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CONTRIBUTION TO THE WEEVILS (COLEOPTERA, CURCULIONOIDEA) OF KEFALONIA ISLAND (GREECE)

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Abstract

The knowledge on the fauna of Curculionoidea of Kefalonia Island is compiled, recent data from a collection trip in spring (10 days in April and May) 2017 are added, and an updated checklist is provided and discussed. At present 231 species belonging to seven families (Anthribidae, Apionidae, Brachyceridae, Curculionidae, Dryophthoridae, Nanophyidae and Rhynchitidae) are reported from Kefalonia, from which 108 are recorded in the present paper as new to the island. *Ceutorhynchus pectoralis* Weise, 1895, *Pachyrhinus lethierryi* (Desbrochers des Loges, 1875), *Perapion oblongum* (Gyllenhal, 1839) and *Polydrusus cervinus* (Linnaeus, 1758) are reported for the first time from Greece.

Keywords: Curculionoidea, island fauna, new records, faunistics, checklist, Greece, Ionian islands, Kefalonia

Introduction

Kefalonia is the largest of the Ionian Islands of Greece with an area of 786.58 km². Mountain Ainos (Enos) reaches 1628 m a.s.l., and that makes it the highest mountain of the Ionian Islands (wikipedia 2018). The fauna of Kefalonia is comparatively rich. Its beetle fauna has been explored by Miller, at his 1862 expedition, who recorded 60 Curculionoidea (Miller 1862) and subsequent contribution was made by Kiesenwetter (1864), who included Miller's records. Von Oertzen (1886) compiled the records in the first Greek catalogue. Since then only occasional data on Kefalonian weevil fauna were published (e.g. Apfelbeck 1922: *Polydrusus cephalonicus*; Wagner 1912: *Exapion winkleri*; Schilsky 1911: *Phyllobius insulanus*; Osella & Bellò 2010: *Minyops insularis* Osella & Bellò 2010; Borovec & Germann 2013: *Polydrusus moricei* Pic, 1903) or later in the catalogues of Greek weevils (Bahr et al. 2017; Germann et al. 2018). In the present contribution we give an overview on the weevil fauna of the island, with additional records of 108 species, as a result of a ten days' collecting trip.

weevils (Curculionoidea) of Kefalonia Island

Material and methods

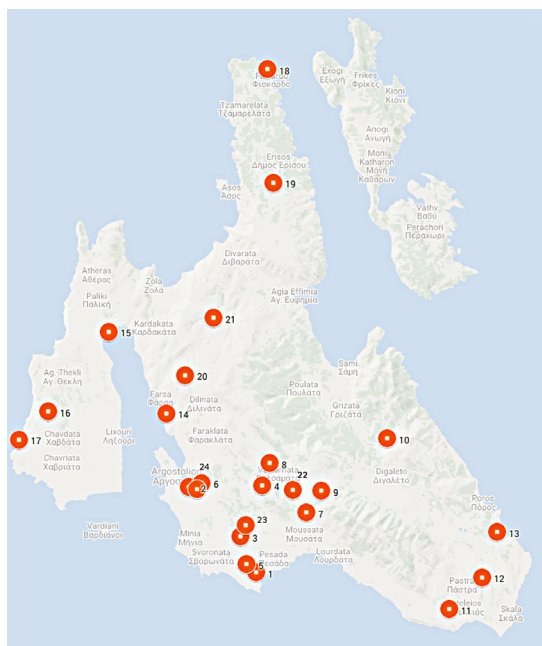


Fig. 1. Map with all 24 sampled localities on Kefalonia island (copyright: google).

During an excursion from 27th April to 5th May 2017 we sampled 24 localities throughout the island. Weevils were hand-collected directly on plants, swept or beaten off vegetation with a sweeping net or a beating tray, and sifted from leaf litter and cushion plants using a beetle sifter with grid of 7 mm and 10 mm width. To collect nocturnal species (e.g. *Otiiorhynchus* Germar, 1822) field work during night hours was done. In total 24 localities were sampled (Table 1), over the island to cover as much of the landscape diversity as possible (Figure 1).

The collected specimens are conserved in the author's collections and in the collections of the Naturmuseum Solothurn and Naturhistorisches Museum Bern (both Switzerland). All data will be submitted, becoming freely available, to the Catalogue of Greek weevils (Germann et al. 2018). In the course of a reliable identification of a *Phyllobius*-species, type specimens from the Museum für Naturkunde, Berlin (MFN) were examined. Nomenclature used follows Alonso-Zarazaga et al. (2017).

Table 1. Sampled localities on Kefalonia (altitude in m a.s.l.; coordinates are given in decimal degrees).

