

Scarabaeoid beetles (Coleoptera: Scarabaeoidea) in Sarnena Sredna Gora Mountains

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Abstract. Five families and 100 species of Scarabaeoidea are recorded from Sarnena Sredna Gora Mts. Of these 63 species are new for the study region and for 84 new locality records are presented. The new records of the species *Geotrupes mutator* (Marsham, 1802), *Trox sabulosus sabulosus* (Linnaeus, 1758), *Aesalus scarabaeoides scarabaeoides* (Panzer, 1793), *Sinodendron cylindricum* (Linnaeus, 1758), *Platycerus caraboides* (Linnaeus, 1758), *Ochodaeus thalycroides* Reitter, 1892, *Aphodius coniugatus* (Panzer, 1795), *Onthophagus illyricus* (Scopoli, 1763), *Chaetonyx schatzmayri* Mariani, 1946, *Hoplia argentea* (Poda von Neuhaus, 1761), *Anisoplia dispar* Erichson, 1847 and *Protaetia affinis affinis* (Andersch, 1797) are of particular interest. The species *Aphodius foetidus* (Herbst, 1783) is reported for the second time for Bulgaria. The species *Lucanus cervus cervus* (Linnaeus, 1758) is included in the Directive 92/43/EEC on the conservation of natural habitats and wild fauna and flora.

Key words: Scarabaeoidea, Bulgaria, Sarnena Sredna Gora

Introduction

Systematic studies on Scarabaeoidea in Sarnena Sredna Gora Mts. had not been previously conducted. Faunistic research on this superfamily had been conducted in the neighboring regions Upper Thracian Plain (Zacharieva 1965a), Central and East Stara Planina Mts. (Zacharieva-Stoilova 1974). The dung beetles from the families Geotrupidae and Scarabaeidae in the other parts of Sredna Gora Mts. – Sashtinska and Ichtimanska – were studied by Todorov (2001a, 2001b, 2001c). Data about 37 species of the superfamily from Sarnena Sredna Gora can be found in the publications of Joakimov (1904), Pittioni (1940), Angelov (1965), Zacharieva (1965a), Rössner & Krell (2001), Rössner & Ahrens (2004), Lobo *et al.* (2011, 2015) and Bekchiev *et al.* (2018).

The purpose of the present work is to prepare a species list of the superfamily for the region of Sarnena Sredna Gora on the basis of the available records and a new collection material. The doubtful for the studied area records, as well as those from the neighboring localities (e.g. „Stara Zagora“, „Chirpan“, „Kazanlak“, „Yambol“ and „Karlovo“) are not

SCARABAEOIDEA

included in the species list and can also be found in the publications of Netolitzky (1912), Nedelkov (1905, 1909a, 1909b), Mikšić (1957), Kantardzhieva-Minkova (1953), Zacharieva-Stoilova (1951, 1962a, 1962b) and Guéorguiev & Bunalski (2004).

Materials and methods

Material for the present study has been collected by the authors in the period 2018 to 2020 from different localities and habitat types in Sarnena Sredna Gora. The collection methods included direct collection of beetles from plants or from dung of domestic animals, as well as pitfall and light trapping (UV and white lamps). The authors' studies covered mainly the Western part of the mountain, as well as a number of sites in the Chirpan Heights. Material collected by Dilian Georgiev from the Eastern part of the mountain in the period 2016-2018 and kindly provided by him for the present study was included as well.

The abbreviations of the collector's names, used in the species list are as follows: DGr – Denis Gradinarov, YP – Yana Petrova, IGr – Iliya Gradinarov, ECh – Evgeni Chehlarov, TT – Teodora Teofilova, NK – Nikolay Kodzhabashev, DGe – Dilian Georgiev. The abbreviation used for the collection methods are: *p/f* – collected from plants or flowers; *cD* – in cow dung; *hD* – in horse dung; *sD* – in sheep dung; *gD* – in goat dung; *cD/sD* – in cow and sheep dung; *cD/gD* – in cow and goat dung; *cD/hD* – in cow and horse dung; *pT* – by pitfall traps; *aL* – collected at light. The other abbreviations and symbols in the species list are as follows: ex. – specimen/s; obs. – the specimens were observed without collecting; * – the species is new for the studied area.

The higher classification of Scarabaeoidea, used in the species list, follows that in Šlipiński *et al.* (2011) and Löbl & Löbl (2016). The examined specimens are preserved in the Zoological Collection of Sofia University “St. Kliment Ohridski”, Faculty of Biology, Sofia (BFUS) and in the collection of the Institute of Biodiversity and Ecosystem Research, Bulgarian Academy of Sciences, Sofia (IBER).

Results and discussion

List of species

Scarabaeoidea Latreille, 1802

Geotrupidae Latreille, 1802

Bolboceratinae Mulsant, 1842

Odonteini Shokhin, 2007

**Odonteus armiger* (Scopoli, 1772)

New data: NW Svezhen Vill., 42°30.623'N, 25°00.660'E, 754 m a.s.l., meadows and shrubs at the edge of a beech-oak forest, 21.vii.2018, 1 ♀, *aL*, YP & DGr leg. (BFUS); Chirpan Heights, S Saedinenie Vill., 42°21.017'N, 25°17.783'E, 386 m a.s.l., mixed riverine forest, 23.iii. - 08.vii.2019, 1 ♀, *pT*, TT & NK leg. (IBER); NW Svezhen Hut, 42°31.05'N, 25°02.517'E, 1008 m a.s.l., pasture, mountain ridge, 07.vii. - 11.xi.2019, 1 ♂, *pT*, TT & NK leg. (BFUS) (**Plate I, 1**).

Geotrupinae Latreille, 1802

Geotrupini Latreille, 1802

Anoplotrupes stercorosus (Scriba, 1791)

Sredna Gora/S of Turiya Vill. (Joakimov 1904: 20, as *Geotrupes sylvaticus* Panz.).

New data: 3 km NW Gorno Novo Selo Vill., 42°28.404'N, 25°13.272'E, 812 m a.s.l., oak forest, 22.vii. - 26.viii.2018, 1 ♂, 1 ♀, *pT*, DGr & YP leg. (BFUS); the same data, 42°28.393'N, 25°13.241'E, 806 m a.s.l., 1 ♀, *pT*, DGr & YP leg. (BFUS); the same locality, 26.viii. - 24.ix.2018, 1 ♀, *pT*, DGr & YP leg. (BFUS); the same data, 42°28.362'N, 25°13.095'E, 802 m a.s.l., 22.vii. - 26.viii.2018, 1 ♀, *pT*, DGr & YP leg. (BFUS); the same data, 42°28.371'N, 25°13.075'E, 791 m a.s.l., 1 ♀, *pT*, DGr & YP leg. (BFUS); the same data,

SCARABAEOIDEA

42°28.366'N, 25°13.053'E, 780 m a.s.l., 26.viii. - 24.ix.2018, 1 ♂, *pT*, DGr & YP leg. (BFUS) (**Plate I, 2**); E Svezhen Hut, 42°30.583'N, 25°03.85'E, 1100 m a.s.l., beech forest, mountain ridge, 22.iii. - 07.vii.2019, 8 ex., *pT*, TT & NK leg. (IBER); the same locality, 07.vii. - 11.xi.2019, 4 ♂♂, 4 ♀♀, *pT*, TT & NK leg. (IBER); E Svezhen Hut, 42°30.6'N, 25°04.433'E, 975 m a.s.l., beech forest, 22.iii. - 07.vii.2019, 6 ♂♂, 13 ♀♀, *pT*, TT & NK leg. (IBER); the same locality, 07.vii. - 11.xi.2019, 9 ex., *pT*, TT & NK leg. (IBER); W Svezhen Vill., 42°30.517'N, 24°59.983'E, 860 m a.s.l., oak forest, 22.iii. - 07.vii.2019, 23 ♂♂, 45 ♀♀, *pT*, TT & NK leg. (IBER); the same locality, 07.vii. - 11.xi.2019, 2 ♂♂, *pT*, TT & NK leg. (IBER); NW Svezhen Hut, 42°31.05'N, 25°02.667'E, 1022 m a.s.l., pure beech forest, 22.iii. - 07.vii.2019, 6 ♂♂, 9 ♀♀, *pT*, TT & NK leg. (IBER); the same locality, 07.vii. - 11.xi.2019, 6 ♂♂, 6 ♀♀, *pT*, TT & NK leg. (IBER); the same locality, 11.xi.2019 - 09.v.2020, 1 ♀, *pT*, TT & NK leg. (IBER); NW Svezhen Hut, 42°31.00'N, 25°02.633'E, 1015 m a.s.l., coniferous stands with single beech trees, 22.iii. - 07.vii.2019, 1 ♀, *pT*, TT & NK leg. (IBER); the same locality, 07.vii. - 11.xi.2019, 1 ♂, 1 ♀, *pT*, TT & NK leg. (IBER); NW Svezhen Hut, 42°31.05'N, 25°02.517'E, 1008 m a.s.l., pasture, mountain ridge, 22.iii. - 07.vii.2019, 1 ♀, *pT*, TT & NK leg. (IBER); the same locality, 07.vii. - 11.xi.2019, 1 ♀, *pT*, TT & NK leg. (IBER); NW Svezhen Hut, 42°31.983'N, 25°02.083'E, 898 m a.s.l., deciduous forest of beech, oak and hornbeam, 22.iii. - 07.vii.2019, 7 ♂♂, 9 ♀♀, *pT*, TT & NK leg. (IBER); the same locality, 07.vii. - 11.xi.2019, 1 ♂, 6 ♀♀, *pT*, TT & NK leg. (IBER); S Osetenovo Vill., 42°32.717'N, 25°02.533'E, 670 m a.s.l., riverside meadow with oak and willow, 22.iii. - 07.vii.2019, 1 ex., *pT*, TT & NK leg. (IBER); the same locality, 07.vii. - 11.xi.2019, 4 ex., *pT*, TT & NK leg. (IBER); the same locality, 11.xi.2019 - 09.v.2020, 1 ♀, *pT*, TT & NK leg. (IBER); S Osetenovo Vill., 42°34.2'N, 25°01.6'E, 633 m a.s.l., oak forest with undergrowth of *Ruscus* sp., 22.iii. - 07.vii.2019, 1 ♀, *pT*, TT & NK leg. (IBER); S Pavel Banya, 42°31.583'N, 25°11.983'E, 583 m a.s.l., riverine forest with hornbeam and alder, 24.iii. - 09.vii.2019, 19 ♂♂, 27 ♀♀, *pT*, TT & NK leg. (IBER); the same locality, 09.vii. - 09.xi.2019, 7 ♂♂, 13 ♀♀, *pT*, TT & NK leg. (IBER); near Kavaklyka Hut, 42°29.2'N, 25°13.833'E, 1055 m, beech forest, 31.5.2019, 1 ex., TT obs.; SW Srednogorovo Vill., 42°30.067'N, 25°16.35'E, 860 m, oak-hornbeam forest, 31.5.2019, 1 ex., TT obs.; NE Lyulyak Vill., NW Moruley Hut, 42°31.917'N, 25°43.88'E, 785 m, beech forest, 19.vi.2020, 1 ex., TT obs.; near Bratan Hut, 42°30.333'N, 25°09.133'E, 1213 m, beech forest, 20.vi.2020, 1 ex., TT obs.

****Geotrupes (Geotrupes) spiniger* (Marsham, 1802)**

New data: near Rozovets Vill., bank of Stara Reka Riv., 42°27.681'N, 25°07.237'E, 465 m a.s.l., riverside vegetation, pasture, 22.vii.2018, 3 ♂♂, 2 ♀♀, *hD*, DGr leg. (BFUS); SE Svezhen Vill., 42°29.333'N, 25°02.280'E, 804 m a.s.l., pasture, 25.viii.2018, 1 ♂, *sD*, YP leg. (BFUS); near Pavel Banya, right bank of Tundzha Riv., 42°36.216'N, 25°12.187'E, 400 m a.s.l., riverside pasture, 26.viii.2018, 1 ♂, *cD*, YP leg. (BFUS); 1 km SW Turiya Vill., 42°33.810'N, 25°10.395'E, 480 m a.s.l., dirt road, pasture, 21.x.2018, 2 ♂♂, *cD*, YP leg. (BFUS); E Svezhen Hut, 42°30.583'N, 25°03.85'E, 1100 m a.s.l., beech forest, mountain ridge, 07.vii. - 11.xi.2019, 1 ♀, *pT*, TT & NK leg. (IBER); W Svezhen Vill., 42°30.517'N, 24°59.983'E, 860 m a.s.l., oak forest, 07.vii. - 11.xi.2019, 23 ex., *pT*, TT & NK leg. (IBER); NW Svezhen Hut, 42°31.05'N, 25°02.667'E, 1022 m a.s.l., pure beech forest, 07.vii. - 11.xi.2019, 1 ex., *pT*, TT & NK leg. (IBER); S Osetenovo Vill., 42°32.717'N, 25°02.533'E, 670 m a.s.l., riverside meadow with oak and willow, 07.vii. - 11.xi.2019, 1 ♂, 2 ♀♀, *pT*, TT & NK leg. (IBER); S Osetenovo Vill., 42°34.2'N, 25°01.6'E, 633 m a.s.l., oak forest with undergrowth of *Ruscus* sp., 07.vii. - 11.xi.2019, 1 ♂, *pT*, TT & NK leg. (IBER); E Zelenikovo Vill., 42°24.767'N, 25°05.217'E, 344 m a.s.l., Scots pine plantation, 09.vii. - 09.xi.2019, 1 ♀, *pT*, TT & NK leg. (IBER); Chirpan Heights, S Saedinenie Vill., 42°21.017'N, 25°17.783'E, 386 m a.s.l., mixed riverine forest, 08.vii. - 10.xi.2019, 2 ex., *pT*, TT & NK leg. (IBER).

SCARABAEOIDEA

****Geotrupes (Geotrupes) mutator (Marsham, 1802)***

New data: SE Svezhen Vill., 42°29.350'N, 25°02.280'E, 807 m a.s.l., pasture, 21.x.2018, 1 ♂, cD, DGr leg. (BFUS); the same data, 42°29.400'N, 25°02.266'E, 798 m a.s.l., 1 ♂, 3 ♀♀, cD, YP & DGr leg. (BFUS) (**Plate I, 3**); 1 km SW Turiya Vill., 42°33.810'N, 25°10.395'E, 480 m a.s.l., dirt road, pasture, 21.x.2018, 1 ♂, 1 ♀, cD, YP leg. (BFUS); near Pavel Banya, right bank of Tundzha Riv., 42°36.192'N, 25°12.241'E, 408 m a.s.l., riverside pasture, 21.x.2018, 1 ♂, cD/sD, YP leg. (BFUS); 1,5 km SW Rozovets Vill., 42°26.930'N, 25°06.172'E, 411 m a.s.l., riverside pasture, 21.x.2018, 1 ♂, cD, YP leg. (BFUS); S Osetenovo Vill., 42°32.717'N, 25°02.533'E, 670 m a.s.l., riverside meadow with oak and willow, 07.vii. - 11.xi.2019, 1 ♂, pT, TT & NK leg. (IBER).

Notes: The species is recorded from Bulgaria by several authors (Guéorguiev & Bunalski 2004, Todorov 2001a), is omitted for the country in the Catalogue of Palaearctic Coleoptera (Nikolajev *et al.* 2016).

Jekelius (Reitterius) punctulatus (Jekel, 1866)

Buzovgrad (Lobo *et al.* 2015: 193).

Trypocopris (Trypocopris) vernalis vernalis (Linnaeus, 1758)

Sredna Gora/S of Turiya Vill. (Joakimov 1904: 20, as *Geotrupes vernalis* L.).

New data: Beter Peak, 42°30.687'N, 25°37.773'E, 809 m a.s.l., deciduous forest with *Quercus* sp., *Carpinus betulus* L., *Acer* sp., rocks and forest glades with *Paeonia* sp., 28.v.2018, 1 ♀, DGe leg. (BFUS); N of Zmeyovo Vill., on the road to Beter Peak, 42°30.290'N, 25°37.567'E, 620 m a.s.l., mixed forest, 08.vi.2018, 1 ♂, DGe leg. (BFUS) (**Plate I, 4**); 3,5 km NW Babek Vill., 42°28.501'N, 25°03.900'E, 696 m a.s.l., dirt road through an oak forest, cutting area, 25.viii.2018, 1 ♂, found death in discarded bottle filled with water, DGr leg. (BFUS); W Svezhen Vill., 42°30.517'N, 24°59.983'E, 860 m a.s.l., oak forest, 22.iii. - 07.vii.2019, 1 ♀, pT, TT & NK leg. (BFUS); Chirpan Heights, S Saedinenie Vill., 42°20.65'N, 25°17.733'E, 487 m a.s.l., lime grove with undergrowth of *Ruscus* sp., 23.iii. - 08.vii.2019, 15 ♂♂, 15 ♀♀, pT, TT & NK leg. (BFUS); Chirpan Heights, S Saedinenie Vill., 42°20.733'N, 25°17.683'E, 449 m a.s.l., mixed deciduous forest with undergrowth of *Ruscus* sp., 23.iii. - 08.vii.2019, 3 ♂♂, 5 ♀♀, pT, TT & NK leg. (BFUS); the same locality, 08.vii. - 10.xi.2019, 1 ♀, pT, TT & NK leg. (BFUS).

Trogidae W.S. Macleay, 1819

Troginae W.S. Macleay, 1819

****Trox (Trox) niger P. Rossi, 1792***

New data: Chirpan Heights, NW Veren Vill., 42°21.55'N, 25°10.617'E, 366 m a.s.l., black locust stands on sandy soil, 23.iii. - 08.vii.2019, 6 ♂♂, 5 ♀♀, pT, TT & NK leg. (BFUS); the same locality, 08.vii. - 10.xi.2019, 1 ♂, pT, TT & NK leg. (BFUS) (**Plate I, 5**); the same locality, 10.xi.2019 - 12.iv.2020, 1 ♀, pT, TT & NK leg. (BFUS); Chirpan Heights, NW Veren Vill., 42°21.317'N, 25°10.783'E, 353 m a.s.l., pasture with *Paliurus spina-christi* Mill. and *Opuntia* sp., 23.iii. - 08.vii.2019, 3 ♂♂, 2 ♀♀, pT, TT & NK leg. (BFUS); the same locality, 10.xi.2019 - 12.iv.2020, 2 ♂♂, 1 ♀, pT, TT & NK leg. (BFUS); Chirpan Heights, N Sredno Gradishte Vill., 42°19.35'N, 25°17.65'E, 418 m a.s.l., oak-hornbeam forest, 23.iii. - 08.vii.2019, 1 ♂, pT, TT & NK leg. (BFUS); Chirpan Heights, NW Stoyan Zaimovo Vill., 42°21.033'N, 25°20.667'E, 406 m a.s.l., boundary of alfalfa field adjacent to tree and shrub lines, 10.xi.2019 - 12.iv.2020, 1 ♀, pT, TT & NK leg. (BFUS).

****Trox (Trox) sabulosus sabulosus (Linnaeus, 1758)***

New data: S Osetenovo Vill., 42°32.717'N, 25°02.533'E, 670 m a.s.l., riverside meadow with oak and willow, 22.iii. - 07.vii.2019, 1 ♀, pT, TT & NK leg. (BFUS); S Osetenovo

SCARABAEOIDEA

Vill., 42°34.2'N, 25°01.6'E, 633 m a.s.l., oak forest with undergrowth of *Ruscus* sp., 22.iii. - 07.vii.2019, 1 ♂, 1 ♀, *pT*, TT & NK leg. (BFUS); S Pavel Banya, 42°31.583'N, 25°11.983'E, 583 m a.s.l., riverine forest with hornbeam and alder, 24.iii. - 09.vii.2019, 1 ♀, *pT*, TT & NK leg. (BFUS) (**Plate I, 6**).

Notes: The species is rarely reported in Bulgaria and has rather limited distribution in the country (Petrova *et al.* 2019).

