MGCR). Ta'izz Governorate, N of Mocha by road, N13°23′37″ E43°16′22″, 5 m, 28.x.2007, dead specimens, A. Reiter leg. (2 ex., MSCZ).
Important published records: Southwestern Yemen: Tihamah coastal region: Mocha ("Moka") (Kerremans, 1905); Yemen, 10.xii.1956, M.H. Housny leg. (Shalaby, 1961)
Remarks: Poorly known subspecies from the western Arabian Peninsula (Kubáň & Volkovitsh, 2006) known only from a few specimens. Some authors (Kerremans, 1905; Théry, 1930b and Obenberger, 1926) interpreted it together with *Julodis cailliaudi mniszechii* as a variability of the nominotypic form. Also the occurrence of this subspecies in UAE is impossible.
Host plant: Larval development outside plant roots in the soil.
Distribution: Southwestern Arabian Peninsula, Tihamah coastal region of the Red Sea in Saudi Arabia and Yemen.

Julodis candida Hołyński, 1996 Plates 78–79

Julodis caillaudi [sic!]: Bílý, 1985: 160 (list; Saudi Arabia).
Julodis (*Julodis*) *candida* Hołyński, 1996: 135. Type locality: Saudi Arabia, Eastern Province, 21 km N of Ain Dar, N26°11′ E49°23′, ca. 180 m.
Julodis candida: Kubáň & Volkovitsh, 2006: 327 (palaearctic catalogue); Bellamy, 2008: 55 (world catalogue); Howarth & Gillett, 2009: 121, fig. 1 (distribution: new for UAE; comments).
Specimens examined: Liwa,Wazeel oasis, N23°01′27″ E54°07′56″, 24.xi.2006, J. Batelka & H. Pinda leg., hand coll. (2 ex., JBCP) (Plates 78, 79).
Additional specimens examined (not from the UAE): SAUDI ARABIA: Eastern Province, Ain Dar, 21 km N, x.1975 [sic!], D.A. Pitcher leg. (holotype of *Julodis candida*, NMPC). Ain Dar (21 km N), x.1974 and ii.1975, D.A. Pitcher leg. (7 ex., MMUE). YEMEN: Ramlat As Sabatayn desert, E of Ma'rib (dunes), 14.viii.1996, X. Vazquez leg. (2 ex., MNCA).
Important published records: UAE: E region of Abu Dhabi Emirate, Sweihan area (near al-Ain), 1982 and 1984, J.N.B. Brown leg., I. Hammer coll. (2 ex., EACA; 2 ex., BMNH) (Howarth & Gillett, 2009). SAUDI ARABIA: Jebel Kenzan, [correct: N25°30′, E49°44′], viii.1974, D.A. Pitcher leg. (1 paratype, RHCM) (Hołyński, 1996). Central YEMEN: Ramlat As Sabatayn desert, Shabwah ancient city [N15°22′ E47°01′20″], 8–9.viii.1936 ["Shibwa"] (1 paratype, RHCM) (Hołyński, 1996).
Remarks: Recorded for UAE by Howarth & Gillett (2009) from the Sweihan – al-Ain area (see above). It is unclear from Howarth & Gillett (2008, 2009) if the record of "*Julodis caillaudi* [sic!]" from the UAE concerned *J. cailliaudi* sensu lato or *J. candida*.
Host plant: Larval development outside plant roots in the soil. Sands.
Distribution: Eastern Saudi Arabia, UAE, central Yemen (new record).

Julodis euphratica euphratica Laporte & Gory, 1835 Plates 80–81

Julodis euphratica Laporte & Gory, 1835: 18, pl. 6, fig. 25. Type locality: "Orient".
Julodis euphratica euphratica: Kubáň & Volkovitsh, 2006: 327 (palaearctic catalogue; distribution: Jordan, Oman, Saudi Arabia); Bellamy, 2008: 54 (world catalogue).
Specimens examined: Near al-Hayer, N24°33′ E55°45′, 14.iii.2005, A. van Harten leg., hand coll. (1♂). Az-Zora, N25°26′10″ E55°28′42″, -9 m, 21.iii.2007, J. Batelka leg. (1 ex., JBCP). Dibba env., N25°31′28″ E56°13′44″, 110 m, 21.iii.2007, J. Batelka leg. (2 ex., JBCP). Khor Fakkan, N25°57′ E56°03′, 30.iii.2008, J. Bosák leg., hand coll. (2♂, 2♀). Sharjah Desert Park, N25°17′ E55°42′, 26.iii.2007, J. Batelka leg. (1 ex., JBCP). Sharjah-Khor Kalba, near tunnel, N24°59′ E59°09′, 17–18.iv.2006, M. Fibiger leg., light trap (1♀). Wadi Bih, N25°47′ E56°04′, 100 m, 22.iii.2007, J. Batelka leg. (1 ex., JBCP). Wadi Hayl, N25°04′ E56°13′, 225 m, 28.iii.2007, J. Batelka leg. (1 ex., JBCP). Wadi Maidaq, 20.iv.2006, A. van Harten leg., light trap (2♂); Wadi Maidaq, rocks, N25°20′40″ E56°05′53″, 443 m, 6.iv.2010, V.M. Gnezdilov leg. (3♂); Wadi Maidaq, N25°19′32″ E56°07′37″, 443 m, 18.iii.2007, J. Batelka leg. (1 ex., JBCP). Wadi Safad, N25°13′14″ E56°18′40″, 125 m, 19.iii.2007,

J. Batelka leg. (1 ex., JBCP). Wadi Shawkah, N27°08′ E56°01′, 305 m, 10.iv.2010, V.M. Gnezdilov leg. (1 ex., ZIN); Wadi Shawkah, N25°06′ E56°02′, 250–280 m, 20.iii.2007, J. Batelka leg. (5 ex., JBCP); Wadi Shawkah, 250–280 m, 26.iii.2007, J. Batelka leg. (16 ex., JBCP) (Plate 80).
Additional specimens examined (not from the UAE): ARABIA (Red Sea coast of Saudi Arabia or Yemen): "Arabie" (1 ex., MNHN in coll. Oberthür) (Plate 81). Western IRAN: Lorestan, 1914, B. von Bodemayer leg. (1 ex., NMPC). IRAQ: Al Khalis, ca. 50 m, 7.iv.1977, J. Macek leg. (1 ex., VKCB). OMAN: Breik Qotait, near Khaburah, 20 m, 12.iii.1980, on *Medicago sativa*, S. Matthew & R. Whitcombe leg. (1♂, NMPC). J. Huwayyah, N24°18′ E55°51′, 4.iii.1993, no. 92, M. Gillett leg. (1 ex., NMPC). Mahdah, N24°27′ E56°00′, 8.iv.1993, no. 17, M. Gillett leg. (1 ex., NMPC). Mahdah, N24°27′ E56°00′, 27.v.1993, no. 268, M. Gillett leg. (1 ex., NMPC). Nizwa, 15.v.2004, S. Prepsl leg. (1 ex., SPCV). Ra's al Hadd, N22°31′ E59°48′, 20.ii.1992, M.D. Gallagher leg. (1 ex., NMPC). Sanaw (50 km S), N22°04′ E58°10′, 24.iv.1986, D. Horpram leg. (1 ex, NHMB). SAUDI ARABIA: Buraydah, 4.iv.1976, R. Menrad leg. (2 ex., VKCB). Buraydah (40 km NW), Rawdha, 1.v.1980, Khurdyim, W. Büttiker leg. (1 ex., NHMB). Ha'il, iv.1944, A.R. Waterston leg. (2♂, MNHN, as *Julodis euphratica egyptiorum* Marseul, 1865, A. Descarpentries det.). J. Banana, 23.iv.1944, A.R. Waterston leg. (1♂, MNHN, as *J. e. egyptiorum*, A. Descarpentries det.). Riyadh (1 ex., as "*J. iris*", NMPC, J. Obenberger det.). N of Riyadh, Wadi Hanifah, ca. 600 m, 7.v.1976, W. Büttiker leg. (1 ex., NHMB).
Remarks: Recorded for the UAE by Wingate (1992), Gillett & Howarth (2004) and Howarth & Gillett (2008, 2009). The nominotypic subspecies is widely distributed in the Arabian Peninsula. In the Sinai Peninsula it is substituted by *J. e. egyptiorum* Marseul, 1865. The distribution in Jordan (Katbeh-Bader, 1996) concerns *J. iris* Laporte & Gory, 1835; no other records of *J. e. euphratica* from Jordan are known.
Host plant: Larval development outside plant roots in the soil.
Distribution: Western Iran, Iraq, Oman (Janikova [no date]), Saudi Arabia (e.g. Shalaby, 1961 [as "*J. iris*"]; Bílý, 1979, 1980, 1982, 1985, 1990), UAE. New species for Iran and Iraq. Not in Jordan (see above).

Julodis fimbriata fimbriata (Klug, 1829) Plate 5
Buprestis fimbriata Klug, 1829: Buprestis no. 2, pl. 1, fig. 2. Type locality: Northern Sudan: Ambikol ["Ambukohl"].
Buprestis arabica Gory, 1840: 15, pl. 3, fig. 13. Type locality: Western Saudi Arabia, Red Sea coast, Jiddah ["Arabie (Djaidda)"]. Synonymy by Marseul (1865).
Sternocera kustai Nonfried, 1892: 335. Type locality: Yemen ["Yemen, Arab. orient"]. Synonymy by Kerremans (1905).
Julodis fimbriata var. *chevalieri* Kerremans, 1914: 245 (available name, esteblished as a subspecific name and by subsequent usage as valid species). Type locality: Central Mali, Tombouctou ["Tombouctou"]. Synonymy by Kubáň (2006).
Julodis chevalieri: Obenberger, 1934b: 162 (characters; comments).
Julodis fimbriata fimbriata: Kubáň & Volkovitsh, 2006: 327 (palaearctic catalogue; synonymy); Bellamy, 2008: 54 (world catalogue).
Specimens examined: ARABIA (Red Sea coast of Saudi Arabia or Yemen): "Arabia" (1 ex., NMPC; 3 ex., ZIN). EGYPT: "Aegyptus" (5 ex., NMPC). Southern EGYPT or northern SUDAN: Nubia ["Nubia"] (2 ex., NMPC; 2 ex., ZIN). ERITREA: "Erythrea", iii.1933, B. Machulka leg. (2 ex., NMPC). ETHIOPIA: "Abyssinia" (1♀); "Abyssinia 1880" (1♂); "Abyssinia Voy. 1881" (1♂), all A. Raffray leg. (all MNHN in coll. Oberthür). MALI: Hombori (2 km N), 290 m, 7.xii.2006, S15°17′30″ W01°41′33″, M. Škorpík leg. (12 ex., MSCZ). Tombouctou, 1900, A. Chevalier leg. (4 ex., syntypes of *Julodis fimbriata* var. *chevalieri*, MNHN). MAURITANIA: Massif d'Adrar, Site rupestre d'Agrour, N20°32′14″ W12°47′04″, 681 m, 20–21.x.2010, A. Reiter leg. (1 ex., MSCZ). NIGER: Aïr Mts., Massif de Tarouadji, 900 m, 8–12.ix.1947, L. Chopard & A. Villiers leg. (1♂, NMPC). Agadez (10 km W), 5.xi.1978, R. Macek leg. (2 ex., NMPC). Agadez (70 km N), 6.xi.1978, R. Macek leg. (1 ex., NMPC). Assamakka [N19°20′ E05°46′13″] (100 km S), 4.xi.1978, R. Macek leg. (1 ex., NMPC). Iferouane: 10.xi.1978, J. Seifert leg. (2♂, MSCZ); 10.xi.1978, R. Macek leg. (13 ex., NMPC). Western SAUDI ARABIA: "Arabie" (4♂, 2♀, syntypes of *Julodis arabica*, MNHN). Taif-Mecca road, 1980,

W. Büttiker leg. (1 ♂, NHMB). Jiddah, 12.vi.1982, W. Büttiker leg. (1♂, NHMB) (Plate 5). SUDAN: "Sudan aegyp." (38 ex., NMPC). Barbar ["Sudan Berber"], Dr. Schwarzenberg (3 ex., NMPC). Dongola (1 ex., NMPC). Juba, iii.1980 (1 ex., ZIN). Khartoum: "Chartum" (1 ex., NMPC); Skála leg. (1♂, NMPC); 29.xii.1972, 29.xii.1973 and 22.xi.1977, all V. Seichert leg. (3 ex., VKCB); xi.1973 (1 ex.), 29.xii.1972 (2 ex.), 29.xi.1973 (2 ex.), all V. Seichert leg. (NMPC). Khartoum, Tutti Insel, sands, 6.xi.1959, D.M. Steinberg leg. (1 ex., ZIN). Wad Madani ["Uzd-medani"], 9.xi.1959, at light, D.M. Steinberg leg. (1 ex., ZIN). Southwestern YEMEN: Babal Nakaha, Bajil, 400 m, 9.viii.1999, local collector (1♂, VKCB). Bakhsikh, 9.xi.1931, N.N. Filippov leg. (1♀, ZIN).

Important published records: Algeria, Djanet oasis, 1912, R. Chudeau mission, Dr. Person leg. (Théry, 1930b). "Afrique occidentale allemagne" (Théry, 1930b) – most probably northern Cameroon. Northern Eritrea: Asmara, G. Frasca leg. (MSNM) (Obenberger, 1934a). Libya: Fazzan: Wadi Tanezzuft (Al Barkat), 29.vi.2003; Imin Iyadar, 30.viii.2003; Wadi Aramat (Tassili), close to the Algerian border, 11.x.2003, on *Tamarix* and *Acacia tortilis*, J.-C. Ringenbach leg. (Ringenbach, 2006). Mali, Hombori, 23.viii.1909, more specimens on *Combretum aculeatum* (Théry, 1930b). Mauritania: Near Oualata, Konou, October (Théry, 1934); Djedda, apple tree stem, 29.ix.1956 (Shalaby, 1961); Nema (Descarpentries & Bruneau de Miré, 1963).

Remarks: The occurrence of *Julodis fimbriata fimbriata* in the southeastern Arabian Peninsula is impossible. Howarth & Gillett (2008, 2009) recorded "*Julodis fimbriata*" for UAE; we have not studied their specimens but most probably this record concerned of *J. candida* or *J. fimbriata lacunosa* which was recorded from Oman (see below).

The distribution of *J. fimbriata* in Bellamy (2008) is rather incomplete and it does not cover all published data so we present hereby the new distribution of this species. The record "Massai" in Obenberger (1950) [see also Bílý (1971) "E. Africa (Massai)"] is evidently a wrong interpretation of data by Gestro (1889), who recorded *J. fimbriata* from "Massaua", currently Massawa at the Red Sea shore in northern Eritrea.

Host plant: Larval development outside plant roots in the soil.

Distribution: Southern Algeria (Théry, 1929a, 1930a,b), northern Cameroon and Chad (Descarpentries & Bruneau de Miré, 1963; Descarpentries & Mateu, 1965), southern Egypt (Kerremans, 1908; Innes Bey, 1910; Andres, 1931; Lotte, 1943), Eritrea (Gestro, 1889; Obenberger, 1934a), Ethiopia (Kerremans, 1905), Libya (Bílý, 1973; Ringenbach, 2006), Mali (Kerremans, 1905, 1914), Mauritania (Théry, 1934; Descarpentries & Bruneau de Miré, 1963; new record), Niger (Obenberger, 1950; Descarpentries & Bruneau de Miré, 1963), Sudan (Klug, 1829 [type locality]; Bílý, 1973; new record), western Yemen (Nonfried, 1892; Kerremans, 1905; new record), Saudi Arabia (Gory, 1940; new record).

Julodis fimbriata lacunosa Fairmaire, 1882 Plate 6

Julodis lacunosa Fairmaire, 1882: 49. Type locality: Northern Somalia, ancient Maakhir State, Warsangali Sultanate ["Çomalis"].

Julodis argodi Abeille de Perrin, 1900: 3. Type locality: Northern Somalia, Berbera ["Berbera (Somalis)"]. – Kubáň, 2006: 47 (synonymy); Kubáň & Volkovitsh, 2006: 327 (palaearctic catalogue; synonym of *fimbriata lacunosa*); Bellamy, 2008: 65 (world catalogue; synonym of *fimbriata lacunosa*).

Julodis fimbriata lacunosa: Kubáň, 2006: 41 (resurrected name; new status and combination); Kubáň & Volkovitsh, 2006: 327 (palaearctic catalogue); Bellamy, 2008: 65 (world catalogue).

Specimens examined: OMAN: NE Oman, M. Gillett leg. (1 ex., MGCR). Near Sib, N 23°33′ E56°15′, 11.viii.1982, M.D. Gallagher leg. (1 ex., NHMB). Wadi Musah, N24°22′ E56°05′, 4.vi.1993, 341, M. Gillett leg. (1 ex., NMPC). Wadi Andam, N21°19′48″ E58°15′24″, 90 m, 19.ix.1995, G. Lowe leg. (1 ex., NMPC). "Oman Hr. Stöckli" (1♂, NHMB). Northern SOMALIA: Berbera ["Berberah" "Berbera jungle"] (1♀, syntype of *Julodis argodi*, MNHN). Ancient Maakhir State: Warsangali Sultanate ["Somali Ouarsangueli"], 1881, G. Révoil leg. (1♀, syntype of *Julodis lacunosa*, MNHN).

Remarks: As yet the only specimens known are those listed above. The occurrence of this subspecies in the UAE is highly possible (see above). The records of "*Julodis fimbriata*" in the UAE by Howarth & Gillett (2008, 2009) and in Oman by Janikova [no date] concerns most probably *Julodis fimbriata lacunosa.* Also specimens collected by Gillett in Oman (see above in Specimens examined) were determined as "*Julodis fimbriata* Klug".
Host plant: Larval development outside plant roots in the soil.
Distribution: Oman, northern Somalia.

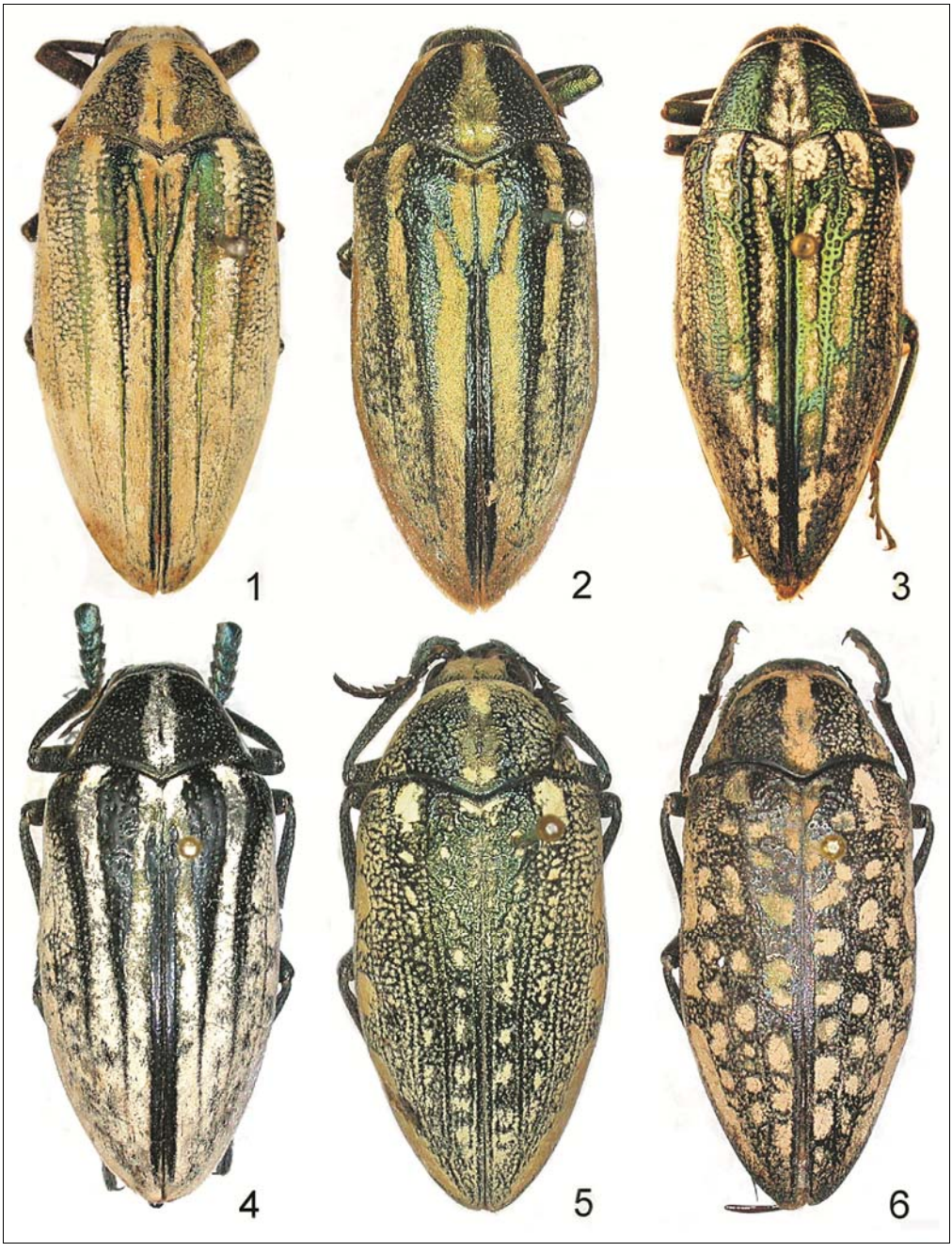
Julodis speculifer dicksonae Théry, 1936 Plate 83
Julodis distincta dicksonae Théry, 1936b: 118. Type locality: Southern Kuwait, Urayfijan N28°54' E48°08', ca. 50 m ["N.-E. de l'Arabie, Arafjan, sud de Kumait"].
Julodis speculifer: Bílý, 1979: 215; 1985: 160; 1990: 32 (all as "*speculifera* [sic!]", localities in Saudi Arabia and Kuwait).
Julodis speculifer dicksonae: Kubáň, 2006: 43 (new combination); Kubáň & Volkovitsh, 2006: 329 (palaearctic catalogue); Bellamy, 2008: 80 (world catalogue).
Specimens examined: Southwestern JORDAN: Tafila (33 km S), Shaubak, N30°32′ E35°35′, 1250 m, 26.iv.1989, G.C. Bozano leg. (2 ex., SPCV, VKCB). Wadi Rum, Tuwaykil, 16.iv.2002, sands, M. Snížek leg. (3 ex., MSCB). KUWAIT: Southern coastal part, Aratjar, N28°54′ E48°08′, ca. 50 m, iii.1933, Miss. Dickson leg. (1♂, syntype of *Julodis speculifer dicksonae*, MNHN); Burgan, N28°55′ E47°57′, 114 m, 5.vi.1988, W. Büttiker leg. (1♂, NHMB). SAUDI ARABIA: Najd Province: near Sakaka, Rajajit, viii.1980, J. Gasparetti leg. (1♀, NHMB). Ha'il, 2–8.iv.1944, A.R. Waterston leg. (2♂, 1♀, MNHN). Riyadh, v.1981, J. Ledoux leg. (1♂, NHMB). Asir Province: Bahara, N21°26′ E39°26′, 10.v.1976, W. Büttiker leg. (2♂, 1♀, NHMB). Eastern Province, Udhailiyah Camp, 27.iv.1982, No. 164, D.A. Pitcher leg. (1 ex., MMUE, 1♀, NMPC) (Plate 83); Itawiyah, 8.iv.1983, No. 311, D.A. Pitcher leg. (1 ex., MMUE). Abqaiq, saltmine, v.1975, D.A. Pitcher leg. (2 ex., MMUE). Ain Dar (7 km S), 30.iv.1982, No. 179, D.A. Pitcher leg. (2 ex., MMUE).
Remarks: Very poorly known Arabian subspecies (Kubáň & Volkovitsh, 2006) represented in the collections only by a few specimens. Bílý (1979, 1985, 1990) published 12 ex. from Saudi Arabia and 1 ex. from Kuwait as "*Julodis speculifera* [sic!]". The closest locality of *J. speculifer speculifer* Laporte, 1835, is Iraq (Baghdad) and very similar subspecies, *J. syriaca palmyrensis* Obenberger, 1923 (Plate 82) is distributed in Jordan and Syria. The occurrence of *J. s. dicksonae* in the UAE is highly possible; the closest locality in Saudi Arabia (Udhailiyah) is situated only 250 km west of the UAE (see also Howarth & Gillett, 2009).
Host plant: Larval development outside plant roots in the soil. Sands.
Distribution: Southwestern Jordan (Kubáň & Volkovitsh, 2006; new record), Kuwait (Théry, 1936b [type locality]; Bílý 1990), Saudi Arabia (Bílý, 1979, 1985, 1990).

