

## Click-Beetles collected in Iran by the expeditions of the Naturkundemuseum Erfurt with description of two new species (Insecta: Coleoptera: Elateridae)

GIUSEPPE PLATIA

### Abstract

In this paper 37 species of click-beetles collected in Iran in the years 2008, 2010 and 2012 by the expeditions of members of the furtherance society of Naturkundemuseum Erfurt are listed. The five species *Athous haemorrhoidalis* (Fabricius, 1801); *Hemicrepidius agajewi* Platia, 2008; *Adrastus limbatus* (Fabricius, 1777), *Zoroachros mesasiaticus* (Dolin, 1995) and *Zoroachros nanus* (Gurjeva, 1963) are new to Iran. Two species are described as new for science: *Ampedus weigeli* n. sp. and *Melanotus karajensis* n. sp. and an updated checklist of click-beetles from Iran is given.

### Zusammenfassung

In vorliegender Arbeit werden Funde von 37 Schnellkäferarten, die auf Expeditionen von Mitgliedern des Fördervereins des Naturkundemuseums Erfurt in den Jahren 2008, 2010 und 2012 in Iran gesammelt wurden, vorgestellt. Fünf Arten davon sind neu für die Fauna Irans: *Athous haemorrhoidalis* (Fabricius, 1801); *Hemicrepidius agajewi* Platia, 2008; *Adrastus limbatus* (Fabricius, 1777), *Zoroachros mesasiaticus* (Dolin, 1995) und *Zoroachros nanus* (Gurjeva, 1963). Zwei weitere Arten – *Ampedus weigeli* n. sp. und *Melanotus karajensis* n. sp. – werden als neu für die Wissenschaft beschrieben und abgebildet, sowie eine aktuelle Checkliste der Schnellkäfer Irans vorgestellt.

**Key words:** Coleoptera, Elateridae, new species, new records, *Ampedus*, *Melanotus*, Iran

### Introduction

The last important contribution to the knowledge of the click-beetles of Iran with a checklist of the known species was published by CATE et al. (2002). In this paper were treated a list of 70 species of which 13 new and other 32 as new records. Since this publication other papers (PLATIA et al. 2002, PLATIA & GUDENZI 2005, 2006, MERTLIK & DUSANEK 2006, PLATIA 2008, 2010b & 2012, NASSERZADEH et al. 2008, MARDJANI-AN & BARIMANI 2011, PLATIA & NEMETH 2011) have enriched the fauna of the country with the descriptions of many species and the new records of other collectors. The present paper gives a further small contribution to the knowledge of this fauna with the descriptions of two new species and the new records of other four. An updated checklist of the elaterids from Iran including 189 species is given. All records are results of three scientific expeditions of the Naturkundemuseum Erfurt, respectively of members of the furtherance society of the museum. This expeditions were supported by Prof. Alirezah Saboori and his team from the University of Karaj/Tehran. For more informations about routes, localities and habitats see the paper of WEIGEL et al. (in prep.) in the present volume.

### Material and Methods

**Body measurements:** Body length is measured along the midline from the anterior margin of the frons to the apex of the elytra, body width across the broadest part of the beetle.

**Pronotal measurements:** Pronotal length is measured along the midline, pronotal width across the broadest part which is usually at the hind angles.

Tribal placement of genera and species listed below follows BOUCHARD et al. (2011) except for the subfamily Aplastinae. The abbreviations of countries, given by “distribution” follows CATE (2007).

## Abbreviations

The names of institutions, museums and collections containing the material studied, to which we are deeply indebted, are abbreviated as follows:

- CAB – Collection Andrzej Lason (Bialystok, Poland)  
CASH – Collection André Skale (Hof/Saale, Germany)  
CAWW – Collection Andreas Weigel (Wernburg, Germany)  
CDFS – Collection Dirk Frenzel (Sonneberg, Germany)  
CGPG – Collection Giuseppe Platia (Gatteo, Italy)  
CJWP – Collection Jörg Weipert (Plaue, Germany)  
CKK – Collection R. Krolak (Kluczborka, Poland)  
CSRG – Collection Sergio Riese (Genova, Italy)  
NME – Naturkundemuseum Erfurt, Germany (M. Hartmann).  
spm. – specimen(s)

## The species

Subfamily Agrypninae Candèze, 1857

### Tribe Agrypnini, 1857

#### *Lacon unicolor* (Candèze, 1874)

Material examined. 1 spm. ♂ – Iran: Fars prov., vic. Qualat (29°48'13"N, 52°19'11"E), 2000–2150 m, 28.IV.2010, D. Frenzel (CDFS).  
Distribution. A: IN, Turkey (MERTLIK & PLATIA 2008).

### Tribe Oophorini Gistel, 1856

#### *Aeoloides figuratus* (Germar, 1844)

Material examined. 2 spm. ♂ – Iran: Gilan Prov., Astaneh, Safid Rud (37°15'32"N, 49°55'27"E), 3.V.2012, D. Frenzel (NME, CDFS).  
Distribution. E: AB AR GG ST A: AF IQ IN KI KU KZ PA QA SA SY TD TM TR UZ „Palestine“

#### *Drasterius bimaculatus* (Rossi, 1790)

Material examined. 25 spm. (♂ ♀) – Iran: Mazandaran Prov., Tonekabon, Ramezan Chil (36°48'20"N, 50°51'44"E), 12 m, 3.V.2012, J. Weipert; Mazandaran Prov., N Elburz, Now Shahr (36°36'17"N, 51°38'23"E), 1–5.VI.2008, D. Frenzel; Teheran

prov., Karaj university of agriculture (35°47'97"N, 51°00'25"E), 1360 m, 26.V.2008, J. Weipert; Teheran prov., Karaj university of agriculture (35°47'97"N, 51°00'25"E), 1360 m, 30.IV.2010, A. Skale; Karaj university of agriculture (35°47'59"N, 51°00'02"E), 1360 m, 29.IV.-12.V.2012, D. Frenzel; Teheran Prov., Najmaabad (35°49'56"N, 50°28'15"E), 1170 m, 7.V.2012, J. Weipert, D. Frenzel; Teheran Prov., S Elburz, Agasht (36°00'20"N, 50°52'84"E), 1600-1700 m, 27.V.2008, D. Frenzel; Gilan Prov., Astaneh, Safid Rud (37°15'32"N, 49°55'27"E), 5 m, 3.V.2012, J. Weipert, D. Frenzel; Cahar Prov., Mahali-o-Bakhtiyari, Chadegan, E, Abadchi Tal (32°45'58"N, 50°45'01"E), 2160 m, 11.V.2012, J. Weipert; Isfahan prov., Quamsar (33°44'58"N, 51°24'12"E), 2070 m NN, 12.V.2012, D. Frenzel; Isfahan prov., Quamsar, 10 km SW Kamoo (33°39'37"N, 51°16'04"E), 2650 m, 12.V.2012, D. Frenzel; Qom prov., Neyzar, 30 km N Deljjan, Rud-e-Qom (34°16'59"N, 50°31'33"E), 1300 m, 8.V.2012, D. Frenzel (CDFS, CASH, CJWP, NME).