Lucanidae Latreille, 1804

Aesalinae W.S. Macleay, 1819

Aesalini W.S. Macleay, 1819

****Aesalus scarabaeoides scarabaeoides* (Panzer, 1793)**

New data: E Svezhen Hut, 42°30.583'N, 25°03.85'E, 1100 m a.s.l., beech forest, mountain ridge, 07.vii. - 11.xi.2019, 1 ♂, *pT*, TT & NK leg. (BFUS) (**Plate I, 7**).

Notes: Rarely collected species in Bulgaria. It is reported from Nesebar, Arkutino (Black Sea Coast) and Gorna Breznitsa (Maleshevska Planina Mts.) (Guéorguiev & Bunalski 2004).

Syndesinae W.S. Macleay, 1819

Sinodendrini LeConte, 1861

***Sinodendron cylindricum* (Linnaeus, 1758)**

Sredna Gora/S of Turiya Vill. (Joakimov 1904: 22).

New data: E Svezhen Hut, 42°30.583'N, 25°03.85'E, 1100 m a.s.l., beech forest, mountain ridge, 07.vii. - 11.xi.2019, 1 ♂, *pT*, TT & NK leg. (BFUS) (**Plate I, 8**).

Notes: The species is common in the mountain forest belt in Bulgaria (Guéorguiev & Bunalski 2004, Bekchiev *et al.* 2018, Petrova & Gradinarov, unpublished data). Omitted in the country list for Bulgaria in the Catalogue of Palaearctic Coleoptera (Bartolozzi *et al.* 2016).

Lucaninae Latreille, 1804

Lucanini Latreille, 1804

***Lucanus cervus cervus* (Linnaeus, 1758)**

Sredna Gora/S of Turiya Vill. (Joakimov 1904: 21, as both *L. pentaphylus* and *L. turcicus*).

New data: Svezhen Vill., 42°30.305'N, 25°01.510'E, 750 m a.s.l., riverside vegetation, 23.vi.2018, 1 ♂, DGr obs.; NW Svezhen Vill., 42°30.649'N, 25°00.641'E, 749 m a.s.l., meadows and shrubs at the edge of a beech-oak forest, 23.vi.2018, 1 ♀, YP & DGr obs.; 3 km NW Gorno Novo Selo Vill., 42°28.378'N, 25°13.211'E, 817 m a.s.l., dirt road through an oak forest, 24.vi.2018, 1 ♀, on the road, YP & DGr obs.; S Osetenovo Vill., 42°34.2'N, 25°01.6'E, 633 m a.s.l., oak forest with undergrowth of *Ruscus* sp., 07.vii.2019, 1 ♀, TT obs.; N Moruley Hut, 42°31.577'N, 25°44.992'E, 560 m, oak forest, 19.vi.2020, 1 ♂, TT obs.

Notes: The species is included in the Directive 92/43/EEC on the conservation of natural habitats and wild fauna and flora (Council of Europe 1992).

Platycerini Mulsant, 1842

***Platycerus caraboides* (Linnaeus, 1758)**

Buzovgrad (Bekchiev *et al.* 2018: 503).

New data: E Svezhen Hut, 42°30.6'N, 25°04.433'E, 975 m a.s.l., beech forest, 22.iii. - 07.vii.2019, 2 ♀♀, *pT*, TT & NK leg. (BFUS); W Svezhen Vill., 42°30.517'N, 24°59.983'E, 860 m a.s.l., oak forest, 22.iii. - 07.vii.2019, 1 ♀, *pT*, TT & NK leg. (BFUS); NW Svezhen Hut, 42°31.05'N, 25°02.667'E, 1022 m a.s.l., pure beech forest, 22.iii. - 07.vii.2019, 2 ♂♂, 1 ♀, *pT*, TT & NK leg. (BFUS) (**Plate I, 9**); S Pavel Banya, 42°31.583'N, 25°11.983'E, 583 m a.s.l.,

SCARABAEOIDEA

riverine forest with hornbeam and alder, 24.iii. - 09.vii.2019, 1 ♀, *pT*, TT & NK leg. (BFUS); E Svezhen Hut, 42°30.6'N, 25°04.433'E, 975 m, beech forest, 09.v.2020, 2 ♂♂, TT & NK leg. (BFUS).

Notes: The species is known from more than 20 localities in Bulgaria (Guéorguiev & Bunalski 2004, Bekchiev *et al.* 2018). Omitted in the country list for Bulgaria in the Catalogue of Palaearctic Coleoptera (Bartolozzi *et al.* 2016).

Dorcini Parry, 1864

****Dorcus parallelipedus* (Linnaeus, 1758)**

New data: near Zelenikovo Vill., 42°24.969'N, 25°04.815'E, 330 m a.s.l., roadside verges, 24.v.2018, 1 ♂, YP leg. (BFUS); on the road to Moruley Peak, 42°31.462'N, 25°45.530'E, 620 m a.s.l., *Quercus-Carpinus* forest, forest glades, 07.vi.2018, 1 ♀, DGe leg. (BFUS); S Osetenovo Vill., 42°32.717'N, 25°02.533'E, 670 m a.s.l., riverside meadow with oak and willow, 22.iii. - 07.vii.2019, 1 ex., *pT*, TT & NK leg. (BFUS); the same locality, 07.vii. - 11.xi.2019, 1 ♂, 1 ♀, *pT*, TT & NK leg. (BFUS); Chirpan Heights, S Saedinie Vill., 42°20.733'N, 25°17.683'E, 449 m a.s.l., mixed deciduous forest with undergrowth of *Ruscus* sp., 23.iii. - 08.vii.2019, 1 ♀, *pT*, TT & NK leg. (BFUS); S Pavel Banya, 42°31.583'N, 25°11.983'E, 583 m a.s.l., riverine forest with hornbeam and alder, 24.iii. - 09.vii.2019, 1 ♀, *pT*, TT & NK leg. (BFUS); the same locality, 09.vii. - 09.xi.2019, 1 ♂, *pT*, TT & NK leg. (BFUS); NW Svezhen Hut, 42°31.05'N, 25°02.667'E, 1022 m a.s.l., pure beech forest, 07.vii. - 11.xi.2019, 1 ♂, *pT*, TT & NK leg. (BFUS); S Osetenovo Vill., 42°32.717'N, 25°02.533'E, 670 m a.s.l., riverside meadow with oak and willow, 07.vii. - 11.xi.2019, 1 ♂, *pT*, TT & NK leg. (BFUS); Chirpan Heights, NW Veren Vill., 42°21.55'N, 25°10.617'E, 366 m a.s.l., black locust stands on sandy soil, 08.vii. - 10.xi.2019, 1 ♂, *pT*, TT & NK leg. (BFUS) (**Plate I, 10**); Chirpan Heights, S Saedinie Vill., 42°21.017'N, 25°17.783'E, 386 m a.s.l., mixed riverine forest, 08.vii. - 10.xi.2019, 1 ♀, *pT*, TT & NK leg. (BFUS); Varben Vill., 42°25.267'N, 24°58.00'E, 328 m, house yard, 19.vi.2020, 1 ♀, found dead, TT leg. (BFUS).

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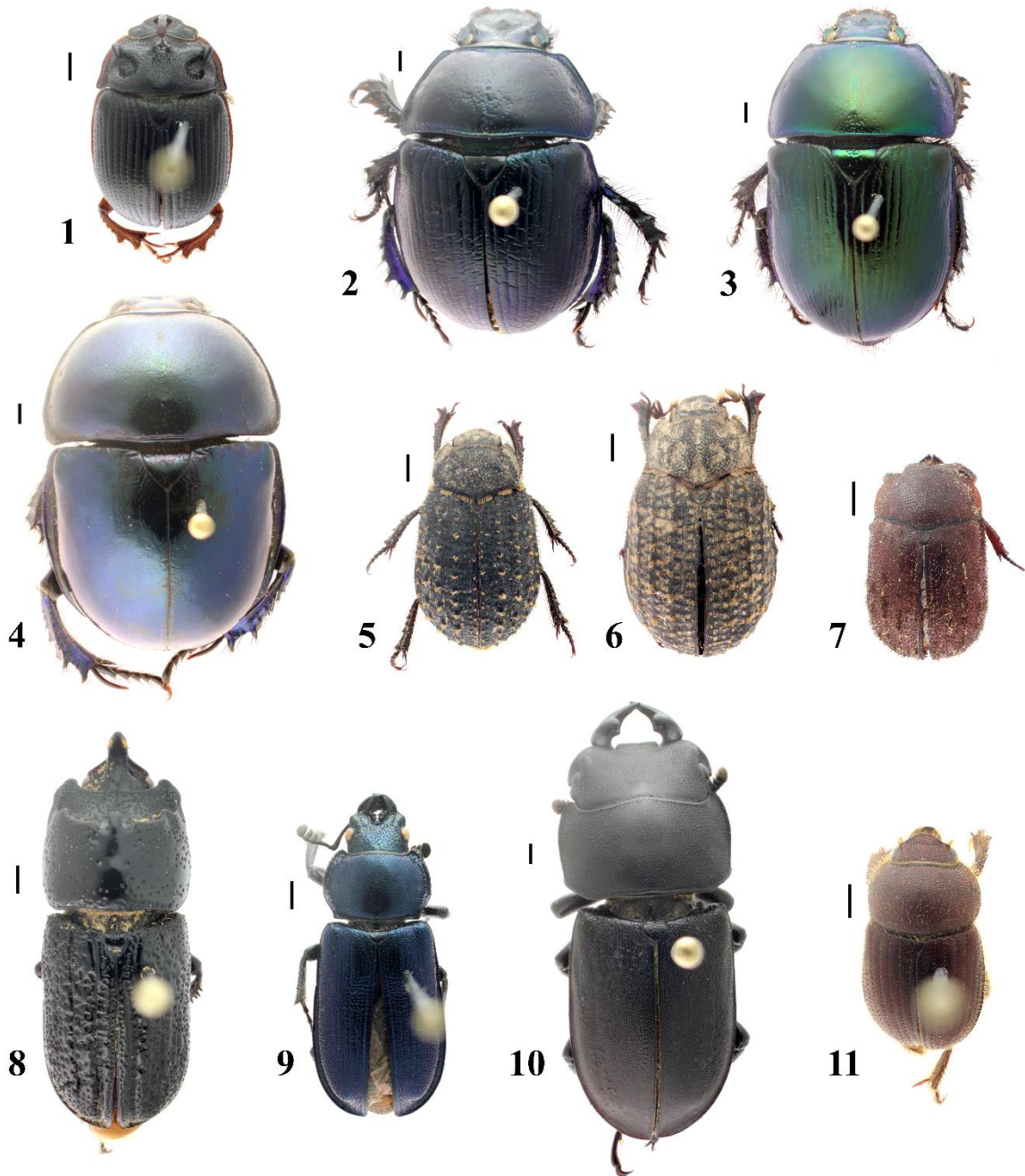


Plate I. Geotrupidae, Trogidae, Lucanidae, Ochodaeidae: 1 – *Odonteus armiger*, NW Svezhen Hut, 07.vii. – 11.xi.2019, male; 2 – *Anoplotrupes stercorosus*, 3 km NW Gorno Novo Selo Vill., 26.viii. – 24.ix.2018, female; 3 – *Geotrupes mutator*, SE Svezhen Vill., 21.x.2018, male; 4 – *Trypocopris vernalis*, N of Zmeyovo Vill., 08.vi.2018, male; 5 – *Trox niger*, NW Veren Vill., 08.vii. – 10.xi.2019, male; 6 – *Trox sabulosus*, S Pavel Banya, 24.iii. – 09.vii.2019, female; 7 – *Aesalus scarabaeoides*, E Svezhen Hut, 07.vii. – 11.xi.2019, male; 8 – *Sinodendron cylindricum*, the same locality and date, male; 9 – *Platycerus caraboides*, NW Svezhen Hut, 22.iii. – 07.vii.2019, male; 10 – *Dorcus parallelipedus*, NW Veren Vill., 08.vii. – 10.xi.2019, male; 11 – *Ochodaeus thalycroides*, NW Svezhen Hut, 07.vii. – 11.xi.2019, male. Scale bars: 1 mm.

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Ochodeidae Mulsant & Rey, 1871

Ochodaeinae Mulsant & Rey, 1871

Ochodaeini Mulsant & Rey, 1871

**Ochodaeus thalycroides* Reitter, 1892

New data: NW Svezhen Hut, 42°31.05'N, 25°02.517'E, 1008 m a.s.l., pasture, mountain ridge, 22.iii. - 07.vii.2019, 1 ♂, *pT*, TT & NK leg. (BFUS); NW Svezhen Hut, 42°31.983'N, 25°02.083'E, 898 m a.s.l., deciduous forest of beech, oak and hornbeam, 07.vii. - 11.xi.2019, 1 ♂, *pT*, TT & NK leg. (BFUS) (**Plate I, 11**); Chirpan Heights, S Saedinenie Vill., 42°20.65'N, 25°17.733'E, 487 m a.s.l., lime grove with undergrowth of *Ruscus* sp., 08.vii. - 10.xi.2019, 1 ♀, *pT*, TT & NK leg. (BFUS).

Notes: The known localities of the species are Sugarevo (Pirin Mts.), Assenovgrad env. (W Rhodopes) and Arkutino Reserve (Black Sea Coast) (Guéorguiev & Bunalski 2004).

Scarabaeidae Latreille, 1802

Aphodiinae Leach, 1815

Aphodiini Leach, 1815

**Acanthobodilus immundus* (Creutzer, 1799)

New data: SE Beguntsi Vill., 42°32.525'N, 24°53.196'E, 320 m a.s.l., riverside meadows, 24.viii.2018, 1 ♂, *cD*, YP & DGr leg. (BFUS); near Pavel Banya, right bank of Tundzha Riv., 42°36.216'N, 25°12.187'E, 400 m a.s.l., riverside pasture, 26.viii.2018, 2 ♀♀, *cD*, YP leg. (BFUS); 1 km NE Mrachenik Vill., 42°30.027'N, 24°58.565'E, 665 m a.s.l., meadow next to pine forest, 23.ix.2018, 1 ♂, *aL*, YP & DGr leg. (BFUS) (**Plate II, 12**).

**Acrossus depressus* (Kugelann, 1792)

New data: near Rozovets Vill., bank of Stara Reka Riv., 42°27.685'N, 25°07.232'E, 469 m a.s.l., riverside vegetation, 24.vi.2018, 1 ♀, *hD*, DGr leg. (BFUS) (**Plate II, 13**).

**Acrossus luridus* (Fabricius, 1775)

New data: 4,5 km SW Chehlaré Vill., 42°24.657'N, 25°06.266'E, 438 m a.s.l., pasture, 22.iv.2018, 1 ♂, 1 ♀, *hD*, DGr leg. (BFUS); near Babek Vill., 42°26.232'N, 25°04.837'E, 387 m a.s.l., pasture, 22.iv.2018, 9 ♂♂, *sD*, YP & DGr leg. (BFUS); 5 km SE Turiya Vill., 42°31.786'N, 25°11.763'E, 565 m a.s.l., riverside meadows, 23.iv.2018, 1 ♂, *hD*, YP & DGr leg. (BFUS).

**Acrossus rufipes* (Linnaeus, 1758)

New data: near Rozovets Vill., bank of Stara Reka Riv., 42°27.681'N, 25°07.237'E, 465 m a.s.l., riverside vegetation, pasture, 22.vii.2018, 1 ♂, 3 ♀♀, *hD*, YP & DGr leg. (BFUS) (**Plate II, 14**); W Svezhen Vill., 42°30.517'N, 24°59.983'E, 860 m a.s.l., oak forest, 07.vii. - 11.xi.2019, 5 ♂♂, *pT*, TT & NK leg. (IBER).

**Aphodius coniugatus* (Panzer, 1795)

New data: SE Svezhen Vill., 42°29.350'N, 25°02.280'E, 807 m a.s.l., pasture, 21.x.2018, 1 ♂, *cD*, DGr leg. (BFUS); the same data, 42°29.400'N, 25°02.266'E, 798 m a.s.l., 1 ♀, *cD*, DGr leg. (BFUS); the same locality, 2 ♂♂, *hD*, YP leg. (BFUS); 1 km SW Turiya Vill., 42°33.810'N, 25°10.395'E, 480 m a.s.l., dirt road, pasture, 21.x.2018, 1 ♂, 2 ♀♀, *cD*, YP leg. (BFUS) (**Plate II, 15**).

Notes: The species is recorded for Bulgaria by Nedelkov (1909a), Zacharieva (1965b), Zacharieva-Stoilova (1974) and Zacharieva-Stoilova & Dimova (1981). Omitted in the country list for Bulgaria in the Catalogue of Palaearctic Coleoptera (Dellacasa 2016).

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***Aphodius fimetarius* (Linnaeus, 1758)**

Starozagorski bani Vill. (= Starozagorski mineralni bani) (Angelov 1965: 97).

New data: 1,5 km NW Babek Vill., 42°27.384'N, 25°04.172'E, 512 m a.s.l., meadows, 23.vi.2018, 1 ♀, YP & DGr leg. (BFUS); near Babek Vill., 42°26.154'N, 25°04.951'E, 379 m a.s.l., dirt road, roadside vegetation, 23.ix.2018, 1 ♀, *cD*, DGr leg. (BFUS); SE Svezhen Vill., 42°29.333'N, 25°02.280'E, 804 m a.s.l., pasture, 23.ix.2018, 2 ♂♂, *sD*, YP leg. (BFUS); 2 km NE Rozovets Vill., 42°28.294'N, 25°08.502'E, 560 m a.s.l., roadside vegetation, 24.ix.2018, 1 ♂, *cD*, DGr leg. (BFUS); SE Beguntsi Vill., near Byala Reka Riv., 42°32.603'N, 24°53.238'E, 313 m a.s.l., mixt riverside vegetation, 20.x.2018, 2 ♂♂, *cD*, YP & DGr leg. (BFUS); SE Svezhen Vill., 42°29.350'N, 25°02.280'E, 807 m a.s.l., pasture, 21.x.2018, 1 ♂, 2 ♀♀, *cD*, DGr leg. (BFUS); the same data, 42°29.400'N, 25°02.266'E, 798 m a.s.l., pasture, 21.x.2018, 6 ♂♂, *cD*, YP & DGr leg. (BFUS) (**Plate II, 16**); the same locality and date, 3 ♂♂, 4 ♀♀, *hD*, YP leg. (BFUS); 1 km SW Turiya Vill., 42°33.810'N, 25°10.395'E, 480 m a.s.l., dirt road, pasture, 21.x.2018, 6 ♂♂, 2 ♀♀, *cD*, YP leg. (BFUS); 1,5 km SW Rozovets Vill., 42°26.930'N, 25°06.172'E, 411 m a.s.l., riverside pasture, 21.x.2018, 1 ♂, 1 ♀, *cD*, YP leg. (BFUS).

****Aphodius foetidus* (Herbst, 1783)**

New data: Hrishteni Vill., 42°27.063'N, 25°42.153'E, 227 m a.s.l., near outbuildings, ruderal vegetation, 29.iv.2018, 1 ♂, DGe leg. (BFUS); SE Svezhen Vill., 42°29.400'N, 25°02.266'E, 798 m a.s.l., pasture, 21.x.2018, 2 ♀♀, 1 ♂, *cD/gD*, YP leg. (BFUS) (**Plate II, 17**).

Notes: In Bulgaria the species is known only from Nessebar (Bunalski 2001). The record from Sarnena Gora is the second for the country.

****Bodilopsis rufa* (Moll, 1782)**

New data: near Rozovets Vill., bank of Stara Reka Riv., 42°27.685'N, 25°07.232'E, 469 m a.s.l., riverside vegetation, 24.vi.2018, 2 ♀♀, *hD*, DGr leg. (BFUS) (**Plate II, 18**); SE Svezhen Vill., 42°29.333'N, 25°02.280'E, 804 m a.s.l., pasture, 25.viii.2018, 1 ♂, *sD*, YP & DGr leg. (BFUS); near Pavel Banya, right bank of Tundzha Riv., 42°36.216'N, 25°12.187'E, 400 m a.s.l., riverside pasture, 26.viii.2018, 1 ♀, *cD*, YP leg. (BFUS); 1 km NE Mrachenik Vill., 42°30.027'N, 24°58.565'E, 665 m a.s.l., meadow next to pine forest, 23.ix.2018, 2 ♂♂, *aL*, YP & DGr leg. (BFUS); 2 km NE Rozovets Vill., 42°28.294'N, 25°08.502'E, 560 m a.s.l., roadside vegetation, 24.ix.2018, 3 ♂♂, 1 ♀, *cD*, DGr leg. (BFUS); S Osetenovo Vill., 42°34.2'N, 25°01.6'E, 633 m a.s.l., oak forest with undergrowth of *Ruscus* sp., 07.vii. - 11.xi.2019, 1 ♀, *pT*, TT & NK leg. (IBER).