Subfamily **Polycestinae** Lacordaire, 1857

Tribe **Acmaeoderini** Kerremans, 1893

Genus ***Acmaeodera*** Eschscholtz, 1829

Acmaeodera* (*Acmaeodera*) *guichardi Levey & Volkovitsh, 1996 Plates 7, 20, 21, 38
Specimens examined: Adgat env., hotel Le Meridien, al-Aqah, 30.iii.2008, U. Schmidt leg. (1♂, 2♀). Sharjah Desert Park, N25°17′ E55°42′, 19–22.iii.2008, hand coll., A. van Harten leg. (5 ex.); 16.iii.2009, water trap, C. Schmid-Egger leg. (1 ex.). Wadi Hayl, N25°05′ E56°13′, 19.iii.2009, C. Schmid-Egger leg. (2 ex., SECB); 225 m, 28.iii.2007, J. Batelka leg. (2 ex., JBCP). Wadi Maidaq, N25°18′ E56°07′, 7–14.iii.2006, yellow and water traps, A. van Harten leg. (26 ex.); 29.iii.–10.iv.2006, (4 ex.); 24.iii.2008, hand coll., A. van Harten leg. (1 ex.); 3–17.ii.2008, water trap, A. van Harten leg. (2 ex.); 20.ii–2.iii.2009, water trap, A. van Harten leg. (1 ex.); 9–11.iii.2009, water trap, A. van Harten



Plates 1–6. 1: *Julodis cailliaudi cailliaudi* (Latreille, 1827), male (syntype of *J. aethiopica* Laporte, 1835, synonym of *cailliaudi cailliaudi*), 30.0 mm, Nubie. 2, 3: *J. cailliaudi mniszechii* Reiche in Thomson, 1860. 2: male (syntype of *J. mniszechii*), 32 mm, Ethiopia; 3: female (syntype of *J. c.* var. *berberae* Abeille de Perrin, 1900, synonym of *cailliaudi mniszechii*), 29.0 mm, Somalia, Berbera. 4: *J. c. spectabilis* Gory, 1840 male, 29.0 mm, "Arabia". 5: *J. fimbriata fimbriata* (Klug, 1829), male, 28.0 mm, Saudi Arabia, Jiddah. 6: *J. f. lacunosa* Fairmaire, 1882, male, 28.0 mm, Oman, near Sib.

leg. (9 ex.); 15–31.x.2010, water trap, A. van Harten leg. (1 ex.). Wadi Shawkah, N25°06′ E56°01′, 1–7.iv.2007, water trap, A. van Harten leg. (5 ex.); 5–12.v.2007, water trap, A. van Harten leg. (1 ex.); 19–28.xi.2007, water trap, A. van Harten leg. (1 ex.); Wadi Shawkah, N25°06′ E56°02′, 250–280 m, 20.iii.2007, J. Batelka leg. (1 ex., JBCP); 250–280 m, 20–23.iii.2007, pan traps, J. Batelka leg. (2 ex., JBCP); 250–280 m, 26.iii.2007, J. Batelka leg. (1♂, ZIN). Wadi Wurayah, N25°24′ E56°17′, 12–14.iv.2005, light trap, T. Pape leg. (3 ex.).

Remarks: *Acmaeodera guichardi* was for the first time recorded from the UAE by Howarth & Gillett (2008, 2009). This species was described from a single female from Oman (Masqat). Male genital structures are illustrated here for the first time (Plates 20, 21). As it turned out, *A. guichardi* is quite common in the UAE, although its biology remains unknown.

Host plant: Unknown.

Distribution: Oman, UAE.

Acmaeodera* (*Acmaeotethya*) *vanharteni Volkovitsh **nov. spec.** Plates 8, 22, 23

Specimens examined: Holotype: ♂ (ZIN), United Arab Emirates, Wadi Maidaq, N25°18′ E56°07′, 29.iii–10.iv.2006, A. van Harten leg. Paratypes (GMCC, MGCR, NMPC, ZIN, UAEIC): same locality, (1♂, 1♀); 7–14.iii.2006, yellow and white water traps, A. van Harten leg. (3♂, 2♀); 9–11.iii.2009, water traps, A. van Harten leg. (2♂, 1♀). Al-Ain, Markhaniya, 17–18.iv.2000, malt traps, M. Gillett leg. (2♀, MGCR). Wadi Bih (dam), N25°48′ E 56°04′, 29.iii.2008, hand coll., A. van Harten leg. (1♀); 22–26.iii.2009, water traps A. van Harten leg. (16♂, 13♀); 2–4.iv.2009, water traps, A. van Harten leg. (3♂, 1♀). Wadi Maidaq, N25°18′ E56°07′, 27.iv–14.v.2009, water trap, A. van Harten leg. (1♀). Wadi Safad, N25°13′ E56°19′, 24.ii.2007, G. Sama leg., *Acacia* spec.?, ex larva, 26., 31.v., 2. vi., 18.vii.2007 (1♂, 1♀ and 5 ex., MGCR). Wadi Shawkah, N25°06′ E56°02′, 250–280 m, 20–23.iii.2007, pan traps, J. Batelka leg. (1♂, 3♀, JBCP, ZIN). Wadi Wurayah, N25°24′ E56°17′, 12–14.iv.2005, light trap, A. van Harten leg. (1♂). OMAN: Rostag env., Muscat (ca. 150 km W), iv.1986, Ch. Green leg. (1♂, NMPC). Wadi Fizh, near Zaymi, N24°27′, E56°16′, 8.ix.1994, 8598, K. Roberts & M. Gallagher leg. (1♀, NMPC). Mahdah, N24°22′ E55°55′, on flowers of *Convolvulus virgatus*, 28.iii.1999, M. Gillett leg. (2♀, MGCR, ZIN). Wadi A'bul, N24°26′ E56°04′, on flowers of *C. virgatus*, 28.iii.1999, M. Gillett leg. (2♀, MGCR). Jebel Akhdar, near Bahla, N23°14.3′ E57°08.8′, 1460 m, [no date,] Ströhle leg. (1♂, 1♀, GNCW).

Description: Body (Plate 8) small, slender, 3.36 (3.17–3.50; n=20) times as long as pronotum at base, convex, without dorsal curvature; black with feeble steel or bronzy sheen; antennae and legs blackish brown or brown, protibiae slightly expanded apically with straight external margin; pronotal sides only occasionally with small yellowish maculae at posterior corners; elytra dark brown with yellowish marking, without metallic sheen; elytral marking of modified "*saxicola*" type formed by transverse and oblique, curved, frequently interrupted, yellowish stripes at anterior half and 2 pairs of small, sometimes confluent maculae at posterior half; body dorsally covered with short, recumbent and semierect brown and yellowish setae, ventrally with longer white setae; length 6.0 (4.4–7.3) mm, width 1.8 (1.3–2.3) mm.

Head broad, slightly convex, flattened at the middle when seen from above; frons feebly convex, flattened or weakly depressed at the middle, occasionally with medial line or depression, with slightly curved diverging sides. Vertex 1.93 (1.72–2.11) times as wide as transverse diameter of eye and 1.12 (1.06–1.19) times as wide as frons above antennal sockets. Clypeus moderately wide, with broad, deep, arcuate medial emargination anteriorly. Frons with reticulate sculpture of superficial, round umbilicate punctures bearing large micropunctures and inconspicuous grains; intervals about 1/2 diameter of puncture, smooth; head covered with dense, short, semierect, white setae, sometimes mixed with brownish ones. Antennae long, brown, expanded from antennomere 4 in both sexes; in male 1.99 (1.83–2.25) times, in female 1.65 (1.53–1.84) times as long as height of eye; antennomere 2 oval, slightly swollen apically; antennomere 3 conical, expanded toward apex; antennomere 4 sharply

expanded, triangular, slightly wider than long; antennomeres 5–10 slightly transverse, wider than long, trapezoid; antennomere 11 irregularly rounded; antennae in female similar but less expanded.

Pronotum convex, large, slightly wider than elytra at humeri, 1.39 (1.31–1.48) times as wide at base as long, widest at the middle, rarely at posterior 1/3; sides regularly arcuate. Anterior margin nearly straight or weakly bisinuate, basal margin straight. Lateral carina thin, interrupted, only rarely reaching anterior corners, frequently absent. Pronotal surface regularly convex, without medial depression or line; prescutellar fossa frequently absent, lateral fossae punctiform, inconspicuous. Pronotal sides with reticulate sculpture of round umbilicate punctures bearing distinct inner structure, toward disc changing to reticulate-rugose sculpture with poorly marked concentric rugosity; disc medially with pseudoalveolate sculpture of large, deep punctures. Pronotum with short, uniform, recumbent, yellowish vestiture, sometimes mixed with brownish setae; unicolorous, only occasionally with yellow maculae at posterior corners. Anterior prosternal margin weakly emarginate; prosternum evenly convex, covered with pseudoalveolate sculpture of small, deep punctures; meso- and metaventrites with the same sculpture. Hypomeron with reticulate sculpture of larger umbilicate punctures with distinct inner structure.

Elytra elongate, 2.57 (2.40–2.74) times as long as wide at base, convex, slender; sides slightly expanded at humeri, subparallel or feebly diverging toward posterior 1/3, then shortly converging to narrowly rounded apices. Subhumeral incisure shallow but distinct; epipleural serration well developed at posterior 1/3, apical denticles sharp. Strial punctures small, deep, oval, merging on dark background, striae finely sulcate at posterior 1/2. Intervals flattened or slightly convex, subequal, relatively narrow, at disc 2–4 times as wide as striae; 9th interval weakly elevated; intervals covered with very fine, inconspicuous, uni- and multiseriate punctures; background finely shagreened. Elytra dark brown with yellowish marking of modified "*saxicola*" type formed by transverse and oblique, curved, frequently interrupted, yellowish stripes at anterior 1/4 and 1/2, and 2 pairs of small, often confluent maculae at posterior half; elytral pattern in males is more extensive than that in females; elytra covered with dense, short (less than interval width), semierect, uni- or multiseriate yellowish and brownish setae.

Legs dark bronze or brown; metacoxal plates with posterior margin nearly straight, without lateral tooth. Protibiae slender, gradually widened to the apices with external margin straight; meso- and metatibiae slender, metatibiae bearing comb of brownish setae externally. Tarsomeres subequal; 5th wide, expanded apically; tarsal pads developed on tarsomere 4, rudimentary on tarsomeres 1–3. Tarsal claws long, curved, with internal tooth in male reaching apical 1/3; in female, shorter, reaching about 1/2.

Abdomen black with steel or bronzy sheen; covered with uniform ocellate sculpture of dense umbilicate punctures with indistinct inner sculpture, smaller and sparser on the sternal discs. Abdomen covered with dense, recumbent, white setae. Anal ventrite in male short, widely rounded apically, that in female longer and narrowly rounded apically.

Male: Aedeagus as in Plates 22, 23.

Female: Ovipositor of tubular type, long, approximately 5 times as long as expanded apical part.

Differential diagnosis: *Acmaeodera vanharteni* nov. spec. belongs to the *A.* (*Acmaeotethya*) *cisti* Wollaston, 1862 species-group (Volkovitsh, 1979), diagnosis see under *A. batelkai* nov. spec.

Host plant: *Acacia* (Fabaceae) (G. Sama, see Specimens examined).

Remark: The name "*A. omanensis* Volkovitsh" in Gillett & Gillett (2005) and Howarth & Gillett (2008, 2009) is a **nomen nudum**.

Distribution: Oman, UAE.
Etymology: This species is named in the honour of Antonius van Harten, the coordinator of the "Arthropod fauna of UAE" project.

Acmaeodera* (*Acmaeotethya*) *batelkai Volkovitsh **nov. spec.** Plates 9, 24, 25, 39, 41
Specimens examined: Holotype: ♂ (ZIN), United Arab Emirates, Ra's al-Khaimah, env. Darah, by the road to Kalba, 25.xi.2006, J. Batelka & H. Pinda leg., reared from dead wooden stalks of *Physorrhynchus chamaerapistrum*, emerged on vii.2007. Paratypes (9♂, 6♀, JBCP, NMPC, UAEIC, ZIN): same locality and labels.
Description: Body (Plate 9) small, wide, 3.35 (3.13–3.53; n=14) times as long as pronotum at base, slightly convex, without dorsal curvature; black with feeble steel or bronzy sheen; antennae and legs yellowish brown, protibiae spatulate with slightly serrate external margin (Plate 41); pronotal sides with small yellowish maculae at anterior corners and, more rarely, at posterior corners, occasionally these maculae partially or entirely reduced; elytra brown or black and brown with yellow ochre marking, without metallic sheen; elytral marking of irregular "*rubromaculata*" type formed by longitudinal and oblique yellowish stripes and confluent maculae; body dorsally covered with very short, recumbent and semierect brown and yellowish setae, ventrally with longer white setae; length 5.9 (4.9–6.7) mm, width 1.8 (1.5–1.9) mm.
Head broad, flattened when seen from above; frons feebly convex or flattened, without medial line or depression, with nearly straight, weakly diverging sides. Vertex 1.78 (1.50–2.00) times as wide as transverse diameter of eye and 1.07 (1.00–1.15) times as wide as frons above antennal sockets. Clypeus rather broad, with broad, deep, arcuate medial emargination anteriorly. Frons with ocellate, here and there changing to reticulate sculpture of superficial, round umbilicate punctures with inconspicuous inner structure; intervals less than diameter of puncture, slightly shagreened and rugulose; covered with short, semierect yellowish and brownish setae. Antennae long, yellowish brown, expanded from antennomere 4 in both sexes; in male 1.96 (1.83–2.16) times, in female 1.80 (1.61–1.90) times as long as height of eye; antennomere 2 oval, slightly swollen; antennomere 3 conical, expanded towards apex; antennomere 4 sharply expanded, triangular, slightly wider than long; distal antennomeres 5–10 weakly transverse, wider then long, roundly triangular; antennomere 11 irregularly rounded; antennae of female similar but less expanded.
Pronotum convex, large, slightly wider than elytra at humeri, 1.40 (1.30–1.48) times as wide at base as long, widest at the middle; sides regularly arcuate. Anterior margin bisinuate, slightly arcuately or angularly projecting forward, basal margin straight. Lateral carina entire, reaching anterior corners, slightly curved. Pronotal surface regularly convex, without medial depression or line; prescutellar fossa absent, lateral fossae punctiform, inconspicuous. Pronotal sides with uniform reticulate sculpture of round umbilicate punctures with inconspicuous inner structure, not forming concentric rugosity towards disc; disc medially with pseudoalveolate sculpture of large deep punctures. Pronotum with short, uniform, recumbent, yellowish and brownish setae; with yellow maculae at anterior and more rarely at posterior corners, occasionally reduced. Anterior prosternal margin weakly emarginate; prosternum evenly convex, covered with ocellate sculpture of small, deep punctures, sparser on process; meso- and metaventrites with the same sculpture. Hypomeron bearing similar sculpture of larger punctures.
Elytra weakly elongate, 2.43 (2.35–2.51) times as long as wide at base, slightly convex, wide; sides weakly expanded at humeri, subparallel or feebly diverging towards posterior 1/3, then arcuately converging to widely rounded apices. Subhumeral incisure shallow but distinct; epipleural serration poorly marked at posterior 1/4, apical denticles wide, obtuse. Strial

punctures small, superficial, round, merging; striae finely sulcate at posterior 1/2. Intervals flattened, subequal, broad, at disc 3–5 times as wide as striae; 9th interval not elevated; intervals with fine, inconspicuous, multiseriate punctures; background smooth. Elytra dull, brown or black and brown with yellow ochre marking of "*rubromaculata*" type formed by irregular, longitudinal and oblique yellowish stripes and confluent maculae; covered with dense, short (less than wide of interval), semierect, multiseriate, brownish and yellowish setae.

Legs: Femora black and brown, tibiae and tarsi yellowish; metacoxal plates with posterior margin nearly straight, without lateral tooth. Protibiae spatulate with slightly serrate external margin (Plate 41); meso- and metatibiae slender, metatibiae bearing comb of yellowish setae externally. Tarsomeres subequal; 5th wide, expanded apically; tarsal pads developed on tarsomeres 3–4, each larger towards distal end, rudimentary on tarsomeres 1–2. Tarsal claws long, curved, with internal tooth in male reaching apical 1/4, in female, shorter, reaching about 1/3.

Abdomen black with steel or bronzy sheen; covered with uniform ocellate sculpture of dense umbilicate punctures with indistinct inner structure, smaller and sparser on sternal discs. Abdomen covered with dense, recumbent, white and brownish setae. Anal ventrite in male short, obtuse apically, transversely depressed, that in female longer and narrowly rounded apically, shallowly depressed.

Male: Aedeagus as in Plates 24, 25.

Female: Ovipositor (Plate 39) of tubular type, long, approximately 3.5 times as long as expanded apical part, with deeply emarginated apex.

Differential diagnosis: *Acmaeodera batelkai* nov. spec. belongs to the *A. cisti* species-group (Volkovitsh, 1979) and comes close to *A. vanharteni* nov. spec. but differs by wider and more flattened body; sparser and less differentiated head puncturation with indistinct inner structure (that in *A. vanharteni* nov. spec. with distinct micropunctures and central grains); lateral carina distinct and entire, visible from above (that in *A. vanharteni* nov. spec. interrupted or absent); usually two lateral maculae at anterior and posterior corners present (in *A. vanharteni* nov. spec. only rarely one macula at posterior corners present); wider and more flat elytral intervals; less differentiated elytral pattern (Plates 8, 9); shape of anal ventrite and aedeagus structure (Plates 22–25). The main diagnostic character of *A. batelkai* nov. spec. is that the spatulate protibiae has a slightly serrate external margin (Plate 41) (in *A. vanharteni* nov. spec. protibiae gradually widened towards apices with straight external margin).

Note: All specimens have been reared from the host plant, covered with wooden dust and some of them slightly deformed. For this reason colour of body and appendages in the specimens emerged in the natural condition can be partly different.

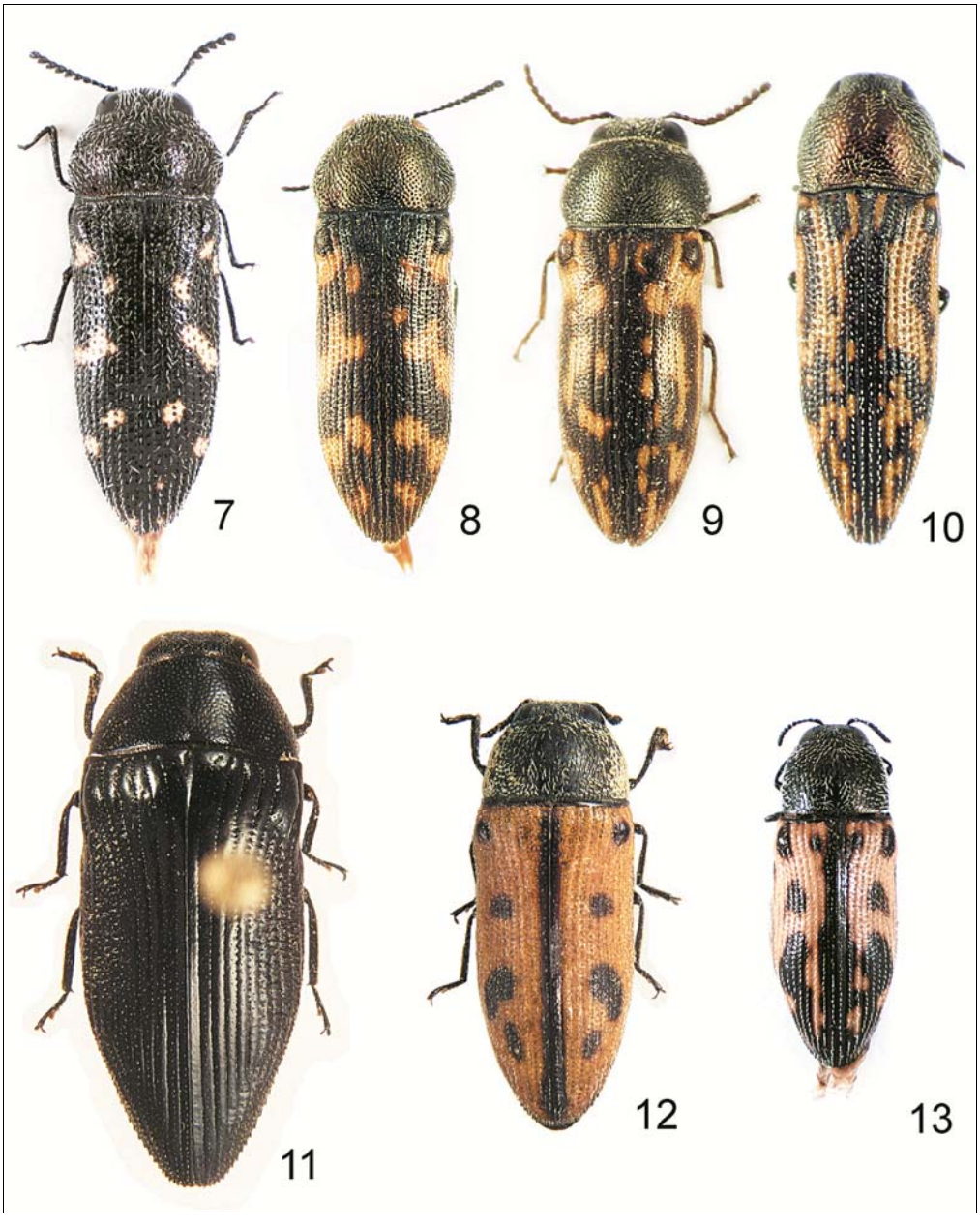
Host plant: *Physorrhynchus chamaerapistrum* (Brassicaceae), reared from dead wooden stalks.

Distribution: UAE.

Etymology: This species is dedicated to Jan Batelka, one of collectors of this species.