Distribution. E: AB AL AR AU BE BH BU CR CT CZ FR GE GG GR HU IT MA MC MD PL PT RO SK SL SP ST SZ UK YU N: AG CI (Lanzarote) EG LB MO TU A: AF CY IN IQ IS JO KI KZ SY TM TR UZ.

### Tribe Dendrometrini Gistel, 1856

#### *Athous haemorrhoidalis* (Fabricius, 1801)

Fig. 4, 4a, 12.

Material examined. 1 spm. ♂ – Iran: Teheran Prov., Naimaabad, W, Salzwüste (35°49'56"N, 50°28'15"E), 1170 m, 7.V.2012, J. Weipert (CJWP).  
Aedeagus as in fig. 4, 4a.

Distribution. E: AL AR AU AZ BE BU BY CR CT CZ DE EN FI FR GB GE GR HU IR IT LA LS LT LU MC MD NL NR PL PT RO SK SL SP ST SV SZ TR UK YU A: CY KZ TR.

**New to Iran.**

#### *Hemicrepidius agajewi* Platia, 2008 Fig. 3, 3a, 8, 11.

Material examined. 1 spm. ♂ – Iran: Mazandaran Prov., N Elburz, Dohesar-Road, River (36°40'00"N, 50°49'57"E), 460 m, 1.VI.2008, A. Skale (NME).  
Aedeagus as in fig. 3, 3a.  
Distribution. Azerbaijan. **New to Iran.**

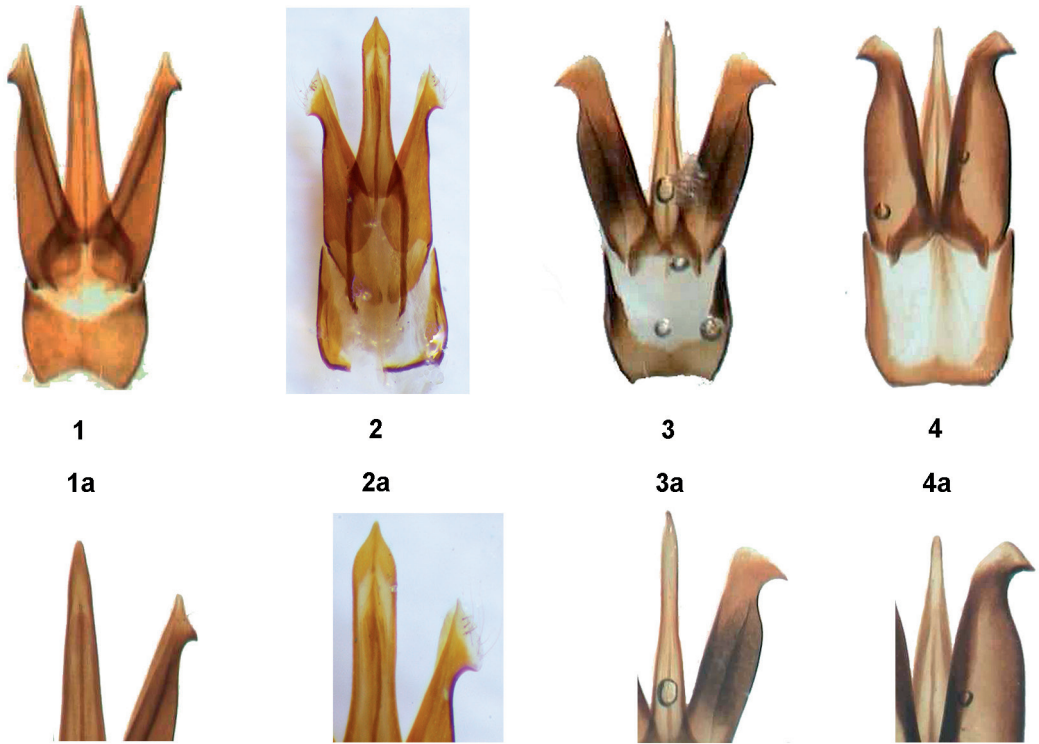


Figure 1–4. Male genitalia in dorsal view. 1, 1a. *Ampedus weigeli* n. sp.; 2, 2a. *Melanotus karajensis* n. sp.; 3, 3a. *Hemicrepidius agajewi* Platia; 4, 4a. *Athous* (s. str.) *haemorrhoidalis* (F.).

***Megathous menetriesi* (Reitter, 1890)**

Material examined. 3 spm. (♂ ♀) – Iran: Mazandaran prov., N Elburz, SW Now Shahr (36°35'20"N, 51°34'05"E), 500 m, 3.VI.2008, A. Skale, D. Frenzel (CDFS, CASH, NME).

Ecological note. Collected in primary forest.

Distribution. E: AB A: IN.

***Pleurathous hyrcanicus* Nasserzadeh, Platia & Barimani, 2008**

Material examined. 2 spm. (♂ ♀) – Iran: Mazandaran Prov., NW Elburz, Javaherdeh Rd., Doshoon Kooch (36°51'87"N, 50°30'41"E), 1460–1750 m, 2.VI.2008, D. Frenzel; Mazandaran Prov., N Elburz, Dohesar-Road, River (36°35'11"N, 50°47'67"E), 550 m, 1.VI.2008, D. Frenzel (CDFS, NME).

Distribution. Iran.

**Tribe Agriotini Laporte, 1840**

***Agriotes bagherii* Platia, Furlan & Gudenzi, 2002**

Material examined. 1 spm. ♂ – Iran: Teheran Prov., Naimaabad, W, Salzüste (35°49'56"N, 50°28'15"E), 1170 m, 7.V.2012, D. Frenzel (CDFS).

Distribution. A: IN.

***Agriotes brevis* Candèze, 1863**

Material examined. 2 spm. ♂ – Iran: Mazandaran prov., Kodir, Bergwiese (36°26'56"N, 51°48'06"E), 1700 m, 5.V.2012, J. Weipert; Mazandaran prov., Koli-jac (36°28'28"N, 51°39'35"E), 1850 m, 5.V.2012, D. Frenzel (CDFS, NME).

Distribution. E: AB AU AR AU BH BU CR CZ FR GE GG GR HU IT MD PL SK SL SP ST UK YU A: IN TM TR, Israel (PLATIA 2010a).

***Agriotes infuscatus* Desbrochers des Loges, 1870**

Material examined. 1 spm. ♂ – Iran: Mazandaran prov., vic. Lashak (36°23'18"N, 51°39'12"E), 1600–1700 m, 6.V.2010, D. Frenzel (CDFS).

Distribution. E: AB AR BU CR FR GG IT ST, Greece (PLATIA 2011), Bosnia-Herzegovina (PLATIA & NEMETH 2011) A: IN TR

***Agriotes lineatus* (Linnaeus, 1758)**

Material examined. 1 spm. ♂ – Iran: Ardabil prov., Namin S (38°22'16"N, 48°26'00"E), 1340 m, 2.V.2012, D. Frenzel (CDFS).