****Bodilopsis sordida sordida* (Fabricius, 1775)**

New data: near Pavel Banya, right bank of Tundzha Riv., 42°36.203'N, 25°12.246'E, 406 m a.s.l., riverside pasture, 26.viii.2018, 1 ex., ECh leg. (IBER).

****Calamosternus granarius* (Linnaeus, 1767)**

New data: 5 km SE Turiya Vill., 42°31.786'N, 25°11.763'E, 565 m a.s.l., riverside meadows, 23.iv.2018, 1 ♀, *hD*, YP & DGr leg. (BFUS).

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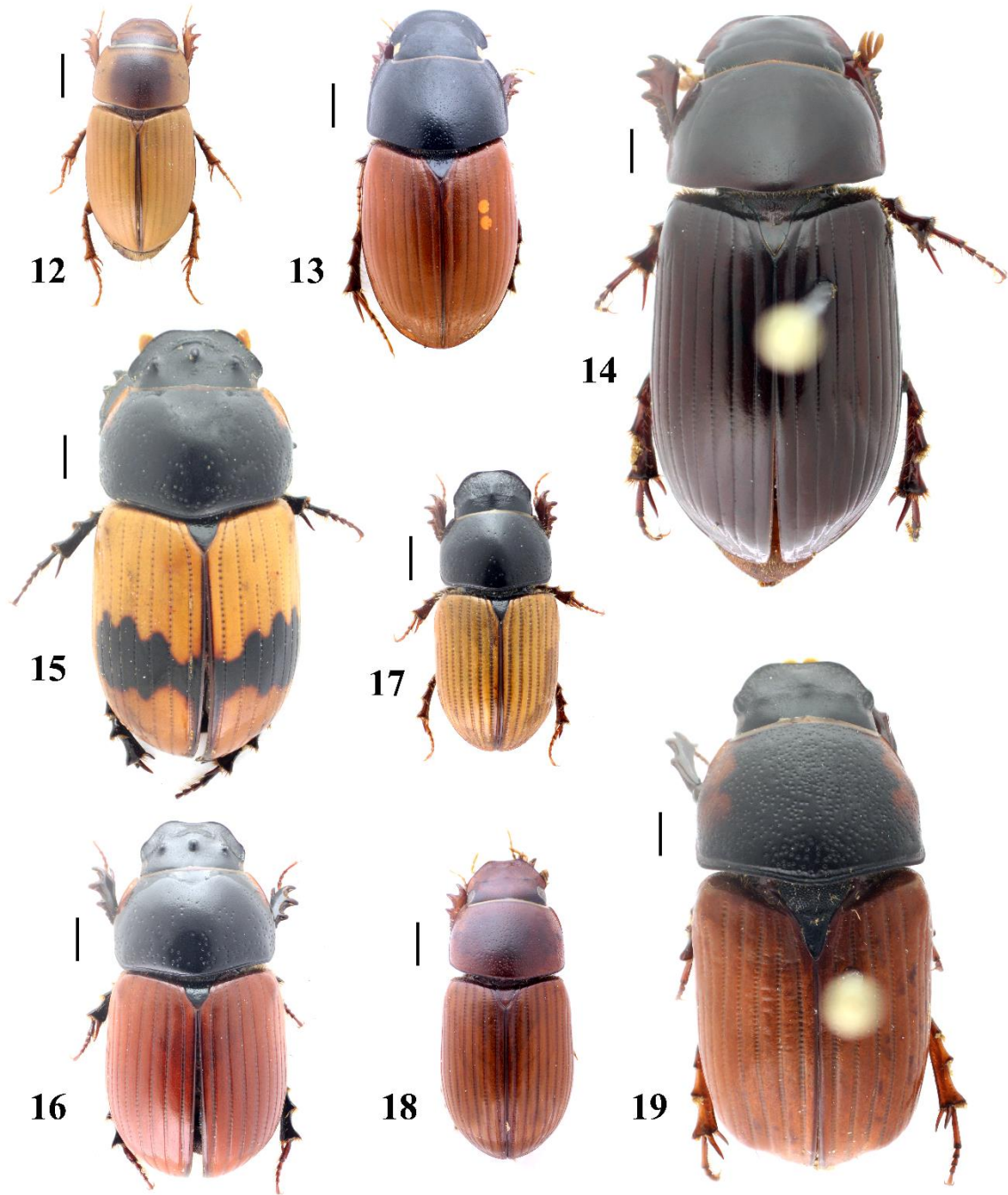


Plate II. Scarabaeidae (Aphodiinae): 12 – *Acanthobodilus immundus*, 1 km NE Mrachenik Vill., 23.ix.2018, male; 13 – *Acrossus depressus*, near Rozovets Vill., 24.vi.2018, female; 14 – *Acrossus rufipes*, the same locality, 22.vii.2018, female; 15 – *Aphodius coniugatus*, 1 km SW Turiya Vill., 21.x.2018, male; 16 – *Aphodius fimetarius*, SE Svezhen Vill., 21.x.2018, male; 17 – *Aphodius foetidus*, the same locality and date, female; 18 – *Bodilopsis rufa*, near Rozovets Vill., 24.vi.2018, female; 19 – *Coprimorphus scrutator*, SE Svezhen Vill., 21.x.2018, female. Scale bars: 1 mm.

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***Chilothorax distinctus distinctus* (O. F. Müller, 1776)**

Turiya Vill. (Joakimov 1904: 21, as *Aphodius inquinatus* Fabr.).

New data: near Babek Vill., 42°26.232'N, 25°04.837'E, 387 m a.s.l., pasture, 22.iv.2018, 1 ♀, sD, YP & DGr leg. (BFUS); NW Svezhen Vill., 42°30.650'N, 25°00.641'E, 749 m a.s.l., meadows and shrubs at the edge of a beech-oak forest, 23.iv. - 25.v.2018, 1 ♀, pT, DGr & YP leg. (BFUS); SE Svezhen Vill., 42°29.400'N, 25°02.266'E, 798 m a.s.l., pasture, 21.x.2018, 5 ♂♂, 1 ♀, cD, DGr leg. (BFUS); the same locality and date, 5 ♂♂, 1 ♀, hD, YP leg. (BFUS); near Pavel Banya, right bank of Tundzha Riv., 42°36.203'N, 25°12.246'E, 406 m a.s.l., riverside pasture, 21.x.2018, 3 ♂♂, 1 ♀, sD, YP leg. (BFUS) (**Plate III, 20**).

****Colobopterus erraticus* (Linnaeus, 1758)**

New data: near Babek Vill., 42°26.232'N, 25°04.837'E, 387 m a.s.l., pasture, 22.iv.2018, 1 ♀, sD, YP & DGr leg. (BFUS); Hrishteni Vill., 42°27.063'N, 25°42.153'E, 227 m a.s.l., near outbuildings, ruderal vegetation, 29.iv.2018, 1 ♀, DGe leg. (BFUS); 1,5 km SW Rozovets Vill., 42°26.933'N, 25°06.180'E, 409 m a.s.l., riverside pasture, 25.viii.2018, 1 ♂, cD, YP leg. (BFUS); near Pavel Banya, right bank of Tundzha Riv., 42°36.216'N, 25°12.187'E, 400 m a.s.l., riverside pasture, 24.ix.2018, 1 ♂, sD, DGr leg. (BFUS).

***Coprimorphus scrutator* (Herbst, 1789)**

Turiya Vill. (Joakimov 1904: 21).

New data: 1,5 km SW Rozovets Vill., 42°26.933'N, 25°06.180'E, 409 m a.s.l., riverside pasture, 25.viii.2018, 1 ♂, 2 ♀♀, cD, YP leg. (BFUS); near Babek Vill., 42°26.154'N, 25°04.951'E, 379 m a.s.l., dirt road, roadside vegetation, 23.ix.2018, 5 ♂♂, 5 ♀♀, cD, DGr leg. (BFUS); 2 km NE Rozovets Vill., 42°28.294'N, 25°08.502'E, 560 m a.s.l., roadside vegetation, 24.ix.2018, 3 ♀♀, cD, DGr leg. (BFUS); SE Svezhen Vill., 42°29.400'N, 25°02.266'E, 798 m a.s.l., pasture, 21.x.2018, 1 ♀, cD, YP leg. (BFUS) (**Plate II, 19**); 1 km SW Turiya Vill., 42°33.810'N, 25°10.395'E, 480 m a.s.l., dirt road, pasture, 21.x.2018, 1 ♂, 1 ♀, cD, YP leg. (BFUS); 1,5 km SW Rozovets Vill., 42°26.930'N, 25°06.172'E, 411 m a.s.l., riverside pasture, 21.x.2018, 1 ♀, cD, YP leg. (BFUS).

****Euorodalus paracoenosus* (Balthasar & Hrubant, 1960)**

New data: 3 km NE Mrachenik Vill., 42°30.102'N, 24°59.900'E, 805 m a.s.l., roadside verges and an oak forest, 24.v.2018, 1 ♀, hD, YP & DGr leg. (BFUS).

****Labarrus lividus* (A. G. Olivier, 1789)**

New data: near Pavel Banya, right bank of Tundzha Riv., 42°36.203'N, 25°12.246'E, 406 m a.s.l., riverside pasture, 26.viii.2018, 1 ex., ECh leg. (IBER).

****Limarus maculatus* (Sturm, 1800)**

New data: 6 km SE Turiya Vill., 42°31.283'N, 25°12.111'E, 604 m a.s.l., road, roadside verges, 26.viii.2018, 1 ♀, hD, DGr leg. (BFUS) (**Plate III, 21**); E Svezhen Vill., 42°29.833'N, 25°02.95'E, 863 m a.s.l., coniferous stands with single trees of beech, birch and black locust, 22.iii. - 07.vii.2019, 1 ♀, pT, TT & NK leg. (IBER); W Svezhen Vill., 42°30.517'N, 24°59.983'E, 860 m a.s.l., oak forest, 07.vii. - 11.xi.2019, 2 ♀♀, pT, TT & NK leg. (IBER); S Osetenovo Vill., 42°32.717'N, 25°02.533'E, 670 m a.s.l., riverside meadow with oak and willow, 07.vii. - 11.xi.2019, 1 ♀, pT, TT & NK leg. (IBER); S Osetenovo Vill., 42°34.2'N, 25°01.6'E, 633 m a.s.l., oak forest with undergrowth of *Ruscus* sp., 07.vii. - 11.xi.2019, 1 ♀, pT, TT & NK leg. (IBER); NW Svezhen Hut, 42°31.00'N, 25°02.633'E, 1015 m a.s.l., coniferous stands with single beech trees, 11.xi.2019 - 09.v.2020, 1 ♀, pT, TT & NK leg. (IBER).

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****Loraphodius suarius* (Faldermann, 1835)**

New data: 1 km NE Mrachenik Vill., 42°30.039'N, 24°58.570'E, 665 m a.s.l., meadow next to pine forest, 23.ix.2018, 2 ♂♂, *hD*, DGr leg. (BFUS) (**Plate III, 22**).

****Melinopterus consputus* (Creutzer, 1799)**

New data: SE Beguntsi Vill., near Byala Reka Riv., 42°32.603'N, 24°53.238'E, 313 m a.s.l., riverside vegetation, dirt road, 20.x.2018, 1 ♀, *cD*, YP & DGr leg. (BFUS); the same locality and date, 1 ♂, 4 ♀♀, *gD*, YP & DGr leg. (BFUS); SE Svezhen Vill., 42°29.400'N, 25°02.266'E, 798 m a.s.l., pasture, 21.x.2018, 1 ♂, 1 ♀, *cD*, DGr leg. (BFUS); the same locality and date, 4 ♂♂, 2 ♀♀, *hD*, YP leg. (BFUS); 1,5 km SW Rozovets Vill., 42°26.930'N, 25°06.172'E, 411 m a.s.l., riverside pasture, 21.x.2018, 4 ♂♂, 2 ♀♀, *cD*, YP leg. (BFUS); near Pavel Banya, right bank of Tundzha Riv., 42°36.237'N, 25°12.250'E, 407 m a.s.l., riverside forest, 21.x.2018, 1 ♀, *sD*, DGr leg. (BFUS); the same data, 42°36.192'N, 25°12.241'E, 408 m a.s.l., riverside pasture, 20 ♂♂, 11 ♀♀, *cD/sD*, YP leg. (BFUS).

****Melinopterus prodromus* (Brahm, 1790)**

New data: near Pavel Banya, right bank of Tundzha Riv., 42°36.193'N, 25°12.263'E, 409 m a.s.l., riverside pasture, 23.iv.2018, 1 ♂, DGr leg. (BFUS); SE Beguntsi Vill., near Byala Reka Riv., 42°32.601'N, 24°53.247'E, 313 m a.s.l., dirt road, riverside meadows, 20.x.2018, 2 ♂♂, *gD*, YP & DGr leg. (BFUS); SE Svezhen Vill., 42°29.400'N, 25°02.266'E, 798 m a.s.l., pasture, 21.x.2018, 2 ♀♀, *hD*, YP leg. (BFUS); near Pavel Banya, right bank of Tundzha Riv., 42°36.237'N, 25°12.250'E, 407 m a.s.l., riverside forest, 21.x.2018, 6 ♂♂, 2 ♀♀, *sD*, DGr leg. (BFUS); the same data, 42°36.192'N, 25°12.241'E, 408 m a.s.l., riverside pasture, 5 ♂♂, 4 ♀♀, *sD*, YP leg. (BFUS).

****Melinopterus sphacelatus* (Panzer, 1798)**

New data: 4,5 km SW Chehlare Vill., 42°24.657'N, 25°06.266'E, 438 m a.s.l., pasture, 22.iv.2018, 1 ♀, *hD*, DGr leg. (BFUS); SE Svezhen Vill., 42°29.400'N, 25°02.266'E, 798 m a.s.l., pasture, 21.x.2018, 1 ♀, *hD*, YP leg. (BFUS); near Pavel Banya, right bank of Tundzha Riv., 42°36.203'N, 25°12.246'E, 406 m a.s.l., riverside pasture, 21.x.2018, 1 ♂, *sD*, YP leg. (BFUS) (**Plate III, 23**).

****Nialus varians* (Duftschmid, 1805)**

New data: Hrishteni Vill., 42°27.063'N, 25°42.154'E, 202 m a.s.l., next to a dirt road, 12.v.2018, 1 ♂, DGe leg. (BFUS) (**Plate III, 24**).

****Nimbus contaminatus* (Herbst, 1783)**

New data: SE Beguntsi Vill., near Byala Reka Riv., 42°32.601'N, 24°53.247'E, 313 m a.s.l., dirt road, riverside meadows, 20.x.2018, 2 ♀♀, *gD*, YP & DGr leg. (BFUS); SE Svezhen Vill., 42°29.400'N, 25°02.266'E, 798 m a.s.l., pasture, 21.x.2018, 1 ♂, 3 ♀♀, *hD*, YP leg. (BFUS); near Pavel Banya, right bank of Tundzha Riv., 42°36.192'N, 25°12.241'E, 408 m a.s.l., riverside pasture, 21.x.2018, 9 ♂♂, 4 ♀♀, *cD/sD*, YP leg. (BFUS) (**Plate III, 25**).

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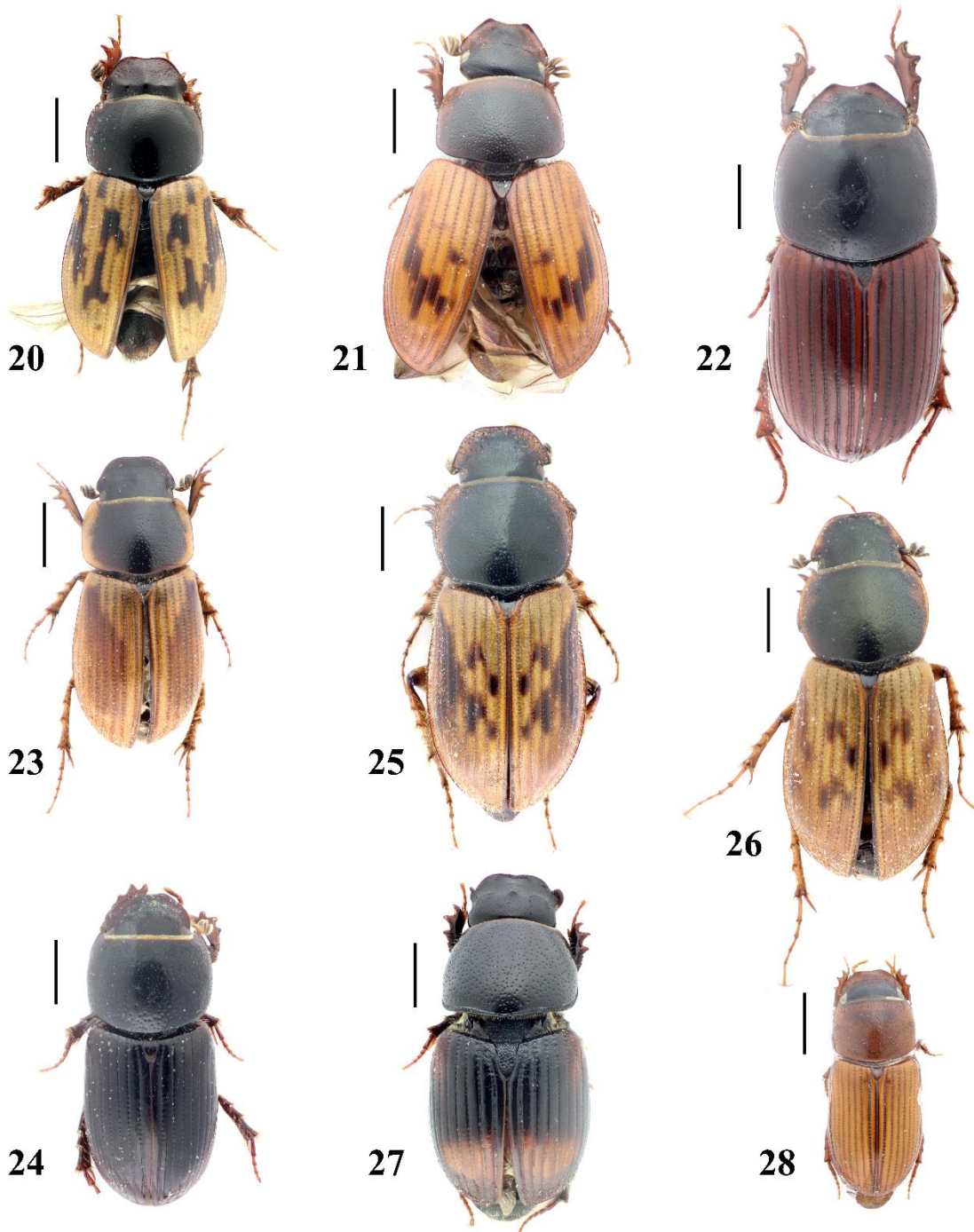


Plate III. Scarabaeidae (Aphodiinae): 20 – *Chilothorax distinctus*, near Pavel Banya, 21.x.2018, male; 21 – *Limarus maculatus*, 6 km SE Turiya Vill., 26.viii.2018, female; 22 – *Loraphodius suarius*, 1 km NE Mrachenik Vill., 23.ix.2018, male; 23 – *Melinopterus sphacelatus*, near Pavel Banya, 21.x.2018, male; 24 – *Nialus varians*, Hrishteni Vill., 12.v.2018, male; 25 – *Nimbus contaminatus*, near Pavel Banya, 21.x.2018, male; 26 – *Nimbus obliteratedus*, the same locality and date, male; 27 – *Otophorus haemorrhoidalis*, 1,5 km SW Rozovets Vill., 25.viii.2018, male; 28 – *Subrinus sturmi*, 3 km SE Svezhen Vill., 25.viii.2018, male. Scale bars: 1 mm.