Acmaeodera* (*Cobosiella*) *holynskii Volkovitsh **nov. spec.** Plates 10, 26, 27

Specimens examined: Holotype: ♂ (ZIN), United Arab Emirates, Sharjah, N25°21′ E55°24′, 24.ix–9.x.2005, light trap, A. van Harten leg. Paratypes (BMNH, DBCR, GMCC, HMCM, NMPC, UAEIC, VKCB, ZIN): Al-Ajban, N24°36′ E55°01′, 25.vii–21.viii.2006, Malaise trap, A. van Harten leg. (1♂); 7–14.viii.2006, Malaise trap, A. van Harten leg. (1♀); 28.viii–4.ix.2006, Malaise trap, A. van Harten leg. (1♂). Northwestern INDIA: Radjastan Province: Thar Desert, Pushkar, 29.ii.1996, Geis leg. (1♂ with additional labels "Zucht aus [reared from] *Acacia*", "Schlüpf [emerged] vii.1996") (2♂, 1♀, HMCM, ZIN). Uttaranchal State: "Out of Sundari wood. Dehra Dun" [back side: 01–13–7–1911], "50",



Plates 7–13. 7: *Acmaeodera* (*Acmaeodera*) *guichardi* Levey & Volkovitsh, 1996, male, 6.6 mm, UAE, Wadi Shawkah; 8: *A.* (*Acmaeotethya*) *vanharteni* Volkovitsh nov. spec., male, holotype, 6.1 mm; 9: *A.* (*A.*) *batelkai* Volkovitsh nov. spec., male, holotype, 5.7 mm; 10: *A.* (*Cobosiella*) *holynskii* Volkovitsh nov. spec., male, holotype, 6.2 mm; 11: *A.* (*Ptychomus*) *arabica* Gory, 1840, 10.5 mm, Oman, Mahdah; 12: *Xantheremia* (*Xantheremia*) *pantherina* (Bílý, 1979), 6.5 mm, Israel, Arava valley, 9 km SW of Yahel; 13: *X.* (*X.*) *prepsli* Volkovitsh nov. spec., female, holotype, 5.7 mm. (Photographs 7–10, 13 M.G.Volkovitsh)

"Acmaeodera arya Hol., det. R. Holynski, 1978", "Acmaeodera arya Holynski, 1978, Holotype [handwritten, red]" (1♂, BMNH); same labels (part without Dehra Dun indication), 20, 30.vi., 1–20.vii, 3, 7, 10, 24.vii., "37", "40", "42", "48", "51", "57", "Acmaeodera arya Hol., det. R. Holynski, 1978", "Paratype [handwritten, red]" (2♂, 2♀, 5 ex. [partly damaged], BMNH, ZIN). Madhya Pradesh State: Hoshangabad, Rahatgaon, Hoshangabad, 16.vii.1927, from *Acacia catechu*, C.P, S.N. Chatterjee leg. (1♀, NMPC). Southern IRAN: Hormozgan Province: Hasan Langi, N27°23′ E56°50′, 155 m, 17.vii.2004, S. Kadlec leg. (1 ex., NMPC). Isin env., N27°19′ E56°16′, 70 m, 21.iv.2006, *ex larva*, *Acacia* sp., D. Baiocchi leg. (2♂, DBCR, ZIN). Southern PAKISTAN: Baluchistan Province: Khuzdar District, Awaran, 4–7.iv.1993, S. Bečvář leg. (1♂, VKCB). Sind Province: Kirthar National Park, Karchat, 25.ii–4.iii.1995, D. Hauck & L. Čížek leg. (1♂, 2♀, VKCB, ZIN). QATAR: Jeryan Al Batna, Rawdat Rashed env., N25°10′ E51°15′, 4.iii.2003, G. Sama leg. (1 ♀, GMCC). W Qatar, Al Jemailiyah (4–10 km W), N25°30′ E50°57′, dead in *Acacia* sp., G. Sama leg. (1 ex., GMCC).

Additional specimens not included among paratypes: Northern INDIA: Uttaranchal State: "Out of Sundariwood [2 with Dehra Dun indication]", "20, 30.vi., 13, 24.vii.1911", "36", "38", "39", "41", "45"," "46", "47", "Acmaeodera arya Hol., det. R. Holynski, 1978", "Paratype [handwritten, green]", "coll. RBHołyński BPgxh – BPgxn" (2♂ and 5 ex. of unknown sex, RHCM).

Description: Body (Plate 10) of medium size, strongly elongate, 3.47 (3.24–3.82; n=19) times as long as pronotum at base, slender, convex, with poorly defined dorsal curvature; blackish-bronze, nearly black, occasionally with violet sheen; elytra black and brown with yellowish marking, sometimes yellowish colour dominant; elytral marking irregular and asymmetric formed by longitudinal, oblique and transverse stripes and maculae, dark elements concentrating on 1st–2nd and 5–9th intervals, sides ochre-yellow, sometimes with reddish pigments at anterior corners and subapical 1/3 (some specimens from India); head and pronotal disc covered with long, elytra with short setiform scales, sides of pronotum, thoracic and abdominal ventrites with dense, oval branched scales, nearly concealing background; length 7.5 (5.1–10.2) mm, width 2.2 (1.4–3.0) mm.

Head broad, flattened when seen from above; frons flat, sometimes with medial line, slightly transversely depressed just above clypeus, with straight, distinctly diverging sides. Vertex 2.05 (1.94–2.23) times as wide as transverse diameter of eye and 1.10 (1.05–1.17) times as wide as frons above antennal sockets. Clypeus narrow, with arcuately curved lateral branches, and with broad, deep, angular medial emargination anteriorly. Frons with ocellate, sometimes changing to reticulate sculpture of large, elongate, superficial umbilicate punctures bearing flat grains and inconspicuous micropunctures; intervals less than 1/2 diameter of punctures; background nearly completely concealed by dense, long, recumbent setiform scales. Antennae in male 1.99 (1.88–2.18) times, in female 1.49 (1.33–1.71) times as long as height of eye; in male sharply expanded from antennomere 4; antennomere 2 weakly elongate, swollen at the middle; antennomere 3 1.5 times longer than 2nd, slightly expanded apically; antennomere 4 sharply expanded, triangular, nearly as wide as long; distal antennomeres 5–10 slightly transverse, wider then long; antennomere 11 elongately rhomboid; antennae in female similar but less expanded.

Pronotum rather convex and elongate, 1.37 (1.32–1.44) times as wide at base as long, widest at midlength, rarely posterior midlength or anterior midlength; sides arcuately converging towards anterior corners and weaker to posterior corners. Anterior margin slightly bisinuate with arcuately projecting medial lobe, basal margin widely emarginated. Lateral carina entire, straight. Pronotal surface convex, with distinct, sometimes deep medial depression; basal fossae well developed, deep. Pronotal sides with coarse reticulate, nearly alveolate sculpture of small, round umbilicate punctures, towards disc changing to reticulate-rugose sculpture of coalescent umbilicate punctures; disc medially with simple punctate sculpture of large deep punctures separated by intervals equal to or less than diameter of puncture. Pronotal sides with oval branched scales along lateral carina; remaining surface with long, recumbent, white

setiform scales. Anterior prosternal margin nearly straight, bordered by fine sulcus; prosternum evenly convex, covered with coarse ocellate sculpture of small, deep punctures, sparser on process; meso- and metaventrites with the same sculpture. Hypomeron bearing reticulate sculpture of large, polygonal, superficial umbilicate punctures.

Elytra strongly elongate, 2.57 (2.40–2.76) times as long as wide at base, convex, narrow; sides slightly widened at humeri, subparallel towards posterior 1/3, then elongately converging to narrowly rounded apices. Subhumeral incisure deep, antero-lateral angles acute, strongly projecting forward; epipleural serration formed by rather big, saw-like denticles at posterior 1/4, apical denticles claw-shaped. Strial punctures large, deep, separated at anterior half, completely merging at posterior 1/2. Intervals convex, subequal, narrow, at disc 1.5–3 times as wide as striae; 9th interval elevated and finely serrated; covered with very fine, inconspicuous, uni- or multiseriate punctures; background finely shagreened. Surface covered with short (less than width of intervals), transparent, finely lanceolate, uni- and multiseriate scales. Elytra dull, blackish-brown with yellowish pattern or yellowish with dark marking as described above (Plate 10).

Legs blackish-bronze, sometimes with violet sheen; metacoxal plates with posterior margin nearly straight, without lateral tooth. Tibiae slender, protibiae gradually expanded and bearing lateral tooth; metatibia bearing comb of yellowish setae externally. Tarsomeres subequal; 5th wide, expanded apically; tarsal pads developed on tarsomeres 1–4, each larger toward distal end. Tarsal claws long, curved, with internal tooth at the middle.

Abdomen blackish-bronze with violet sheen; sides of ventrites 1–2 with ocellate sculpture of dense umbilicate punctures changing to small simple punctures on sternal discs. Abdomen covered with dense, oval, white branched scales, nearly concealing background; medially with sparser recumbent scales. Anal ventrite in male short, regularly rounded apically, bordered with fine sulcus, that of female longer and narrowly rounded.

Male: Aedeagus as in Plates 26, 27.

Female: Ovipositor of tubular type, long, approximately 5 times as long as expanded apical part.

Differential diagnosis: In spite of some differences *Acmaeodera holynskii* nov. spec. belongs to the subgenus *Cobosiella* Volkovitsh, 1979, based on such characters as slender body with acuminate elytral apices (Plate 10) and, particularly, branched scales on ventral surface and pronotal sides, and male genitalia. It differs from all other species of the subgenus by irregular and asymmetric elytral marking; elongated pronotum with distinct medial depression and concave pronotal base; dense scaly pubescence, nearly entirely concealing background on the head, pronotal sides and ventral surface; male antennae long, expanded from antennomere 4 (also in *A. glebi* Volkovitsh, 2009), and aedeagus structure (Plates 26, 27).

Host plant: *Acacia catechu*, *Acacia* spp. (Fabaceae), "Sundariwood". The name "Sundariwood" is usually referred to *Heritiera fomes* (Malvales: Sterculiaceae), however, this tree is a specialized element of mangroves and its presence at Dehra Dun area seems doubtful. It's quite possible that "sundariwood" means the local name for some another tree.

Distribution: Northwestern India, southern Iran, southern Pakistan, Qatar, UAE.

Etymology: This species is dedicated to Roman Hołyński, a distinguished expert in Oriental buprestids who first paid attention to this species in BMNH collection.

Acmaeodera* (*Ptychomus*) *arabica Gory, 1840 Plate 11

Specimens examined: ETHIOPIA: "Abyssinien" (1 ex., NMPC), E. Holm det. ISRAEL: Wadi Gerguda, 20.vi.19.., H. Bytinski-Salz leg. (1 ex., NMPC), S. Bílý det. OMAN: Mahdah, N24°27′ E56°00′: 3.v.1993, no. 252, M. Gillett leg. (1 ex., NMPC) (Plate 11); 21.v.1993, no. 253, M. Gillett leg. (1 ex., NMPC); 31.v.1993, no. 295, M. Gillett leg. (1 ex., NMPC), all S. Bílý det. SAUDI ARABIA: Jizan,

25.iii.1983, collected by A. Talhouk, S. Tilkian, R. Abouzouheyrah, M. Eltaher & A. Elmadi (1 ex., NMPC), M.G. Volkovitsh det.
Remarks: Recorded from UAE by Gillett & Gillett (2005) and Howarth & Gillett (2008, 2009). Absent in examined material.
Host plant: *Acacia* (Volkovitsh, 2004).
Distribution: Ethiopia, Israel, Oman, Saudi Arabia, Yemen (Volkovitsh, 2006), UAE (Gillett & Gillett, 2005).

Genus ***Xantheremia*** Volkovitsh, 1979

Xantheremia (***Xantheremia***) ***pantherina*** (Bílý, 1979) Plate 12
Recorded from UAE by Gillett & Gillett (2005) and Howarth & Gillett (2008, 2009) as *Acmaeodera*. Absent in examined material. Comment see below: *Xantheremia prepsli* nov. spec.
Host plant: *Calligonum commosum* (Polygonaceae) (Volkovitsh, 2004).
Distribution. Egypt, Iraq, Israel, Saudi Arabia (Volkovitsh, 2006).

Xantheremia **(*Xantheremia*)** ***prepsli*** Volkovitsh **nov. spec.** Plates 13, 36, 37, 40
Specimens examined: Holotype: ♀ (ZIN), United Arab Emirates, Wadi Shawkah, N25°06′ E58°03′, 5–12.v.2007, water trap, A. van Harten leg. Paratypes (ZIN, UAEIC, NMPC, MGCR, MJCP, MNCA, SPCV, ZIN): Wadi Shawkah, N25°06′ E58°03′, 5–12.v.2007, water traps, A. van Harten leg. (2♀, NMPC, ZIN). Sharjah Desert Park, N25°17′ E55°42′, 25.ii-25.iii.2006, light trap, A. van Harten leg. (1♂, 1♀, ZIN). Southern IRAN: Hormozgan Province: N of Bandar-e Abbas, Hoshangan (4 km NEE), 30.iv.2002, S. Kadlec leg. (2 ex., NMPC). SE of Minab, Angohran, 24.iv.2002, M. Johanides leg. (1 ex., MJCP). Minab, 18–20.v.2006, S. Prepsl leg. (8♂, 19♀, SPCV, ZIN). Northern OMAN: Jebel Huwarrah, N24°52′ E55°19′, 7.iv.1999, on *Iphiona aucheri/Pulicaria glutinosa* flowers, M. Gillett leg. (2♂, 1♀, MGCR, ZIN). Jebel Auha, Buraimi, N24°17′ E55°50′, 8.iv.1999, on *Pulicaria glutinosa* flowers, M. Gillett leg. (1♀, 2 ex., MGCR); same locality, 16.iv.1999, M. Gillett leg. (12 ex., MGCR). Southern PAKISTAN: Baluchistan Province: Bela, 3–4.v.1993, S. Prepsl leg. (34♂, 16♀, 11 ex., NMPC, SPCV, TCMC, VKCB, ZIN). SAUDI ARABIA: Najd, N of Al Khurmah, N22°25′47″ E41°47′58″, *Acacia* sp., ex larva, 2007 (2♂, MNCA).
Description: Body (Plate 13) small, 3.18 (3.05–3.38; n=12) times as long as pronotum at base, slender, slightly flattened, with poorly defined dorsal curvature; blackish-bronze with bronzy or steel sheen; elytra ochre-yellow, elytral pattern brown or blackish-brown, variable, more or less symmetrical, consisting of sutural stripe and maculae on 4–8th intervals sometimes merging in large macula at posterior half of elytra or nearly entirely reduced; dorsally covered with narrow lanceolate scales, ventrally with broad lanceolate or oval scales nearly concealing background; length 5.8 (5.0–6.7) mm, width 1.8 (1.5–2.1) mm.
Head moderately broad, flattened and feebly depressed in the middle when seen from above; frons flat, with shallow medial depression or fossa, with straight, markedly diverging sides. Vertex flattened, with distinct medial carina, 1.67 (1.47–1.84) times as wide as transverse diameter of eye and 1.14 (1.06–1.22) times as wide as frons above antennal sockets. Clypeus wide, with deep, angular anterior emargination. Frons with striate sculpture of very fine, concentric striae consisting of merging micropunctures, sometimes with a few obliterated umbilicate punctures just above clypeus; intervals much wider than striae, finely shagreened. Head covered with fine lanceolate scales not concealing background. Antennae relatively long, expanded from antennomere 4 in both sexes; in male 1.83 (1.63–1.94) times, in female 1.58 (1.39–1.83) times as long as height of eye; in male antennomere 2 oval, elongate; antennomere 3 shorter, also elongate; antennomere 4 triangular, as wide or nearly as wide as 5th;

antennomeres 5–10 triangular, nearly as wide as long; antennomere 11 irregular; in female distal antennomeres 4–10 shorter and more transverse.

Pronotum weakly transverse, slightly narrower than elytra at humeri, 1.42 (1.35–1.50) times as wide at base as long, widest at base; sides subparallel at basal half, arcuately converging at anterior half. Anterior margin nearly straight, basal margin straight. Lateral carina well marked, entire, reaching anterior angles, nearly straight. Pronotal surface convex, without medial groove or line, with inconspicuous smooth medial stripe; basal fossae inconspicuous; sides above lateral carina with a few series of elongate, asperate, umbilicate punctures changing to striate sculpture of very fine, concentric striae similar to those on the head; medial stripe with very fine micropunctures, intervals finely shagreened; sides covered with broad lanceolate or oval scales concealing background just above lateral carina, remaining surface with thin sparse lanceolate scales. Anterior prosternal margin nearly straight bordered with fine sulcus; prosternum convex, prosternal process with concentric striation; hypomeron with reticulate-rugose sculpture of large elongate umbilicate punctures; meso- and metaventrites with ocellate sculpture; thoracic segments covered with oval scales concealing background.

Elytra elongate, 2.42 (2.35–2.48) times as long as wide at base, moderately convex, wide; sides subparallel or slightly diverging towards posterior 1/3, then arcuately converging towards narrowly rounded apices. Subhumeral incisure arcuate, distinct; epipleural serration formed by small, poorly visible subapical denticles. Strial punctures large and deep on light background and small shallow on dark one, separated at anterior half, merging, finely sulcate at posterior 1/2. Intervals flat, subequal, at disc 1.5–2.0 times as wide as striae; 9th interval weakly elevated, smooth; intervals bearing small, uniseriate punctures on feebly shagreened background. Elytra covered with thin lanceolate uniseriate scales. Elytra yellow with brown or blackish-brown, variable, more or less symmetric marking, consisting of sutural stripe and maculae on 4–8th intervals (Plate 13), sometimes merging in large macula at posterior half of elytra or nearly entirely reduced.

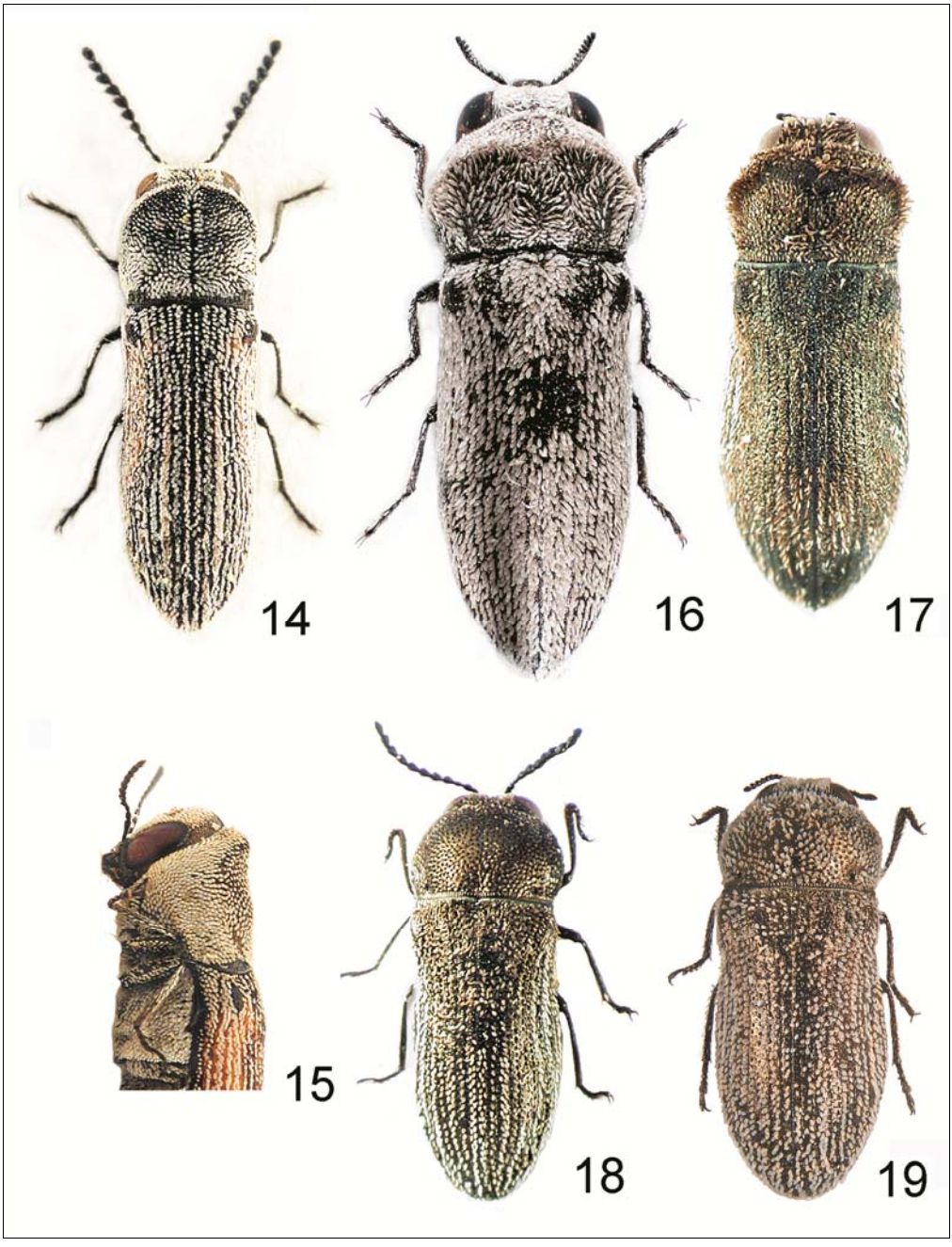
Legs blackish-bronze; metacoxal plates with emarginate posterior margin. Tibiae slender, metatibiae bearing comb of yellowish setae externally. Tarsomeres subequal; tarsal pads poorly developed on tarsomere 4, rudimentary on tarsomeres 1–3. Tarsal claws long, curved, with internal subapical tooth.

Abdomen blackish-bronze, sides with ocellate changing to punctate sculpture towards discs; covered with wide lanceolate or oval scales, nearly concealing background on sides; medially with very thin scales. Anal ventrite regularly rounded and bordered with sulcus apically, without depressions.

Male: Aedeagus as in Plates 36, 37.

Female: Ovipositor as in Plate 40.

Differential diagnosis: *Xantheremia prepsli* nov. spec. belongs to the *X.* (*Xantheremia*) *flavipennis* (Klug, 1829) species-group (Volkovitsh, 1979). It comes close to *X. philistina* (Marseul, 1865) from Israel, Syria and Egypt, and *X. pantherina* (Bílý, 1979) known from Egypt, Iraq, Israel and Saudi Arabia. *Xantheremia prepsli* nov. spec. differs from these species by longer antennae expanded from antennomere 4 which is subequal in width to 5th; by shape of distal antennomeres which are triangular, nearly as long as wide in male (in *X. pantherina* and *X. philistina* antennae expanded from antennomere 5, distal antennomeres strongly transverse, approx. 2 times as wide as long); by very fine striation of head and pronotum without traces of umbilicate punctures; and by different structure of aedeagus and ovipositor.



Plates 14–19. 14, 15: *Acmaeoderella* (*Omphalothorax*) *argentea* Volkovitsh nov. spec., male, paratype, 6.4 mm, Iran, Hormozgan. 14: Dorsal view; 15: pronotum, lateral view. 16: *A.* (*Acmaeoderella*) *pseudonivetecta* Volkovitsh nov. spec., male, paratype, 8.4 mm. 17: *A.* (*Euacmaeoderella*) cf. *nivifera* (Abeille de Perrin, 1894), male, 6.8 mm. 18: *A.* (*E.*) *ballioni* (Ganglbauer, 1888), male, 4.7 mm, UAE, Fujairah. 19: *A.* (*E.*) *squamosa* (Théry, 1914), 5.0 mm, Israel, Central Negev, Nahal Neqarot, 11 km SE of Mizpé Ramon. (Photographs 14–18 M.G.Volkovitsh.)

Note: The records of *X. flavipennis*, *X. pantherina* and *X. philistina* from UAE (Gillett & Gillett, 2005, Howarth & Gillett, 2008, 2009 [as *Acmaeodera flavipennis* and *A. pantherina*]) most probably belonged to *X. prepsli* nov. spec.
Host plant: *Acacia* (Fabaceae).
Distribution: Southern Iran, Oman, southern Pakistan, Saudi Arabia, UAE.
Etymology: This species is named in honour of Stanislav Prepsl (Vyškov, Czech Republic), the first collector of this species.