Distribution. E: AB AL AR AU BE BH BU BY CR CT CZ DE EN ES FI FR GB GE GG GR HU IR IT LA LS LT LU MC MD NL NR NT PL PT RO SK SL SP ST SV SZ TR UK YU A: ES GAN IN JIL KI KZ LE, LIA MG SY TM TR XIN, Israel (PLATIA 2010a) AURI NARI NTri

***Agriotes modestus* Kiesenwetter, 1858**

Material examined. 4 spm. (♂ ♀) – Iran: Teheran prov., Karaj university of agriculture (35°47'97"N, 51°00'25"E), 1360 m, 25.V.–8.VI.2008, A. Skale, D. Frenzel; Cahar Prov., Mahali-o-Bakhtiyari, Shahr-e Kord, NW Ghale Sabz. (32°30'36"N, 50°14'49"E), 2240 m, 10.V.2012, J. Weipert (CDFS, CASH, NME).

Distribution. E: AU BU CZ FR GR IT HU MD RO SK SP ST UK A: IN KZ SY, Turkmenistan (PLATIA 2010a), Morocco (PLATIA & GUDENZI 2005), Algeria (PLATIA 2011).

***Agriotes sputator* (Linnaeus, 1758)**

Material examined. 1 spm. ♀ – Iran: Ardabil prov., Heyran (38°24'25"N, 48°35'39"E), 1100–1200 m, 2.V.2012, D. Frenzel (CDFS).

Distribution. E: AB AL AR AU BE BH BU BY CR CT CZ DE EN FR GB GE GG GR HU IT LA LS LT LU MC MD NL NR NT PL RO SL SP ST SV SZ UK YU N: AG A: ES FE IN KZ MG NO SY TR WS XIN NARI

**Tribe Ampedini Gistel, 1856**

***Ampedus weigeli* n. sp.**

Fig. 1, 1a, 5, 5a, 6, 9

**Holotype** ♂ – Iran: Teheran prov., Karaj university of agriculture (35°47'97"N, 51°00'25"E), 1360 m, 30.IV.2010, A. Weigel (NME); 2 Paratypes (♂ ♀) – same data as Ht (♂) (CGPG); Ardabil-Gilan Prov. Boarder, 30 km W Astara, 18.V.2007, A. Klimenko (♀)(CSR); 5 Paratypes (2 ♂, 3 ♀): Azerbaijan: Yardimli rayonu, Talysh Mts., 17–23 km NE of Yardimli (38°56'N, 48°26'E), 368–450 m, 27.V., 1.–7.VI.2013, R. Krolik; A. Lasoń (CAB, CKK, CGPG).

**Diagnosis.** Species comparable to *Ampedus lenkoranus* (Reitter, 1889) for the general shape and colour it can be distinguished by the second article of antennae shorter compared to the third, the shape of pronotum with sides less arcuate and shorter paramera of male genitalia.

**Description.** Male. Bicoloured; shiny, black with red-orange elytra and brownish legs; covered with moderate blackish pubescence.

**Frons** convex, punctures of variable size, umbilicate with very short, variable, shiny intervals.

**Antennae** just reaching the apices of the posterior angles of pronotum, serrated from fourth article on, second article subcylindrical, as long as wide, third subconical just longer than second and nearly as long as wide, second and third taken together as long as fourth; fourth-tenth triangular, fourth a little longer than wide, the following on average as long as wide, last longer than penultimate, ellipsoidal, constricted at the apical third.

**Pronotum** 1,15–1,2x wider than long, widest at the apices of the posterior angles, convex, with a vestige of mid-longitudinal depression on the basal slope; sides from behind the middle very gradually converging forwards, slightly sinuate before the posterior angles, the latter not or just divergent, shortly unicarinate; puncturation rather uniformly distributed, only on the disk a little sparser, slightly umbilicate, with variable and very short shiny intervals, gradually denser towards the

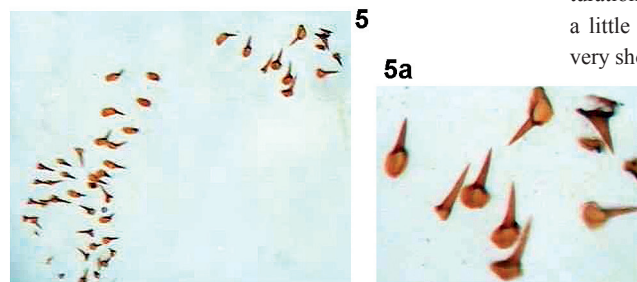


Fig. 5. 5a. Sclerites of bursa copulatrix. *Ampedus weigeli* n. sp.

sides, more clearly umbilicate and nearly contiguous at the lateral extremities.

**Scutellum** shield-shaped, longer than wide, slightly sinuate at sides, ridged at base, moderately convex, punctured.

**Elytra** 2,85–2,9x longer than pronotum and as wide as it, convex; sides subparallel from base to the middle then gradually converging to the apices; striae well marked and deeply punctured; interstriae flat with smaller punctures.

**Aedeagus** as in fig. 1, 1a (length 1,25 mm).

**Female.** Very similar to the male with shorter antennae not reaching the apices of the posterior angles and second and third antennal segments, taken together, a little longer than fourth.

Bursa copulatrix sclerified as in fig. 5, 5a.

**Size.** Length 8,4–9,2 mm; width 2,37–2,62 mm.

**Etymology.** The species is dedicated to the collector Andreas Weigel (Wernburg), specialist of Cerambycidae and xylobiontic beetles.

#### ***Ampedus biformis* Dolin, 1970**

Material examined. 2 spm. (♂ ♀) – Iran : Mazandaran Prov., vic. Now Shar, Kheiroud Kenar forest (36°33'06"N, 51°36'47"E), 1050 m, 3.V.2010, A. Skale (NME).

Distribution. E: AB A: IN.

#### ***Ampedus cyanicollis* Dolin, 1970**

Material examined. 3 spm. (1 ♂, 2 ♀) – Iran: Mazandaran prov., Nur, national reserve (36°34'51"N, 52°02'56"E), 8 m, 4.V.2010, A. Skale; Mazandaran Prov., vic. Koliijak, mountain slope (36°28'18 "N, 51°40'14 "E), 1840 m, 5.V.2010, A. Weigel, D. Frenzel; Mazandaran Prov., vic. Koliijak (36°28'28"N, 51°39'35"E), 1600–1850 m, 4–5.V.2010, D. Frenzel; Mazandaran prov., vic. Now Shahr, Kheiroud Kenar forest (36°36'35"N, 51°34'10"E), 40–200 m, 3–4.V.2010, D. Frenzel; Gilan prov., Gijan, W of Hashtpar (37°41'19"N, 48°51'17"E), 240 m, 1.V.2012, J. Weipert (CDFs, CASH, CJWP, NME).

Distribution. E: AB A: IN.

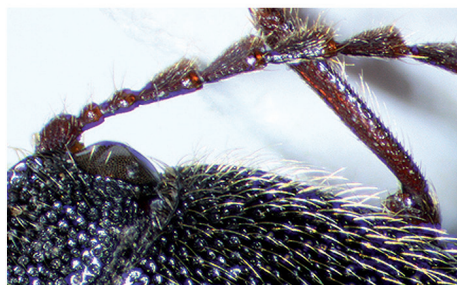
#### ***Ampedus iranicus* Gurjeva, 1972**

Material examined. 3 spm. ♀ – Iran: Mazandaran Prov., vic. Koliijak, mountain slope (36°28'18 "N, 51° 40' 14 "E), 1840 m, 5.V.2010, A. Weigel; Mazandaran prov., Firooz Kola, high plain (36°23'12"N, 51°46'11"E), 1500–1600 m, 6.V.2010, A. Weigel (CJWP, NME).