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****Nimbus obliteratus* (Panzer, 1823)**

New data: SE Beguntsi Vill., near Byala Reka Riv., 42°32.603'N, 24°53.238'E, 313 m a.s.l., riverside vegetation, dirt road, 20.x.2018, 7 ♂♂, 7 ♀♀, *cD*, YP & DGr leg. (BFUS); the same locality and date, 8 ♂♂, 7 ♀♀, *gD*, YP & DGr leg. (BFUS); 1 km SW Turiya Vill., 42°33.810'N, 25°10.395'E, 480 m a.s.l., dirt road, pasture, 21.x.2018, 1 ♂, *cD*, YP leg. (BFUS); near Pavel Banya, right bank of Tundzha Riv., 42°36.237'N, 25°12.250'E, 407 m a.s.l., riverside forest, 21.x.2018, 5 ♂♂, 7 ♀♀, *sD*, DGr leg. (BFUS); the same data, 42°36.192'N, 25°12.241'E, 408 m a.s.l., riverside pasture, 23 ♂♂, 23 ♀♀, *cD/sD*, YP leg. (BFUS) (**Plate III, 26**); S Osetenovo Vill., 42°32.717'N, 25°02.533'E, 670 m a.s.l., riverside meadow with oak and willow, 07.vii. - 11.xi.2019, 4 ex., *pT*, TT & NK leg. (IBER); S Osetenovo Vill., 42°34.2'N, 25°01.6'E, 633 m a.s.l., oak forest with undergrowth of *Ruscus* sp., 11.xi.2019 - 09.v.2020, 1 ♀, *pT*, TT & NK leg. (IBER).

****Otophorus haemorrhoidalis* (Linnaeus, 1758)**

New data: 1,5 km SW Rozovets Vill., 42°26.933'N, 25°06.180'E, 409 m a.s.l., riverside pasture, 25.viii.2018, 1 ♂, *cD*, DGr leg. (BFUS) (**Plate III, 27**); 1 km SW Turiya Vill., 42°33.810'N, 25°10.395'E, 480 m a.s.l., dirt road, pasture, 21.x.2018, 1 ♂, *cD*, YP leg. (BFUS).

****Oxyomus sylvestris* (Scopoli, 1763)**

New data: S Osetenovo Vill., 42°32.717'N, 25°02.533'E, 670 m a.s.l., riverside meadow with oak and willow, 22.iii. - 07.vii.2019, 1 ♂, *pT*, TT & NK leg. (IBER).

****Sigorus porcus* (Fabricius, 1792)**

New data: SE Svezhen Vill., 42°29.350'N, 25°02.280'E, 807 m a.s.l., pasture, 21.x.2018, 1 ♂, *cD*, DGr leg. (BFUS).

****Subrinus sturmi* (Harold, 1870)**

New data: 3 km SE Svezhen Vill., 42°28.886'N, 25°03.236'E, 774 m a.s.l., roadside meadows next to an oak forest, 25.viii.2018, 1 ♂, *aL*, YP, DGr & ECh leg. (BFUS) (**Plate III, 28**).

***Teuchestes fossor* (Linnaeus, 1758)**

Sredna Gora/S of Turiya Vill. (Joakimov 1904: 21).

****Trichonotulus scrofa* (Fabricius, 1787)**

New data: 4,5 km SW Chehlare Vill., 42°24.657'N, 25°06.266'E, 438 m a.s.l., pasture, 22.iv.2018, 1 ♀, *hD*, DGr leg. (BFUS).

****Volinus sticticus* (Panzer, 1798)**

New data: near Babek Vill., 42°26.232'N, 25°04.837'E, 387 m a.s.l., pasture, 22.iv.2018, 2 ♂♂, *sD*, YP & DGr leg. (BFUS); 5 km SE Turiya Vill., 42°31.786'N, 25°11.763'E, 565 m a.s.l., riverside meadows, 23.iv.2018, 1 ♀, *cD*, DGr leg. (BFUS); the same locality and date, 1 ♂, 2 ♀♀, *hD*, YP & DGr leg. (BFUS); 6 km SE Turiya Vill., 42°31.283'N, 25°12.111'E, 604 m a.s.l., road, roadside verges, 26.viii.2018, 1 ♀, *hD*, DGr leg. (BFUS); 1 km NE Mrachenik Vill., 42°30.039'N, 24°58.570'E, 665 m a.s.l., meadow next to pine forest, 23.ix.2018, 1 ♂, *hD*, DGr leg. (BFUS); SE Svezhen Vill., 42°29.400'N, 25°02.266'E, 798 m a.s.l., pasture, 21.x.2018, 3 ♀♀, *cD*, DGr leg. (BFUS); the same locality and date, 1 ♀, *hD*, YP leg. (BFUS); S Osetenovo Vill., 42°32.717'N, 25°02.533'E, 670 m a.s.l., riverside meadow with oak and willow, 22.iii. - 07.vii.2019, 4 ♀♀, *pT*, TT & NK leg. (IBER); W Svezhen Vill.,

SCARABAEOIDEA

42°30.517'N, 24°59.983'E, 860 m a.s.l., oak forest, 07.vii. - 11.xi.2019, 3 ex., *pT*, TT & NK leg. (IBER).

Scarabaeinae Latreille, 1802

Coprini Leach, 1815

***Copris (Copris) hispanus cavolinii* (V. Petagna, 1792)**

Turiya Vill. (Pittioni 1940: 224, as *Copris hispanus* L.).

***Copris (Copris) lunaris* (Linnaeus, 1758)**

Turiya Vill. (Pittioni 1940: 224).

New data: Hrishteni Vill., 42°27.212'N, 25°42.315'E, 230 m a.s.l., yard of a house, viii.2016, 1 ♂, found dead, DGe leg. (BFUS); the same locality, 30.v.2018, 1 ♂, DGe leg. (BFUS); near Pavel Banya, right bank of Tundzha Riv., 42°36.193'N, 25°12.263'E, 409 m a.s.l., riverside pasture, 23.iv.2018, 2 ♀♀, *cD*, DGr leg. (BFUS); the same data, 42°36.216'N, 25°12.187'E, 400 m a.s.l., 26.viii.2018, 2 ♂♂, *cD*, YP & DGr leg. (BFUS) (**Plate IV, 29**); near Rozovets Vill., bank of Stara Reka Riv., 42°27.681'N, 25°07.237'E, 465 m a.s.l., riverside vegetation, pasture, 22.vii.2018, 1 ♀, *hD*, YP & DGr leg. (BFUS); 1,5 km SW Rozovets Vill., 42°26.930'N, 25°06.172'E, 411 m a.s.l., riverside pasture, 25.viii.2018, 1 ex., ECh leg. (IBER); E Svezhen Vill., 42°29.833'N, 25°02.95'E, 863 m a.s.l., coniferous stands with single trees of beech, birch and black locust, 22.iii. - 07.vii.2019, 1 ♂, *pT*, TT & NK leg. (IBER); W Svezhen Vill., 42°30.517'N, 24°59.983'E, 860 m a.s.l., oak forest, 07.vii. - 11.xi.2019, 1 ♂, 1 ♀, *pT*, TT & NK leg. (IBER); S Osetenovo Vill., 42°32.717'N, 25°02.533'E, 670 m a.s.l., riverside meadow with oak and willow, 07.vii. - 11.xi.2019, 12 ♂♂, 6 ♀♀, *pT*, TT & NK leg. (IBER).

***Gymnopleurus (Gymnopleurus) geoffroyi* (Fuessly, 1775)**

Starozagorski bani Vill. (= Starozagorski bani) (Angelov 1965: 102).

Oniticellini H.J. Kolbe, 1905

****Euoniticellus fulvus* (Goeze, 1777)**

New data: 4,5 km SW Chehlare Vill., 42°24.657'N, 25°06.266'E, 438 m a.s.l., pasture, 22.iv.2018, 3 ♀♀, *hD*, DGr leg. (BFUS); near Babek Vill., 42°26.232'N, 25°04.837'E, 387 m a.s.l., pasture, 22.iv.2018, 1 ♂, *sD*, YP & DGr leg. (BFUS); 3 km NE Mrachenik Vill., 42°30.102'N, 24°59.900'E, 805 m a.s.l., roadside verges and oak forest, 24.v.2018, 3 ♂♂, *hD*, YP & DGr leg. (BFUS) (**Plate IV, 30**); near Rozovets Vill., bank of Stara Reka Riv., 42°27.685'N, 25°07.232'E, 469 m a.s.l., riverside vegetation, 24.vi.2018, 1 ♂, 1 ♀, *hD*, DGr leg. (BFUS); the same data, 42°27.681'N, 25°07.237'E, 465 m a.s.l., riverside vegetation, pasture, 22.vii.2018, 1 ♂, 2 ♀♀, *hD*, YP & DGr leg. (BFUS); SE Beguntsi Vill., 42°32.525'N, 24°53.196'E, 320 m a.s.l., riverside meadows, 24.viii.2018, 1 ♂, 4 ♀♀, *cD*, YP & DGr leg. (BFUS); SE Svezhen Vill., 42°29.333'N, 25°02.280'E, 804 m a.s.l., pasture, 25.viii.2018, 5 ♂♂, *sD*, YP leg. (BFUS); 1,5 km SW Rozovets Vill., 42°26.933'N, 25°06.180'E, 409 m a.s.l., riverside pasture, 25.viii.2018, 3 ♂♂, 3 ♀♀, *cD*, YP & DGr leg. (BFUS); 6 km SE Turiya Vill., 42°31.283'N, 25°12.111'E, 604 m a.s.l., road, roadside verges, 26.viii.2018, 1 ♂, *hD*, DGr leg. (BFUS); near Pavel Banya, right bank of Tundzha Riv., 42°36.216'N, 25°12.187'E, 400 m a.s.l., riverside pasture, 26.viii.2018, 1 ♀, *cD*, YP leg. (BFUS); the same locality, 24.ix.2018, 1 ♀, *sD*, DGr leg. (BFUS); 1 km NE Mrachenik Vill., 42°30.039'N, 24°58.570'E, 665 m a.s.l., meadow next to pine forest, 23.ix.2018, 1 ♂, 2 ♀♀, *hD*, DGr leg. (BFUS); SE Svezhen Vill., 42°29.333'N, 25°02.280'E, 804 m a.s.l., pasture, 23.ix.2018, 2 ♂♂, 1 ♀, *cD*, YP leg. (BFUS); near Babek Vill., 42°26.154'N, 25°04.951'E, 379 m a.s.l., roadside vegetation, 23.ix.2018, 1 ♀, *cD*, DGr leg. (BFUS); 2 km NE Rozovets Vill., 42°28.294'N, 25°08.502'E, 560 m a.s.l., roadside vegetation, 24.ix.2018, 1 ♂, *cD*, DGr leg. (BFUS); 1,5 km SW Rozovets Vill.,

SCARABAEOIDEA

42°26.930'N, 25°06.172'E, 411 m a.s.l., riverside pasture, 21.x.2018, 1 ♀, *cD*, YP leg. (BFUS).

Onthophagini Burmeister, 1846

Caccobius (Caccobius) schreberi (Linnaeus, 1767)

Starozagorski bani Vill. (= Starozagorski bani) (Angelov 1965: 106).

New data: near Babek Vill., 42°26.232'N, 25°04.837'E, 387 m a.s.l., pasture, 22.iv.2018, 1 ♂, *sD*, YP & DGr leg. (BFUS); SE Beguntsi Vill., near Byala Reka Riv., 42°32.601'N, 24°53.247'E, 321 m a.s.l., riverside meadows, 23.v.2018, 1 ♂, *sD*, YP & DGr leg. (BFUS); near Babek Vill., 42°26.258'N, 25°04.815'E, 390 m a.s.l., pasture, 23.vi.2018, 1 ♂, 1 ♀, *sD*, DGr leg. (BFUS); near Rozovets Vill., bank of Stara Reka Riv., 42°27.685'N, 25°07.232'E, 469 m a.s.l., riverside vegetation, 24.vi.2018, 1 ♀, *hD*, DGr leg. (BFUS); the same data, 42°27.681'N, 25°07.237'E, 465 m a.s.l., riverside vegetation, pasture, 22.vii.2018, 2 ♂♂, 2 ♀♀, *hD*, YP & DGr leg. (BFUS) (**Plate IV, 31**); SE Beguntsi Vill., 42°32.525'N, 24°53.196'E, 320 m a.s.l., riverside meadows, 24.viii.2018, 1 ♂, 2 ♀♀, *cD*, YP & DGr leg. (BFUS); SE Svezhen Vill., 42°29.333'N, 25°02.280'E, 804 m a.s.l., pasture, 25.viii.2018, 2 ♂♂, 2 ♀♀, *sD*, YP & DGr leg. (BFUS); 1,5 km SW Rozovets Vill., 42°26.930'N, 25°06.172'E, 411 m a.s.l., riverside pasture, 25.viii.2018, 1 ex., ECh leg. (IBER); near Pavel Banya, right bank of Tundzha Riv., 42°36.216'N, 25°12.187'E, 400 m a.s.l., riverside pasture, 26.viii.2018, 1 ♀, *cD*, YP leg. (BFUS); 1 km NE Mrachenik Vill., 42°30.039'N, 24°58.570'E, 665 m a.s.l., meadow next to pine forest, 23.ix.2018, 1 ♀, *hD*, DGr leg. (BFUS).

Euonthophagus amyntas alces (Fabricius, 1792)

Starozagorski bani Vill. (= Starozagorski bani) (Angelov 1965: 103, as *Onthophagus amyntas* Oliv.).

Onthophagus (Furconthophagus) furcatus (Fabricius, 1781)

Turiya Vill. (Pittioni 1940: 234).

New data: near Babek Vill., 42°26.232'N, 25°04.837'E, 387 m a.s.l., pasture, 22.iv.2018, 1 ♂, 1 ♀, *sD*, YP & DGr leg. (BFUS); 2,5 km SE Domlyan Vill., 42°30.776'N, 24°55.298'E, 448 m a.s.l., meadows and shrubs next to an oak forest, 23.v. - 23.vi.2018, 1 ♀, *pT*, DGr & YP leg. (BFUS) (**Plate IV, 33**); the same locality, 23.vi. - 21.vii.2018, 1 ♂, 1 ♀, *pT*, DGr & YP leg. (BFUS); the same data, 42°30.780'N, 24°55.288'E, 442 m a.s.l., 23.v. - 23.vi.2018, 1 ♂, *pT*, DGr & YP leg. (BFUS) (**Plate IV, 32**); near Babek Vill., 42°26.258'N, 25°04.815'E, 390 m a.s.l., pasture, 23.vi.2018, 1 ♂, 3 ♀♀, *sD*, DGr leg. (BFUS); SE Beguntsi Vill., 42°32.525'N, 24°53.196'E, 320 m a.s.l., riverside meadows, 24.viii.2018, 2 ♂♂, 12 ♀♀, *cD*, YP & DGr leg. (BFUS); SE Svezhen Vill., 42°29.333'N, 25°02.280'E, 804 m a.s.l., pasture, 25.viii.2018, 7 ♂♂, 11 ♀♀, *sD*, YP & DGr leg. (BFUS); near Pavel Banya, right bank of Tundzha Riv., 42°36.216'N, 25°12.187'E, 400 m a.s.l., riverside pasture, 26.viii.2018, 1 ♂, 4 ♀♀, *cD*, YP leg. (BFUS); 1 km NE Mrachenik Vill., 42°30.039'N, 24°58.570'E, 665 m a.s.l., meadow next to pine forest, 23.ix.2018, 22 ♂♂, 18 ♀♀, *hD*, DGr leg. (BFUS); SE Svezhen Vill., 42°29.333'N, 25°02.280'E, 804 m a.s.l., pasture, 23.ix.2018, 3 ♂♂, 1 ♀, *sD*, YP leg. (BFUS); near Babek Vill., 42°26.154'N, 25°04.951'E, 379 m a.s.l., dirt road, roadside vegetation, 23.ix.2018, 2 ♂♂, 2 ♀♀, *cD/gD*, DGr leg. (BFUS); 2 km NE Rozovets Vill., 42°28.294'N, 25°08.502'E, 560 m a.s.l., roadside vegetation, 24.ix.2018, 1 ♀, *cD*, DGr leg. (BFUS); near Pavel Banya, right bank of Tundzha Riv., 42°36.216'N, 25°12.187'E, 400 m a.s.l., riverside pasture, 26.viii.2018, 1 ex., ECh leg. (IBER); the same data, 24.ix.2018, 9 ♂♂, 5 ♀♀, *sD*, DGr leg. (BFUS); SE Beguntsi Vill., near Byala Reka Riv., 42°32.603'N, 24°53.238'E, 313 m a.s.l., mixt riverside vegetation, 20.x.2018, 3 ♂♂, 5 ♀♀, *cD/gD*, YP & DGr leg. (BFUS); E Zelenikovo Vill., 42°24.767'N, 25°05.217'E, 344 m a.s.l., Scots pine plantation, 24.iii. - 09.vii.2019, 1 ♀, *pT*, TT & NK leg. (IBER); S Osetenovo Vill., 42°32.717'N, 25°02.533'E, 670 m a.s.l., riverside

SCARABAEOIDEA

meadow with oak and willow, 07.vii. - 11.xi.2019, 1 ♂, *pT*, TT & NK leg. (IBER); S Osetenovo Vill., 42°34.2'N, 25°01.6'E, 633 m a.s.l., oak forest with undergrowth of *Ruscus* sp., 07.vii. - 11.xi.2019, 2 ♂♂, 3 ♀♀, *pT*, TT & NK leg. (IBER); Chirpan Heights, NW Veren Vill., 42°21.317'N, 25°10.783'E, 353 m a.s.l., pasture with *Paliurus spina-christi* Mill. and *Opuntia* sp., 08.vii. - 10.xi.2019, 1 ♀, *pT*, TT & NK leg. (IBER); the same locality, 10.xi. - 12.iv.2020, 1 ♀, *pT*, TT & NK leg. (IBER).

****Onthophagus (Onthophagus) illyricus (Scopoli, 1763)***

New data: 3 km NE Mrachenik Vill., 42°30.102'N, 24°59.900'E, 805 m a.s.l., roadside verges and an oak forest, 24.v.2018, 5 ♂♂, 5 ♀♀, *hD*, YP & DGr leg. (BFUS); near Rozovets Vill., bank of Stara Reka Riv., 42°27.685'N, 25°07.232'E, 469 m a.s.l., riverside vegetation, 24.vi.2018, 3 ♀♀, *hD*, DGr leg. (BFUS); the same data, 42°27.681'N, 25°07.237'E, 465 m a.s.l., riverside vegetation, pasture, 22.vii.2018, 2 ♂♂, 2 ♀♀, *hD*, YP & DGr leg. (BFUS); SE Beguntsi Vill., 42°32.525'N, 24°53.196'E, 320 m a.s.l., riverside meadows, 24.viii.2018, 1 ♂, 2 ♀♀, *cD*, YP & DGr leg. (BFUS); SE Svezhen Vill., 42°29.333'N, 25°02.280'E, 804 m a.s.l., pasture, 25.viii.2018, 2 ♂♂, *sD*, YP & DGr leg. (BFUS); 1,5 km SW Rozovets Vill., 42°26.933'N, 25°06.180'E, 409 m a.s.l., riverside pasture, 25.viii.2018, 2 ♂♂, *cD*, YP & DGr leg. (BFUS); 500 m SW Turiya Vill., 42°34.111'N, 25°10.346'E, 460 m a.s.l., meadows and roadside vegetation, 26.viii.2018, 1 ♂, YP & DGr leg. (BFUS) (**Plate IV, 34**); near Pavel Banya, right bank of Tundzha Riv., 42°36.216'N, 25°12.187'E, 400 m a.s.l., riverside pasture, 26.viii.2018, 2 ♀♀, *cD*, YP leg. (BFUS); SE Svezhen Vill., 42°29.333'N, 25°02.280'E, 804 m a.s.l., pasture, 23.ix.2018, 1 ♂, *sD*, YP leg. (BFUS); SE Svezhen Vill., 42°29.400'N, 25°02.266'E, 798 m a.s.l., pasture, 21.x.2018, 1 ♀, *cD*, DGr leg. (BFUS); E Svezhen Vill., 42°29.833'N, 25°02.95'E, 863 m a.s.l., coniferous stands with single trees of beech, birch and black locust, 22.iii. - 07.vii.2019, 2 ♂♂, *pT*, TT & NK leg. (IBER); W Svezhen Vill., 42°30.517'N, 24°59.983'E, 860 m a.s.l., oak forest, 07.vii. - 11.xi.2019, 1 ♂, *pT*, TT & NK leg. (IBER).