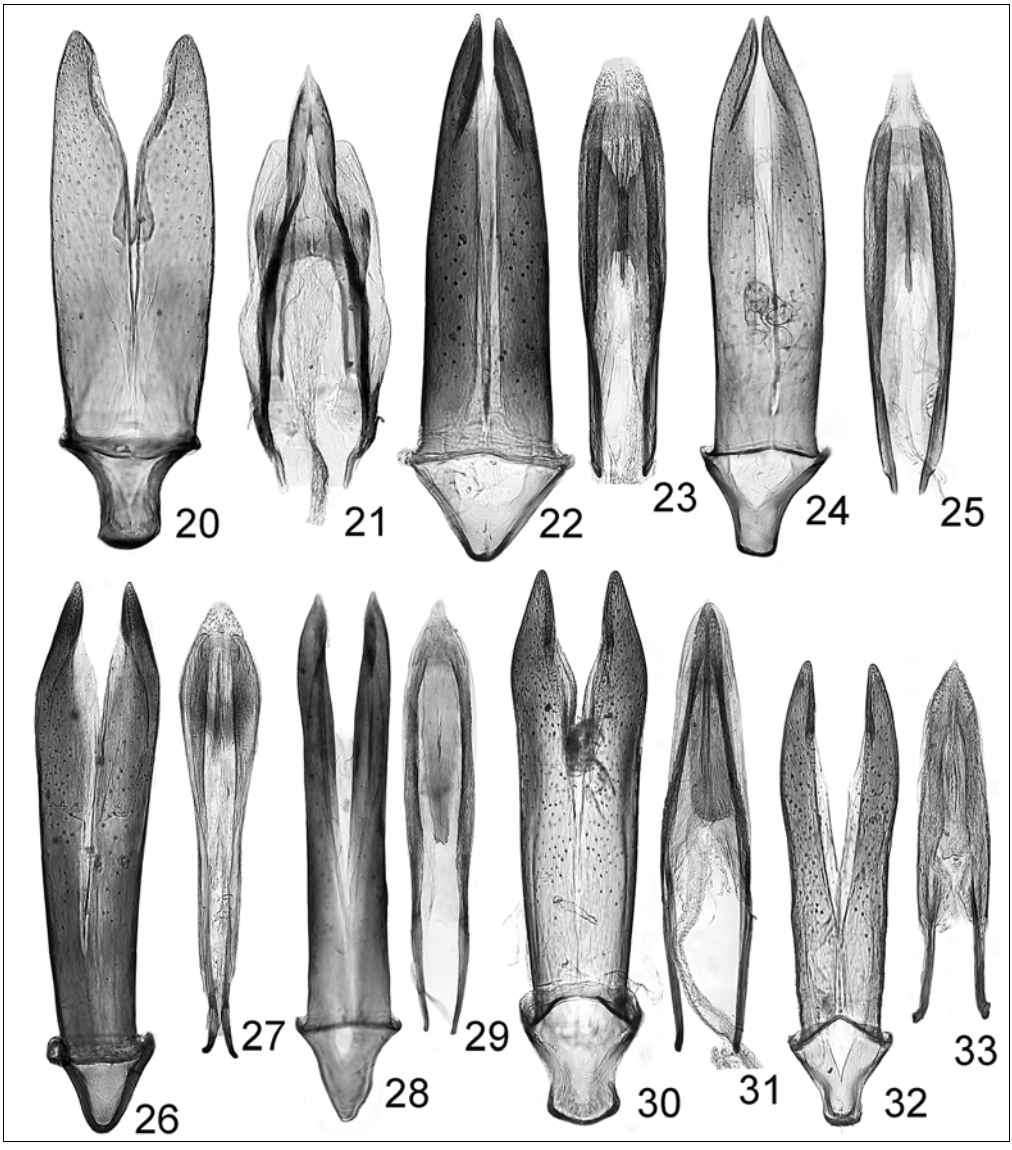
Genus ***Acmaeoderella*** Cobos, 1955

Acmaeoderella* (*Omphalothorax*) *argentea Volkovitsh **nov. spec.** Plates 14, 15, 28, 29
Specimens examined: Holotype: ♂ (ZIN), United Arab Emirates, N of Ajman, N25°26′ E55°29′, 18–22.v.2008, water traps, A. van Harten leg. Paratypes (MGCR, MJCP, NMPC, VKCB, ZIN): Ar-Rafah, N25°43′ E55°51′, 18–22.v.2008, water traps, A. van Harten leg. (1♂, 1♀, NMPC, ZIN). OMAN: Jebel Huwarrah, N24°52′ E55°19′, 14.v.1999, on *Acacia tortilis*, M. Gillett leg. (1♂, MGCR). Southern IRAN: Hormozgan Province: SE of Minab, Angohran, 24.iv.2002, P. Kabátek, M. Johanides & S. Kadlec leg. (1♂, 1♀, 5 ex., MJCP, VKCB, ZIN). Kuh-e Surmeh Mts., W slope, Hajjiabad (55 km S), N27°58′ E55°58′, 2000 m, 10.v.1973, loc. no. 195, Exp. Nat. Mus. Praha (1♀, NMPC).
Description: Body (Plate 14) small, 3.65 (3.47–3.79; n=8) times as long as pronotum at base, slender, elongate, subcylindrical, with poorly defined dorsal curvature; dark bronze; elytra brown with feeble bronzy sheen; elytral pattern of "*virgulata*" type, nearly regular, consisting of 2 longitudinal yellowish stripes on 3rd and 6–9th intervals, sometimes partly reduced, expanded or confluent; head, pronotal sides and ventral surface covered with regular, oval, white scales entirely concealing background, sparser on pronotal disc, and forming longitudinal uni- or multiseriate stripes on elytra; length 6.0 (5.2–7.2) mm, width 1.6 (1.4–1.9) mm.
Head broad, slightly convex, entirely covered with oval scales concealing background; frons flattened, without medial depression or line, with nearly straight, strongly diverging sides. Vertex flattened or slightly convex, without medial carina or line, 2.13 (1.94–2.25) times as wide as transverse diameter of eye and 1.18 (1.13–1.23) times as wide as frons above antennal sockets. Clypeus very narrow, with anterior margin widely emarginated. Frons with ocellate sculpture of small, round, superficial umbilicate punctures with large grains and indistinct micropunctures, denser at sides; intervals less than 1/2 of diameter of puncture. Antennae long, sharply dimorphic, in male 2.15 (2.03–2.28), in female 1.64 (1.59–1.69) times as long as height of eye, expanded from antennomere 4 in both sexes; antennomere 2 slender, slightly swollen at the middle; antennomere 3 slender, slightly longer than second; in male antennomere 4 sharply expanded, as wide as long; antennomeres 5–10 triangular, as wide as long; antennomere 11 elongate, irregularly oval. In female antennomere 4 conical, narrower than 5th; antennomeres 5–10 triangular, much less expanded, slightly wider than long; antennomere 11 elongate, irregular, weakly transverse.
Pronotum (Plates 14, 15) elongate, 1.04 (1.00–1.06) times as wide at base as long, widest at anterior 1/5; sides slightly diverging towards anterior corners, shortly converging to base and anterior margin. Anterior margin widely, arcuately projecting forward, basal margin weakly emarginated. Lateral carina absent. Pronotal surface in lateral view depressed anteriorly and posteriorly of the middle, medially slightly elevated (Plate 15); anterior margin swollen and in frontal view deeply triangularly emarginated at the middle by medial line; basal fossae inconspicuous; pronotal surface with uniform coarse alveolate sculpture of large, deep alveolae with inconspicuous internal structure. Sides with large oval scales entirely concealing background; disc with shorter and sparser oval scales directed radially and not

concealing background. Thorax ventrally entirely covered with oval scales; anterior prosternal margin deeply emarginated; prosternum convex, covered with small, transverse umbilicate punctures; meso- and metaventrites with the same sculpture; hypomeron with larger, round, superficial umbilicate punctures bearing large central grains.
Elytra strongly elongate, 2.63 (2.45–2.74) times as long as wide at base, subcylindrical, slender; sides subparallel towards posterior 1/4, then shortly converging to narrowly, sometimes separately rounded apices. Subhumeral incisure, arcuate, lateral margin slightly curved posteriorly; epipleural serration formed by small, narrow, sharp denticles at posterior 1/4. Strial punctures large, elongate, deep, adjacent and impressed along elytral length. Intervals flat, narrow, at disc equal or 1.5–2 times as wide as striae; 9th interval slightly elevated, without denticles; covered with small, uniseriate or confused punctures on coarse transversely rugose background. Elytra brown, sometimes with distinct bronzy sheen; elytral pattern of "*virgulata*" type formed by 2 longitudinal yellowish stripes on 3rd and 6–9th intervals, sometimes partly reduced or expanded. Elytra covered with oval white scales, forming longitudinal uni- or multiseriate (on expanded intervals) stripes.
Legs blackish-bronze; metacoxal plates subparallel with slightly emarginated posterior margin; femora covered with dense oval scales. Tibiae slender; metatibiae bearing comb of yellowish setae externally. Tarsomere 1 distinctly shorter than 2nd and 3rd together; tarsal pads poorly developed, each larger towards distal end. Tarsal claws with sharp internal tooth at basal 1/3.
Abdomen blackish-bronze, covered with uniform ocellate sculpture of small, round umbilicate punctures, sparser and smaller on discs, and with overlapping oval scales, completely concealing background. Anal ventrite short, obtuse apically in both sexes.
Male: Aedeagus as in Plates 28, 29.
Female: Ovipositor of tubular type, rather long.
Differential diagnosis: *Acmaeoderella argentea* nov. spec. belongs to the *A.* (*Omphalothorax*) *adspersula* (Illiger, 1803) species-group and comes closest to *A. densisquamis* (Abeille de Perrin, 1904). It differs by shorter body and pronotum [in *A. densisquamis* body 3.83 (3.44–4.29) times as long as pronotal width at base, pronotum 0.99 (0.97–1.03) times as wide at base as long]; weakly convex vertex and less diverging frontal sides (in *A. densisquamis* vertex strongly convex as seen from above); contour of pronotum at lateral view (in *A. densisquamis* pronotal surface nearly straight, without medial elevation and swollen anterior margin which is only shallowly depressed by distinct medial groove); uniform pronotal sculpture (in *A. densisquamis* alveolae obliquely elongated and their walls form oblique rugae), and aedeagus structure. Larvae of *A. densisquamis* feed in *Pistacia* (D. Gianasso, D. Baiocchi, pers. comm.) while *A. argentea* nov. spec. is possibly associated with *Acacia*.
Host plant: ?*Acacia* (Fabaceae).
Distribution: Southern Iran, Oman, UAE.
Etymology: The species name reflects somewhat silvery appearance resulting from white scales interference.

Acmaeoderella* (*Acmaeoderella*) *pseudonivetecta Volkovitsh **nov. spec.** Plates 16, 30, 31
Specimens examined: Holotype: ♂ (ZIN), United Arab Emirates, Ar-Rafah, 18–28.vi.2008, water traps, A. van Harten leg. Paratypes (GMCC, MGCR, MNCA): Al-Ain al-Faidah, N24°03′ E55°42′, 13.v.1999, in trap at ground level in saline sand with *Halopeplis perfoliata*, M. Gillett leg. (1♂, MGCR). Al-Ain, Markhaniya, 12.v.2000, on salt bush (1ex., MGCR). Southern IRAN: Hormozgan Province: Pahel env., 17.iv.2007, 30, *Zygophyllum* [living roots], ex larva, 24.iv.2007, G. Magnani leg. (1♂, GMCC). OMAN: Ibri (50 km NW), 2.iv.1995, J. Wittmann leg. [ex coll. M. Hauser] (1♂, MNCA).

Description: Body (Plate 16) of medium size, 3.20 (3.14–3.25; n=4) times as long as pronotum at base, robust, subcylindrical, with poorly defined dorsal curvature; blackish-bronze with coppery sheen; elytra blackish-bronze, unicolorous; entirely covered with large oval scales, completely concealing background ventrally, sparser and narrower on pronotum, and forming longitudinal stripes on elytra; length 8.4 (7.8–8.8) mm, width 2.6 (2.4–2.8) mm.
Head broad, convex, contour arcuate, completely covered with oval scales, concealing background; frons convex, occasionally with medial line and with straight, strongly diverging sides. Vertex convex, with short but distinct medial carina, 1.80 (1.59–1.92) times as wide as transverse diameter of eye and 1.32. (1.22–1.43) times as wide as frons above antennal sockets. Clypeus very narrow, with nearly straight anterior margin. Frons covered with ocellate sculpture of small, round, superficial umbilicate punctures with indistinct micropunctures; intervals less than diameter of puncture. Antennae (male) very short, 0.89. (0.83–0.94) times as long as height of eye; sharply expanded from antennomere 5; antennomere 2 oval, swollen; antennomere 3 short, slightly expanded apically; antennomere 4 conical, nearly as long as 3rd; antennomeres 5–10 sharply transverse, about 2 times as wide as long; antennomere 11 transverse, trapezoid; proximal antennomeres covered with dense scales.
Pronotum nearly globose, convex, 1.25 (1.23–1.29) times as wide at base as long, widest at the middle; sides regularly arcuate. Anterior margin widely, slightly angularly projecting forward, basal margin weakly concave. Lateral carina inconspicuous. Pronotal surface convex, without medial depression or line; basal fossae poorly marked, visible due to radially orientated scales; with coarse alveolate sculpture of small, deep alveolae, concealing by scales laterally and along anterior margin; disc with oval and widely lanceolate, semierect scales forming transverse comb of oppositely directed scales. Anterior prosternal margin weaky emarginate; prosternum convex, covered with fine simple punctures on shagreened background; meso- and metaventrites with similar sculpture; thoracic segments entirely covered with oval scales concealing background.
Elytra moderately elongate, 2.38 (2.32–2.41) times as long as wide at base, subcylindrical, wide; sides subparallel towards posterior 1/3, then sharply converging to narrowly rounded apices. Subhumeral incisure deep, arcuate; epipleural serration formed by small, poorly visible denticles. Strial punctures small, oval, superficial, separated at anterior half, merging and forming fine sulci at posterior 1/2, poorly visible against coarse, transversely rugose background. Intervals flat, subequal, at disc 3.5–4 times as wide as striae; 9th interval weakly elevated, smooth; covered with small, confused punctures. Elytra covered with large, oval, overlapping scales, forming longitudinal stripes on disc, completely concealing background laterally (Plate 16). Elytra dull, blackish-bronze.
Legs blackish-bronze, sometimes with coppery sheen, covered with dense oval scales; metacoxal plates subparallel with straight posterior margin. Tibiae slender, gradually expanded towards apices; metatibiae bearing comb of yellowish setae externally. Tarsomeres subequal; tarsal pads developed on tarsomere 4, rudimentary on tarsomeres 1–3. Tarsal claws long, curved, swollen at base, without internal tooth.
Abdomen blackish-bronze, covered with wide overlapped scales, completely concealing background.
Male: Aedeagus as in Plates 30, 31.
Female: Unknown.
Differential diagnosis: *Acmaeoderella pseudonivetecta* nov. spec. comes close to *A. nivetecta* Volkovitsh, 1976, and *A. alfierii* (Théry, 1929). It differs from *A. nivetecta* by short antennae with strongly transverse antennomeres (in *A. nivetecta* antennae longer than height of eye; distal antennomeres no more than 1.5 times as wide as long); pronotum with transverse comb



Plates 20–33. 20, 21: *Acmaeodera* (*Acmaeodera*) *guichardi* Levey & Volkovitsh, 1996, Oman, Wadi A'bul, microslide no. 1729. 20: Tegmen (1.20 mm); 21: Penis (0.75 mm). 22, 23: *A.* (*Acmaeotethya*) *vanharteni* Volkovitsh nov. spec., paratype, UAE, Wadi Maidaq, microslide no. 1821. 22: Tegmen (1.35 mm); 23: Penis (1.10 mm). 24, 25: *A.* (*A.*) *batelkai* Volkovitsh nov. spec., paratype, UAE, Darah env., microslide no. 1818. 24: Tegmen (1.55 mm); 25: Penis (1.30 mm). 26, 27: *A.* (*Cobosiella*) *holynskii* Volkovitsh nov. spec., holotype, microslide no. 1822. 26: Tegmen (1.60 mm); 27: Penis (1.30 mm). 28, 29: *Acmaeoderella* (*Omphalothorax*) *argentea* Volkovitsh nov. spec., paratype, UAE, Al-Rafah, microslide no. 1855. 28: Tegmen (1.40 mm); 29: Penis (1.20 mm). 30, 31: *A.* (*Acmaeoderella*) *pseudonivetecta* Volkovitsh nov. spec., paratype, UAE, Ain al Faidah, microslide no. 1829. 30: Tegmen (1.85 mm); 31: Penis (1.55 mm). 32, 33: *A.* (*Euacmaeoderella*) cf. *nivifera* (Abeille de Perrin, 1894), microslide no. 1828. 32: Tegmen (1.30 mm); 33: Penis (1.00 mm). (Photographs M.G.Volkovitsh.)

of scales (in *A. nivetecta* scales not forming a comb, discal scales short, usually as long as diameter of alveolae); tarsal claws simple with swollen base (in *A. nivetecta* claws with large sharp internal tooth); the larvae of the new species feed in the roots of *Zygophyllum* (Zygophyllaceae), while larvae of *A. nivetecta* live in the roots of *Heliotropium grande* (Boraginaceae). According to the Théry description (Théry, 1929b) *A. pseudonivetecta* nov. spec. differs from *A. alfierii* by smaller size (in *A. alfierii* body length 10 mm, width 3.75 mm); frons without depression; antennae shorter than height of eye; elytral striae formed by small, superficial punctures (in *A. alfierii* striae coarse, formed by deep punctures); elytral scales arranged linearly (in *A. alfierii* scales arranged irregularly); tarsal claws without internal tooth (in *A. alfierii* claws with large internal tooth at base).
Remarks: It is quite possible from the indications that the records of *Acmaeoderella squamosa* (Théry, 1914) (see below) in Gillett & Howarth (2004), Gillett & Gillett (2005), and Howarth & Gillett (2008, 2009) actually belonged to this new species. One paratype (MGCR) collected by Gillett bears a label "*Acmaeoderella squamosa*".
Host plant: *Zygophyllum* (Zygophyllaceae), in living roots.
Distribution: Southern Iran, Oman, UAE.
Etymology: The species name reflects the similarity of the new species to *A. nivetecta* from the Central Asia, northern Iran and Afghanistan.

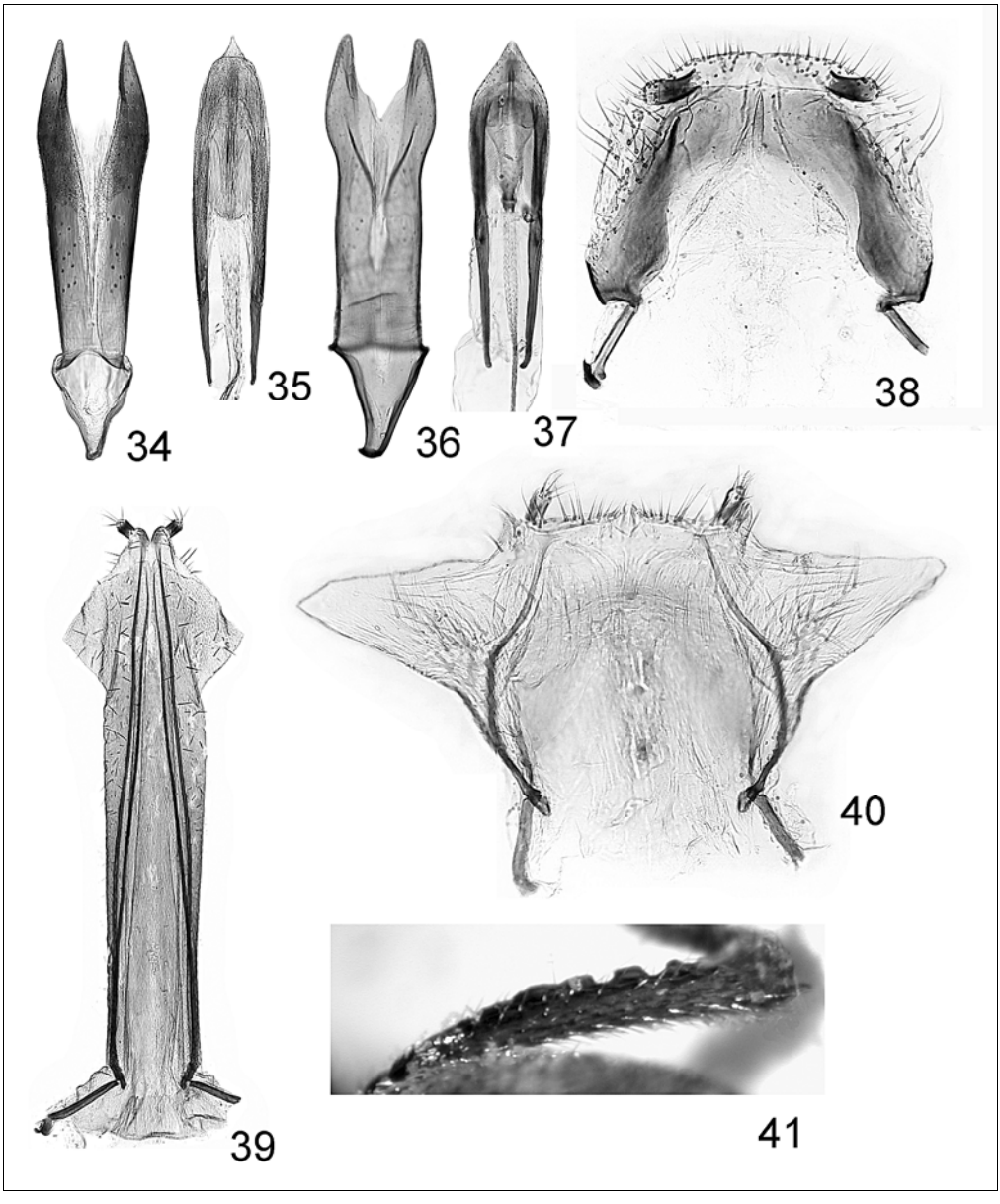
Acmaeoderella* (*Euacmaeoderella*) *ballioni (Ganglbauer, 1888) Plates 18, 34, 35
Specimen examined: Dibba env., N25°31′58″ E56°13′44″, 110 m, 21.iii.2007, J. Batelka leg. (1♂, ZIN).
Host plant: In Central Asia (Kazakhstan, Turkmenistan) this species is associated mainly with *Convolvulus* (Convolvulaceae).
Distribution: Afghanistan, Iran, Kazakhstan, Tadjikistan, Turkmenistan, UAE, Uzbekistan. New species for the UAE.

Acmaeoderella* (*Euacmaeoderella*)** cf. ***nivifera (Abeille de Perrin, 1894) Plates 17, 32, 33
Specimen examined: Wadi Shawkah, N25°06′ E56°02′, 250–280 m, 26.iii.2007, J. Batelka leg. (1♂, ZIN).
Note: The single specimen of this species was collected dead with all the appendages broken, pubescens partly lost, and colouration possibly changed while drying. In the course of dissection to extract genitalia the specimen was destroyed, which made it unsuitable for adequate description. Supposedly this species is related to *Acmaeoderella nivifera* (Abeille de Perrin, 1894) but differs by larger size and coarse alveolate sculpture of pronotum. Fresh specimens are needed for appropriate description.
Host plant: Unknown.

Acmaeoderella* (*Euacmaeoderella*) *squamosa (Théry, 1914) Plate 19
Recorded from UAE by Gillett & Howarth (2004), Gillett & Gillett (2005) and Howarth & Gillett (2008, 2009). This species was absent in examined material. The record needs confirmation because there are undescribed new species from the same group collected in Oman (see above: *Acmaeoderella pseudonivetecta* nov. spec.).
Host plant: Unknown.
Distribution. Egypt, Iraq, Israel, Saudi Arabia, Tunisia (Volkovitsh, 2006).