Distribution. A: IN.



6



7



8

Fig. 6–8. First articles of antennae. 6. *Ampedus weigeli* n. sp. ♂; 7. *Melanotus karajensis* n.sp. ♂; 8. *Hemicrepidius agajewi* Platia.

#### ***Ampedus lenkoranus* (Reitter, 1889)**

Material examined. 1 spm. ♂ – Iran: Mazandaran prov., Nur, national reserve (36°34'51"N, 52°02'56"E), 8 m, 4.V.2010, A. Skale (NME).

Distribution. E: AB AR ST A: IN.

#### **Tribe Megapenthini Gurjeva, 1973**

##### ***Megapenthes rutilipennis* Candèze, 1859**

Material examined. 4 spm. ♂ ♀ – Iran: Mazandaran prov., Nur, national reserve (36°34'51"N, 52°02'56"E), 8 m, 4.V.2010, A. Weigel, D. Frenzel; Mazandaran Prov., Now Shar, S. Kheiroud Kenar forest (36°34'24"N, 51°35'24"E), 400–900 m, 4.V.2012, J. Weipert (NME).

Distribution. E: AB ST A: IN TR.



***Procaerus tibialis* (Lacordaire, 1835)**

Material examined. 2 spm. ♀ – Iran: Mazandaran Prov., vic. Now Shar, Kheiroud Kenar forest (Gorazbon distr.) (36°31'38"N, 51°38'46"E), 880 m, 2.V.2010, A. Weigel (CJWP, NME).

Distribution. E: AU BE BH BU CR CT CZ DE FI FR GB GE GR HU IT LT LV MD NR PL RO SK SL SP SV ST SZ UK YU N: AG A: IN, Albania (PEDRONI & PLATIA 2010) A: Turkey (MERTLIK & PLATIA 2008).

**Tribe Pomachiliini Candèze, 1859**

***Betarmon bisbimaculatus* (Fabricius, 1803)**

Material examined. 6 spm. (♂ ♀) – Iran: Mazandaran Prov., N Elburz, Kheirud (36°37'40"N, 51°34'52"E), 2.VI.2008, D. Frenzel; Mazandaran Prov., N Elburz, Now Shahr (36°36'17"N, 51°38'23"E), 1–5.VI.2008, D. Frenzel (CDFS, NME).

Distribution. E: AB AR AU BU CR CZ FR GE GG GR HU IT PL RO SK SL SP SZ UK YU A: IN TR.

**Tribe Synaptini Gistel, 1856**

***Adrastus limbatus* (Fabricius, 1777)**

Material examined. 1 spm. ♂ – Iran: Teheran Prov., S Elburz, Kondor (35°50'19"N, 51°05'21"E), 1642 m, A. Skale (CASH).

Distribution. E: AL AU BE BH BU BY CR CZ FR GE GR HU IT LT LU MC MD NL PL RO SK SL SP ST SZ UK YU A: TR. **New to Iran.**

***Adrastus samedovi* Dolin & Agajew, 1974**

Material examined. 4 spm. (3 ♂, 1 ♀) – Iran: Mazandaran Prov., N Elburz, Kheirud (36°37'40"N, 51°34'52"E), 2.VI.2008, D. Frenzel (CDFS, NME).

Distribution. E: AB A: IN, Turkey (MERTLIK & PLATIA 2008).

***Synaptus filiformis* (Fabricius, 1781)**

Material examined. 1 spm. ♂ – Iran: Gilan Prov., Astaneh, Safid Rud (37°15'32"N, 49°55'27"E), 3.V.2012, D. Frenzel (CDFS).

Distribution. E: AB AL AR AU BE BH BU BY CR CT CZ EN FR GB GE GG GR HU IT LA LS LT LU MC MD NL PL PT RO SK SL SP ST SZ UK YU A: IN KZ SY TR, Lebanon, Tadjhikistan (PLATIA 2010a).

**Subfamily Melanotinae Candèze, 1859**

***Melanotus karajensis* n. sp.**

Fig. 2, 2a, 7, 10.

**Holotype** ♂ – Iran: Teheran prov., Karaj university of agriculture (35°47'97"N, 51°00'25"E), 1360 m, 24.V.2008, J. Weipert (NME); 5 Paratypes ♂ – same data as Ht, 24–25–26.V.2008, J. Weipert, D. Frenzel (CDFS, CGPG, CJWP, NME).

**Diagnosis.** The new species can be compared to *Melanotus sobrinus* (Ménétriés, 1832) for the general shape, it can be separated by the slender body, the uniform dark-brown colour and genitalia.

**Description.** Male. Moderately shiny; entirely dark-brown with antennae and legs lighter, brown-ferruginous; covered with dense, partially erect, yellow-golden, pubescence.

**Frons** flat, anterior margin moderately and regularly arcuate, slightly thickened and just protruding above the clypeus, puncturation coarse, punctures of variable diameters, strongly umbilicate with very short, shiny interstices or contiguous.

**Antennae** exceeding by one article the apices of posterior angles of pronotum, serrated from fourth article on; second article subcylindrical, as long as wide, third subconical, a little longer than second, taken together, as long as fourth; fourth-tenth triangular, on average 1,4x longer than wide, last longer than penultimate, subbellipsoid, constricted at the apical third.

**Pronotum** just wider than long, widest at the apices of posterior angles, regularly convex, sides arcuate, from the middle regularly converging forwards, just sinuate before the posterior angles, the latter short, truncate, with a short carina subparallel to the lateral margins; puncturation rather uniformly distributed, punctures on disk umbilicate, with very short, shiny intervals, gradually denser towards the sides contiguous or confluent at the lateral extremities.

**Scutellum** shield-shaped, ridged at base, slightly situate at sides, flat, coarsely punctured.

**Elytra** 2,9–3x longer than pronotum and as wide as it, convex; sides subparallel from base to behind the middle, further gradually converging to the apices; striae well marked and deeply punctured, interstriae flat with smaller and dense punctures.

Prosternal process immediately bent behind the procoxal cavities and slightly emarginate at apex.

**Aedeagus** as in fig. 2, 2a (length 1,34 mm).

Fig. 9–12. Habitus ♂. 9. *Ampedus weigeli* n. sp.; 10. *Melanotus karajensis* n. sp.; 11. *Hemicepidius agajewi* Platia; 12. *Athous* (s. str.) *haemorrhoidalis* (F.).



9



10



11



12

Female unknown.

**Size.** Length 9,7– 11,8 mm; width 2,56–3,12 mm.

**Etymology.** The name of the species is derived from Karaj, locality where the species was collected.

***Melanotus admirabilis* Gurjeva, 1984**

Material examined. 1 spm. ♂ – Iran: Mazandaran prov., C-Elburz, Kandovar, Tunnel env. (36°09'61"N, 51°19'31"E), 2650 m, 5.VI.2008, D. Frenzel (NME).  
Distribution. A: TM, IN.