Notes: In Bulgaria this species has been reported from coastal to inland mountainous areas (Angelov 1965, Zacharieva 1965a, Zacharieva-Stoilova 1969, Zacharieva *et al.* 1975, Bunalski 2000, Guéorguiev & Ljubomirov 2009, Guéorguiev *et al.* 2011, Petrova *et al.* 2016), is omitted for the country in the Catalogue of Palaearctic Coleoptera (Ziani & Bezděk 2016). The species is common in pastures from 100 to 1300 m a.s.l. in Bulgaria (Petrova & Gradinarov, unpublished data).

Onthophagus (Onthophagus) taurus (Schreber, 1759)

Turiya Vill. (Joakimov 1904: 20, as *Onthophagus taurus* L.).

New data: near Babek Vill., 42°26.232'N, 25°04.837'E, 387 m a.s.l., pasture, 22.iv.2018, 1 ♂, *sD*, YP & DGr leg. (BFUS); SE Beguntsi Vill., near Byala Reka Riv., 42°32.601'N, 24°53.247'E, 321 m a.s.l., riverside meadows, 23.v.2018, 1 ♂, 1 ♀, *sD*, YP & DGr leg. (BFUS); near Rozovets Vill., bank of Stara Reka Riv., 42°27.681'N, 25°07.237'E, 465 m a.s.l., riverside vegetation, pasture, 22.vii.2018, 5 ♂♂, *hD*, YP & DGr leg. (BFUS) (**Plate IV, 35**); SE Beguntsi Vill., 42°32.525'N, 24°53.196'E, 320 m a.s.l., riverside meadows, 24.viii.2018, 1 ♂, 1 ♀, *cD*, YP & DGr leg. (BFUS); SE Svezhen Vill., 42°29.333'N, 25°02.280'E, 804 m a.s.l., pasture, 25.viii.2018, 2 ♂♂, 2 ♀♀, *sD*, YP & DGr leg. (BFUS); 1,5 km SW Rozovets Vill., 42°26.933'N, 25°06.180'E, 409 m a.s.l., riverside pasture, 25.viii.2018, 1 ♀, *cD*, YP leg. (BFUS); near Pavel Banya, right bank of Tundzha Riv., 42°36.216'N, 25°12.187'E, 400 m a.s.l., riverside pasture, 26.viii.2018, 6 ♂♂, 5 ♀♀, *cD*, YP leg. (BFUS); 1 km NE Mrachenik Vill., 42°30.039'N, 24°58.570'E, 665 m a.s.l., meadow next to pine forest, 23.ix.2018, 1 ♂, *hD*, DGr leg. (BFUS); near Babek Vill., 42°26.154'N, 25°04.951'E, 379 m a.s.l., dirt road, roadside vegetation, 23.ix.2018, 8 ♂♂, 3 ♀♀, *cD/gD*, DGr leg. (BFUS); near Pavel Banya, right bank of Tundzha Riv., 42°36.216'N, 25°12.187'E, 400

SCARABAEOIDEA

m a.s.l., riverside pasture, 24.ix.2018, 2 ♂♂, 1 ♀, sD, DGr leg. (BFUS); 1 km SW Turiya Vill., 42°33.810'N, 25°10.395'E, 480 m a.s.l., dirt road, pasture, 21.x.2018, 2 ♂♂, cD, YP leg. (BFUS); near Pavel Banya, right bank of Tundzha Riv., 42°36.192'N, 25°12.241'E, 408 m a.s.l., riverside pasture, 26.viii.2018, 1 ex., ECh leg. (IBER); the same data, 21.x.2018, 1 ♀, cD/sD, YP leg. (BFUS); S Osetenovo Vill., 42°32.717'N, 25°02.533'E, 670 m a.s.l., riverside meadow with oak and willow, 07.vii. - 11.xi.2019, 1 ♂, pT, TT & NK leg. (IBER).

****Onthophagus (Palaeonthophagus) coenobita* (Herbst, 1783)**

New data: N Kolena Vill., 42°29.425'N, 25°43.169'E, 290 m a.s.l., next to a dirt road, forest with *Quercus* sp. and *Carpinus orientalis* Mill., 11.iv.2018, 1 ♂, 1 ♀, in excrements of Carnivora, DGe leg. (BFUS); 5 km SE Turiya Vill., 42°31.786'N, 25°11.763'E, 565 m a.s.l., riverside meadows, 23.iv.2018, 1 ♂, 4 ♀♀, hD, YP & DGr leg. (BFUS); NW Svezhen Vill., 42°30.650'N, 25°00.641'E, 749 m a.s.l., meadows and shrubs at the edge of a beech-oak forest, 23.iv. - 25.v.2018, 1 ♀, pT, DGr & YP leg. (BFUS); 3 km NE Mrachenik Vill., 42°30.102'N, 24°59.900'E, 805 m a.s.l., roadside verges and an oak forest, 24.v.2018, 6 ♀♀, hD, YP & DGr leg. (BFUS); 5 km SW Chehlaré Vill., 42°24.709'N, 25°06.163'E, 433 m a.s.l., deciduous forest, 24.v.2018, 1 ♀, pT, DGr & YP leg. (BFUS); 3 km NE Mrachenik Vill., 42°30.135'N, 24°59.888'E, 808 m a.s.l., oak forest, 24.v. - 23.vi.2018, 2 ♂♂, 1 ♀, pT, DGr & YP leg. (BFUS) (**Plate V, 36**); the same data, 42°30.141'N, 24°59.885'E, 806 m a.s.l., 1 ♂, pT, DGr & YP leg. (BFUS); NW Svezhen Vill., 42°30.600'N, 25°00.655'E, 749 m a.s.l., meadows and shrubs at the edge of a beech-oak forest, 25.v.2018, 1 ♀, pT, DGr & YP leg. (BFUS); 5 km SW Chehlaré Vill., 42°24.709'N, 25°06.160'E, 430 m a.s.l., deciduous forest, 23.vi. - 21.vii.2018, 2 ♂♂, 2 ♀♀, pT, DGr & YP leg. (BFUS); the same locality, 21.vii. - 25.viii.2018, 1 ♀, pT, DGr & YP leg. (BFUS); the same data, 42°24.709'N, 25°06.170'E, 433 m a.s.l., 23.vi. - 21.vii.2018, 1 ♀, pT, DGr & YP leg. (BFUS); 3 km NW Gorno Novo Selo Vill., 42°28.393'N, 25°13.241'E, 806 m a.s.l., oak forest, 22.vii. - 26.viii.2018, 2 ♀♀, pT, DGr & YP leg. (BFUS); SE Svezhen Vill., 42°29.333'N, 25°02.280'E, 804 m a.s.l., pasture, 25.viii.2018, 1 ♂, sD, YP & DGr leg. (BFUS); 1,5 km SW Rozovets Vill., 42°26.930'N, 25°06.172'E, 411 m a.s.l., riverside pasture, 25.viii.2018, 1 ex., ECh leg. (IBER); the same data, 21.x.2018, 1 ♂, 1 ♀, cD, YP leg. (BFUS); E Svezhen Vill., 42°29.833'N, 25°02.95'E, 863 m a.s.l., coniferous stands with single trees of beech, birch and black locust, 22.iii. - 07.vii.2019, 4 ♂♂, 7 ♀♀, pT, TT & NK leg. (IBER); W Svezhen Vill., 42°30.517'N, 24°59.983'E, 860 m a.s.l., oak forest, 22.iii. - 07.vii.2019, 1 ♂, pT, TT & NK leg. (IBER); the same locality, 07.vii. - 11.xi.2019, 1 ♂, 1 ♀, pT, TT & NK leg. (IBER); S Osetenovo Vill., 42°34.2'N, 25°01.6'E, 633 m a.s.l., oak forest with undergrowth of *Ruscus* sp., 22.iii. - 07.vii.2019, 1 ♀, pT, TT & NK leg. (IBER); the same locality, 07.vii. - 11.xi.2019, 1 ♀, pT, TT & NK leg. (IBER); Chirpan Heights, NW Veren Vill., 42°21.55'N, 25°10.617'E, 366 m a.s.l., black locust stands on sandy soil, 23.iii. - 08.vii.2019, 2 ♂♂, 2 ♀♀, pT, TT & NK leg. (IBER); Chirpan Heights, S Saedinenie Vill., 42°20.65'N, 25°17.733'E, 487 m a.s.l., lime grove with undergrowth of *Ruscus* sp., 23.iii. - 08.vii.2019, 3 ♂♂, 11 ♀♀, pT, TT & NK leg. (IBER); NW Svezhen Hut, 42°31.00'N, 25°02.633'E, 1015 m a.s.l., coniferous stands with single beech trees, 07.vii. - 11.xi.2019, 3 ♂♂, 4 ♀♀, pT, TT & NK leg. (IBER); NW Svezhen Hut, 42°31.983'N, 25°02.083'E, 898 m a.s.l., deciduous forest of beech, oak and hornbeam, 07.vii. - 11.xi.2019, 2 ♀♀, pT, TT & NK leg. (IBER); S Osetenovo Vill., 42°32.717'N, 25°02.533'E, 670 m a.s.l., riverside meadow with oak and willow, 07.vii. - 11.xi.2019, 12 ♂♂, 15 ♀♀, pT, TT & NK leg. (IBER); E Zelenikovo Vill., 42°24.767'N, 25°05.217'E, 344 m a.s.l., Scots pine plantation, 09.vii. - 09.xi.2019, 10 ♂♂, 7 ♀♀, pT, TT & NK leg. (IBER); Chirpan Heights, NW Veren Vill., 42°21.317'N, 25°10.783'E, 353 m a.s.l., pasture with *Paliurus spina-christi* Mill. and *Opuntia* sp., 10.xi. - 12.iv.2020, 1 ♀, pT, TT & NK leg. (IBER).

SCARABAEOIDEA

Onthophagus (Palaeonthophagus) fissicornis (Steven, 1809)

Starozagorski bani Vill. (= Starozagorski bani) (Angelov 1965: 103).

****Onthophagus (Palaeonthophagus) fracticornis (Preyssler, 1790)***

New data: near Babek Vill., 42°26.232'N, 25°04.837'E, 387 m a.s.l., pasture, 22.iv.2018, 2 ♂♂, *sD*, YP & DGr leg. (BFUS); 5 km SE Turiya Vill., 42°31.786'N, 25°11.763'E, 565 m a.s.l., riverside meadows, 23.iv.2018, 1 ♂, *cD*, DGr leg. (BFUS); the same locality and date, 5 ♂♂, 1 ♀, *hD*, YP & DGr leg. (BFUS); 3 km NE Mrachenik Vill., 42°30.102'N, 24°59.900'E, 805 m a.s.l., roadside verges and an oak forest, 24.v.2018, 1 ♂, 6 ♀♀, *hD*, YP & DGr leg. (BFUS) (**Plate V, 37**); 6 km SE Turiya Vill., 42°31.283'N, 25°12.111'E, 604 m a.s.l., road, roadside verges, 26.viii.2018, 1 ♂, *hD*, DGr leg. (BFUS); 1 km NE Mrachenik Vill., 42°30.039'N, 24°58.570'E, 665 m a.s.l., meadow next to pine forest, 23.ix.2018, 1 ♀, *hD*, DGr leg. (BFUS); near Babek Vill., 42°26.154'N, 25°04.951'E, 379 m a.s.l., dirt road, roadside vegetation, 23.ix.2018, 1 ♂, 1 ♀, *cD*, DGr leg. (BFUS); 2 km NE Rozovets Vill., 42°28.294'N, 25°08.502'E, 560 m a.s.l., roadside vegetation, 24.ix.2018, 1 ♂, 7 ♀♀, *cD*, DGr leg. (BFUS); SE Begunsi Vill., near Byala Reka Riv., 42°32.601'N, 24°53.247'E, 313 m a.s.l., dirt road, riverside meadows, 20.x.2018, 1 ♀, *gD*, YP & DGr leg. (BFUS); SE Svezhen Vill., 42°29.400'N, 25°02.266'E, 798 m a.s.l., pasture, 21.x.2018, 2 ♂♂, 5 ♀♀, *cD*, DGr leg. (BFUS); the same locality and date, 3 ♂♂, 5 ♀♀, *hD*, YP leg. (BFUS); 1,5 km SW Rozovets Vill., 42°26.930'N, 25°06.172'E, 411 m a.s.l., riverside pasture, 21.x.2018, 3 ♂♂, 2 ♀♀, *cD*, YP leg. (BFUS); 1 km SW Turiya Vill., 42°33.810'N, 25°10.395'E, 480 m a.s.l., dirt road, pasture, 21.x.2018, 5 ♂♂, 1 ♀, *cD*, YP leg. (BFUS); E Svezhen Vill., 42°29.833'N, 25°02.95'E, 863 m a.s.l., coniferous stands with single trees of beech, birch and black locust, 22.iii. - 07.vii.2019, 1 ♀, *pT*, TT & NK leg. (IBER); NW Svezhen Hut, 42°31.05'N, 25°02.517'E, 1008 m a.s.l., pasture, mountain ridge, 22.iii. - 07.vii.2019, 2 ♀♀, *pT*, TT & NK leg. (IBER); Chirpan Heights, S Saedinenie Vill., 42°20.65'N, 25°17.733'E, 487 m a.s.l., lime grove with undergrowth of *Ruscus* sp., 23.iii. - 08.vii.2019, 16 ♂♂, 22 ♀♀, *pT*, TT & NK leg. (IBER); W Svezhen Vill., 42°30.517'N, 24°59.983'E, 860 m a.s.l., oak forest, 07.vii. - 11.xi.2019, 1 ♂, 1 ♀, *pT*, TT & NK leg. (IBER); S Osetenovo Vill., 42°32.717'N, 25°02.533'E, 670 m a.s.l., riverside meadow with oak and willow, 07.vii. - 11.xi.2019, 3 ♂♂, *pT*, TT & NK leg. (IBER).

****Onthophagus (Palaeonthophagus) grossepunctatus Reitter, 1905***

New data: N Kolena Vill., 42°29.425'N, 25°43.169'E, 290 m a.s.l., next to a dirt road, forest with *Quercus* sp. and *Carpinus orientalis* Mill., 11.iv.2018, 1 ♀, in excrements of Carnivora, DGe leg. (BFUS); near Babek Vill., 42°26.232'N, 25°04.837'E, 387 m a.s.l., pasture, 22.iv.2018, 2 ♂♂, *sD*, YP & DGr leg. (BFUS); 3 km NE Mrachenik Vill., 42°30.102'N, 24°59.900'E, 805 m a.s.l., roadside verges and an oak forest, 24.v.2018, 1 ♀, *hD*, YP & DGr leg. (BFUS); NW Svezhen Vill., 42°30.600'N, 25°00.655'E, 749 m a.s.l., meadows and shrubs at the edge of a beech-oak forest, 25.v. - 23.vi.2018, 1 ♂, 1 ♀, *pT*, DGr & YP leg. (BFUS) (**Plate V, 38**); 5 km SW Chehlare Vill., 42°24.709'N, 25°06.160'E, 430 m a.s.l., deciduous forest, 23.vi. - 21.vii.2018, 1 ♀, *pT*, DGr & YP leg. (BFUS); 1 km SW Turiya Vill., 42°33.829'N, 25°10.442'E, 488 m a.s.l., hillside, meadows, 24.vi.2018, 1 ♂, in excrements, YP & DGr leg. (BFUS); near Babek Vill., 42°26.154'N, 25°04.951'E, 379 m a.s.l., dirt road, roadside vegetation, 23.ix.2018, 1 ♂, *cD*, DGr leg. (BFUS); 2 km NE Rozovets Vill., 42°28.294'N, 25°08.502'E, 560 m a.s.l., roadside vegetation, 24.ix.2018, 2 ♀♀, *cD*, DGr leg. (BFUS); E Svezhen Vill., 42°29.833'N, 25°02.95'E, 863 m a.s.l., coniferous stands with single trees of beech, birch and black locust, 22.iii. - 07.vii.2019, 1 ♂, *pT*, TT & NK leg. (IBER); the same locality, 07.vii. - 11.xi.2019, 1 ♂, *pT*, TT & NK leg. (IBER).

SCARABAEOIDEA

****Onthophagus (Palaeonthophagus) lemur (Fabricius, 1781)***

New data: 5 km SE Turiya Vill., 42°31.786'N, 25°11.763'E, 565 m a.s.l., riverside meadows, 23.iv.2018, 1 ♀, *hD*, YP & DGr leg. (BFUS); 3 km NE Mrachenik Vill., 42°30.102'N, 24°59.900'E, 805 m a.s.l., roadside verges and an oak forest, 24.v.2018, 1 ♀, *hD*, YP & DGr leg. (BFUS); Chirpan Heights, NW Veren Vill., 42°21.55'N, 25°10.617'E, 366 m a.s.l., black locust stands on sandy soil, 23.iii. - 08.vii.2019, 1 ♂, *pT*, TT & NK leg. (IBER).

Onthophagus (Palaeonthophagus) nuchicornis (Linnaeus, 1758)

Turiya Vill. (Joakimov 1904: 20).

Onthophagus (Palaeonthophagus) ovatus (Linnaeus, 1767)

Turiya Vill., Sredna Gora/S of Turiya Vill. (Joakimov 1904: 21).

New data: 5 km SE Turiya Vill., 42°31.786'N, 25°11.763'E, 565 m a.s.l., riverside meadows, 23.iv.2018, 1 ♂, *cD*, DGr leg. (BFUS); NW Svezhen Vill., 42°30.600'N, 25°00.655'E, 749 m a.s.l., meadows and shrubs at the edge of a beech-oak forest, 25.v. - 23.vi.2018, 1 ♂, *pT*, DGr & YP leg. (BFUS) (**Plate V, 39**); SE Svezhen Vill., 42°29.333'N, 25°02.280'E, 804 m a.s.l., pasture, 25.viii.2018, 2 ♀♀, *sD*, YP & DGr leg. (BFUS); near Pavel Banya, right bank of Tundzha Riv., 42°36.216'N, 25°12.187'E, 400 m a.s.l., riverside pasture, 26.viii.2018, 1 ♂, 3 ♀♀, *cD*, YP leg. (BFUS); the same locality, 24.ix.2018, 1 ♂, *sD*, DGr leg. (BFUS); SE Beguntsi Vill., near Byala Reka Riv., 42°32.603'N, 24°53.238'E, 313 m a.s.l., mixt riverside vegetation, 20.x.2018, 1 ♂, 1 ♀, *cD*, YP & DGr leg. (BFUS); W Svezhen Vill., 42°30.517'N, 24°59.983'E, 860 m a.s.l., oak forest, 07.vii. - 11.xi.2019, 1 ♂, *pT*, TT & NK leg. (IBER).

Onthophagus (Palaeonthophagus) ruficapillus Brullé, 1832

Starozagorski bani Vill. (= Starozagorski mineralni bani) (Angelov 1965: 105).