Tribe **Polycestini** Lacordaire, 1857

Genus ***Pseudocastalia*** Kraatz, 1896



Plates 34–41. 34–37: Aedeagus. 34, 35: *Acmaeoderella* (*Euacmaeoderella*) *ballioni* (Ganglbauer, 1888), UAE, Dibba env., microslide no. 1827. 34: Tegmen (1.10 mm); 35: Penis (1.00 mm). 36, 37: *Xantheremia* (*Xantheremia*) *prepsli* Volkovitsh nov. spec., paratype, UAE, Sharjah Desert Park, microslide no. 1852. 36: Tegmen (1.55 mm); 37: Penis (1.05 mm). 38–40: Ovipositors. 38: *Acmaeodera* (*Acmaeodera*) *guichardi* Levey & Volkovitsh, 1996, Oman, Wadi A'bul, microslide no. 1730 (0.60 mm); 39: *A.* (*Acmaeotethya*) *batelkai* Volkovitsh nov. spec., paratype, UAE, Darah env., microslide no. 1819 (2.00 mm); 40: *X.* (*X.*) *prepsli* Volkovitsh nov. spec., UAE, Wadi Shawkah, microslide no. 1854 (0.65 mm). 41: Protibia *A.* (*A.*) *batelkai* Volkovitsh nov. spec., paratype, UAE, Darah env. (Photographs M.G.Volkovitsh.)

Pseudocastalia arabica arabica (Gestro, 1877) Plate 42

Specimens examined: DJIBOUTI: Gibdo [N11°53′55″ E42°39′04″], v.1905, K. Katona leg. (1♂, 1♀, ZIN) (Plate 42). Obock, v.1902 (1♀, NMPC); vi.1902 (1 ex., MNHN). ETHIOPIA: "Abyssinia" (1 ex., MNHN). Harar, Coll. Plason (1♂, NMPC). SAUDI ARABIA: Jiddah (2♀, NMPC). Northern SOMALIA: Berbera (1♂, 4♀, NMPC; 1 ex., MNHN). Ancient Maakhir State: Warsangali Sultanate ["Somali Ouarsangueli"], 1881, G. Révoil leg. (1 ex., MNHN). Southern VIETNAM: "Long Xuyen Cochinchine Dorr. [printed]" (more ex., MNHN, 1♂, 2♀, NMPC). YEMEN: Aden, 6.vi.1876, O. Beccari leg. (♀, lectotype of *Polycesta arabica*, designated by Holm (1982), MNHN; 2 paralectotypes, MNHN, ZMHB); Aden (4 ♀, NMPC, ZIN; 1 ex., MNHN); Aden, Coll. Argod (1♂, 1♀, NMPC).

Important published records: Djedda, in house, 3.vii.1956 (Shalaby, 1961).

Recorded from UAE (Abu Dhabi, 1988–1990, B. Brown leg., 16 ex.) by Howarth & Gillett (2009). Absent in examined material.

Host plants: Unknown. According to records of this species inside buildings (Shalaby, 1961) it is highly possible that the larvae of this species can develop within the dead, dry or technical wood like related polycestine species. Beetles of some species were found within the wooden parts of historical buildings. *Strigoptera fairmairei* (Waterhouse, 1904) in temple wooden column (northern Vietnam, Ninh Binh, V. Kubáň, pers. observ.), *Strigopteroides depressa depressa* (Fabricius, 1775) in wooden door of Emir's Palace (Uzbekistan, Chiva, S. Bílý & V. Kubáň, pers. observ.), in wooden column's in Emir's Palace (Uzbekistan, Bukhara, M.G. Volkovitsh, pers. observ.), in construction beam (Central Asia, Gussakovskii, 1949), *Thurntaxisia alexandri* Schatzmayr, 1929 in telegraph poles (Greece, Mühle et al., 2000).

Remarks: Howarth & Gillett (2009) recorded the presence of this species in BMNH from Syria, India and Korea, which seems extremely doubtful. These localities are not mentioned either in the recent revisions of *Pseudocastalia* (Cobos, 1981, Holm, 1982) or catalogues (Bellamy, 2008), nor were specimens with such labels found during MGV's study of the polycestine collection in BMNH (February, 2009). Nevetherless, Kerremans (1902) indicated "Aden, Cochinchine", and "Aden, Tonkin, Abyssinie, Somali" (Kerremans, 1905). Cobos (1981) regarded the record "Tonkin" to be a mistake. Moreover, V. Kubáň found in the collections of MNHN and NMPC a few specimens (see Specimens examined) of *P. arabica arabica* from southern Vietnam ("Long Xuyen Cochinchine"). In spite of these data we still have doubts that the natural geographic distribution of *P. a. arabica* reaches southeastern Asia. This occurrence could be explained as a result of an occasional introduction of this species with wood or mislabelling. Further findings are necessary to confirm the occurence of this species in southeastern Asia.

Distribution: Djibouti (Fairmaire, 1892; new record), Eritrea (Gestro, 1889), Ethiopia (Kerremans, 1905; new record), Saudi Arabia (Holm, 1982), Yemen (Gestro, 1877 [type locality]), UAE (Howarth & Gillett, 2009), Somalia (Fairmaire, 1882; new record).

Subfamily **Chrysochroinae** Laporte, 1835

Tribe **Paratassini** Bílý & Volkovitsh, 1996

Genus ***Paratassa*** Marseul, 1882

Paratassa orientalis Bílý & Volkovitsh, 1996 Plate 43

Specimens examined: Margham env., N24°55′ E55°38′, 163 m, 24.xi.2007, J. Batelka & H. Pinda leg. (1♂, 1♀, JBCP).

Host plant: *Diplotaxis hara* (Bílý, 1983; Bílý & Volkovitsh, 1996).

Distribution: Western Iran (Khuzestan), UAE. New species for the UAE.

Tribe **Chrysochroini** Laporte, 1835

Genus ***Steraspis*** Dejean, 1833

Steraspis* (*Steraspis*) *speciosa arabica Waterhouse, 1904 Plate 44

Specimens examined: Southern OMAN: Dhofar Province: Rakhyut env., 20–50 m, 1–8.viii.1999, R. Červenka leg. (1♂, VKCB). Taqah env., 0–100 m, viii.1999, S. Jákl leg. (1♂, 1♀, NMPC, VKCB). Mughsayl, ix.2000, D. Gianasso leg. (1♂, 1♀, NMPC). Wadi Darbat, ix.2000, D. Gianasso leg. (1♀, NMPC). SAUDI ARABIA: Riyadh (30 km SSE), near Al Ha'ir, Wadi Shaib Luha, 17.xii.1976, W. Büttiker leg. (2 ex., NHMB). Southern YEMEN, Kawr Sayban Mt., NW Al Mukalla, N14°37′ E49°03′, 575 m, 29.iii.2007, P. Kabátek leg. (1 ex., NMPC).

Remarks: Waterhouse (1904) described *Steraspis arabica* as a species from Mascat (Oman). From Oman it is recorded by Janikova [no date] as "*Steraspis speciosa*". From southeastern Saudi Arabia (Rub'al Khali desert) recorded by Blair (1931). From central part of Saudi Arabia (S of Riyadh; see above) recorded by Bílý (1979) as "*Steraspis speciosa* Klug, 1829". Gillett & Howarth (2004) recorded *S. arabica* first for the UAE (Jebel Hafit), subsequently recorded also by Gillett & Gillett (2005) and Howarth & Gillett (2008, 2009). Curletti (2009) treated *S. arabica* as an Arabian subspecies of African *S. speciosa* (Klug, 1829). Distribution see also Kubáň (2006) and Bellamy (2008).

Host plant: *Acacia* (field observation from Oman, J. Horák, pers. comm.).

Distribution: Oman, southeastern Saudi Arabia, UAE, southern Yemen. New species for Yemen.

Tribe **Sphenopterini** Lacordaire, 1857

Genus ***Sphenoptera*** Dejean, 1833

Sphenoptera* (*Tropeopeltis*) *arabica Gory, 1841 Plate 45

Specimens examined: Southwestern OMAN: Dhofar Province: Rakhyut village env., 50 m, viii.1999, on *Acacia* sp., S. Jákl leg. (2♂, 1♀, NMPC, VKCB). YEMEN: Southwestern Yemen: Al Hudaydah NEE, Jabal Bura', N14°52′ E43°24′, 225–600 m, 30.x–1.xi.2005, P. Kabátek leg. (2♂, 2♀, PKCP, VKCB) (Plate 45); same data but 200–800 m, J. Halada leg. (1♀, NMPC). Southeastern Yemen: Al Ghaydah NE, Jabal al Fatk, Hawf, N16°38′ E53°04′, 0–160 m, 15.x.2005, reared from *Boswellia* sp., P. Kabátek leg. (1♀, VKCB).

Recorded from the UAE by Gassouma (1991) and subsequently by Howarth & Gillett (2008, 2009). We have not studied specimens published by Gassouma (1991) and Howarth & Gillett (2008, 2009). A widely distributed polyphagous species developing in the dead twigs and stems of *Acacia* spp. (P. Kabátek and Z. Košťál, pers. comm.).

Host plant: Fruit trees (Gassouna, 1991); branches and trunks of *Moringa peregrina* (Moringaceae) (Halperin & Argaman, 2000; Volkovitsh, 2004); *Acacia* (Fabaceae), *Boswellia* (Burseraceae) (new records).

Distribution: Egypt, Israel, Oman, Saudi Arabia, UAE, Yemen. New species for Yemen.

Sphenoptera* (*Tropeopeltis*) *vanharteni Kalashian **nov. spec.** Plates 46, 47, Figures 3, 6

Specimens examined: Holotype: ♂ (NMPC), United Arab Emirates, Wadi Maidaq, N25°18′ E56°07′, 23.iii.2010, hand coll., K. Mahmood leg. Paratype: Wadi Wurayah, N25°24′ E56°17′, 3.iv.2007, water trap, A. van Harten leg. (1♀, MKCY).

Description: Body elongate, 2.80–2.85 times as long as wide, strongly convex, in male metallic green with golden reflection, in female dark bronze, frons with reddish reflection anteriorly. Surface shine, not shagreened. Body dorsally nearly completely glabrous with few

very short setae anteriorly, pronotum and elytra laterally with very short nearly invisible single setae; sternum and abdomen with rather distinct moderately long setae rather dense laterally, sparse medially. Length 7.1–7.2 mm, width at base of elytra 2.5–2.6 mm.

Head broad, slightly narrower than pronotum anteriorly; eyes slightly convex, not projecting beyond outline of head. Vertex 2.4–2.5 times as wide as transverse diameter of eye. Clypeus in shape of crescent with rounded apices, microreticulated. Frons with sides nearly straight and subparallel, moderately convex, anteriorly flattened, with pair of small and very indistinct elevations at the level of middle of eyes (in front view). Supraantennal keels poorly separated, laterally smoothed, not reaching inner margins of eyes. Frons with rather coarse and dense macropunctures, becoming slightly smaller and sparser posteriorly. Micropunctures sparse, indistinct. Antennae about 1.5 times as long as eye height, serrate from slightly longitudinal antennomere 4, antennomere 3 short, slightly enlarged distally, antennomere 5 nearly equilateral, following antennomeres distinctly transverse, slightly stouter in male than in female.

Pronotum 1.35–1.40 times as wide as long, widest near posterior angles, sides very slightly converging in approximately basal 1/2, then barely convexly more abruptly converging anteriorly. Anterior margin feebly bisinuate, bordered with thin entire sulcus. Posterior margin bisinuate, its median projection of moderate width with almost straightly truncated apex. Lateral carinae nearly straight, anteriorly reaching approximately to anterior 1/6 of pronotum, in view from above nearly completely visible. Disc of pronotum nearly regularly convex, flattened in front of scutellum. Macropunctures laterally coarse and dense, sparser and shallower in the middle. Micropunctures moderately dense, evidently denser and more distinct than on frons.

Scutellum transversely triangular with rounded lateral angles, with arcuate ledge separating convex anterior part with single micropunctures from flattened and microreticulated apical portion.

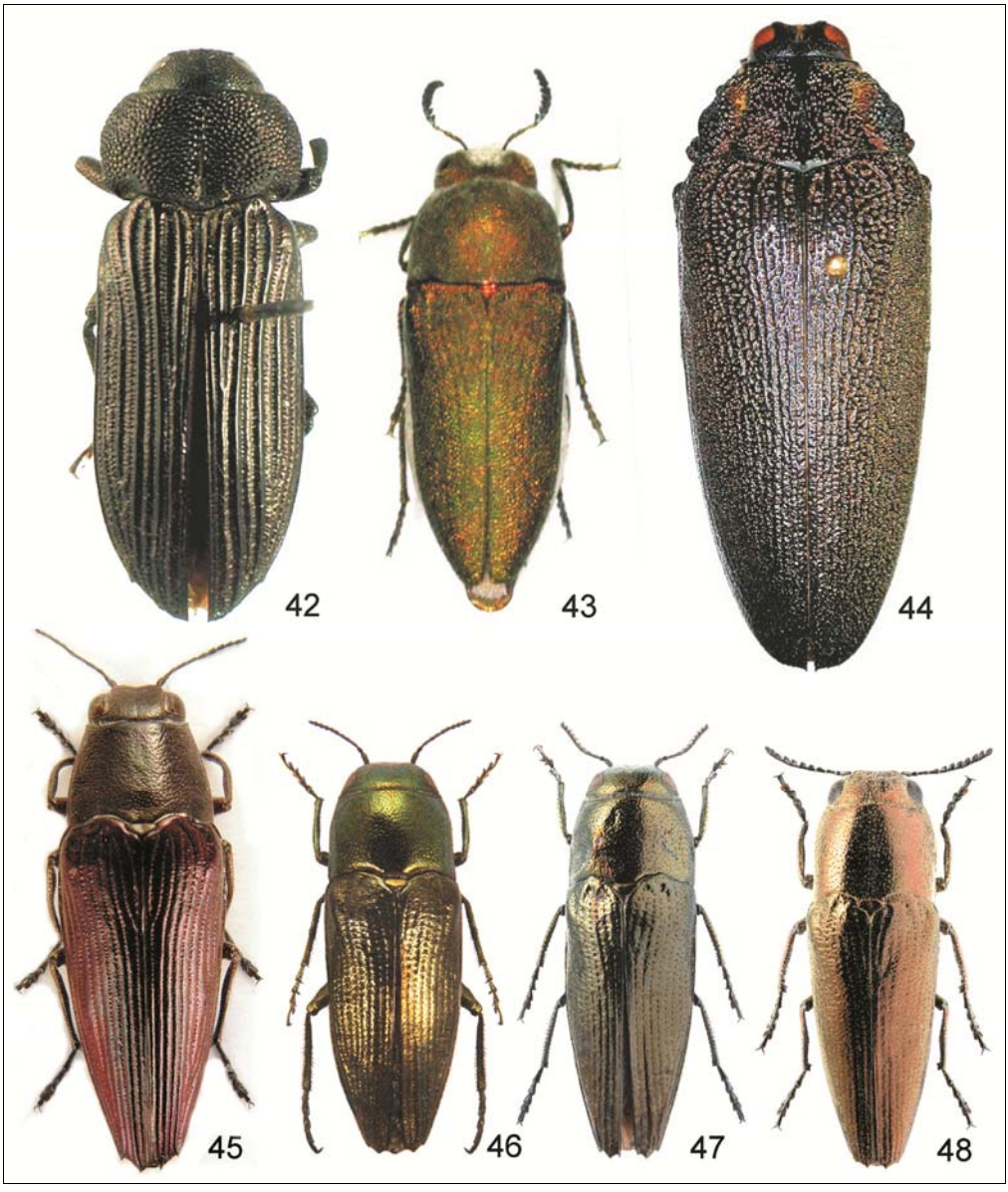
Elytra 2.0–2.05 times as long as wide, anteriorly slightly wider than pronotum, sides very slightly converging in basal 1/2–3/5, then more abruptly slightly arcuately converging to apices, which are tridentate, with lateral and sutural teeth sharp and narrow and medial tooth rather wide and nearly straight. Interstries anteriorly very slightly, posteriorly more strongly convex, odd interstries somewhat more elevated than even ones. Striae moderately deep with short hyphen-shaped punctures, laterally situated inside of rounded punctures, interstriae with irregular rows of small punctures. Micropunctures less distinct than those on pronotum but more distinct than on frons.

Prosternal process slightly convex, bordered by deep groove, with rather coarse and dense punctures like those on the remainder of sternum, punctuation slightly smoothed and become smaller in abdomen. Anal ventrite in male slighly shorter than in female, slightly arcuately truncate apically, in female apically rounded. Protibiae very slightly curved in both sexes, in male a little stronger, than in female, meso- and metatibiae nearly straight in both sexes.

Male genitalia as in Figure 6.

Ovipositor as in Figure 3.

Differential diagnosis: The new species is closely related to *Sphenoptera tantilla* Fåhraeus in Boheman, 1851, and *S. pusillima* Obenberger, 1926, from southern and eastern Africa respectively. Both species differs from the new one by absence of supraantennal keels, frons without any traces of elevations, punctation of pronotum and elytra distinctly smaller but denser, in *S. pusillima* in lateral portion of pronotum somewhat fused into short irregular wrinkles. Sides of pronotum nearly parallel in posterior 2/3 (in *S. pusillima* slightly incurved near sharp posterior angles). Ovipositor with narrow medial plate dorsally. Males of both species were not studied.



Plates 42–48. 42: *Pseudocastalia arabica arabica* (Gestro, 1877), male, 16.9 mm, Djibouti, Gibdo (Photograph M.G. Volkovitsh); 43: *Paratassa orientalis* Bílý & Volkovitsh, 1996, female, 10.0 mm, UAE, Margham env.; 44: *Steraspis* (*Steraspis*) *speciosa arabica* Waterhouse, 1904, female, 45.0 mm, Oman, Taqah env.; 45: *Sphenoptera* (*Tropeopeltis*) *arabica* Gory, 1841, male, 15.0 mm, Yemen, Al Hudaydah; 46: *S.* (*T.*) *vanharteni* Kalashian nov. spec., male, holotype, 7.1 mm; 47: *S.* (*T.*) *vanharteni* Kalashian nov. spec., female, patarype, 7.2 mm (Photograph © K. Makarov); 48: *S.* (*Hoplistura*) *gnezdilovi* Kalashian nov. spec., male, holotype, 9.9 mm (Photograph © K. Makarov).

Host plant: Unknown.
Distribution: UAE.
Etymology: This species is named in the honour of Antonius van Harten, the leader of the "Arthropod Fauna of UAE" project.

Sphenoptera* (*Hoplistura*) *gnezdilovi Kalashian **nov. spec.** Plate 48, Figure 2
Specimens examined: Holotype: ♂ (ZIN), United Arab Emirates, Jebel Jibir, N25°38′14″ E56°06′53″, 1272 m, 8.iv.2010, V.M. Gnezdilov leg. Paratype: Wadi Hayl, N25°04′54″ E56°13′32″, 262 m, 11.iv.2010, V.M. Gnezdilov leg. (♂, MKCY).
Description: Body strongly elongate, 3.00–3.05 times as long as wide, rather strongly convex, bronze with slight reddish reflection. Surface shiny, without microreticulation, body dorsally nearly glabrous with single short setae at anterior portion of frons, sternum and pronotum with rather dense distinct setae laterally becoming sparser medially. Length 9.7–9.9 mm, width at base of elytra 3.2–3.3 mm.
Head broad, nearly as wide as anterior margin of pronotum. Eyes large, convex, distinctly projecting beyond outline of head, vertex 2.12–2.2 times as wide as transverse diameter of eye. Clypeus in shape of narrow semicircle with rounded apices, microreticulated. Frons with feebly sinuate sides very slightly converging posteriorly, nearly flat with rather distinct supraantennal keels not reaching inner margins of eyes. Frons with pair of very small and indistinct elevations medially at level of middle of eyes (in frontal view), macropunctures rather coarse and dense, slightly smoothed and becoming sparser medially and posteriorly. Micropunctures sparse, poorly visible. Antennae 2.25–2.35 times as long as eye height, serrate from antennomere 4, antennomere 3 elongate, slightly enlarged distally, antennomere 4 slightly longitudinal, following antennomeres moderately transverse.
Pronotum approximately 1.25 times as wide as long, widest slightly anteriad of midlength or near anterior 2/5, its sides subparallel, slightly convexly converging anteriad and very slightly posteriad towards sharp posterior angles. Anterior margin bisinuate, bordered with entire sulcus. Basal margin bisinuate, its median projection of moderate width with almost straightly truncate apex. Lateral carinae developed in posterior 3/5, visible from above up to approximately midlength of pronotal sides. Pronotum nearly regularly moderately convex, flattened along middle line. Macropunctures of medium size, medially rather sparse, laterally condensed, partly fused into irregular transverse and oblique wrinkles; micropunctures dense, more distinct than in frons.
Scutellum transversely pentagonal, flattened or slightly convex, with rather numerous micropunctures.
Elytra 2.05–2,01 times as long as wide, distinctly wider than pronotal base, slightly obliquely narrowed to posterior 2/5, then more abruptly and slightly convexly to tridentate apices, with lateral and sutural teeth sharp and narrow and medial tooth rather wide, sharply obtuse-angled. Striae forming by thin hyphen-shaped punctures somewhere fused, interstries anteriorly and medially nearly flat, laterally and posteriorly slightly convex, apically odd interstries more elevated than even ones. Each interstria with irregular row of small macropunctures, laterally also with flat irregular wrinkles. Micropunctures small, poorly visible.
Prosternal process slightly convex, not bordered, with several large and coarse punctures, like those on remainder of sternum, on abdomen puncturation slightly smoothed. Anal ventrite truncate distally. Protibiae distinctly curved, with inner margin sinuate, mesotibiae slightly curved, with two large teeth on inner margin apically, metatibiae with similar teeth, nearly straight with inner margin distinctly sinuate.
Male genitalia as in Figure 2.

Female unknown.
Differential diagnosis: Closely related to *Sphenoptera nitens* Kerremans, 1898, known from Saudi Arabia and Egypt, *S. nubiae* Obenberger, 1924, from Egypt and *S. gossypicida* Obenberger, 1927, known from Sudan and Egypt. All three species differ from *S. gnezdilovi* nov. spec. by frons being distinctly bicolorous with anterior portion brightly metallic green, frons with pair of rather rough and large elevations, micropunctures of dorsal surface denser and more distinct, supraantennal keels in *S. gossypicida* weaker, in two other species more developed than in the new species. Pronotum in all three species distinctly and nearly regularly, somewhat arcuately widened towards posterior angles.
Host plant: Unknown.
Distribution: UAE.
Etymology: The new species is dedicated to the collector, V.M. Gnezdilov (ZIN).