***Melanotus fulvus* Reitter, 1891**

Material examined. 2 spm. ♂ – Teheran prov., Karaj university of agriculture (35°47'97"N, 51°00'25"E), 1360 m, 20.V.2008, A. Skale (CASH, NME).  
Distribution. A: IN IQ TM, Turkey (MERTLIK & PLATIA 2008), Israel (PLATIA 2010a), Syria (PLATIA 2011).

***Melanotus sobrinus* (Ménétriés, 1832)**

Material examined. 2 spm. ♂ – Iran: Teheran prov., Karaj university of agriculture (35°47'97"N, 51°00'25"E), 1360 m, 25.V–8.VI.2008, A. Skale (CASH, NME).  
Distribution. E: AB AR GG ST A: IN TM.

***Melanotus villosus* (Fourcroy, 1785)**

Material examined. 5 spm. (2 ♂, 3 ♀) – Iran: Mazandaran Prov., vic. Now Shar, Kheiroud Kenar forest (Gorazbon distr.)(36°31'38"N, 51°38'46"E), 880 m, 2.V.2010, A. Weigel; Mazandaran Prov., vic. Now Shar, Kheiroud Kenar forest (36°34'24"N, 51°35'24"E), 400–900 m, 4.V.2012, D. Frenzel; Mazandaran Prov., NW Elburz, Javaherdeh Rd., Doshoon Kooch (36°51'87"N, 50°30'41"E), 1460–1750 m, 2.VI.2008, D. Frenzel (CDFS, CJWP, NME).

Distribution. E: AB AL AR AU BE BH BU BY CR CT CZ DE EN FI FR GB GE GG GR HU IR IT LA LS LT LU MD MK NL NR NT PL PT RO SK SL SP SV ST SZ TR UK YU N: AG MO A: IN TR YUN „Manchuria“.

#### Subfamily Negastrinae Nakane & Kishii, 1956

##### *Zorochros mesasiaticus* (Dolin, 1995)

Material examined. 1 spm. ♀ – Iran: Qom prov., Neyzar, 30 km N Deljjan, Rud-e-Qom (34°16'59"N, 50°31'33"E), 1300 m, 8.V.2012, D. Frenzel (CDFS).

Distribution. A: KI KZ TD UZ. **New to Iran.**

##### *Zorochros nanus* (Gurjeva, 1963)

Material examined. 1 spm. ♀ – Iran: Qazvin Prov., SW Elburz, Kordak, Kordak-river (36°10'70"N, 50°49'77"E), 1900 m, 28.V.2008, J. Weipert (CJWP).

Distribution. A: KI, Turkey (MERTLIK & PLATIA 2008).

**New to Iran.**

##### *Zorochros pilosellus* (Reitter, 1895)

Material examined. 4 spm. (♂ ♀) – Iran: Teheran Prov., S Elburz, Kondor nr. Karaj Bachtal (35°50'19"N, 51°05'21"E), 1640 m, D. Frenzel; Isfahan prov., Quamsar, 10 km SW Kamoo (33°39'37"N, 51°16'04"E), 2650 m, 12.V.2012, D. Frenzel (NME, CDFS).

Distribution. E: AB AR GR A: IN TM TR.

#### Subfamily Cardiophorinae Candèze, 1860

##### *Cardiophorus bogatschevi* Dolin, 1985

Material examined. 1 spm. ♀ – Iran: Ardabil Prov., S Namin (38°22'16"N, 48°26'00"E), 1340 m, 2.V.2012, J. Weipert (NME).

Distribution. E: AB A: IN KZ TM, Uzbekistan (PLATIA 2011).

##### *Cardiophorus magnanii* Platia, Furlan & Gudenzi, 2002

Material examined. 1 spm. ♀ – Iran: Fars prov., river above Qalat village (29°47'99"N, 52°19'56"E), 2240 m, 28.IV.2010, A. Skale (NME).

Distribution. A: IN.

##### *Cardiophorus nigratissimus* Buysson, 1891

Material examined. 23 spm. (♂, ♀) – Iran: Teheran Prov., S Elburz, Kondor (35°50'19"N, 51°05'21"E), 1642 m, 27.V.2008, A. Skale; Teheran Prov., Najmaabad W (35°55'04"N, 50°33'18"E), 1200 m, 7.V.2012, D. Frenzel; Qazvin Prov., SW Elburz, Fashandak (36°09'82"N, 50°42'98"E), 1870 m, 28.V.2008, A. Skale, J. Weipert, D. Frenzel; Fars prov., Persepolis (29°56'07"N, 52°53'11"E), 1600 m, 27.IV.2010, D. Frenzel (CDFS, CASH, CJWP, NME).

Distribution. E: AB AR GG A: IN IQ SY TM TR.

##### *Cardiophorus vestigialis* Erichson, 1840

Material examined. 37 spm. (♂, ♀ ♀) – Iran: Mazandaran prov., Nur, national reserve (36°34'51"N, 52°02'56"E), 8 m, 4.V.2010, A. Weigel, A. Skale, D. Frenzel; Mazandaran prov., Firooz Kola, high plain (36°23'12"N, 51°46'11"E), 1500–1600 m, 6.V.2010, J. Weipert, A. Weigel; Mazandaran prov., 10 km W Pol-e Sefid (36°05'43"N, 52°57'20"E), 870 m, 6.V.2012, J. Weipert, D. Frenzel; Mazandaran prov., Koljiak (36°26'06"N, 51°43'58"E), 1400 m, 5.V.2010, D. Frenzel; Mazandaran prov., vic. Lashak (36°23'18"N, 51°39'12"E), 1600–1700 m, 6.V.2010, D. Frenzel; Mazandaran Prov., Dashtnazar (36°25'40"N, 51°28'54"E), 1000 m, 5.V.2012, J. Weipert; Mazandaran Prov., 15 km E Baladeh, vic. Valashid (36°12'13"N, 51°52'31"E), 1980 m, 7.V.2010, A. Weigel; Teheran prov., Karaj university of agriculture (35°47'97"N, 51°00'25"E), 1360 m, 30.IV.2010, A. Skale; Teheran Prov., C Elburz, Damavand Mt., Gosfand Sara, Larijan (35°52'64"N, 52°07'55"E), 2450–2600 m, 29.V.2008, D. Frenzel (CDFS, CASH, CAWW, CJWP, NME).

Distribution. E: AB AL AR AU BE BH BU CR CT CZ FI FR GB GE GG GR HU IT MD NR NT PL PT RO SK SL SP SV ST SZ UK YU N: AG EG LB MO TU A: CY ES FE IN KZ MG TM TR WS, Lebanon, Syria, Jordan (PLATIA 2010a).

##### *Craspedostethus permodicus* (Faldermann, 1835)

Material examined. 15 spm. (♂, ♀) – Iran: Teheran prov., Karaj university of agriculture (35°47'97"N, 51°00'25"E), 1360 m, 25.V.–8.VI.2008, A. Skale, D. Frenzel, J. Weipert (CDFS, CASH, CJWP, NME).