New data: Hrishteni Vill., 42°27.212'N, 25°42.315'E, 230 m a.s.l., yard of a house, 10.iv.2018, 1 ♀, DGe leg. (BFUS); 4,5 km SW Chehlaré Vill., 42°24.657'N, 25°06.266'E, 438 m a.s.l., pasture, 22.iv.2018, 3 ♀♀, *hD*, DGr leg. (BFUS); near Babek Vill., 42°26.232'N, 25°04.837'E, 387 m a.s.l., pasture, 22.iv.2018, 6 ♂♂, 8 ♀♀, *sD*, YP & DGr leg. (BFUS); Hrishteni Vill., 42°27.063'N, 25°42.153'E, 227 m a.s.l., near outbuildings, ruderal vegetation, 29.iv.2018, 1 ♂, DGe leg. (BFUS); NW Svezhen Vill., 42°30.616'N, 25°00.680'E, 746 m a.s.l., meadows and shrubs at the edge of a beech-oak forest, 25.v. - 23.vi.2018, 2 ♂♂, *pT*, DGr & YP leg. (BFUS); 1 km SW Turiya Vill., 42°33.829'N, 25°10.442'E, 488 m a.s.l., hillside, meadows, 24.vi.2018, 1 ♀, in excrements, YP & DGr leg. (BFUS); near Pavel Banya, right bank of Tundzha Riv., 42°36.216'N, 25°12.187'E, 400 m a.s.l., riverside pasture, 26.viii.2018, 3 ♀♀, *cD*, YP leg. (BFUS); Chirpan Heights, NW Veren Vill., 42°21.55'N, 25°10.617'E, 366 m a.s.l., black locust stands on sandy soil, 23.iii. - 08.vii.2019, 1 ♀, *pT*, TT & NK leg. (IBER); Chirpan Heights, NW Veren Vill., 42°21.317'N, 25°10.783'E, 353 m a.s.l., pasture with *Paliurus spina-christi* Mill. and *Opuntia* sp., 10.xi. - 12.iv.2020, 1 ♂, *pT*, TT & NK leg. (IBER).

****Onthophagus (Palaeonthophagus) similis (Scriba, 1790)***

New data: S Osetenovo Vill., 42°32.717'N, 25°02.533'E, 670 m a.s.l., riverside meadow with oak and willow, 22.iii. - 07.vii.2019, 1 ♀, *pT*, TT & NK leg. (IBER).

****Onthophagus (Palaeonthophagus) vacca (Linnaeus, 1767)***

New data: near Babek Vill., 42°26.232'N, 25°04.837'E, 387 m a.s.l., pasture, 22.iv.2018, 1 ♂, 1 ♀, *sD*, YP & DGr leg. (BFUS); near Rozovets Vill., bank of Stara Reka Riv., 42°27.681'N, 25°07.237'E, 465 m a.s.l., riverside vegetation, pasture, 22.vii.2018, 1 ♂, *hD*, YP & DGr leg. (BFUS); SE Svezhen Vill., 42°29.333'N, 25°02.280'E, 804 m a.s.l., pasture,

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25.viii.2018, 2 ♀♀, *sD*, YP leg. (BFUS) (**Plate V, 40**); 2 km NE Rozovets Vill., 42°28.294'N, 25°08.502'E, 560 m a.s.l., roadside vegetation, 24.ix.2018, 1 ♀, *cD*, DGr leg. (BFUS).

Onthophagus (Palaeonthophagus) verticicornis (Laicharting, 1781)

Sredna Gora/S of Turiya Vill. (Joakimov 1904: 21); Turiya Vill. (Pittioni 1940: 234); Starozagorski bani Vill. (= Starozagorski bani) (Angelov 1965: 105).

New data: N Kolena Vill., 42°29.425'N, 25°43.169'E, 290 m a.s.l., dirt road, forest with *Quercus* sp. and *Carpinus orientalis* Mill., 11.iv.2018, 1 ♂, 1 ♀, in excrements of Carnivora, DGe leg. (BFUS); near Babek Vill., 42°26.232'N, 25°04.837'E, 387 m a.s.l., pasture, 22.iv.2018, 1 ♀, *sD*, YP & DGr leg. (BFUS); 5 km SE Turiya Vill., 42°31.786'N, 25°11.763'E, 565 m a.s.l., riverside meadows, 23.iv.2018, 2 ♂♂, 5 ♀♀, *cD*, DGr leg. (BFUS); the same locality and date, 8 ♂♂, 5 ♀♀, *hD*, YP & DGr leg. (BFUS); 3 km NE Mrachenik Vill., 42°30.102'N, 24°59.900'E, 805 m a.s.l., roadside verges and an oak forest, 24.v.2018, 2 ♂♂, 3 ♀♀, *hD*, YP & DGr leg. (BFUS) (**Plate V, 41**); NW Svezhen Vill., 42°30.600'N, 25°00.655'E, 749 m a.s.l., meadows and shrubs at the edge of a beech-oak forest, 25.v. - 23.vi.2018, 1 ♂, 1 ♀, *pT*, DGr & YP leg. (BFUS); near Rozovets Vill., bank of Stara Reka Riv., 42°27.685'N, 25°07.232'E, 469 m a.s.l., riverside vegetation, 24.vi.2018, 1 ♀, *hD*, DGr leg. (BFUS); 1 km SW Turiya Vill., 42°33.829'N, 25°10.442'E, 488 m a.s.l., hillside, meadows, 24.vi.2018, 1 ♂, in excrements, YP & DGr leg. (BFUS); E Svezhen Vill., 42°29.833'N, 25°02.95'E, 863 m a.s.l., coniferous stands with single trees of beech, birch and black locust, 22.iii. - 07.vii.2019, 8 ♂♂, 32 ♀♀, *pT*, TT & NK leg. (IBER); the same locality, 07.vii. - 11.xi.2019, 1 ♀, *pT*, TT & NK leg. (IBER); NW Svezhen Hut, 42°31.00'N, 25°02.633'E, 1015 m a.s.l., coniferous stands with single beech trees, 22.iii. - 07.vii.2019, 1 ♀, *pT*, TT & NK leg. (IBER); NW Svezhen Hut, 42°31.05'N, 25°02.517'E, 1008 m a.s.l., pasture, mountain ridge, 22.iii. - 07.vii.2019, 4 ♂♂, 1 ♀, *pT*, TT & NK leg. (IBER); S Osetenovo Vill., 42°32.717'N, 25°02.533'E, 670 m a.s.l., riverside meadow with oak and willow, 22.iii. - 07.vii.2019, 1 ♂, *pT*, TT & NK leg. (IBER); Chirpan Heights, NW Veren Vill., 42°21.55'N, 25°10.617'E, 366 m a.s.l., black locust stands on sandy soil, 23.iii. - 08.vii.2019, 5 ♂♂, 2 ♀♀, *pT*, TT & NK leg. (IBER); Chirpan Heights, S Saedinenie Vill., 42°20.65'N, 25°17.733'E, 487 m a.s.l., lime grove with undergrowth of *Ruscus* sp., 23.iii. - 08.vii.2019, 12 ♂♂, 12 ♀♀, *pT*, TT & NK leg. (IBER); W Svezhen Vill., 42°30.517'N, 24°59.983'E, 860 m a.s.l., oak forest, 07.vii. - 11.xi.2019, 1 ♀, *pT*, TT & NK leg. (IBER).

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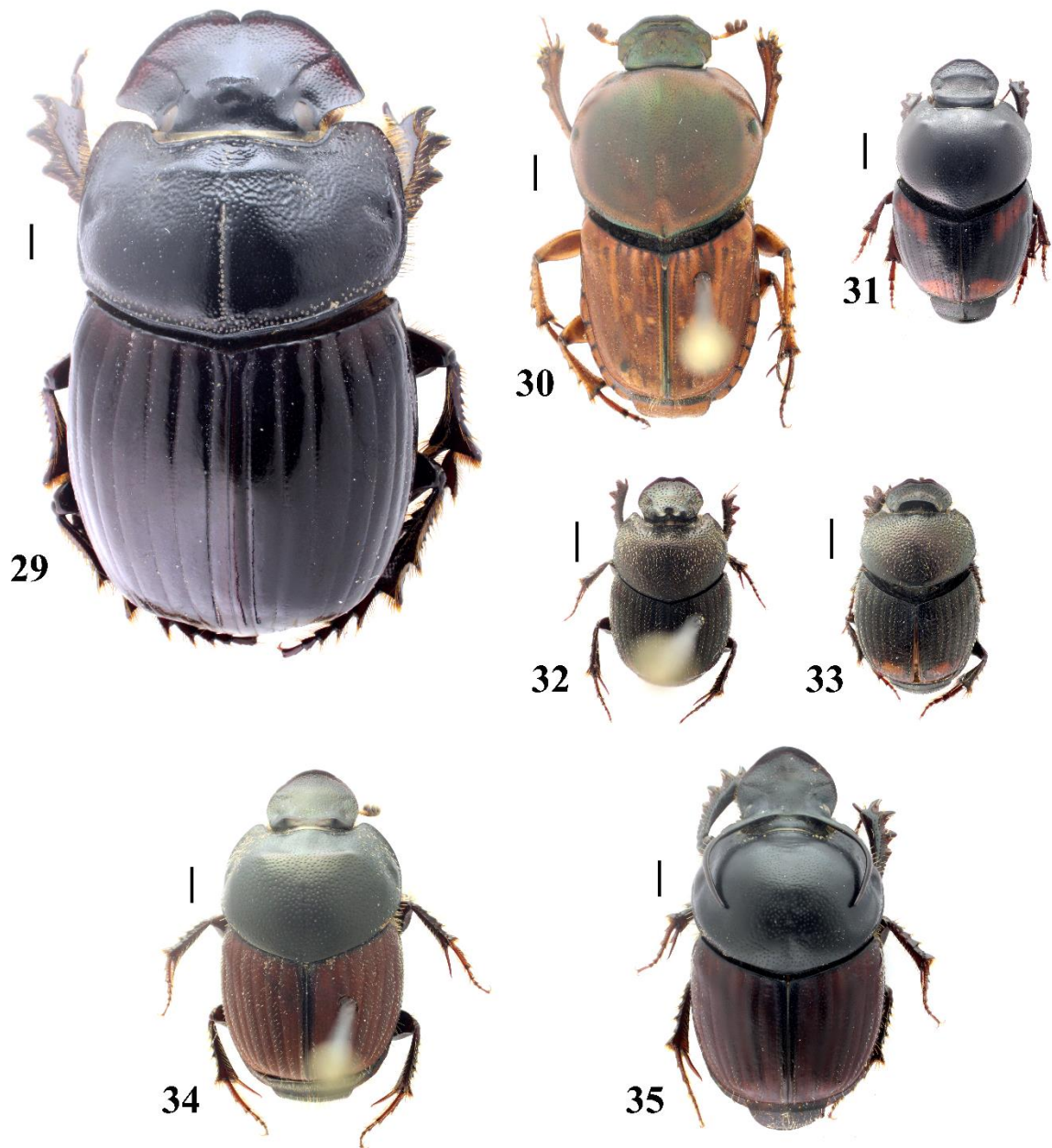


Plate IV. Scarabaeidae (Scarabaeinae): 29 – *Copris lunaris*, near Pavel Banya, 26.viii.2018, male; 30 – *Euoniticellus fulvus*, 3 km NE Mrachenik Vill., 24.v.2018, male; 31 – *Caccobius schreberi*, near Rozovets Vill., 22.vii.2018, male; 32, 33 – *Onthophagus furcatus*, 2,5 km SE Domlyan Vill., 23.v. – 23.vi.2018, male and female; 34 – *Onthophagus illyricus*, 500 m SW Turiya Vill., 26.viii.2018, male; 35 – *Onthophagus taurus*, near Rozovets Vill., 22.vii.2018, male. Scale bars: 1 mm.

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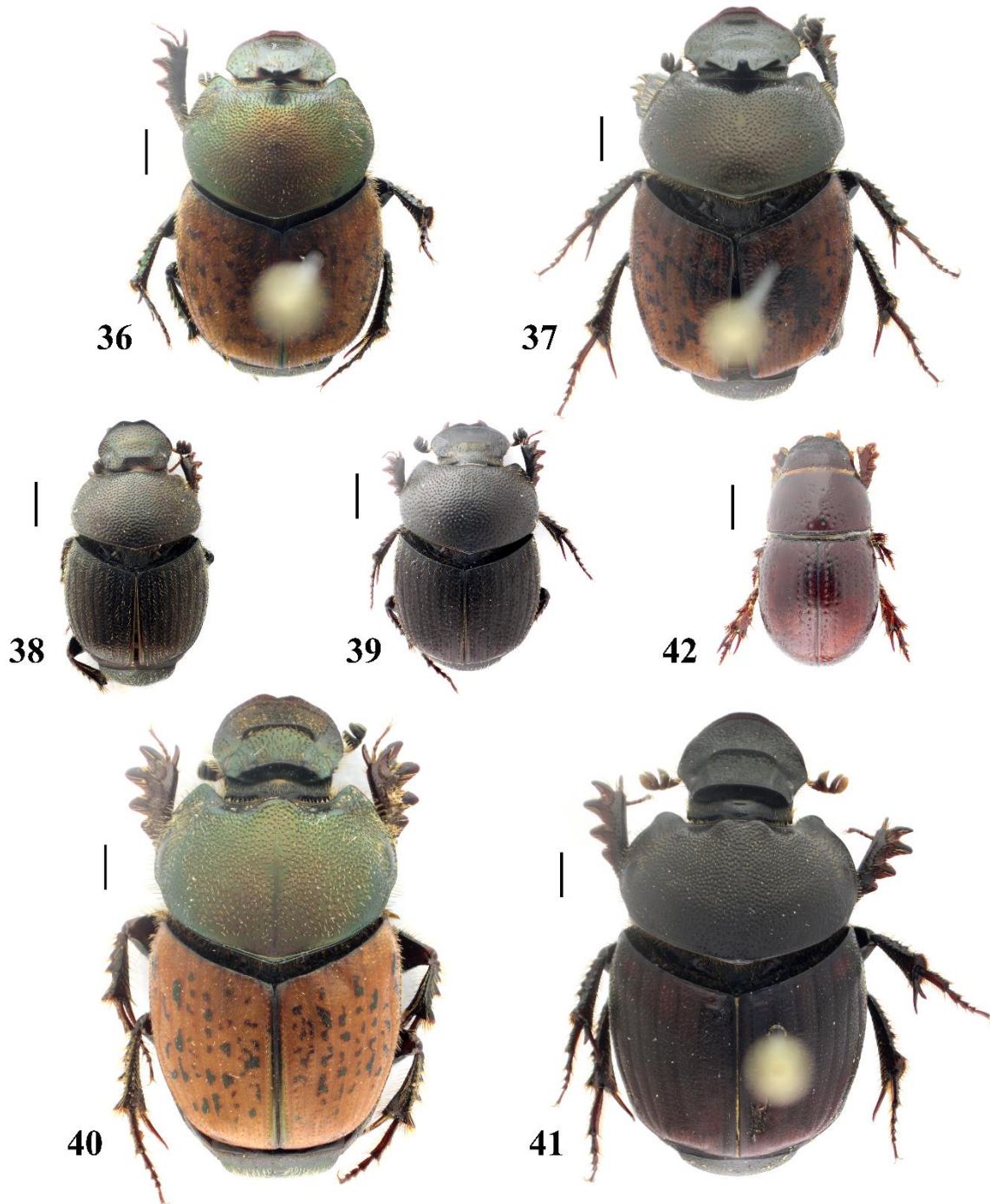


Plate V. Scarabaeidae (Scarabaeinae, Orphninae): 36 – *Onthophagus coenobita*, 3 km NE Mrachenik Vill., 24.v. - 23.vi.2018, male; 37 – *Onthophagus fracticornis*, 3 km NE Mrachenik Vill., 24.v.2018, male; 38 – *Onthophagus grossepunctatus*, NW Svezhen Vill., 25.v. - 23.vi.2018, female; 39 – *Onthophagus ovatus*, the same locality and dates, male; 40 – *Onthophagus vacca*, SE Svezhen Vill., 25.viii.2018, female; 41 – *Onthophagus verticicornis*, 3 km NE Mrachenik Vill., 24.v.2018, female; 42 – *Chaetonyx schatzmayri*, 3 km NE Mrachenik Vill., 24.viii.2018, male. Scale bars: 1 mm.

SCARABAEOIDEA

Scarabaeini Latreille, 1802

***Scarabaeus pius* (Illiger, 1803)**

Turiya (Pittioni 1940: 218).

***Scarabaeus typhon* (Fischer von Waldhelm, 1823)**

Turiya (Pittioni 1940: 217, as *Scarabaeus affinis* Brullé, Lobo *et al.*, 2011: 210).

Sisyphini Mulsant, 1842

****Sisyphus (Sisyphus) schaefferi schaefferi* (Linnaeus, 1758)**

New data: Chirpan Heights, NW Veren Vill., 42°21.55'N, 25°10.617'E, 366 m a.s.l., black locust stands on sandy soil, 23.iii. - 08.vii.2019, 2 ♂♂, *pT*, TT & NK leg. (IBER); Chirpan Heights, S Saedinenie Vill., 42°21.017'N, 25°17.783'E, 386 m a.s.l., mixed riverine forest, 08.vii. - 10.xi.2019, *pT*, TT & NK leg. (IBER); Chirpan Heights, N Sredno Gradishte Vill., 42°19.35'N, 25°17.65'E, 418 m a.s.l., oak-hornbeam forest, 08.vii. - 10.xi.2019, *pT*, TT & NK leg. (IBER).

Orphninae Erichson, 1847

Orphnini Erichson, 1847

****Chaetonyx schatzmayri* Mariani, 1946**

New data: 3 km NE Mrachenik Vill., 42°30.135'N, 24°59.888'E, 808 m a.s.l., oak forest, 24.viii.2018, 2 ♂♂, 1 ♀, in soil, DGr leg. (BFUS) (**Plate V, 42**).

Notes: Rarely reported species in Bulgaria. Known from Black Sea Coast (Král & Malý 1993, Bunalski 2001), Strandzha Mts. (Bunalski, 2001) and Western Rhodopes Mts. (Král & Malý 1993).

Melolonthinae Leach, 1819

Hopliini Latreille, 1829

****Hoplia (Decamera) praticola* Duftschmid, 1805**

New data: NW Svezhen Vill., 42°30.649'N, 25°00.641'E, 749 m a.s.l., edge of a beech-oak forest, 23.iv.2018, 1 ♂, at dusk, YP & DGr leg. (BFUS) (**Plate VI, 43**).

****Hoplia (Hoplia) argentea* (Poda von Neuhaus, 1761)**

New data: NW Svezhen Vill., 42°30.600'N, 25°00.655'E, 749 m a.s.l., meadows and shrubs at the edge of a beech-oak forest, 23.iv. - 25.v.2018, 4 ♂♂, 3 ♀♀, *pT*, YP & DGr leg. (BFUS); NW Svezhen Vill., 42°30.605'N, 25°00.636'E, 752 m a.s.l., meadow, 23.iv. - 25.v.2018, 1 ♂, *pT*, YP & DGr leg. (BFUS); N of Lyuyak Vill., 42°31.393'N, 25°40.589'E, 578 m a.s.l., stone quarry, rocky grassland near *Quercus-Carpinus* forest, 18.v.2018, 1 ♂, DGe leg. (BFUS); 1 km SE Svezhen Vill., 42°29.396'N, 25°02.491'E, 805 m a.s.l., meadows and shrubs, 23.v.2018, 5 ♀♀, on flowers of *Crataegus monogyna* Jacq., YP, DGr & IGr leg. (BFUS); 2 km NE Mrachenik Vill., 42°30.260'N, 24°59.074'E, 717 m a.s.l., roadside meadows and shrubs, 24.v.2018, 1 ♀, YP leg. (BFUS); NW Svezhen Vill., 42°30.649'N, 25°00.641'E, 749 m a.s.l., edge of a beech-oak forest, 25.v.2018, 3 ♂♂, 2 ♀♀, on flowers of *Crataegus monogyna* Jacq., YP leg. (BFUS) (**Plate VI, 44**).

Notes: The species had been reported for Bulgaria by different authors (e.g. Joakimov 1904, Nedelkov 1905, 1909a, Netolitzky, 1912, Zacharieva-Stoilova 1974, Rössner 1997, Bunalski 2001, Petrova *et al.* 2016), is omitted for the country in the Catalogue of Palaearctic Coleoptera (Bezděk 2016).