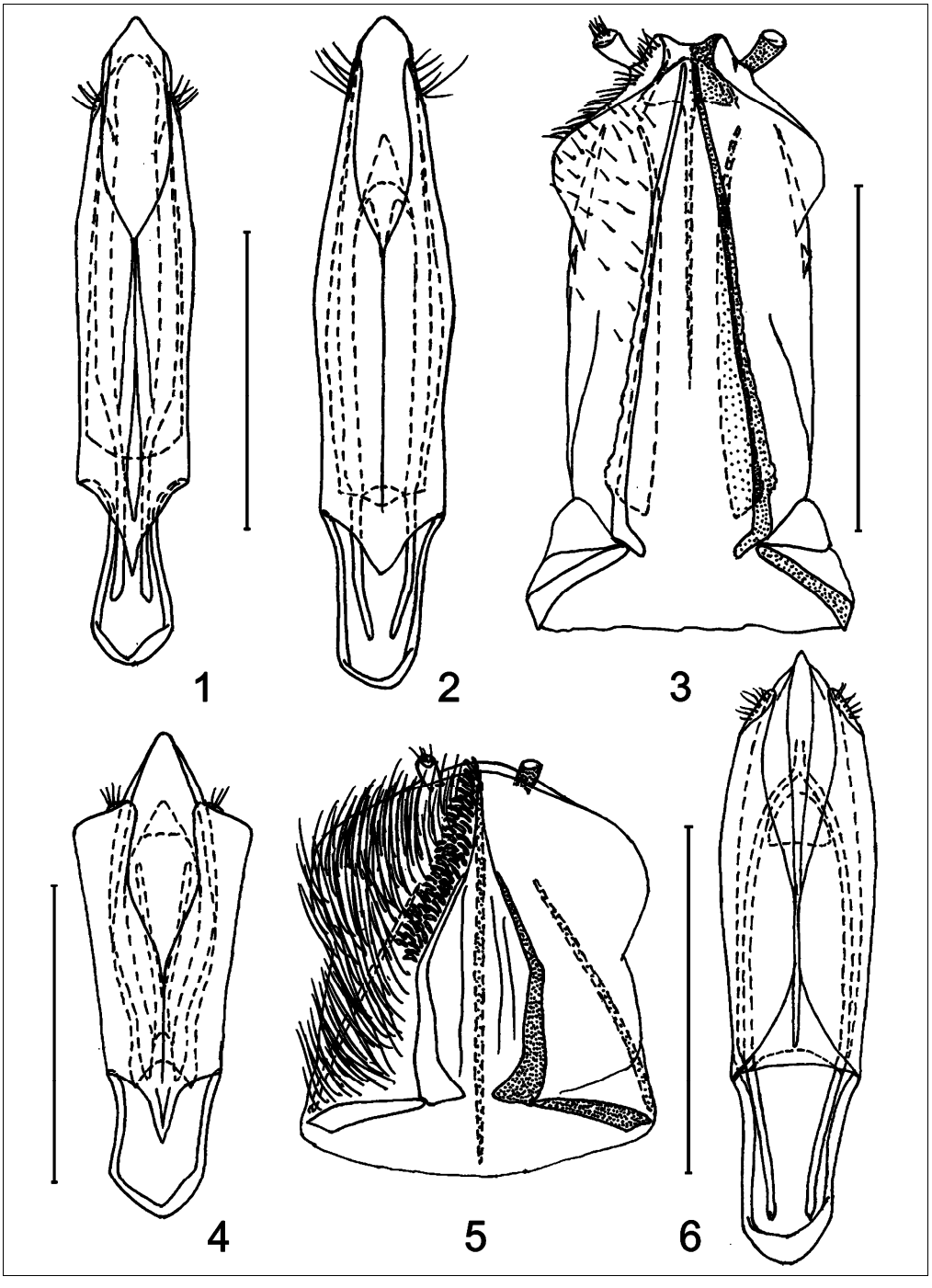
Sphenoptera* (*Chrysoblemma*)** cf. ***artemisiae Reitter, 1889 Plate 49
Specimen examined: Wadi Wurayah, N25°23′ E56°16′, 210m, 25.iii.2007, J. Batelka leg. (1 ex., JBCP).
Host plant: Unknown.

Sphenoptera* (*Chrysoblemma*) *mirabilis Kalashian **nov. spec.** Plate 50, Figures 4, 5
Specimens examined: Holotype: ♂ (NMPC), United Arab Emirates, N of Ajman, 5–16.vii.2008, water trap, A. van Harten leg. Paratype: N of Ajman, 16–23.vii.2008, water trap, A. van Harten leg. (♀, MKCY).
Description: Body moderately elongate, 2.65 (female) and 2.75 (male) as long as wide, strongly convex, nearly cylindrical, bronze, in male with greenish, in female with reddish reflection. Surface with rather dense short bright setae. Body length in male 6.1 mm, in female 8.2 mm, width 2.2 and 3.1 mm respectively.
Head large, barely narrower than anterior margin of pronotum, eyes large, in male convex, distinctly projecting beyond outline of head, in female slightly convex, barely projecting. Vertex about 2.8 times as wide as transverse diameter of eye in both sexes. Frons with sides very slightly diverging posteriorly, nearly regularly, moderately convex, flattened anteriomedially; supraantennal keels indistinct. Clypeus short, with slightly arcuately convex anterior margin. Macropunctures coarse, large and dense, somewhere adjoined, sculpture slightly smoothed posteriorly, micropunctures inconspicuous. Antennae serrated from antennomere 4, in male 1.9 times as long as eye height, antennomere 3 short, antennomere 4 slightly, following antennomeres strongly transverse, in female antennae 1.6 times as long as eye height, antennomere 3 rather elongate, antennomere 4 slightly longitudinal, antennomere 5 nearly equilateral, following antennomeres moderately transverse.
Pronotum 1.15–1.20 times as wide as long, widest slightly before middle, weakly convexly narrowed anteriad and posteriad, sides slightly emarginate behind posterior angles. Anterior margin bisinuate with strongly projecting medial lobe, not bordered, posterior margin slightly bisinuate with rather wide medial lobe. Lateral carinae very short, distinct only just anteriad of posterior angles. Pronotum nearly regularly globose, flattened medially, surface with dense moderately large macropunctures, slightly smoothed and sparser medially, micropunctures rather dense but very small, hardly visible.
Scutellum transversely triangular with anterior margin arcuate, flattened, bearing single micropunctures.
Elytra in female 1.70, in male 1.85 times as long as wide, distinctly wider than base of pronotum, sides subparallel very slightly emarginate in anterior 2/3, then slightly convexly converging to tridentate apices, sutural and lateral teeth narrow, sharp, medial one wide,

unevenly obtuse-angled. Elytra convex, strial structure nearly completely concealing by rather coarse sculpture consisting of irregular transverse wrinkles and dense moderately large macropunctures. Micropunctures inconspicuous.
Prosternal process slightly convex, coarsely and densely punctured, bordered with entire narrow smooth elevation, remainder of sternum and abdomen with dense and coarse punctures slightly smoothed towards middle line and backwards. Anal ventrite slightly arcuately truncate in both sexes. Protibiae in male moderately, in female slightly curved, meso- and metatibiae nearly straight in both sexes.
Male genitalia as in Figure 4.
Ovipositor as in Figure 5.
Differential diagnosis: It seams that this quite distinct species have no close relatives. It shares some superficial similarity with the Mediterranean *Sphenoptera rotundicollis* Gory & Laporte, 1839, which can be easily distinguished by strong lateral keels of pronotum reaching its anterior 1/5–1/6, by much coarser macropuntures, inconspicuous pubescence of the dorsal surface and by distinctly convex odd elytral interstries.
Host plant: Unknown.
Distribution: UAE.
Etymology: The name is derived from Latin "*mirabilis*" (strange, wonderful) to emphasise the originality of the new species.

Sphenoptera* (*Chrysoblemma*) *scovitzii alfierii Obenberger, 1923 Plate 53
Specimens examined: Um al-Quwain, N25°29′38″ E55°33′22″, 7.iv.2010, V.M. Gnezdilov leg., on *Tamarix nilotica* (1♂, 1♀). Ajman industrial area, 18.iv.2010, V. M. Gnezdilov, on *Tamarix nilotica* (2♂).
Additional specimens examined (not from the UAE): ISRAEL: Yeroham ["Palestine, Bir Rachma"], 6.vi.19.., on *Tamarix*, H. Bytinski-Salz leg. (2♂, NMPC); same locality but 1.vi. and 5.vii., on *Acacia* (2♂, NMPC). Beersheba, 14.vi.19.., *Polygonum*, H. Bytinski-Salz leg. (1♂, NMPC). Central Negev: Hamakhtesh Hagadol, Yeroham (12 km ESE), 8.vii.1996, on *Tamarix*, M.G. Volkovitsh & M. Yu. Dolgovskaya leg. (2 ex., ZIN). EGYPT: Ismailia (1♂, NMPC). SAUDI ARABIA: Eastern Province, Al Hasa, Arambo Farm, 19.xi.1981, D.A. Pitcher leg. (1♂, NMPC). ALGERIA: Beni Abbés env., Ougarta, 4.vi.1947, F. Pierre leg. (1♀, NMPC) (Plate 53), all V. Kubáň det.
Remarks: Described from Egypt ("Meadi"). In the Palearctic catalogue (Volkovitsh & Kalashian, 2006) recorded from Egypt, Israel and Syria. Moreover, in the course of the study the additional specimens originated from Algeria and Saudi Arabia were found (NMPC) which are new records for these countries. Some of the specimens of this subspecies were determined by different specialists (J. Obenberger in coll.; Bílý, 1985, 1990) as *Sphenoptera dumonti* Théry, 1922. According to the description (Théry, 1922) this taxon is really similar to *S. s. alfierii*, but to clarify this question the study of type specimens of *S. dumonti* is necessary. *Sphenoptera dumonti* is distributed in Egypt, Algeria, Tunisia, and Saudi Arabia (Volkovitsh & Kalashian, 2006) and it develops in the wood of *Calligonum commosum* (Peyerimhoff, 1926).
Host plant: Unknown. Nominotypic subspecies feeds in the roots of *Climacoptera* and *Salsola* (Chenopodiaceae) (Volkovitsh, 2004).
Distribution: Algeria, Egypt (incl. Sinai), Israel, Saudi Arabia, Syria, UAE. New species for the UAE, Algeria and Saudi Arabia.

Sphenoptera* (*Deudora*) *schmideggeri Kalashian **nov. spec.** Plate 51, Figure 1
Specimen examined: Holotype: ♂ (NMPC), United Arab Emirates, N of Ajman, 15–16.iii.2009, water trap, C. Schmid-Egger leg.



Figures 1–6. *Sphenoptera* spp. 1, 2, 4, 6: Male genitalia. 3, 5: Ovipositors. 1: *S.* (*Deudora*) *schmideggeri* Kalashian nov. spec.; 2: *S.* (*Hoplistura*) *gnezdilovi* Kalashian nov. spec.; 3, 6: *S.* (*Tropeopeltis*) *vanharteni* Kalashian nov. spec.; 4, 5: *S.* (*Chrysoblemma*) *mirabilis* Kalashian nov. spec. (Illustrations G. Karagyan.)

Description: Body moderately elongate, 2.6 times as long as wide, moderately convex, dark bronze with reddish reflection. Length 7.70 mm, width at base of elytra 2.95 mm.
Head moderately broad, slightly narrower than pronotum anteriorly, eyes large, moderately convex, slightly projecting beyond outline of head, vertex 2.15 times as wide as transverse diameter of eye. Clypeus in shape of narrow semicircle with rounded apices. Frons with sides barely diverging posteriad, nearly flat, with two pairs of distinct irregular elevations medially. Supraantennal keels distinct, not reaching inner margins of eyes. Macropunctures large, coarse and dense, slightly smoothed posteriorly, elevations with single punctures, micropunctures sparse, distinct only on elevations. Frons, besides reliefs glabrous, with rather dense short but distinct setae. Antennae 1.95 times as long as eye height, serrate from antennomere 4, antennomere 3 elongate, slightly enlarged distally, antennomere 4 very slightly, following antennomeres distinctly transverse.
Pronotum 1.45 times as wide as long, with sides nearly parallel in posterior 2/3, barely, convexly converging anteriad, posterior angles nearly straight. Anterior margin bisinuate, without bordering, posterior margin bisinuate with moderately wide median lobe. Lateral carinae nearly straight, reaching anterior 1/7, nearly entirely visible from above. Pronotum moderately convex with three longitudinal depressions – shallow median one and two deeper lateral depressions between midline and sides. Surface medially (on convex portion) with sparse rather coarse macropunctures, medial depression with punctures smaller and denser, lateral depressions with very dense coarse punctures, lateral sides with very coarse, partly asperate punctures sometimes fused into irregular wrinkles. Micropunctures rather distinct and dense. Pronotum with short setae, denser in depressions.
Elytra 1.9 times as long as wide, distinctly wider than pronotal base, with sides subparallel in anterior 3/5, than slightly convexly converging towards tridentate apices, sutural and lateral teeth narrow, sharp, medial one wide, unevenly obtuse-angled. Elytra moderately convex with odd interstries rather strongly convex, even ones nearly flat. Surface with rather coarse (especially laterally) irregular wrinkles, striae forming by hyphen-shaped punctures, laterally more or less concealing, interstries with irregular rows of small sparse macropunctures. Surface with short rather dense setae.
Prosternal process slightly impressed along the middle with dense puncturation, laterally of punctured area with nearly glabrous narrow stripes, then bordered with row of large punctures partly fused. Remainder of sternum and abdomen with dense punctures partly fused into irregular wrinkles, this sculpture slightly smoothed backwards, sternum and abdomen with dense setae condensed laterally. Metacoxae with two incisions – one medial and one near lateral angles. Anal ventrite truncate distally with lateral angles tooth-shaped. Protibiae distinctly curved, with inner margin sinuate, mesotibiae slightly curved, with two large teeth on inner margin apically, metatibiae with similar teeth, nearly straight with inner margin distinctly sinuate.
Male genitalia as in Figure 1.
Female unknown.
Differential diagnosis: Close to the Mediterranean species from the *Sphenoptera* (*Deudora*) *gemmata* Olivier, 1790 species-group (*S. gemmata*, *S. signata* Jakovlev, 1887, *S. vittaticolis* Lucas, 1844), but in all three species pronotum is rather regularly, somewhat arcuately widened posteriorly, sides of pronotum nearly continuing outline of elytra, protibiae in male less curved, macropunctures of the dorsal surface less dense and coarse, in *S. gemmata* and *S. signata* pronotum with poorly developed or absent longitudinal depressions, elytral interstries less convex, than in a new species. Besides this, the new species can be easily distinguished by the tridentate elytra (in all other species of the subgenus *Deudora* elytral

apices are more or less irregularly rounded, only occasionally with very small sutural tooth and the traces of lateral spine).
Host plant: Unknown.
Distribution: UAE.
Etymology: The new specis is dedicated to its collector, C. Schmid-Egger (Berlin, Germany).

Sphenoptera* (*Deudora*)** cf. ***parysatis Obenberger, 1929 Plate 52
Specimen examined: Ra's al-Jibal Mts., Jebel Jibir, N25°39′00″ E56°07′20″, 1380 m, 27.iii.2007, J. Batelka leg. (1 ex., NMPC), V. Kubáň det.
Host plant: Unknown.

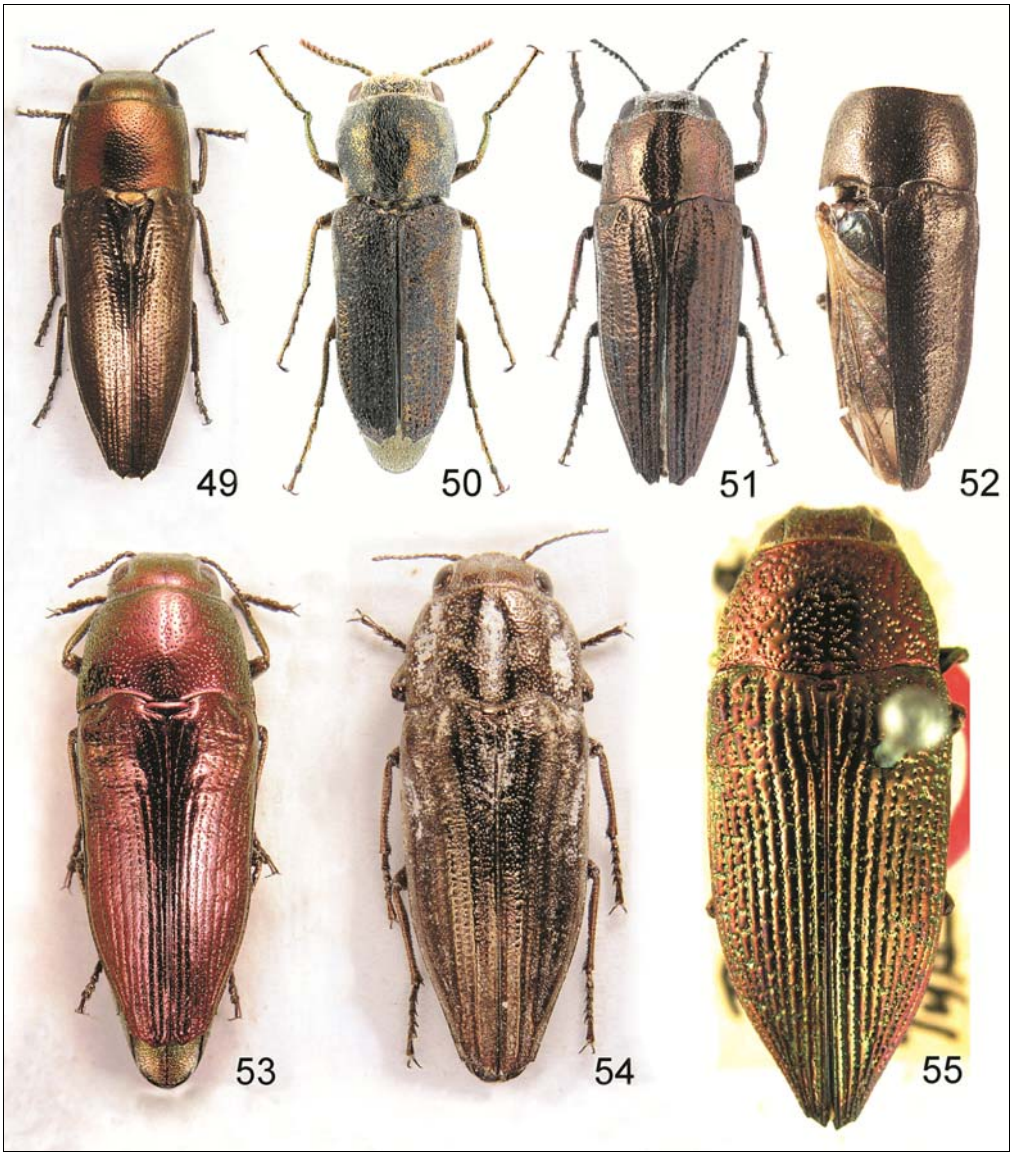
Sphenoptera* (*Paradeudora*) *kermanshahensis Obenberger, 1952 Plate 54
Specimens examined: Wadi Yudayyah, N25°05′45″ E55°47′05″, 190 m, 18.iii.2007, J. Batelka leg. (1♀, JBCP; 1♀, NMPC) (Plate 54), V. Kubáň det.
Additional specimens examined (not from the UAE): Western IRAN: Kermanshah Province: Kermanshah (1♂, syntype of *Sphenoptera* (*Paradeudora*) *kermanshahensis*, NMPC). IRAQ: Karbala, Nukhayab, 8.iv.1986, R. Linnavuori leg. (2 ex., MZHF; 1 ex., ZIN); Dhi Qar, Nasiriyah, Abu Ghar, 31.iii.1981, R. Linnavuori leg. (1 ex., MZHF), all M.G. Volkovitsh det. KUWAIT: Near Raudhatain, 16.iii.1981, R. Linnavuori leg. (4 ex., MZHF, 1 ex., ZIN), all M.G. Volkovitsh det. SAUDI ARABIA: "Arabia bor." (1♂, NMPC), V. Kubáň det. Eastern Province: Ain Dar (8.5 km N), N26°03′ E49°25′, ca. 110 m, v.1975 (5 ex., MMUE), S. Bílý det. (Bílý, 1985); Ain Dar, N25°55′ E49°20′, v.1975, BM, 1979.439, D.A. Pitcher leg. (1 ex., MKCY), M.Yu. Kalashian det.. Near Nobak, 18.v.1978, R. Linnavuori leg. (2 ex., MZHF), M.G. Volkovitsh det. Eastern Province maritime: Al'Uqayr ["Uqair"] (19 km SE), v.1975, D.A. Pitcher leg. (1♂, NMPC), S. Bílý det. (Bílý, 1985). Central SYRIA: Ancient city Palmyra (W env.), 28.iv.1990, V. Kabourek leg. (1 ex., VKCZ), V. Kubáň det.
Host plant: Unknown.
Distribution: Iraq, western Iran, Kuwait, northern and eastern Saudi Arabia, central Syria, UAE. New species for the UAE, Iraq, Kuwait and Syria.

Tribe ***Dicercini*** Gistel, 1848

Genus ***Capnodis*** Eschscholtz, 1829

Capnodis excisa excisa Ménétriés, 1848 Plate 60
Remarks: Bílý (1985) recorded the nominotypic subspecies as new for Saudi Arabia (Eastern Province), subsequently Walker & Pittaway (1987) also for Kuwait (see also Howarth & Gillett, 2009). Howarth & Gillett (2009) recorded *Capnodis excisa excisa* as new for the UAE from Madam area, J.N.B. Brown leg. (1 ex. in the Abu Dhabi ENHG collection).
Host plants: *Calligonum* (Polygonaceae) (Volkovitsh & Alexeev, 1994).
Distribution: Armenia, Azerbaijan, Iran, Iraq, Kazakhstan, Kuwait, eastern Saudi Arabia, Tadjikistan, Turkmenistan, northeastern Turkey, UAE, Uzbekistan.

Capnodis excisa alfierii Théry, 1929 Plate 61
Specimens examined: OMAN: Wahiba Sands, near Wasil, N22°26′ E58°45′, 350 m, 25.x.1990, M.D. Gallagher leg. (1♀, NMPC). Wahiba Sands, near Mintirib, N22°26′ E58°48′, 350 m, 13.ii.1986, M.D. Gallagher leg. (1♀, NMPC) (Plate 61). Track desert, sands, near Mintirib, N22°05′ E58°51′, 240 m, 18.iii.1986, W. Büttiker leg. (2♂, NMPC).
Remarks: Blair (1931) described *Capnodis excisa* var. *aericolor* based upon two specimens from south eastern Saudi Arabia from Rub'al Khali desert (Hadh al Mazarig, 175 m, 17.i.1931, B. Thomas leg.). Kubáň (2006) synonymized this taxon with *C. e. alfierii*, which



Plates 49–55. 49: *Sphenoptera* (*Chrysoblemma*) cf. *artemisiae* Reitter, 1889, 10.5 mm, UAE Wadi Wurayah; 50: *S.* (*C.*) *mirabilis* Kalashian nov. spec., male, holotype, 6.1 mm (Photograph © K. Makarov); 51: *S.* (*Deudora*) *schmideggeri* Kalashian nov. spec., male, holotype, 7.7 mm. (Photograph © K. Makarov.); 52: *S.* (*D.*) cf. *parysatis* Obenberger, 1929, 9.0 mm, UAE, Ra's al-Jibal Mts., Jebel Jibir; 53: *S.* (*C.*) *scovitzii alfierii* Obenberger, 1923, female, 16.0 mm, Algerien, Beni Abbés env., Ougarta; 54: *S.* (*Paradeudora*) *kermanshahensis* Obenberger, 1952, female, 14.0 mm, UAE, Wadi Yudayyah; 55: *Lampetis* (*Spinthoptera*) *arabica* (Gahan, 1895), 15.0 mm, syntype, Yemen, Hadhramaut.

was recorded only from southeastern Egypt, Sinai and Israel. From Oman Janikova recorded [no date] this species as "*Capnodis excisa aericolor*". The occurrence of this subspecies is possible in the southern portion of the UAE.
Host plants: *Calligonum commosum* (Polygonaceae) (Théry, 1929b; Volkovitsh, 2004).
Distribution: Southeastern Egypt (incl. Sinai), Israel, Oman, southeastern Saudi Arabia.

Genus ***Lampetis*** Dejean, 1833

Lampetis* (*Spinthoptera*) *arabica (Gahan, 1895) Plate 55
Remarks: Recorded for the UAE by Gillett & Gillett (2005) and subsequently by Howarth & Gillett (2008, 2009) but we have not studied these specimens and this record cannot be accepted without a revision of specimens. So far only the type specimens of *Lampetis arabica* (BMNH) (Plate 55) are known. Accordingly to Kerremans (1910) also in Saudi Arabia (Jiddah) – unproven record.
Host plant: Unknown.
Distribution: Yemen (Hadramaut).