E: AR ST A: IN.



## Updated checklist of Elateridae from Iran

### Subfamily Agrypninae Candèze, 1857

Tribe Agrypnini Candèze, 1857

*Adelocera ovalis* (Germar, 1824)  
*Agrypnus bilyi* Cate, Platia & Schimmel, 2002  
*Agrypnus crenicollis* (Ménétriés, 1832)  
*Agrypnus murinus* (Linnaeus, 1758)  
*Agrypnus thibetanus* (Reitter, 1913)  
*Lacon lepidopterus* (Panzer, 1801)  
*Lacon mekrani* (Candèze, 1889)  
*Lacon modestus* (Boisduval, 1835)  
*Lacon nadaii* Platia & Nemeth, 2011  
*Lacon unicolor* (Candèze, 1874)  
*Lanelater arabicus* (Candèze, 1874)  
*Lanelater bartoni* (Fleutiaux, 1902)  
*Lanelater bipunctatus* (Candèze, 1857)  
*Lanelater iranicus* Platia, 2012  
*Lanelater persicus* (Candèze, 1874)  
*Lanelater saudarabicus* Chassain 1983  
*Octocryptus wittmeri* Chassain, 1979

Tribe Hemirhipini Candèze, 1857

*Calais brandti* Platia & Gudenzi, 1999  
*Calais persicus* Chassain, 1991  
*Calais parreysii* (Steven, 1830)

Tribe Oophorini Gistel, 1856

*Aeoloderma crucifer* (Rossi, 1790)  
*Aeoloides atricapillus* (Germar, 1824)  
*Aeoloides figuratus* (Germar, 1844)  
*Aeoloides griseescens* (Germar, 1844)  
*Aeoloides holzschuhi* Platia & Schimmel, 1997  
*Aeolosomus rossii* (Germar, 1844)  
*Conoderus productus arabicus* (Chassain, 1979)  
*Drasterius bimaculatus* (Rossi, 1790)  
*Heteroderes gallagheri* Platia & Schimmel, 1997  
*Heteroderes heydeni* (Reitter, 1891)

### Subfamily Dendrometrinae Gistel, 1856

Tribe Dendrometrini Gistel, 1856

*Athous* (s. str.) *haemorrhoidalis* (Fabricius, 1801)  
*Athous* (*Haplathous*) *subfuscus* (O.F. Müller, 1764)  
*Athous* (*Orthathous*) *astrabadensis* Faust, 1877

*Athous* (*Orthathous*) *iranicus* Platia, 2004  
*Denticollis linearis* (Linnaeus, 1758)  
*Hemicrepidius agajewi* Platia, 2008  
*Hemicrepidius hirtus* (Herbst, 1784)  
*Hemicrepidius nigrifolius* (Reitter, 1890)  
*Limoniscus wittmeri* Chassain, 1998  
*Limonius minutus* (Linnaeus, 1758)  
*Megathous menetriesi* (Reitter, 1890)  
*Pleurathous rosinae* (Reitter, 1889)  
*Pleurathous hyrcanicus* Nasserzadeh & Platia, 2008  
*Pseudocrepidophorus flavescens* (Eschscholtz, 1818)

Tribe Prosternini Gistel, 1856

*Anostirus eschscholtzi* (Faldermann, 1835)  
*Anostirus lederi* (Heyden, 1878)  
*Anostirus saltinii* Cate, Platia & Schimmel, 2002  
*Anostirus teheranus* Binaghi, 1940  
*Hypoganus stepanovi* Denisova, 1948  
*Prosternon admirabilis* Gurjeva, 1984  
*Selatosomus pasticus* (Ménétriés, 1832)

### Subfamily Elaterinae Leach, 1815

Tribe Agriotini Laporte, 1840

*Agriotes bagherii* Platia, Furlan & Gudenzi, 2002  
*Agriotes brevis* Candèze, 1863  
*Agriotes caspicus* Heyden, 1883  
*Agriotes constrictus* Reitter, 1890  
*Agriotes danieli* Platia & Nemeth, 2011  
*Agriotes hiveae* Platia, 2008  
*Agriotes infuscatus* Desbrochers des Loges, 1870  
*Agriotes iranicus* Platia, Furlan & Gudenzi, 2002  
*Agriotes iraqensis* Platia & Gudenzi, 1997  
*Agriotes lapicida* Faldermann, 1835  
*Agriotes lineatus* (Linnaeus, 1767)  
*Agriotes meticulousus* Candèze, 1863  
*Agriotes modestus* Kiesenwetter, 1858  
*Agriotes pilosellus* (Schönherr, 1817)  
*Agriotes proximoides* Platia, Furlan & Gudenzi, 2002  
*Agriotes samai* Platia, Furlan & Gudenzi, 2002  
*Agriotes sputator* (Linnaeus, 1758)  
*Agriotes squalidus* Schwarz, 1891  
*Agriotes ustulatus* (Schaller, 1783)

Tribe Ampedini Gistel, 1856

- Ampedus bififormis* Dolin, 1970  
*Ampedus cardinalis* (Schiodte, 1865)  
*Ampedus charbinensis* Schimmel, 2006  
*Ampedus cinnaberinus* (Eschscholtz, 1829)  
*Ampedus cyanicollis* Dolin, 1970  
*Ampedus elegantulus* (Schönherr, 1817)  
*Ampedus hjorti* (Rye, 1905)  
*Ampedus iranicus* Gurjeva, 1972  
*Ampedus lenkoranus* (Reitter, 1889)  
*Ampedus ocellatus* (Buysson, 1891)  
*Ampedus persicus* Gurjeva, 1972  
*Ampedus pomonae* (Stephens, 1830)  
*Ampedus rufipennis* (Stephens, 1830)  
*Ampedus sanguineus* (Linnaeus, 1758)  
*Ampedus sanguinolentoides* Platia, Furlan & Gudenzi, 2002  
*Ampedus sinuatus* Germar, 1844  
***Ampedus weigeli* n. sp.**  
*Haterumelater bimaculatus* Schimmel, 1998  
*Haterumelater fulvago* (Marseul, 1868)  
*Reitterelater elongatus* Platia, 2010

Tribe Elaterini Leach, 1815

- Elater ferrugineus lenkoranus* Gurjeva, 1974  
*Mulsanteus guillebelli* (Mulsant & Godart, 1853)  
*Mulsanteus istvani* Platia & Nemeth, 2011  
*Mulsanteus kalabzai* Mertlik & Dusanek, 2006  
*Pittonotus iranicus* Platia & Nemeth, 2011  
*Pittonotus theseus* (Germar, 1817)

Tribe Megapenthini Gurjeva, 1973

- Ectamenogonus montandoni* (Buysson, 1888)  
*Megapenthes pallidulus* Cate, Platia & Schimmel, 2002  
*Megapenthes rutilipennis* Candèze, 1859  
*Procrærus stepanovi* Khnzorian, 1959  
*Procrærus tibialis* (Lacordaire, 1835)

Tribe Physorhinini Candèze, 1859

- Chastanus rosti* (Schwarz, 1897)  
*Ischnodes sanguinicollis* (Panzer, 1793)  
*Podeonius bimaculatus* Platia, 2008