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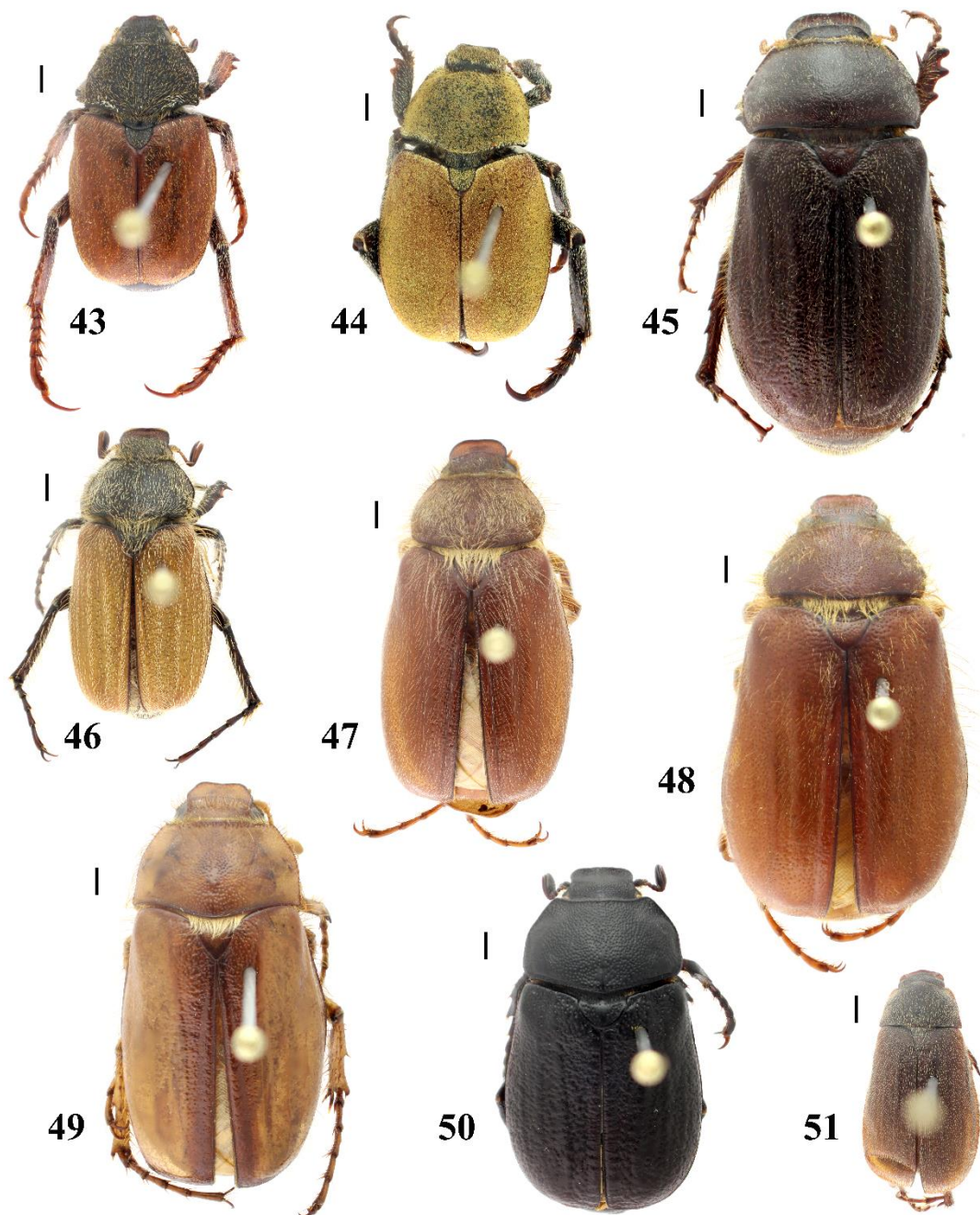


Plate VI. Scarabaeidae (Melolonthinae): 43 – *Hoplia praticola*, NW Svezhen Vill., 23.iv.2018, male; 44 – *Hoplia argentea*, the same locality, 25.v.2018, male; 45 – *Aplidia transversa*, Hrishteni Vill., 11.vi.2018, female; 46 – *Holochelus costulatus*, NW Svezhen Vill., 23.iv.2018, male; 47 – *Holochelus pilicollis*, NW Veren Vill., 23.iii. – 08.vii.2019, male; 48 – *Holochelus vernus*, between Kolena and Lyulyak Vill., 22.iv.2018, male; 49 – *Rhizotrogus aestivus*, NW Svezhen Vill., 23.iv. – 25.v.2018, male; 50 – *Pseudotrematodes frivaldszkyi*, 4,5 km SW Chehlare Vill., 22.iv.2018, male; 51 – *Triodontella dalmatica*, S Osetenovo Vill., 22.iii. – 07.vii.2019, female. Scale bars: 1 mm.

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Melolonthini Leach, 1819

***Anoxia (Anoxia) pilosa* (Fabricius, 1792)**

Izvorovo Vill. (Zacharieva 1965a: 243, as *Anoxia pillosa* F.).

****Melolontha melolontha* (Linnaeus, 1758)**

New data: Hrishteni Vill., 42°27.212'N, 25°42.315'E, 230 m a.s.l., yard of a house, 23.iv.2018, 1 ♂, DGe leg. (BFUS).

Rhizotrogini Burmeister, 1855

***Amphimallon assimile* (Herbst, 1790)**

Svezhen Vill. (= Svezhen) (Rössner & Krell 2001: 191).

***Amphimallon solstitiale solstitiale* (Linnaeus, 1758)**

Turiya Vill. (Joakimov 1904: 20, as *Rhizothrogus solstitialis* L.); Starozagorski bani Vill. (Zacharieva 1965a: 242, as *Amphimallon solstitiale* L.).

****Aplidia transversa transversa* (Fabricius, 1801)**

New data: near Stara Zagora, N of Dabrava quarter, 42°27.505'N, 25°35.617'E, 520 m a.s.l., *Quercus-Carpinus* forest, 23.v.2018, 1 ♀, DGe leg. (BFUS); Hrishteni Vill., 42°27.212'N, 25°42.315'E, 230 m a.s.l., yard of a house, on lamp, 04.vi.2018, 1 ♀, DGe leg. (BFUS); the same locality, 11.vi.2018, 1 ♀, DGe leg. (BFUS) (**Plate VI, 45**).

****Holochelus (Holochelus) costulatus* (Frivaldszky von Frivald, 1835)**

New data: NW Svezhen Vill., 42°30.649'N, 25°00.641'E, 749 m a.s.l., edge of a beech-oak forest, 23.iv.2018, 17 ♂♂, 3 ♀♀, on leaves of *Quercus* sp., at dusk, YP leg. (BFUS) (**Plate VI, 46**); NW Svezhen Vill., 42°30.605'N, 25°00.636'E, 752 m a.s.l., meadow, 23.iv. - 25.v.2018, 1 ♀, *pT*, YP & DGr leg. (BFUS).

****Holochelus (Holochelus) pilicollis pilicollis* (Gyllenhal, 1817)**

New data: Chirpan Heights, NW Veren Vill., 42°21.317'N, 25°10.783'E, 353 m a.s.l., pasture with *Paliurus spina-christi* Mill. and *Opuntia* sp., 23.iii. - 08.vii.2019, 1 ♂, *pT*, TT & NK leg. (BFUS) (**Plate VI, 47**).

***Holochelus (Miltotrogus) aequinoctialis* (Herbst, 1790)**

Stara Zagora, Ayazmoto Place (Zacharieva 1965a: 241, as *Rhizotrogus aequinoctialis* Herbst.).

***Holochelus (Miltotrogus) vernus* (Germar, 1823)**

Starozagorski bani Vill. (Zacharieva 1965a: 241, as *Rhizotrogus vernus* Germ.).

New data: on the road between Kolena and Lyulyak Vill., 42°29.388'N, 25°41.272'E, 331 m a.s.l., *Quercus-Carpinus* forest, 22.iv.2018, 1 ♂, DGe leg. (BFUS) (**Plate VI, 48**); Chirpan Heights, S Saedinenie Vill., 42°20.733'N, 25°17.683'E, 449 m a.s.l., mixed deciduous forest with undergrowth of *Ruscus* sp., 23.iii. - 08.vii.2019, 1 ♀, *pT*, TT & NK leg. (IBER).

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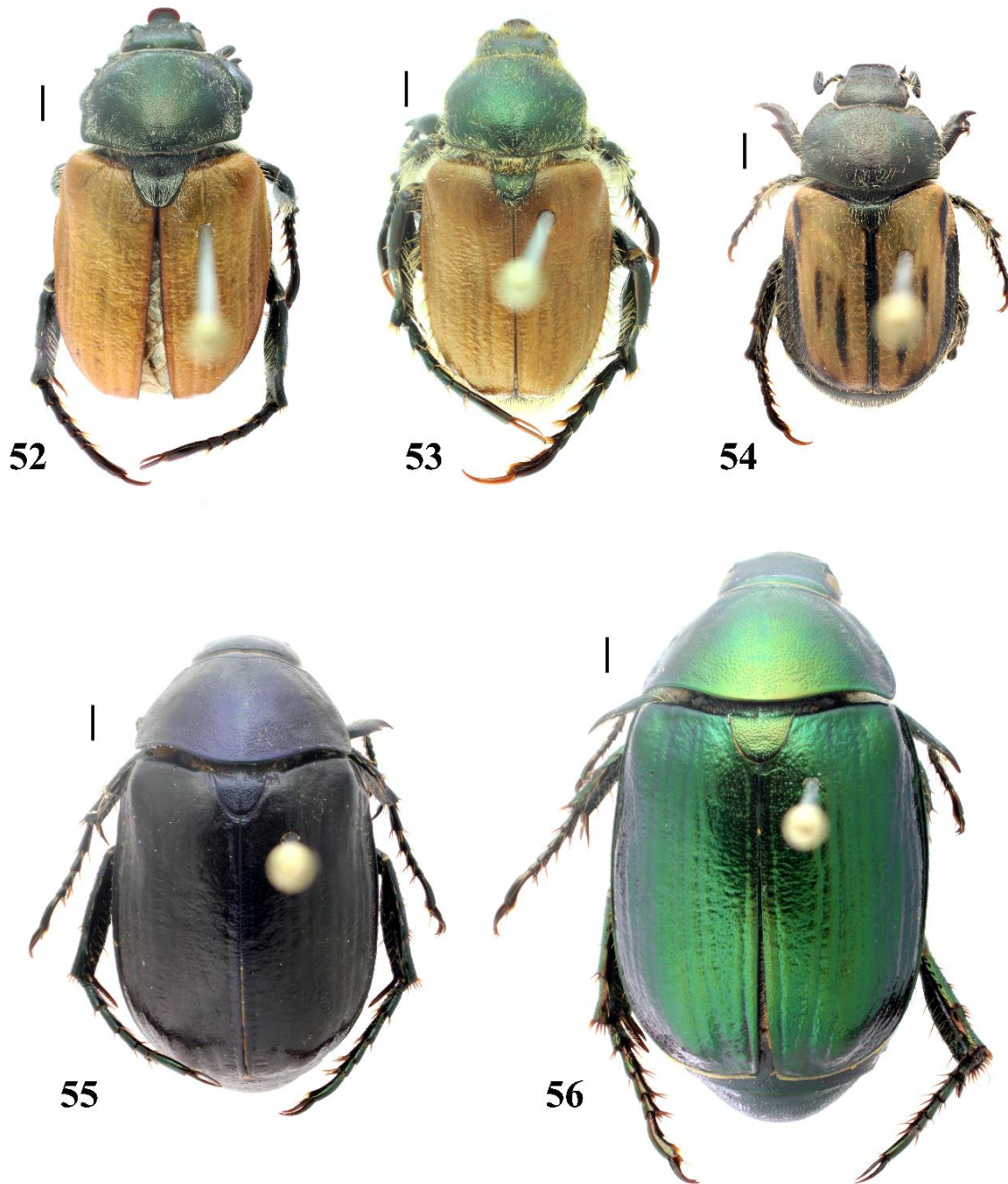


Plate VII. Scarabaeidae (Rutelinae): 52 – *Anisoplia dispar*, SE Svezhen Vill., 24.vi.2018, male; 53 – *Chaetopteroptia segetum*, 5 km SE Turiya Vill., 24.v.2018, male;; 54 – *Blitopertha lineolata*, 1 km SW Turiya Vill., 24.v.2018, female; 55, 56 – *Anomala dubia*, near Rozovets Vill., 24.vi.2018, male and female. Scale bars: 1 mm.

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****Pseudotrematodes frivaldszkyi* (Ménétriés, 1836)**

New data: 4,5 km SW Chehlare Vill., 42°24.705'N, 25°06.309'E, 440 m a.s.l., meadows, 22.iv.2018, 2 ♂♂, at flight, YP & DGr leg. (BFUS) (**Plate VI, 50**).

****Rhizotrogus aestivus* (A. G. Olivier, 1789)**

New data: NW Svezhen Vill., 42°30.591'N, 25°00.618'E, 755 m a.s.l., mixt roadside vegetation, poplar, 23.iv. - 25.v.2018, 1 ♂, *pT*, YP & DGr leg. (BFUS) (**Plate VI, 49**); S Osetenovo Vill., 42°34.2'N, 25°01.6'E, 633 m a.s.l., oak forest with undergrowth of *Ruscus* sp., 22.iii. - 07.vii.2019, 1 ex., *pT*, TT & NK leg. (IBER); Chirpan Heights, NW Veren Vill., 42°21.55'N, 25°10.617'E, 366 m a.s.l., black locust stands on sandy soil, 23.iii. - 08.vii.2019, 3 ♂♂, 2 ♀♀, *pT*, TT & NK leg. (IBER).

Sericini Kirby, 1837

***Omalopecta (Omalopecta) erythroptera* I. Frivaldszky, 1835**

Svezhen Vill. (= Sredna Gora, bei Sweshen) (Rössner & Ahrens 2004: 47).

New data: 3 km NE Mrachenik Vill., 42°30.102'N, 24°59.900'E, 805 m a.s.l., roadside verges and an oak forest, 24.v.2018, 6 ♂♂, 2 ♀♀, *p/f*, YP leg. (BFUS).

****Triodontella dalmatica* (Baraud, 1962)**

New data: 5 km SW Chehlare Vill., 42°24.709'N, 25°06.160'E, 430 m a.s.l., deciduous forest, 22.iv. - 24.v.2018, 1 ♂, *pT*, DGr & YP leg. (BFUS); S Osetenovo Vill., 42°34.2'N, 25°01.6'E, 633 m a.s.l., oak forest with undergrowth of *Ruscus* sp., 22.iii. - 07.vii.2019, 1 ♀, *pT*, TT & NK leg. (BFUS) (**Plate VI, 51**).

Rutelinae W.S. Macleay, 1819

Anomalini Streubel, 1839

****Anisoplia (Anisoplia) dispar* Erichson, 1847**

New data: NW Svezhen Vill., 42°30.645'N, 25°00.62'E, 750 m a.s.l., meadow, 23.vi.2018, 8 ♂♂, 9 ♀♀, on grasses, YP & DGr leg. (BFUS); SE Svezhen Vill., 42°29.331'N, 25°02.255'E, 798 m a.s.l., roadside verges, 24.vi.2018, 2 ♂♂, on grasses, YP & DGr leg. (BFUS) (**Plate VII, 52**).

Notes: Rarely collected species in Bulgaria. Only known from a number of localities along the Black Sea Coast (Kráľ & Malý 1993, Simandl 2002) and from Vrachanska Planina Mts. (Petrova *et al.* 2016).

****Chaetopteropia segetum balcanicola* (Machatschke, 1961)**

New data: Hrishteni Vill., 42°27.212'N, 25°42.315'E, 230 m a.s.l., yard of a house, 20.v.2018, 1 ♀, on grasses, DGe leg. (BFUS); the same locality, 03.vi.2018, 1 ♀, DGe leg. (BFUS); near Zelenikovo Vill., 42°24.943'N, 25°04.815'E, 334 m a.s.l., roadside verges, 24.v.2018, 2 ♂♂, 1 ♀, DGr leg. (BFUS); the same data, 42°24.969'N, 25°04.815'E, 330 m a.s.l., 3 ♂♂, 2 ♀♀, YP leg. (BFUS); 5 km SE Turiya Vill., 42°31.786'N, 25°11.763'E, 565 m a.s.l., riverside meadows, roadside verges, 24.v.2018, 2 ♂♂, YP leg. (BFUS) (**Plate VII, 53**); 2 km N Brezovo, 42°22.069'N, 25°04.867'E, 276 m a.s.l., roadside verges next to agricultural fields, 25.v.2018, 3 ♂♂, 2 ♀♀, DGr leg. (BFUS).

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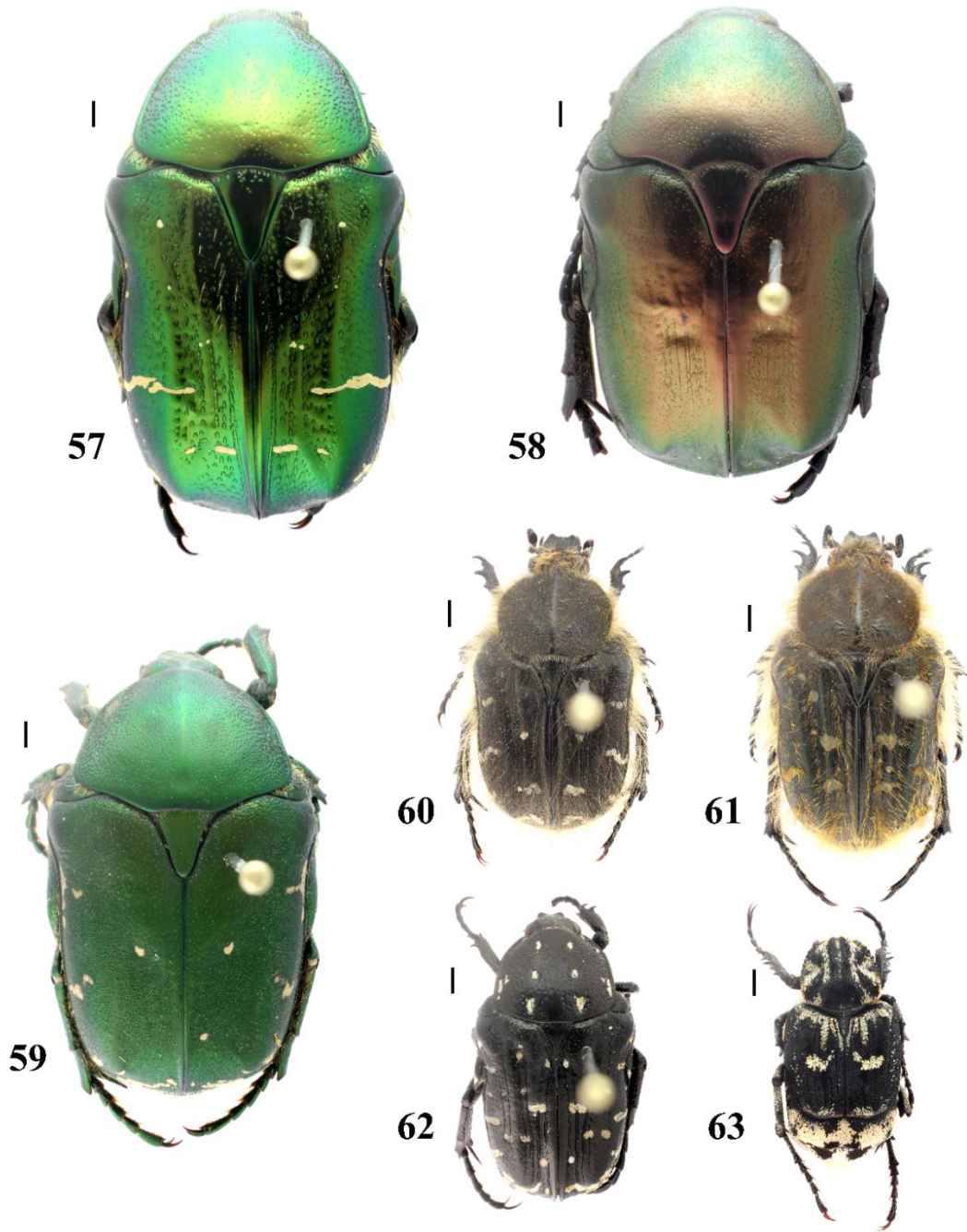


Plate VIII. Scarabaeidae (Cetoniinae): 57 – *Cetonia aurata aurata*, near Zelenikovo Vill., 22.iv.2018, female; 58 – *Protaetia affinis*, 1 km SE Gorno Novo Selo Vill., 24.vi.2018, female; 59 – *Protaetia ungarica*, SE Begunsi Vill., 23.v.2018, male; 60 – *Tropinota hirta suturalis*, near Rozovets Vill., 23.iv.2018, female; 61 – *Tropinota squalida*, the same locality and date, female; 62 – *Oxythyrea funesta*, 500 m SW Turiya Vill., 26.viii.2018, male; 63 – *Valgus hemipterus*, near Zelenikovo Vill., 22.iv.2018, male. Scale bars: 1 mm.