Lampetis* (*Spinthoptera*) *argentata (Mannerheim, 1837) Plate 57
Remarks: Recorded for the UAE by Gillett & Gillett (2005) and Howarth & Gillett (2008, 2009). Bílý (1980, 1982, 1990) recorded this species from southwestern, central and northeastern Saudi Arabia. Described from Turkmenistan. Richter (1952) recorded *Lampetis argentata* from Central Asia, Transcaucasia and Iran, Volkovitsh & Alexeev (1994) also from Afghanistan, Iraq, Kazakhstan and Turkey. Accordingly to Krajčík (pers. comm.), the distribution reaches western Iraq (Syrian Desert). In collections and literature often confused with *L. mimosae* (Klug, 1829) (sensu lato). It is neccessary to revise specimens from the Arabian Peninsula. The occurrence of this species in the UAE is rather doubtful.
Host plant: *Haloxylon*, *Kalidium*, *Salsola* (Amaranthaceae), ?*Juglans* (Juglandaceae) (Volkovitsh & Alexeev, 1994).
Distribution: Afghanistan, Azerbaijan, Armenia, Iran, Iraq, Kazakhstan, Tadjikistan, Turkey, Turkmenistan, Uzbekistan.

Lampetis* (*Spinthoptera*) *catenulata catenulata (Klug, 1829) Plate 58
Specimens examined: SUDAN: "Sudan aegp." (1♂, NMPC) (Plate 58). Southwestern YEMEN: Al Hudaydah E, Hammam Ali (2 km E), N14°40′ E44°10′, 1677 m, 12.iv.2007, P. Kabátek leg. (1♀, NMPC).
Howarth & Gillett (2009) recorded for UAE "*Psiloptera cf. catenulate* [sic!] (Klug)" (see below). The occurrence of *L. c. catenulata* in the UAE is rather questionable. This subspecies is widely distributed in the whole Saharian area and in the Sahel. From Saudi Arabia (Jiddah) recorded by Kerremans (1910) but from the text of this paper is clear that this record concerned *L. mimosae*. Kubáň (2006) recorded the nominotypic subspecies also from Yemen (see Material examined). The record from Oman (Kubáň, 2006) concerned *L. c. svobodai* Krajčík, 2009. In collections and in the literature often confused with *L. argentata* (e.g. Kerremans, 1910; Jakobson, 1913) or under the name "*rugosa*" (e.g. Kerremans, 1908) [not *L. rugosa* (Palisot de Beauvois, 1807)]. Data on the distribution of *L. c. catenulata* in Afghanistan, Iraq, Turkmenistan and "Transcaspia" (Bellamy, 2008) concerned *L. argentata*.
Host plant: Unknown.
Distribution: Chad, Egypt, ?Saudi Arabia, Senegal, Somalia, Sudan, Tunisia, Yemen.

Lampetis* (*Spinthoptera*) *catenulata svobodai Krajčík, 2009 Plate 59
Specimens examined: Southern OMAN: Dhofar Province: road Mirbat–Sadh 4.viii.1999, R. Červenka leg. (2♂, holotype and paratype of *Lampetis catenulata svobodai*, NMPC) (Plate 59); same data but: viii.1999. S. Jákl leg. (2♂, NMPC); Taqah, 20 m, viii.1999, S. Jákl leg. (1♂, NMPC); Road Taqah-Mirbat, 12 km, 50–200 m, 3.viii.1999, R. Červenka leg. (1♂); Mirbat, Wadi Ayn Hilf, 7.ix.2000, D. Gianasso leg. (1♂); Wadi Mughsayl, 6–8.ix.2007, N16°54′41″ E53°45′45″, 30 m, J. Horák leg. (1♂); all paratypes of *L. c. svobodai*.
Remarks: Howarth & Gillett (2009) recorded from the UAE "*Psiloptera* cf. *catenulate* [sic!] (Klug)". This record most probably concerns *L. c. svobodai* which was described quite recently from southern Oman (Krajčík, 2009). The record of *L. c. catenulata* from Oman (Kubáň, 2006) concerned *L. c. svobodai*. The occurrence of this subspecies in the northern part of the UAE is highly possible.
Host plant: *Acacia* (Fabaceae) (field observation from Oman, J. Horák, pers. comm.).
Distribution: Southern Oman (Dhofar).

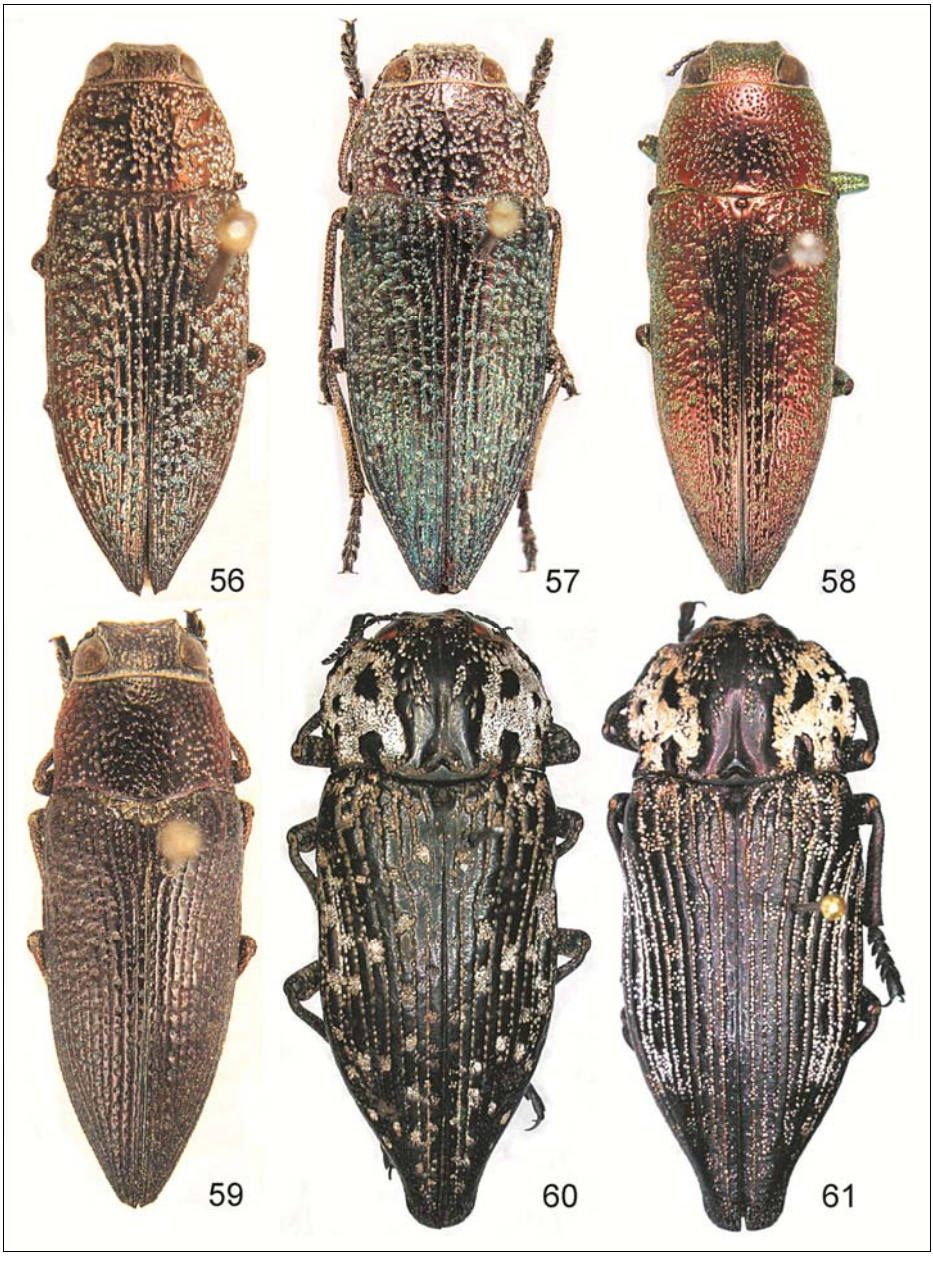
Lampetis* (*Spinthoptera*) *mimosae mimosae (Klug, 1829) Plate 56
Specimens examined: Mushrif Park, N25°17′ E55°28′, 25.ii.2006, A. van Harten leg., hand coll. (1♂). Al-Jazirat al Hamra (7 km S), N25°40′ E55°45′, 27.ii.2006, A. van Harten, hand coll. (1♂). S of Ra's al-Khaimah, N25°43′ E55°52′, 6.iv.2008, J. Bosák leg., hand coll. (1♂). Ra's al-Khaimah Airport (10 km SW), 19.iii.2009, C. Schmid-Egger leg. (1ex., SECB). Sharjah Desert Park, N25°17′ E55°42′, 19–22.iii.2008, A. van Harten leg., hand coll. (1♂) (Plate 56).
Recorded as a new species for UAE by Gillett & Gillett (2005) and subsequently by Howarth & Gillett (2008, 2009).
Host plants: *Zygophyllum* (Zygophyllaceae), ?*Balanites* (Zygophyllaceae), *Calligonum commosum* (Polygonaceae), *Casuarina cunninghamiana* (Casuarinaceae), *Prosopis farcta* (Fabaceae), *Tamarix* (Tamaricaceae) (Bytinski-Salz, 1954; Halperin & Argaman, 2000; Lotte, 1943; Volkovitsh, 2004). Larva develops in the semi-dead wood of various broad-leaved trees, mainly *Acacia* (Fabaceae).
Distribution: Algeria, Chad, Djibouti, Egypt, Erithrea, Ethiopia, Greece, Iran, Israel, Jordan, Lebanon, Libya, Morocco, Oman, Saudi Arabia, Senegal, Sudan, Syria, Tanzania, Tunisia, Turkey, UAE, Yemen.

Subfamily **Buprestinae** Leach, 1815

Tribe **Anthaxiini** Gory & Laporte, 1938

Genus ***Anthaxia*** Eschscholtz, 1829

Anthaxia* (*Haplanthaxia*) *abdita Bílý, 1982 Plate 62
Specimens examined: Ar-Rafah, N25°43′ E55°52′, 17.iv.2010, K. Mahmood leg., hand coll. (1♂). Jebel Jibir, N25°38′14″ E56°06′53″, 26.ix–9.x.2010, A. van Harten leg., water trap (3♂, 2♀). Mountain valley near Khor Kalba (tunnel), N24°58′50″ E56°10′07″, 11.iv.2010, V.M. Gnezdilov leg. (1♂). Wadi Shawkah, N25°06′ E56°01′, 1–7.iv.2007, A. van Harten leg., water trap (3♂, 1♀); 305 m, 10.iv.2010, V.M. Gnezdilov leg. (1♂); Wadi Shawkah, N25°06′14″ E56°02′49″, 300 m, 20.iii.2007, F. Menzel leg. (1♀). Wadi Tarabat, N24°08′ E55°45′, 13.iv.2010, K. Mahmood leg., hand coll. (1♂) (Plate 62).
Additional specimens examined (not from the UAE): EGYPT: South Sinai: Mt. Catherine (40 km NE), Gebel Cunna, 24.ii.1998, *Acacia* sp., ex larva, 20.viii.1998, D. Baiocchi leg. (1♂, NMPC). Southern JORDAN: Ma'an (50 km SE), 1100 m, vii-x.1994, *Acacia* sp., ex larva, N29°59′ E35°56′, S. Bečvář jr. & sen. (1♂, 1♀, NMPC). YEMEN: Sana'a, Wadi Dhahr, 29–31.v.1987, H. Mühle leg. (6♂, 2♀, NMPC, VKCB). Sana'a env., Bait Bows dam, 2300 m, 30.v.2010, N15°16′24″ E44°11′38″, V. Hula & J. Niedobová leg. (9♂, 5♀, NMPC).



Plates 56–61. 56: *Lampetis* (*Spinthoptera*) *mimosae mimosae* (Klug, 1829), female, 15.0 mm, UAE, Sharjah Desert Park; 57: *L.* (*S.*) *argentata* (Mannerheim, 1837), male, 17.0 mm, Turkmenistan, Mt. Uly Balkan, Hauser leg. 1898 (NMPC); 58: *L.* (*S.*) *catenulata catenulata* (Klug, 1829), male, 19.0 mm, "Sudan aegp." (NMPC); 59: *L.* (*S.*) *c. svobodai* Krajčík, 2009, male, paratype, 17.0 mm, Oman, road Taqah–Mirbat, 12 km; 60: *Capnodis excisa excisa* Ménétriés, 1848, male, 29.0 mm, Iran, Hormozgan, 16 km N of Jask (NMPC); 61: *C. e. alfierii* Théry, 1929, female, 32.0 mm, Oman, Wahiba Sands, near Mintirib.

First recorded from the UAE by Gillett & Gillett (2005), subsequently by Howarth & Gillett (2008, 2009).
Host plant: *Acacia*, *Prosopis farcta* (Fabaceae), *Ficus carica* (Moraceae) (Halperin & Argaman, 2000; Volkovitsh, 2004).
Distribution: Egypt (Sinai), Israel, Jordan, Oman, Saudi Arabia, UAE, Yemen. New species for Sinai and Yemen.

Anthaxia* (*Haplanthaxia*) *pinda Bílý & Baiocchi, 2009 Plate 66
Specimens examined: Wadi Wurayah, N25°23′ E56°16′, 210 m, reared from dead twigs of *Nerium oleander*, emerged on iv.2007, J. Batelka leg. (4♂, 5♀) (Plate 66); reared from dead twigs of *Nerium oleander*, emerged on 14.vii.2007, J. Batelka leg. (3♂, 1♀); reared from dead twigs of *Nerium oleander*, emerged on 29.vi.2007, J. Batelka leg. (6♂, 3♀).
Described by Bílý & Baiocchi (2009) – holotype and 13 paratypes from UAE, 23 paratypes from Oman.
Host plant: *Nerium mascatense, N. oleander* (Apocynaceae), *Moringa peregrina* (Moringaceae) (Bílý & Baiocchi, 2009).
Distribution: Oman, UAE.

Anthaxia* (*Haplanthaxia*) *roxana Bílý, 1983 Plate 63
Specimens examined: Sharjah, N25°21′ E55°24′, 28.vi–16.vii.2005, A. van Harten leg., light trap (1♂). Al-Ajban, N24°36′ E55°01′, 9.iv–2.v.2006, A. van Harten leg., Malaise trap (1♀); 24.iv–2.v.2006, A. van Harten leg., Malaise trap (1♂, 2♀); 6–22.v.2006, A. van Harten leg., light trap (1♂, 3♀); 15–22.v.2006, A. van Harten leg., Malaise trap (2♀); 12–19.vi.2006, A. van Harten leg., Malaise trap (1♂); 19–26.vi.2006, A. van Harten leg., Malaise trap (1♂, 2♀).
Additional specimens examined (not from the UAE): Southern IRAN: Hormozgan Province: Bandar-e-Abbas (62 km E), Hasan Langi, 26.vi.2002, S. Kadlec leg. (1♂, 1♀, NMPC) (Plate 63). Sistan and Baluchestan Province: Bampur, *Acacia* sp., ex larva, 1996, M. Kafka leg. (many ex., MKCN, NMPC, VKCB). Southern PAKISTAN: Baluchistan Province: Kuzdar District, Awaran, 4–7.iv.1993, *Acacia* sp., ex larva, v.1993, S. Bečvář leg. (1♀, VKCB). Sind Province: Kirthar National Park, Karchat, 2–4.iii.1995, D. Hauck & L. Čížek leg. (1♂, 1♀, VKCB).
Host plant: *Acacia* (Fabaceae) (new record).
Distribution: Iran, Pakistan, UAE. New species for the UAE.

Anthaxia* (*Haplanthaxia*) *semiramis Obenberger, 1914 Plate 64
Specimens examined: Ajman industrial area, 13.iv.2010, V.M. Gnezdilov leg. (1♂, 1♀). Al-Ajban, N24°36′ E55°01′, 25.ii–19.iii.2006, A. van Harten leg., Malaise trap (3♂); 19–27.iii.2006, A. van Harten leg., Malaise trap (2♂, 1♀); 25.iii–2.iv.2006, A. van Harten leg., Malaise trap (4♂, 1♀) (Plate 64); 1–8.iv.2006, A. van Harten leg., Malaise trap (5♂, 3♀); 2–9.iv.2006, A. van Harten leg., Malaise trap (9♂); 9.iv–2.v.2006, A. van Harten leg., Malaise trap (1♂); 9–16.iv.2006, A. van Harten leg., Malaise trap (2♂, 3♀); 17–24.iv.2006, A. van Harten leg., Malaise trap (5♂, 13♀); 24.iv–2.v.2006, A. van Harten leg., Malaise trap (7♂, 2♀); 17.iv.2010. V.M. Gnezdilov leg. (2♂). Wadi Bih (dam), 22–23.iii.2009, A. van Harten leg., water trap (2♂). Wadi Wurayah farm, 19.iv–18.v.2008, A. van Harten leg., Malaise trap (1♂).
Additional specimens examined (not from the UAE): Central SYRIA: Palmyra (60 km N), Jabal Abu Rujman, 23.iv.2001, reared from *Acacia* sp., O. Mehl leg. (4♂, NMPC).
Host plant: *Acacia* (Fabaceae) (new record).
Distribution: Iraq, Israel, Syria, UAE. New species for the UAE.

***Anthaxia* (*Haplanthaxia*)** spec. Plate 65
Specimens examined: Jebel Jibir, N25°39′ E56°07′, 8.iv.2010, K. Mahmood leg., hand coll. (1♀).
Host plant: Unknown.

Tribe **Melanophilini** Bedel, 1921

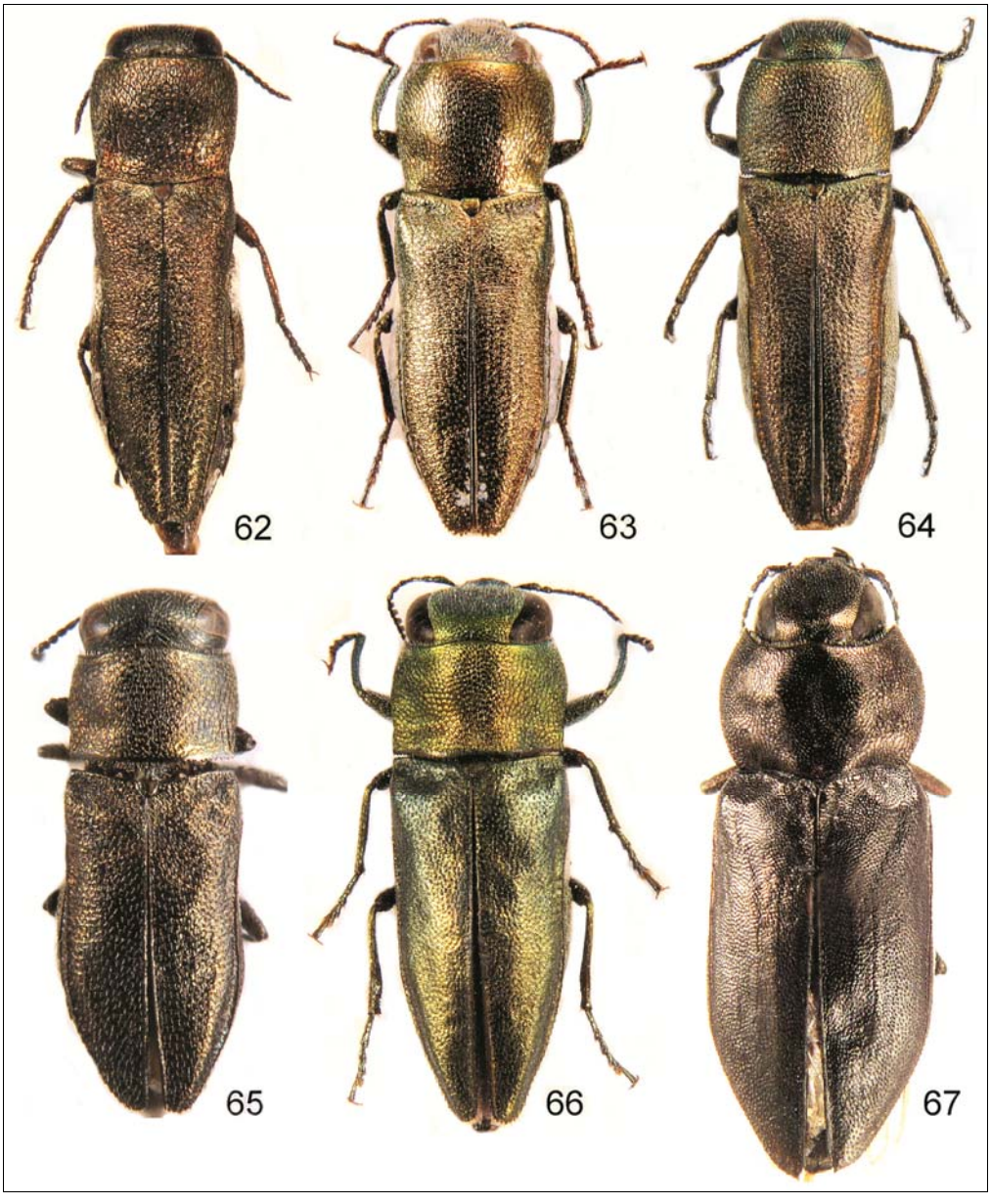
Genus ***Melanophila*** Eschscholtz, 1829

Melanophila cuspidata (Klug, 1829) Plate 67
Specimens examined: NARC, near Sweihan, N24°24′ E55°28′, 30.iv–11.v.2005, A. van Harten, light trap (1♀) (Plate 67).
Host plants: *Cupressus*, *Juniperus* (Cupressaceae), *Elaeagnus* (Elaeagnaceae), *Ficus* (Moraceae), *Phyllirea* (Oleaceae), *Pinus* (Pinaceae), *Pistacia* (Anacardiaceae), *Populus*, *Salix* (Salicaceae), *Quercus* (Fagaceae), *Spartium* (Fabaceae), *Ulmus* (Ulmaceae) (Richter, 1952; Volkovitsh & Alexeev, 1994; Curletti, 1994). *Tamarix* (Tamaricaceae) (Halperin & Argaman, 2000; Tukmenistan, Ashgabat, V. Kubáň, in litt.). Widely polyphagous species on broad-leaved trees and shrubs with the preference for partially burned wood.
Distribution: Afghanistan, Albania, Algeria, Armenia, Azerbaijan, Bosnia-Herzegovina, Bulgaria, Chad, Croatia, Cyprus, Egypt, Ethiopia, France, Georgia, Greece, Iran, Iraq, Israel, Italy, Jordan, Kazakhstan, Kyrgyzstan, Lebanon, Libya, Macedonia, Malta, Morocco, Nigeria, Portugal, Romania, Senegal, Slovenia, Spain, Sudan [type locality], Syria, Tajikistan, Tunisia, Turkey, Turkmenistan, UAE, Uzbekistan, former Yugoslavia. New species for the UAE.