Tribe Pomachiliini Candèze, 1859

- Betarmon bisbimaculatus* (Fabricius, 1803)

Tribe Synaptini Gistel, 1856

- Adrastus dolini* Wellschmied, 1978  
*Adrastus limbatus* (Fabricius, 1777)  
*Adrastus samedovi* Dolin & Agajew, 1974  
*Peripontius crassus* (Buysson, 1906)  
*Synaptus filiformis* (Fabricius, 1781)  
*Tolphorea bicolor* Cate, Platia & Schimmel, 2002  
*Tolphorea luristanicus* (Pic, 1920)  
*Tolphorea volans* Gurjeva, 1983

**Subfamily Melanotinae Candèze, 1859**

- Melanotus admirabilis* Gurjeva, 1984  
*Melanotus bajulus* (Erichson, 1841)  
*Melanotus brunnipes* (Germar, 1824)  
*Melanotus castanipes* (Paykull, 1800)  
*Melanotus dichroides* Platia & Gudenzi, 1999  
*Melanotus fraseri* Platia & Schimmel, 1993  
*Melanotus fulvus* Reitter, 1891  
*Melanotus fusciceps* (Gyllenhal, 1817)  
*Melanotus iranicus* Platia & Gudenzi, 1999  
*Melanotus kalabzai* Platia & Gudenzi, 2006  
***Melanotus karajensis* n. sp.**  
*Melanotus klimenkoi* Platia, 2012  
*Melanotus kliri* Cate, Platia & Schimmel, 2002  
*Melanotus loudai* Platia & Gudenzi, 2005  
*Melanotus monticola* (Ménétriés, 1832)  
*Melanotus punctosinus* Cate, Platia & Schimmel, 2002  
*Melanotus sobrinus* (Ménétriés, 1832)  
*Melanotus villosus* (Fourcroy, 1785)

**Subfamily Negastrinae Nakane & Kishii, 1956**

- Quasimus minutissimus* (Germar, 1817)  
*Zorochros araxicola* (Reitter, 1905)  
*Zorochros freyi* Dolin, 1996  
*Zorochros iranicus* Dolin, 2002  
*Zorochros kopetdaghensis* Dolin, 1994  
*Zorochros mesasiaticus* (Dolin, 1995)  
*Zorochros nanus* (Gurjeva, 1963)  
*Zorochros pallicrus* (Desbrochers des Loges, 1875)  
*Zorochros pilosellus* (Reitter, 1895)  
*Zorochros quadrinaevus* (Reitter, 1895)  
*Zorochros recellentus* Dolin, 1995

**Subfamily Cardiophorinae Candèze, 1860**

- Cardiophorus bellus* Platia & Gudenzi, 2000  
*Cardiophorus bioculatus* Platia, 2010

*Cardiophorus bogatschevi* Dolin, 1985  
*Cardiophorus carnosus* Platia & Gudenzi, 2002  
*Cardiophorus gianassoi* Platia, 2010  
*Cardiophorus goletanicus* Platia, 2010  
*Cardiophorus hauseri* Schwarz, 1900  
*Cardiophorus jelineki* Cate, Platia & Schimmel, 2002  
*Cardiophorus kalashiani* Mardjanian & Barimani, 2011  
*Cardiophorus khnzoriani* Mardjanian & Barimani, 2011  
*Cardiophorus klimenkoi* Platia, 2008  
*Cardiophorus kryzhanovskiyi* Dolin & Tchantladze, 1980  
*Cardiophorus maculatus* Cate, Platia & Schimmel, 2002  
*Cardiophorus magnanii* Platia, Furlan & Gudenzi, 2002  
*Cardiophorus megathorax* (Faldermann 1835)  
*Cardiophorus miniaticollis* Candèze, 1860  
*Cardiophorus nigratissimus* Buysson, 1891  
*Cardiophorus persianus* Cate, Platia & Schimmel, 2002  
*Cardiophorus picinus* Platia & Gudenzi, 2002  
*Cardiophorus pictus* (Faldermann, 1835)  
*Cardiophorus pruinosis* Buysson, 1902  
*Cardiophorus ruficruris* (Brullé, 1832)  
*Cardiophorus sacratus* Erichson, 1840  
*Cardiophorus syriacoides* Platia & Cate, 2001  
*Cardiophorus terminasiani* Mardjanian & Barimani, 2011  
*Cardiophorus trimaculatus* Schwarz, 1894  
*Cardiophorus varandi* Mardjanian & Barimani, 2011  
*Cardiophorus varius* Cate, Platia & Schimmel, 2002  
*Cardiophorus vestigialis* Erichson, 1840  
*Craspedostethus antennalis* Cate, Platia & Schimmel, 2002  
*Craspedostethus dilutus* (Erichson, 1840)  
*Craspedostethus iranicus* Platia & Gudenzi, 1999  
*Craspedostethus longicornis* Cate, Platia & Schimmel, 2002  
*Craspedostethus permodicus* (Faldermann, 1835)  
*Craspedostethus schusteri* (Schwarz, 1897)  
*Dicronychus desbrochersi* Platia & Gudenzi, 2004  
*Dicronychus equiseti* (Herbst, 1784)  
*Dicronychus fusivittatus* Platia & Gudenzi, 1999  
*Dicronychus hoberlandti* Cate, Platia & Schimmel, 2002  
*Dicronychus latescapulatus* (Buysson, 1906)  
*Dicronychus mesopotamicus* Platia & Gudenzi, 1999  
*Dicronychus nigropunctatus* (Candèze, 1860)

*Dicronychus quadrinaevus* (Reitter, 1891)  
*Dicronychus rubripes* (Germar, 1824)  
*Neocardiophorus pilicornis* Platia, 2008

### Subfamily Aplastinae Stibick, 1979

Tribe Aplastini Stibick, 1979

*Gurjevelater iranicus* Platia & Gudenzi, 2001  
*Lomopneus mundus* Gurjeva, 1976