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***Anomala dubia dubia* (Scopoli, 1763)**

Sredna Gora/S of Turiya Vill. (Joakimov 1904: 19, as *Anomala aenea* Dej.).

New data: near Rozovets Vill., bank of Stara Reka Riv., 42°27.685'N, 25°07.232'E, 469 m a.s.l., riverside vegetation, 24.vi.2018, 1 ♂, 1 ♀, on leaves *Alnus glutinosa* (L.) Gaertn., DGr leg. (BFUS) (**Plate VII, 54, 55**).

****Blitopertha lineolata lineolata* (Fischer von Waldhelm, 1824)**

New data: N of Dalboki Vill., 42°29.500'N, 25°46.222'E, 330 m a.s.l., rocks and shrubs near a small river, 06.v.2018, 1 ♀, DGe leg. (BFUS); 3 km NE Mrachenik Vill., 42°30.102'N, 24°59.900'E, 805 m a.s.l., roadside verges, 24.v.2018, 2 ♂♂, 1 ♀, YP leg. (BFUS); 2 km NE Mrachenik Vill., 42°30.260'N, 24°59.074'E, 717 m a.s.l., meadows and shrubs, 24.v.2018, 3 ♂♂, 2 ♀♀, *p/f*, YP & DGr leg. (BFUS); near Zelenikovo Vill., 42°24.943'N, 25°04.815'E, 334 m a.s.l., roadside verges, 24.v.2018, 1 ♂, 1 ♀, *p/f*, DGr leg. (BFUS); the same data, 42°24.969'N, 25°04.815'E, 330 m a.s.l., 1 ♂, *p/f*, YP leg. (BFUS); 1,5 km NW Babek Vill., 42°27.384'N, 25°04.172'E, 512 m a.s.l., meadows, 24.v.2018, 1 ♂, *p/f*, DGr & IGr. leg. (BFUS); the same locality, 23.vi.2018, 2 ♀♀, *p/f*, YP & DGr leg. (BFUS); 5 km SE Turiya Vill., 42°31.786'N, 25°11.763'E, 565 m a.s.l., riverside meadows, 24.v.2018, 1 ♂, 1 ♀, *p/f*, YP leg. (BFUS); 1 km SW Turiya Vill., 42°33.862'N, 25°10.386'E, 480 m a.s.l., meadows and roadside verges, 24.v.2018, 1 ♂, 1 ♀, *p/f*, YP leg. (BFUS) (**Plate VII, 56**); on the road to Moruley Peak, 42°31.462'N, 25°45.530'E, 620 m a.s.l., *Quercus-Carpinus* forest, forest glades, 07.vi.2018, 2 ♂♂, DGe leg. (BFUS); 3 km NW Gorno Novo Selo Vill., 42°28.430'N, 25°13.294'E, 808 m a.s.l., meadows and roadside verges, 24.vi.2018, 1 ♀, *p/f*, YP & DGr leg. (BFUS); 1 km SW Turiya Vill., 42°33.829'N, 25°10.442'E, 488 m a.s.l., hillside, meadows, 24.vi.2018, 2 ♀♀, YP & IGr. leg. (BFUS); NE Varben Vill., 42°25.7'N, 24°58.45'E, 380 m, pasture and edge of oak forest, 01.vi.2019, 1 ♀, TT leg. (IBER).

Dynastinae W.S. Macleay, 1819

Oryctini Mulsant, 1842

***Oryctes (Oryctes) nasicornis kuntzeni* Minck, 1914**

Sredna Gora/S of Turiya Vill. (Joakimov 1904: 19, as *Oryctes grypus* Illig).

New data: Hrishteni Vill., 42°27.212'N, 25°42.315'E, 230 m a.s.l., yard of a house, 27.v.2018, 1 ♂, DGe leg. (BFUS); Varben Vill., 42°25.267'N, 24°58.00'E, 328 m, house yard, 08.vii.2019, 1 ♂, TT & NK leg.

Pentodontini Mulsant, 1842

****Pentodon idiota idiota* (Herbst, 1789)**

New data: Hrishteni Vill., 42°27.063'N, 25°42.153'E, 227 m a.s.l., near outbuildings, 29.iv.2018, 1 ♀, in spider web, DGe leg. (BFUS); Hrishteni Vill., 42°27.212'N, 25°42.315'E, 230 m a.s.l., near the yard of a house, 20.v.2018, 1 ♀, found dead, DGe leg. (BFUS).

Cetoniinae Leach, 1815

Cetoniini Leach, 1815

***Cetonia (Cetonia) aurata aurata* (Linnaeus, 1761)**

Starozagorski bani Vill. (Zacharieva 1965a: 248, as *Cetonia aurata* L.

New data: near Zelenikovo Vill., 42°24.943'N, 25°04.815'E, 334 m a.s.l., roadside verges, 22.iv.2018, 1 ♀, on flowers of *Syringa vulgaris* L., YP leg. (BFUS) (**Plate VIII, 57**); 4,5 km SW Chehlaré Vill., 42°24.689'N, 25°06.265'E, 442 m a.s.l., meadows and shrubs, 22.iv.2018, 3 ♂♂, 2 ♀♀, on flowers of *Crataegus monogyna* Jacq., YP leg. (BFUS); 2,5 km SE Domlyan Vill., 42°30.776'N, 24°55.298'E, 448 m a.s.l., meadows and shrubs, 23.iv. - 25.v.2018, 1 ♀, *pT*, DGr & YP leg. (BFUS); Hrishteni Vill., 42°27.212'N, 25°42.315'E, 230 m a.s.l., yard of a house, 24.iv.2018, 1 ♀, on the trunk of *Pyrus communis* L., DGe leg. (BFUS); 3 km NE

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Mrachenik Vill., 42°30.123'N, 24°59.887'E, 809 m a.s.l., oak forest, 24.v. - 23.vi.2018, 1 ♀, *pT*, DGr & YP leg. (BFUS); NW Svezhen Vill., 42°30.649'N, 25°00.641'E, 749 m a.s.l., edge of a beech-oak forest, 25.v.2018, 1 ♂, 1 ♀, *p/f*, YP leg. (BFUS); NW Svezhen Vill., 42°30.616'N, 25°00.680'E, 746 m a.s.l., meadows and shrubs, 23.vi. - 21.vii.2018, 1 ♀, *pT*, DGr & YP leg. (BFUS); 3 km SE Svezhen Vill., 42°28.875'N, 25°03.264'E, 763 m a.s.l., meadows and roadside verges, 24.vi.2018, 1 ♂, YP & DGr leg. (BFUS); near Kavakliyka Chalet, 42°29.123'N, 25°13.411'E, 975 m a.s.l., meadows, 24.vi.2018, 1 ♀, YP leg. (BFUS); 3 km NW Gorno Novo Selo Vill., 42°28.430'N, 25°13.294'E, 808 m a.s.l., meadows and roadside verges, 24.vi.2018, 1 ♀, *p/f*, YP leg. (BFUS); the same data, 42°28.433'N, 25°13.304'E, 807 m a.s.l., 22.vii.2018, 1 ♀, YP leg. (BFUS); 5 km SW Chehlare Vill., 42°24.707'N, 25°06.158'E, 431 m a.s.l., roadside vegetation, 21.vii.2018, 2 ♂♂, *p/f*, YP & DGr leg. (BFUS); near Turya Vill., 42°34.107'N, 25°10.303'E, 457 m a.s.l., ruderal meadow, 22.vii.2018, 3 ♂♂, 1 ♀, on flowers of *Dipsacus* sp., DGr leg. (BFUS); Chirpan Heights, N Sredno Gradishte Vill., 42°19.35'N, 25°17.65'E, 418 m a.s.l., oak-hornbeam forest, 23.iii. - 08.vii.2019, 1 ♂, 1 ♀, *pT*, TT & NK leg. (IBER); Chirpan Heights, NW Veren Vill., 42°21.55'N, 25°10.617'E, 366 m a.s.l., black locust stands on sandy soil, 23.iii. - 08.vii.2019, 1 ♀, *pT*, TT & NK leg. (IBER); near Bratan Hut, 42°30.333'N, 25°09.133'E, 1200 m, 20.vi.2020, 2 ♂♂, 1 ♀, TT & NK leg. (IBER).

****Protaetia (Cetonischema) speciosissima (Scopoli, 1786)***

New data: 500 m SW Turiya Vill., 42°34.111'N, 25°10.346'E, 460 m a.s.l., meadows and roadside vegetation, 26.viii.2018, 1 ex. YP & ECh obs.

****Protaetia (Eupotosia) affinis affinis (Andersch, 1797)***

New data: 1 km SE Gorno Novo Selo Vill., 42°26.532'N, 25°13.573'E, 468 m a.s.l., roadside vegetation, 24.vi.2018, 1 ♀, DGr leg. (BFUS) (**Plate VIII, 58**).

Notes: Widely distributed in Europe but rarely collected species in Bulgaria, known from several localities in the Danube Plain (Joakimov 1904, Markovich 1904, 1909, Kovachev 1905, Nedelkov 1905,) and Southern Black Sea Coast (Simandl 2002).

****Protaetia (Philhelena) ungarica ungarica (Herbst, 1790)***

New data: SE Beguntsi Vill., near Byala Reka Riv., 42°32.601'N, 24°53.247'E, 321 m a.s.l., riverside meadows, 23.v.2018, 1 ♂, YP & DGr leg. (BFUS) (**Plate VIII, 59**).

Tropinota (Epicometis) hirta hirta (Poda von Neuhaus, 1761)

Starozagorski bani Vill. (Zacharieva 1965a: 247, as *Epicometes* [sic!] *hirta* Poda.

New data: N of Lyuyak Vill., 42°31.297'N, 25°39.937'E, 427 m a.s.l., grasses and shrubs, 21.iv.2018, 1 ♀, DGe leg. (BFUS); near Babek Vill., 42°26.262'N, 25°04.794'E, 388 m a.s.l., meadows with *Ranunculus* sp., 22.iv.2018, 3 ♂♂, 11 ♀♀, *p/f*, YP leg. (BFUS); near Zelenikovo Vill., 42°24.943'N, 25°04.815'E, 334 m a.s.l., roadside verges, 22.iv.2018, 3 ♂♂, 5 ♀♀, *p/f*, YP leg. (BFUS); 4,5 km SW Chehlare Vill., 42°24.689'N, 25°06.265'E, 442 m a.s.l., meadows and shrubs, 22.iv.2018, 4 ♂♂, 1 ♀, on flowers of *Crataegus monogyna* Jacq., YP leg. (BFUS); 2,5 km SE Domlyan Vill., 42°30.764'N, 24°55.321'E, 448 m a.s.l., meadows and shrubs, 23.iv.2018, 4 ♂♂, 2 ♀♀, on flowers of *Crataegus monogyna* Jacq., YP & DGr leg. (BFUS); near Rozovets Vill., 42°27.198'N, 25°06.573'E, 431 m a.s.l., roadside verges, 23.iv.2018, 1 ♀, *p/f*, YP & DGr leg. (BFUS) (**Plate VIII, 60**); Chirpan Heights, Bratya Daskalovi Vill., 42°17.875'N, 25°13.297'E, 241 m a.s.l., grasses and shrubs, edge of pine forest (*Pinus nigra* J.F.Arnold), 26.iv.2018, 1 ♀, DGe leg. (BFUS); 1 km SE Svezhen Vill., 42°29.377'N, 25°02.429'E, 793 m a.s.l., meadows, 23.v.2018, 1 ♀, *p/f*, DGr leg. (BFUS); SE Beguntsi Vill., near Byala Reka Riv., 42°32.601'N, 24°53.247'E, 321 m a.s.l., riverside meadows, 23.v.2018, 1 ♀, YP & DGr leg. (BFUS); 2 km NE Mrachenik Vill., 42°30.260'N,

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24°59.074'E, 717 m a.s.l., meadows and shrubs, 24.v.2018, 1 ♂, 1 ♀, *p/f*, YP & DGr leg. (BFUS); 3 km NE Mrachenik Vill., 42°30.102'N, 24°59.900'E, 805 m a.s.l., roadside verges and an oak forest, 24.v.2018, 1 ♂, 1 ♀, YP leg. (BFUS); 5 km SE Turiya Vill., 42°31.786'N, 25°11.763'E, 565 m a.s.l., roadside verges, 24.v.2018, 1 ♂, *p/f*, YP & DGr leg. (BFUS); 1 km SW Turiya Vill., 42°33.862'N, 25°10.386'E, 480 m a.s.l., meadows and roadside verges, 24.v.2018, 1 ♀, *p/f*, YP leg. (BFUS); NW Svezhen Vill., 42°30.649'N, 25°00.641'E, 749 m a.s.l., edge of a beech-oak forest, 25.v.2018, 1 ♀, *p/f*, YP leg. (BFUS); 2 km N Brezovo, 42°22.069'N, 25°04.867'E, 276 m a.s.l., roadside verges next to agricultural fields, 25.v.2018, 1 ♂, 1 ♀, *p/f*, DGr leg. (BFUS); near Babek Vill., 42°26.258'N, 25°04.815'E, 390 m a.s.l., pasture, 23.vi.2018, 1 ♀, *p/f*, YP & DGr leg. (BFUS); SE Svezhen Vill., 42°29.331'N, 25°02.255'E, 798 m a.s.l., roadside verges, 24.vi.2018, 1 ♀, *p/f*, YP & DGr leg. (BFUS); 5 km SE Turiya Vill., 42°31.786'N, 25°11.763'E, 565 m a.s.l., riverside meadows, roadside verges, 24.vi.2018, 1 ♂, *p/f*, YP & DGr leg. (BFUS).

****Tropinota (Tropinota) squalida squalida* (Scopoli, 1763)**

New data: near Babek Vill., 42°26.262'N, 25°04.794'E, 388 m a.s.l., meadows with *Ranunculus* sp., 22.iv.2018, 2 ♂♂, *p/f*, YP leg. (BFUS); near Rozovets Vill., 42°27.198'N, 25°06.573'E, 431 m a.s.l., roadside verges, 23.iv.2018, 2 ♀♀, *p/f*, YP & DGr leg. (BFUS) (**Plate VIII, 61**); near Babek Vill., 42°26.258'N, 25°04.815'E, 390 m a.s.l., pasture, 23.vi.2018, 1 ♀, *p/f*, YP & DGr leg. (BFUS).

***Oxythyrea cinctella* (Schaum, 1841)**

Turiya Vill. (Joakimov 1904: 19, as *Leucocelis cinctella* Steph.).

****Oxythyrea funesta* (Poda von Neuhaus, 1761)**

New data: near Babek Vill., 42°26.262'N, 25°04.794'E, 388 m a.s.l., meadows with *Ranunculus* sp., 22.iv.2018, 1 ♂, YP leg. (BFUS); near Babek Vill., 42°26.258'N, 25°04.815'E, 390 m a.s.l., pasture, 23.vi.2018, 1 ♀, *p/f*, YP & DGr leg. (BFUS); near Turiya Vill., 42°34.107'N, 25°10.303'E, 457 m a.s.l., ruderal meadow, 22.vii.2018, 7 ♂♂, 1 ♀, on flowers of *Dipsacus* sp., DGr leg. (BFUS); SE Svezhen Vill., 42°29.333'N, 25°02.280'E, 804 m a.s.l., pasture, 25.viii.2018, 2 ♂♂, *p/f*, YP leg. (BFUS); 500 m SW Turiya Vill., 42°34.111'N, 25°10.346'E, 460 m a.s.l., meadows and roadside vegetation, 26.viii.2018, 4 ♂♂, *p/f*, YP & DGr leg. (BFUS) (**Plate VIII, 62**).

Trichiini Fleming, 1821

***Gnorimus nobilis nobilis* (Linnaeus, 1758)**

Turiya Vill. (Joakimov 1904: 19, as *Gnorimus nobilis* L.).

***Gnorimus variabilis* (Linnaeus, 1758)**

Sredna Gora/S of Turiya Vill. (Joakimov 1904: 19).

Valgini Mulsant, 1842

****Valgus hemipterus hemipterus* (Linnaeus, 1758)**

New data: near Babek Vill., 42°26.262'N, 25°04.794'E, 388 m a.s.l., meadows with *Ranunculus* sp., 22.iv.2018, 1 ♂, sweeping, DGr leg. (BFUS); near Zelenikovo Vill., 42°24.943'N, 25°04.815'E, 334 m a.s.l., roadside verges, 22.iv.2018, 1 ♂, on flowers of *Syringa vulgaris* L., YP leg. (BFUS) (**Plate VIII, 63**); 4,5 km SW Chehlare Vill., 42°24.689'N, 25°06.265'E, 442 m a.s.l., meadows and shrubs, 22.iv.2018, 1 ♂, on flowers of *Crataegus monogyna* Jacq., YP leg. (BFUS); near Pavel Banya, right bank of Tundzha Riv., 42°36.193'N, 25°12.263'E, 409 m a.s.l., riverside pasture, 23.iv.2018, 1 ♂, DGr leg. (BFUS); Hrishteni Vill., 42°27.212'N, 25°42.315'E, 230 m a.s.l., yard of a house, 23.iv.2018, 1 ♀,

SCARABAEOIDEA

DGe leg. (BFUS); NW of Zmeyovo Vill., 42°30.197'N, 25°36.025'E, 445 m a.s.l., grasses and shrubs near to alfalfa and fennel (*Foeniculum vulgare* Mill.) stands, 24.iv.2018, 2 ♂♂, DGe leg. (BFUS); SE Beguntsi Vill., near Byala Reka Riv., 42°32.601'N, 24°53.247'E, 321 m a.s.l., riverside meadows, 23.v.2018, 3 ♂♂, p/f, DGr leg. (BFUS); 2 km NE Mrachenik Vill., 42°30.260'N, 24°59.074'E, 717 m a.s.l., roadside meadows and shrubs, 24.v.2018, 1 ♂, YP leg. (BFUS).

Conclusions

Five families and 100 species of Scarabaeoidea from Sarnena Sredna Gora Mts. are included in the list. Of these 63 species are new for the region and for 84 species new locality records are presented. Sixteen species are known only from old records in the literature.

The Western part of Sarnena Gora Mts. can be considered well studied area in regard to Scarabaeoidea with 78 species from various habitats recorded. The Eastern part was not systematically sampled and the data is insufficient for assesment of the species richness. The poorly studied region of Chirpan Heights is presented with only 18 species records. The sampling sites of three species – *Trox niger*, *Sisyphus schaefferi schaefferi* and *Cetonia aurata aurata* are the only situated within the territory of NATURA site “Chirpanski vazvishenia” (site code BG0000628).

The current species records for Sarnena Gora Mts. are approximately a third of all Scarabaeoidea species in Bulgaria – about 300 species according to Petrova *et al.* (2016). For the neighbouring regions – the Upper Thracian Plain, and for both Central and Eastern Stara Planina Mts., 99 and 108 species respectively, are known at present (Zacharieva 1965a, Zacharieva-Stoilova 1974). Considering the data presented and the fact that a few systematic faunistic studies concerning Scarabaeoidea in Bulgaria were recently published, we conclude that Sarnena Gora Mts. is a relatively well studied distinct area in the country.

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