Tribe **Chrysobothrini** Gory & Laporte, 1938

Genus ***Chrysobothris*** Eschscholtz, 1829

Chrysobothris* (*Chrysobothris*) *parvipunctata Obenberger, 1914 Plate 68
Specimens examined: Wadi Wurayah, N25°24′ E58°17′, 25.iv–2.v.2007, A. van Harten leg., Malaise trap (1♂, 2♀); 11–18.v.2007, A. van Harten leg., Malaise trap (2♂, 1♀). Wadi Bih (dam), N25°48′ E58°04′, 9–23.vii.2008, A. van Harten leg., light trap (2♀); 24.iv–1.v.2007, A. van Harten leg., light trap (1♂, 1♀); 2–4.iv.2009. A. van Harten leg., water trap (1♀); 30.iv–4.vi.2008, A. van Harten leg., light trap (1♀). Al-Ajban, N24°36′ E55°01′, 9.iv–2.v.2006, A. van Harten leg., Malaise trap (1♀).
Additional specimens examined (not from the UAE): AFGHANISTAN: Kandahar Province: Kandahar, vii.1956, J. Sedláček leg. (1♀, VKBC). Northwestern INDIA: Rajasthan State: Fatehpur, 17.x.1989 (1 ex., ZIN), Jodhpur, 18.ix., 20.ix., 3.xii.1989, 2.ii.1990 (7 ex., ZIN), all reared from *Acacia senegal*, A.V. Kompantsev leg. IRAN: Hormozgan Province: Minab (15 km S), 26.iv.2002, P. Kabátek leg. (1♂, NMPC) (Plate 68); Minab (12 km NW), Shahvar, N27°14′ E57°01′, 18–19.v.1973, loc. no. 202, Exp. Nat. Mus. Praha (1♀, NMPC) [see also Bílý (1983), as *Chrysobothris beesoni beesoni*]. Kerman Province: Rafsanjan, 1500 m, 20.v.2004, reared from *Pistacia*, H. Hashemi Rad leg. (1♂, 1♀, VKCB). Kohgiluyeh and Boyer-Ahmad Province: Sisakht, Zagros Mts., 2400 m, 13+15.vi.1973, loc. no. 240, Exp. Nat. Mus. Praha (1♂, NMPC) (see also Bílý, 1983). Qom Province: Qom ["Ghom"], 12.vi.1991, light trap, M. Abai leg. (1♀, VKCB). Sistan and Baluchestan Province: Bampur (1♂, NMPC); Khash, D.M. Shteinberg (1 ex., ZIN). Tehran Province: Tehran, on *Prunus persica* (1♂, NMPC). IRAQ: Abu Ghraib, 7.ix.1969, reared from *Malus domestica*, J. Kheiri leg. (1♂, holotype of *C. beesoni kheirii* Cobos, 1970, MNMS). Baghdad (85 km SSW), Karbala ["Arabia Kerbela"] (1♂, syntype of *C. parvipunctata*, NMPC). Mosul, vii.1968, reared from *Pistacia vera*, H.E. Knopf leg. (1♂ 1 ♀, NMPC). Tall Afar, 23.vi.1969, reared from *Malus domestica*, H.E. Knopf leg. (1♀, NMPC). PAKISTAN: Punjab Province: Lahore, 2–14.vi.1919, reared from *Prosopis spicigera*, R.N. Parker leg. (3♂, 2♀, syntypes of *C. beesoni* Obenberger, 1928, NMPC). Sind Province: Kirthar National Park, Karchat, 25.ii–4.iii.1995, D. Hauck & L. Čížek leg. (2♂, VKCB). TURKMENISTAN: Ashgabat, Sovety Azerbaijana vill., 6.v.1991, N. Alexeev leg. (3♂, ZIN), A.V. Alexeev det. (2), W. Barries det. (1); same data but: 5.v.1988, reared in the laboratory 6.vii.1988 (1♀, ZIN), A.V. Alexeev det.; same data but: reared in the laboratory 30.vi.1988 (1♂, ZIN). Ashgabatskii Region, Badghyz, Kerlek vill.,



Plates 62–67. 62: *Anthaxia* (*Haplanthaxia*) *abdita* Bílý, 1982, male, 3.5 mm, UAE, Wadi Tarabat; 63: *A.* (*H.*) *roxana* Bílý, 1983, female, 4.2 mm, Iran, Hormozgan, 62 km E of Bandar-e-Abbas; 64: *A.* (*H.*) *semiramis* Obenberger, 1914, male, 5.5 mm, UAE, al-Ajban; 65: *Anthaxia* (*Haplanthaxia*) spec., female, 3.0 mm, UAE, Jebel Jibir; 66: *A.* (*H.*) *pinda* Bílý & Baiocchi, 2009, male, 6.0 mm, UAE, Wadi Wurayah; 67: *Melanophila cuspidata* (Klug, 1829), female, 12.0 mm, UAE, NARC, near Sweihan.

11.vi.1955, flying on *Pistacia vera* ["fistashka"], A.L. Znamenskaya leg.; same data but: 23–25.vii.1955, from *Pistacia* branches (4), reared from *Pistacia* in the laboratory (2) (3♂, 3♀, ZIN in coll. V.N. Stepanov); same data but: 14.vii.1955, found in the *Pistacia* trunk (1♂, ZIN in coll. V.N. Stepanov); Kushka, Morgunovskii vill., 16.vi.1953, N.G. Lymar' leg. (1♂, ZIN in coll. V.N. Stepanov).
First recorded from the UAE by Gillett & Howarth (2004), subsequently also by Gillett & Gillett (2005) and Howarth & Gillett (2008, 2009).
Host plant: *Acacia senegal* (Fabaceae) (new record); *Malus domestica* (Rosaceae) [Cobos (1970), holotype and 5 paratypes of *C. beesoni kheirii*]; *Pistacia* (Anacardiaceae), larvae under the bark of dying twigs [C. Holzschuh, pers. comm., Iran, Kerman]; *Pistacia vera* (Anacardiaceae) (new record); *Prosopis cineraria* (Fabaceae) [Obenberger (1928), syntypes of *C. beesoni*, as *Prosopis spicigera*]; *Prunus persica* (Rosaceae) (new record); *Punica* (Lythraceae) [Borumand (2002), Iran: Yazd].
Distribution: Afghanistan (Bílý, 1972; Alexeev et al., 1991; new record), India (new record), Iran (Semenov & Richter, 1934; Bílý, 1983; Borumand, 2002; new record), Iraq (Obenberger, 1914; Cobos, 1970 [type localities]; new record), Pakistan (Obenberger, 1928; new record), Turkmenistan (new record), UAE (Gillett & Howarth, 2004; new record). New species for India and Turkmenistan.

Subfamily **Agrilinae** Laporte, 1835

Tribe **Coraebini** Bedel, 1921

Genus ***Clema*** Semenov, 1900

Clema deserti deserti Semenov, 1900 Plate 69
Specimen examined: Sharjah Desert Park, N25°16′52″ E55°41′25″, 10.iv.2010, V.M. Gnezdilov leg. (1 ex., ZIN) (Plate 69).
Additional specimens examined (not from the UAE): Northern China, Gobi Desert, Coll. Hauser (1 ex., NHMB).
Host plant: *Aristida* (Poaceae) (Volkovitsh & Alexeev, 1994).
Distribution: Northern China, Iran, Kazakhstan, Uzbekistan, Turkmenistan. New species for the UAE and China.

Tribe **Agrilini** Laporte, 1835

Genus ***Agrilus*** Curtis, 1825

Agrilus* (*Agrilus*) *yemenita Curletti & van Harten, 2002 Plate 70
Specimens examined: Fujairah, N25°08′ E56°21′, 10–17.vi.2006, A. van Harten leg., water trap (1♀).
Host plant: Most probably *Acacia* (Fabaceae) (Curletti & van Harten, 2002).
Distribution: UAE, Yemen. New species for the UAE.

Agrilus* (*Diplolophotus*) *desertus (Klug, 1829) Plate 71
Specimens examined: Al-Ajban, N24°36′ E55°01′, 2–22.xi.2006, A. van Harten leg., Malaise trap (1♂). Sir Bani Yas, N24°19′ E52°35′, 23–25.ix.2009, B. Howarth, Malaise trap (1♀), Wadi Wurayah (farm), N25°23′ E56°19′, 2–19.iii.2009, A. van Harten leg., Malaise trap (1♂) (Plate 71).
Host plant: *Acacia raddiana, A. flava* (Fabaceae) (Mateu, 1972).
Distribution: Algeria, Chad, Djibouti, Egypt, Iran, Israel, Jordan, Morocco, Saudi Arabia, Tunisia, UAE, Yemen. New species for the UAE.

Agrilus* (*Micragrilus*) *lituratus (Klug, 1829) Plate 72
Specimens examined: Al-Ajban, N24°36′ E55°01′, 24.iv–2.v.2005, A. van Harten leg., Malaise trap; 25.iii–2.iv.2006, A. van Harten leg., Malaise trap; 2–9.iv.2006, A. van Harten leg., Malaise trap; 9–16.iv.2006, A. van Harten leg., Malaise trap; Sharjah, N25°21′ E55°24′, 23–24.v.2005, A. van Harten leg., Malaise trap (together 27 ex., CCIT). Al-Ajban, N24°36′ E55°01′, 16–23.vii.2005, A. van Harten leg., Malaise trap (6♂, 4♀); 1–8.iv.2006, A. van Harten leg., Malaise trap (6♂, 7♀); 17–24.iv.2006, A. van Harten leg., Malaise trap (1♂, 3♀). Sharjah, N25°21′ E55°24′, 16–23.vii.2005 (2♂). Khor Kalba, near tunnel, 3–18.v.2006, A. van Harten leg., light trap (1♀) (Plate 72).
Host plant: *Acacia flava, A. raddiana, A. seyal* (Fabaceae) (Mateu, 1972).
Distribution: Algeria, Chad, Egypt, Iran, Israel, Jordan, Libya, Mauritania, Morocco, Saudi Arabia, Senegal, Sudan, Tunisia, UAE, Yemen. New species for the UAE.

Tribe **Aphanisticini** Jaquelin du Val, 1863

Genus ***Aphanisticus*** Latreille, 1810

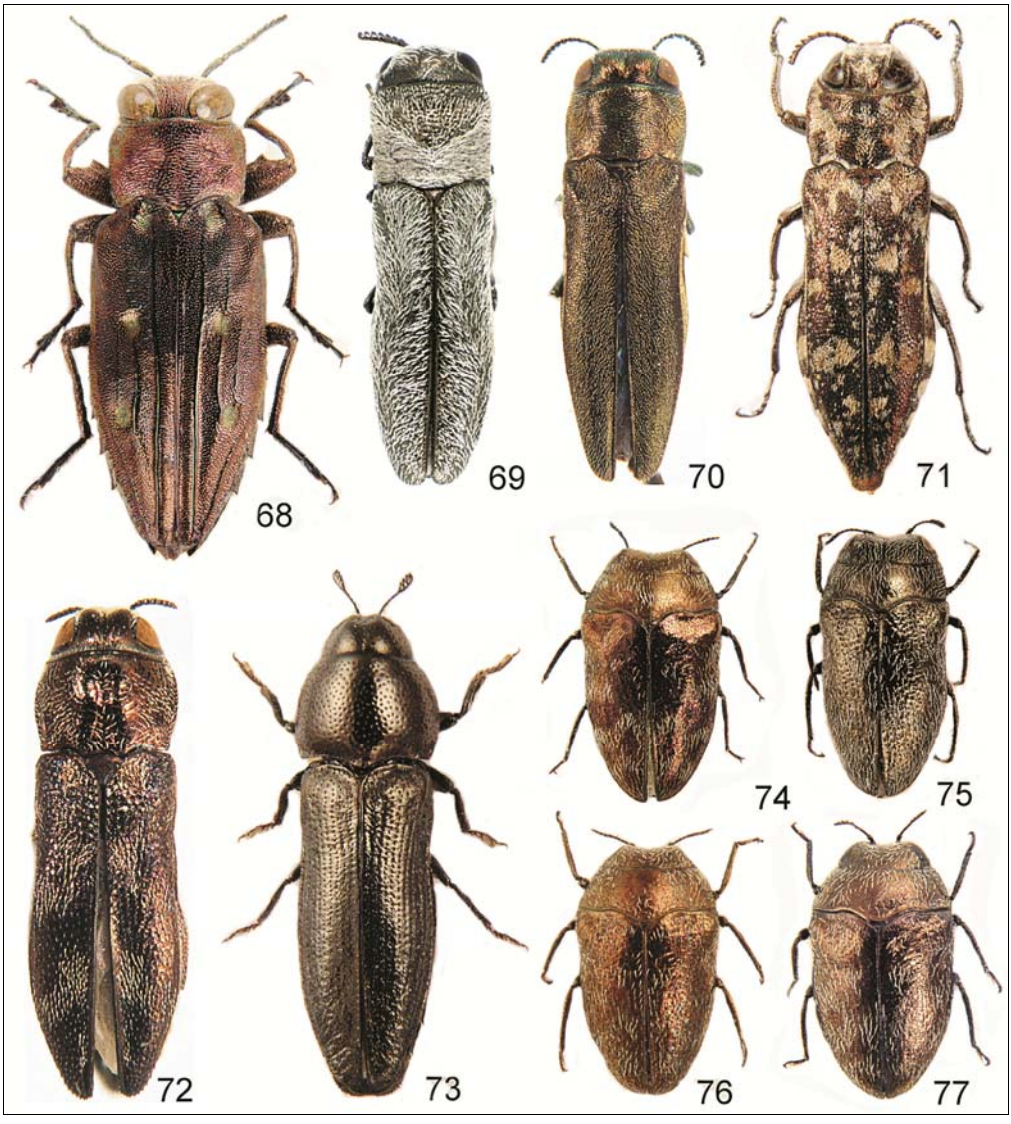
Aphanisticus bedeli Abeille de Perrin, 1893 Plate 73
Specimens examined: Khor al-Khwair, N25°57′ E56°03′, 16–23.v.2007, A. van Harten leg., light trap (1♂).
Additional specimens examined (not from the UAE): ALGERIA: Ghardaia: 2.v.1987, on *Cymbopogon schoenanthus* (L.), V. Kubáň and S. Bílý leg. (ca. 15 ex., NMPC, VKCB); same data but 15.–16.iv.1988, V. Kubáň leg. (ca. 20 ex., VKCB) (Plate 73).
Host plant: *Cymbopogon schoenanthus* (Poaceae) (new record).
Distribution: Algeria, Tunisia, UAE. New species for the UAE.

Tribe **Trachyini** Laporte, 1835

Genus ***Trachys*** Fabricius, 1801

Trachys erythreae Obenberger, 1937 Plate 74
Specimens examined: Wadi Bih (dam), N25°48′ E56°04′, 29.iii.2007, A. van Harten leg., sweeping (1♀); 29.vi–8.vii.2008, A. van Harten leg., light trap (1♀); 9–23.vii.2008, A. van Harten leg., light trap (1♂) (Plate 74); 16.xii.2009–8.iii.2010, A. van Harten leg., water trap (1♀).
Host plant: Unknown.
Distribution: Eritrea, UAE. New species for the UAE.

Trachys latifrons Kerremans, 1907 Plate 75
Specimens examined: Sharjah Desert Park, N25°17′ E55°42′, 6–28.xii.2006, A. van Harten leg., pitfall trap (1♀). Bithnah, N25°11′ E56°14′, 19.x–16.xi.2006, A. van Harten leg., Malaise trap (1♀). Sharjah, N25°21′ E55°24′, 1–14.xi.2010, A. van Harten leg., water trap (1♂, 3♀). Wadi Bih (dam), N25°48′ E56°04′, 29.iii.2007, A. van Harten leg., sweeping (1♂); 2–4.iv.2009, A. van Harten leg., water trap (1♂, 1♀); 1–19.i.2010, A. van Harten leg., water trap (1♂); 13.xiii.2009–8.iii.2010, A. van Harten leg., water trap (2♂) (Plate 75); 16.xii.2009–8.iii.2010, A. van Harten leg., water trap (1♂). Wadi Hayl, N25°05′ E56°13′, 17.iv.2010, K. Mahmood leg., hand coll. (1♀). Wadi Maidaq, N25°18′ E56°07′: 27.vi–29.vii.2006, A. van Harten leg., Malaise trap (1♀); 27.vi–29.viii.2006, A. van Harten leg., Malaise trap (1♂); Wadi Shawkah, N25°06′ E58°03′, 19–28.xi.2007, A. van Harten leg., sample trap (1♀).
Additional specimens examined (not from the UAE): Southwestern SAUDI ARABIA: Abha to Jizan, km 53, Wadi Ad Dilla, 300 m (1 ex., NHMB).
Host plant: Unknown.



Plates 68–77. 68: *Chrysobothris* (*Chrysobothris*) *parvipunctata* Obenberger, 1914, male, 11.0 mm, Iran, Hormozgan, 15 km s of Minab (NMPC); 69: *Clema deserti deserti* Semenov, 1900, 4.6 mm, UAE, Sharjah Desert Park (Photograph M.G. Volkovitsh); 70: *Agrilus* (*Agrilus*) *yemenita* Curletti & van Harten, 2002, male, 5.0 mm, Yemen, Lahi; 71: *A.* (*Diplolophotus*) *desertus* (Klug, 1829), male, 7.5 mm, UAE, Wadi Wurayah (farm); 72: *A.* (*Micragrilus*) *lituratus* (Klug, 1829), female, 3.5 mm, UAE, Khor Kalba; 73: *Aphanisticus bedeli* Abeille de Perrin, 1893, male, 4.0 mm, Algeria, Ghardaia; 74: *Trachys erythreae* Obenberger, 1937, male, 2.5 mm, UAE, Wadi Bih (dam); 75: *T. latifrons* Kerremans, 1907, male, 2.3 mm, UAE, Wadi Bih (dam); 76: *Trachys* nr. *bodenheimeri* Théry, 1934, male, 2.0 mm, UAE, Sharjah Desert Park; 77: *T.* nr. *bodenheimeri* Théry, 1934, female, 2.0 mm, UAE, Wadi Shawkah.

Distribution: Eritrea, Ethiopia, southwestern Saudi Arabia, Sudan, UAE, Yemen. New species for the UAE.

Trachys nr. ***bodenheimeri*** Théry, 1934 Plates 76–77

Specimens examined: Sharjah Desert Park, N25°17′ E55°42′, 25.ii–5.iii.2006, A. van Harten leg., light trap (1♂) (Plate 76). Wadi Bih (dam), N25°48′ E56°04′, 16.xii.2009–8.iii.2010, A. van Harten leg., water trap (1♂). Wadi Shawkah, N25°06′ E56°02′, 250–280 m , 20–23.iii.2007, pan traps, J. Batelka leg. (1♀, JBCP) (Plate 77); Wadi Shawkah, N25°06′ E58°03′, 31.x–27.xi.2006, A. van Harten leg., water trap (1♂); 20–26.iii.2007, A. van Harten leg., sweeping (1♂); 1–7.iv.2007, A. van Harten leg., sweeping (1♂, 1♀); 5–12.v.2007, A. van Harten leg., water trap (3♂, 2♀); 19–22.v.2007, A. van Harten leg., water trap (1♂, 1♀); 25.x–15.xi.2007, A. van Harten leg., water trap (1♂). Wadi Wurayah farm, 19.iv–18.v.2009, A. van Harten leg., Malaise trap (1♂, 1♀).

Additional specimens examined (not from the UAE): OMAN: Dhofar Province: Salalah (20 km NE), Wadi Nashib, 25–26.ix.2008, S. Jákl leg. (1 ex., NMPC). YEMEN: Sana Province: Manakhah (12 km NW), 23.vi–6.viii.2003, A. van Harten leg., Malaise trap (2 ex., NMPC). Lahj Province: Lahj, 15–30.vi.2001, A. van Harten leg., Malaise trap (1 ex., NMPC).

Host plant: Unknown.

Distribution: Oman, UAE, Yemen.

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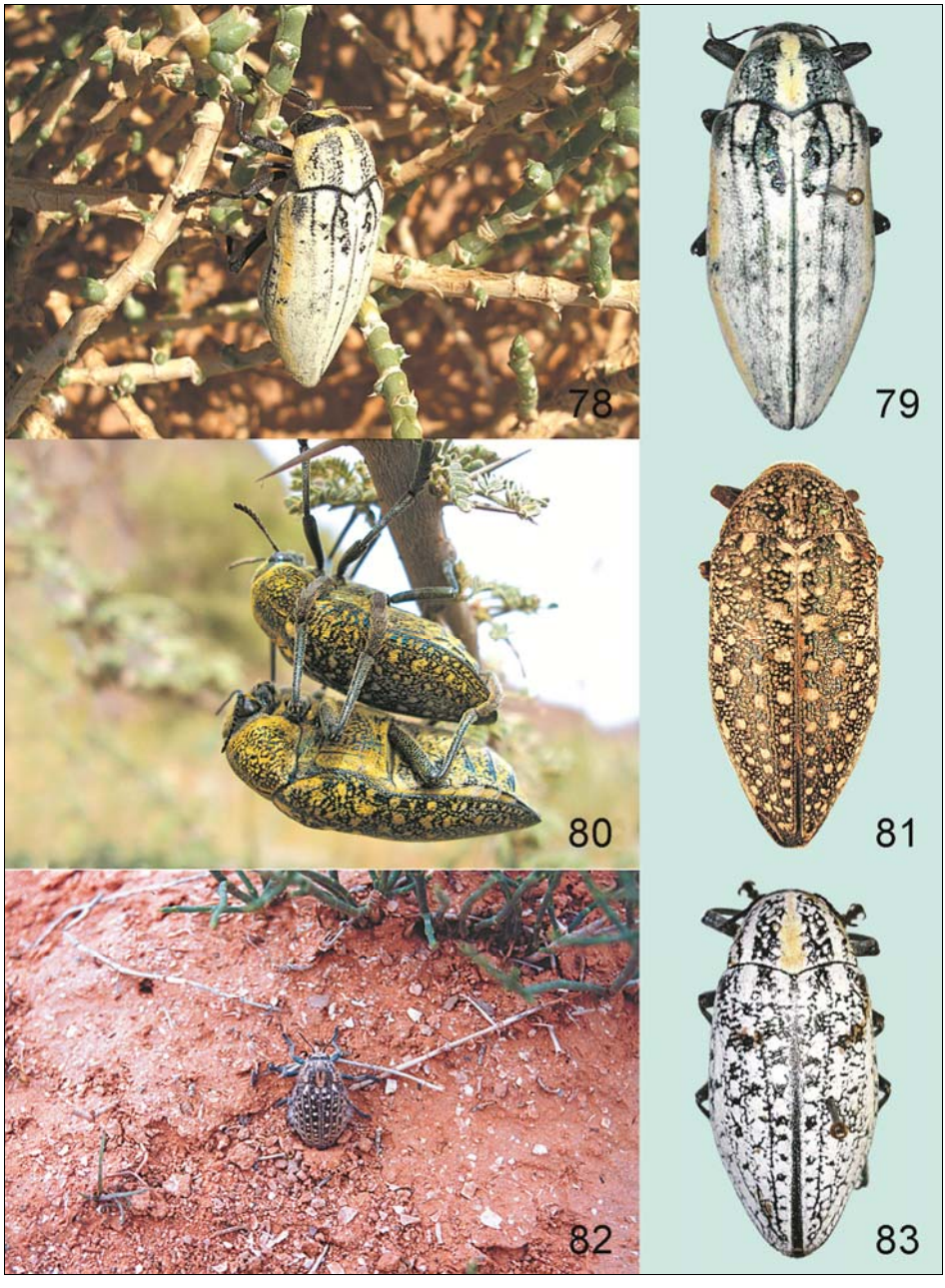

Plates 78–83. 78: *Julodis candida* Hołyński, 1996, specimen feeding on a shrub, UAE, Liwa,Wazeel oasis (Photograph © J. Batelka); 79: *J. candida*, 31.0 mm, the same specimen after mounting; 80: *J. euphratica euphratica* Laporte & Gory, 1835, pre-mating position, UAE, Wadi Shawkah (Photograph © J. Batelka); 81: *J. e. euphratica*, 32.0 mm, "Arabie" (MNHN); 82: *J. syriaca palmyrensis* Obenberger, 1923, female depositing eggs into the soil, Western Jordan, Wadi Mujib, Al Qatrana, Saliya, 15.iv.2002 (Photograph © M. Snížek); 83: *J. speculifer dicksonae* Théry, 1936, female, 29.0 mm, Saudi Arabia, Eastern Province, Udhailiyah Camp (NMPC).

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