### References

- BOUCHARD, P., Y. BOUSQUET, A. E. DAVIES, M. A. ALONSO-ZARAZAGA, J. F. LAWRENCE, C. H. C. LYAL, A. F. NEWTON, C. A. M. REID, M. SCHMITT, S. A. ŚLIPINSKI & A. B. T. SMITH (2011): Family group names in Coleoptera (Insecta). – *ZooKeys* **88**: 1–972.
- CATE, P. C. (2007): Family Elateridae, Pp. 89–209. – In: LÖBL, I. & A. SMETANA (eds.). *Catalogue of Palearctic Coleoptera vol. 4. Elateroidea-Derontoidea-Bostrichoidea-Limexyloidea-Cleroidea-Cucujoidea*. – Apollo Books, Stenstrup, 935 pp.
- CATE P. C., G. PLATIA & R. SCHIMMEL (2002): New species and records of click beetles (Coleoptera: Elateridae) from Iran, with a checklist of known species. – *Folia Heyrovskiana* **10** (1): 25–68.
- MARDJANIAN, M. A. & H. V. BARIMANI (2011): New species of click-beetles of genus *Cardiophorus* Eschscholtz, 1829 (Coleoptera, Elateridae, Cardiophorinae) from Mazandaran (Iran). – *National Academy of Sciences of Armenia Reports* **111** (4) (Entomology): 396–403.
- MERTLIK, J. & G. PLATIA (2008): Catalogue of the families Cebrionidae, Elateridae, Lissomidae and Eucnemidae from Turkey. – *Elateridarium*: 1–40 [www.elateridae.com](http://www.elateridae.com).
- NASSERZADEH, H., G. PLATIA & H. V. BARIMANI (2008): Taxonomic and faunistic notes on *Pleurothous* Reitter, and description of the male characters of *Calais brandti* Platia & Gudenzi (Coleoptera: Elateridae). – *Koleopterologische Rundschau* **78**: 291–296.
- PEDRONI, G. & G. PLATIA (2010): Il popolamento a Coleotteri Elateridi dell'Albania (Coleoptera, Elateridae). – *Bollettino del Museo Civico di Storia Naturale di Verona, Botanica Zoologia* **34**: 65–86.
- PLATIA, G. (2008): Descriptions of new species of click beetles from the Palearctic Region and Taiwan, with chorological and synonymical notes (Insecta Coleoptera Elateridae). – *Quaderno di Studi e Notizie di Storia Naturale della Romagna* **27**: 187–215.
- (2010a): New species and chorological notes of click beetles from Palearctic Region, especially from the Middle East (Coleoptera Elateridae). – *Boletín de la Sociedad Entomológica Aragonesa* **46**: 23–49.
- (2010b): Descriptions of fourteen new species of click beetles from the Palearctic Region, with chorological notes. – *Quaderno di Studi e Notizie di Storia Naturale della Romagna* **30**: 103–130.
- (2011): New species and new records of click beetles from the Palearctic region (Coleoptera Elateridae). – *Boletín de la Sociedad Entomológica Aragonesa* **48**: 47–60.
- (2012): Description of ten new species of click-beetles from the Palearctic region, with new distributional records (Coleoptera, Elateridae). – *Boletín de la Sociedad Entomológica Aragonesa* **50**: 199–207.
- PLATIA, G. & I. GUDENZI (2005): Description of eleven new species of click-beetles of the palearctic region, a case of legs teratology and new records of some species of the italian fauna. – *Quaderno di Studi e Notizie di Storia Naturale della Romagna* **21**: 109–127.

- PLATIA, G. & I. GUDENZI (2006): Click-beetle genera, species, and records new to palearctic and indomalayan regions (Insecta Coleoptera Elateridae). – *Quaderno di Studi e Notizie di Storia naturale della Romagna* **23**: 131–156.
- PLATIA, G. & T. NEMETH (2011): On some Palearctic click-beetles deposited in the Hungarian Natural History Museum (Coleoptera: Elateridae). – *Annales Historico-Naturales Musei nationali Hungarici* **103**: 65–106.
- PLATIA, G., L. FURLAN & I. GUDENZI (2002): Descrizione di sei nuove specie di Elateridi dell’Iran (Insecta, Coleoptera, Elateridae). – *Il Naturalista Valtellinese. – Atti del Museo civico di Storia Naturale di Morbegno* **13**: 65–77.

**Author’s address:**

Giuseppe Platia  
Via Molino Vecchio, 21a  
I – 47043 Gatteo (FC)  
Italia  
pinoplatia-@teletu.it

---

**BAUMBACH, H.; H. SÄNGER & M. HEINZE (Hrsg.) (2013): Bergbaufolgelandschaften Deutschlands. Geobotanische Aspekte und Rekultivierung.** – Weissdorn-Verlag, Jena, 1. Auflage, 668 S., 332 überwiegend farbige Abbildungen, 114 Tabellen, Preis: 49,95 €. Bezug über: Weissdorn-Verlag Jena, Wöllnitzer Str. 53, 07749 Jena.

Gegliedert nach den geförderten Rohstoffen liefert das vorliegende Buch eine Zusammenstellung wissenschaftlicher Ergebnisse und praktischer Erfahrungen zu den Bergbaufolgelandschaften der wichtigsten Reviere Deutschlands. Neben einer Vorstellung der einzelnen Industriestandorte, wurden knapp die Entstehung der Rohstoffe, ihre Abbauverfahren und deren Auswirkungen auf den Naturhaushalt geschildert. Die Bergbaufolgelandschaften sind in ihren abiotischen Umweltbedingungen dargestellt und geobotanisch (Flora, Vegetation, Sukzession) beschrieben. Soweit es die Datengrundlage ermöglicht, wurden Vorkommen, räumliche und zeitliche Verbreitung der sich spontan einstellenden Flora und Vegetation sowie die verschiedenen Rekultivierungsversuche und ihre Entwicklungen wiedergegeben. Dabei wurde auch auf die Ursachen und Muster der Verteilung von Pflanzen und Pflanzengesellschaften eingegangen und, wenigstens zum Teil, auf die Ausbreitungsmechanismen, Strategietypen und Ansprüche der vorgefunde-

nen Pflanzenarten. In den naturschutzfachlichen Bewertungen finden nicht nur Flora, Vegetation und Biotoptypen Erwähnung, sondern über den botanischen Tellerrand wird auch die Bedeutung dieser Lebensräume für die einheimische Fauna betrachtet. Die Beteiligung eines Autorenkollektivs (insgesamt 31 Autoren) bietet den Vorteil, auch sehr spezielle Themenschwerpunkte einfließen zu lassen. So werden in den ausführlichen Beschreibungen der Rekultivierungsflächen im Braunkohlerevier der Niederrheinischen Bucht u. a. forstwirtschaftliche Aspekte wie Wüchsigkeit berücksichtigt und Ergebnisse der Ansaat-Versuche zur Etablierung artenreicher Grünlandbestände vorgestellt. Leider beeinträchtigt die unterschiedliche Herangehensweise jedoch die Vergleichbarkeit der vorgestellten Ergebnisse, da die Detailschärfe der Beschreibungen voneinander abweicht. Auch leidet der strukturelle Aufbau darunter, wenn die Grundlagen der Ausbreitung relativ unmethodisch über die einzelnen Kapitel verstreut sind und beispielsweise allgemeine Besiedlungsfaktoren erst im letzten Drittel des Buches erscheinen. Insgesamt stellt das Buch jedoch eine gut fundierte Informationsquelle für Wissenschaftler und Fachleute verschiedener Bereiche dar und bietet sich durch die meist gute Lesbarkeit auch für einen weiteren interessierten Publikumskreis an.

Yvonne Schneemann

# ZOBODAT - [www.zobodat.at](http://www.zobodat.at)

Zoologisch-Botanische Datenbank/Zoological-Botanical Database

Digitale Literatur/Digital Literature

Zeitschrift/Journal: [Veröffentlichungen des Naturkundemuseums Erfurt \(in Folge VERNATE\)](#)

Jahr/Year: 2013

Band/Volume: [32](#)

Autor(en)/Author(s): Platia Giuseppe

Artikel/Article: [Click-Beetles collected in Iran by the expeditions of the Naturkundemuseum Erfurt with description of two new species \(Insecta: Coleoptera: Elateridae\) 391-402](#)