Nr.	Locality
-----	----------

- | | |
|----|---|
| 1 | Spartia surroundings, 38.1039 N, 20.5622 E, 30 m, cropland, 27.4. |
| 2 | Argostoli, 38.1656 N, 20.5006 E, 5 m, city park, 27.4. |
| 3 | NE Metaxata, 38.1299 N, 20.5475 E, 50 m, olive trees, 28.4. |
| 4 | NE Troianata, 38.1669 N, 20.5679 E, 450 m, 28.4. |
| 5 | S Korianna, 38.1098 N, 20.5533 E, valley with a spring, 28.4. |
| 6 | E Argostoli, 38.1685 N, 20.5120 E, 20 m, dry slope, night catches, 28.4. |
| 7 | SE Epanochori, 38.1471 N, 20.6085 E, dry slope, 29.4. |
| 8 | NW Valsamata, 38.1828 N, 20.5743 E, <i>Quercus</i> forest, 29.4. |
| 9 | Mt. Ainos, 38.1628 N, 20.6220 E, <i>Abies cephalonica</i> forest, 1100 m, 29.4. |
| 10 | E Koulourata, 38.2006 N, 20.6825 E, 320 m, 29.4. |
| 11 | NE Katelios, 38.0774 N, 20.7394 E, 185 m, 30.4. |
| 12 | N Spathi, 38.1004 N, 20.7699 E, 270 m, 30.4. |
| 13 | S Poros, 38.133 N, 20.7835 E, 170 m, 30.4. |
| 14 | S Farsa, 38.2185 N, 20.4796 E, 100 m, dry slope with <i>Euphorbia</i> , 1.5. |
| 15 | N Livadi, 38.2774 N, 20.427 E, 2 m, wetland, 1.5. |
| 16 | W Kaminarata, 38.2199 N, 20.3713 E, 420 m, 2.5. |
| 17 | SW Kaminarata, 38.1997 N, 20.3444 E, 150 m, 2.5. |
| 18 | N Fiskardo, 38.466 N, 20.5728 E, 2 m, coastal forest, 3.5. |
| 19 | W Vari, 38.3845 N, 20.5780 E, 430 m, <i>Quercus</i> forest, 3.5. |

- 20 NW Dilinata, 38.2461 N, 20.4972 E, 600 m, 4.5.
- 21 SW Makriotika, 38.2875 N, 20.5231 E, 620 m, 4.5.
- 22 E Moni Agiou Gerasimou, 38.1635 N, 20.5958 E, 460 m, 4.5.
- 23 Kastro, 38.1382 N, 20.5529 E, 250 m, 5.5.
- 24 SE Argostoli, 38.1639 N, 20.5077 E, 5 m, swampy area, 5.5.

Results & discussion

Overview

Altogether 2051 specimens in 171 species were collected during the present collecting trip. Together with the consulted references, 231 species are at present known from Kefalonia (Appendix). This number definitely exceeds the species numbers recorded for other Greek islands of more or less similar sizes, as Samos (Germann et al. 2015, Germann 2017) with 156 species, Lesbos (Germann & Braunert 2016) with 172 species and Rhodes with 166 species (Bayer et al. 2007, Germann & Braunert 2016). In relation to island size, the present ratio is closest to the considerable high one of Samos (Samos: 478 km²; 0.32, Kefalonia: 786 km²; 0.29). However, it is clear that all these numbers are of preliminary nature and with further collecting efforts a couple of additional species will be added.

Habitats

Roughly eight different habitat types were investigated (Figures 2-9) and typical species found are listed:



Fig. 2: phrygana vegetation near Troianata, 450 m.



Fig. 3: mountain meadow and margin of *Abies cephalonica* forest, on Mt. Ainos, 1100 m.



Fig. 4: humid place along rivulet, dense forest remains, at Koulourata, 320 m.



Fig. 5: dry coast habitat dominated by bushes of *Euphorbia dendroides*, Farsa, 100 m.

weevils (Curculionoidea) of Kefalonia Island



Fig. 6: *Quercus* forest with mainly evergreen oaks (*Q. ilex*, *Q. coccifera*) at Valsamata.



Fig. 7: humid habitat, river delta, near Argostoli, 5 m.



Fig. 8: olive orchard and crop-area at Moni Agiou Gerasimou, 460 m.



Fig. 9: riparian halophytic vegetation, at Livadi, 2 m.

1. Phrygana vegetation with *Donus capiomonti*, *D. cyrtus*, *Exapion winkleri*, *Miarus rotundicollis* (localities 4, 20) (Fig. 2).
2. Mountain meadows and margin of *Abies cephalonica*-forests with *Auchmeresthes kiesenwetteri*, *Otiorhynchus cephalonicus*, *O. jovis*, *Parascythopus apollinis*, *Styphlidius brevisetis*, *Styphlus jonicus* (locality 9) (Fig. 3).
3. Humid places along rivulets, dense forest remains with *Acallocrates denticollis*, *Echinodera brisouti*, *E. corcyrensis*, *E. ingowolffi* and *E. soumasi* (localities 10, 12, 13, 19) (Fig. 4).
4. Dry coast habitats dominated by bushes of *Euphorbia dendroides*, with *Mecinus comosus*, *M. pascuorum*, *Omphalapion dispar*, *Otiorhynchus anadolicus*, *O. lugens*, *Smicronyx jungermanniae*, *S. pauperculus*, *S. syriacus*, *Trichosirocalus campanella*, *T. rufulus* (localities 6, 14) (Fig. 5).
5. *Quercus* forests with mainly evergreen oaks (*Q. ilex*, *Q. coccifera*): *Orchestes hirtellus*, *O. irroratus*, *Phyllobius insulanus*, *Polydrusus armatus*, *P. cephalonicus*, *P. jucundus*, *P. moricei* (localities 8, 19) (Fig. 6).
6. Humid habitats, river deltas with *Bagous robustus*, *Gymnetron veronicae*, *Protapion difforme* (localities 15, 24) (Fig. 7).
7. Olive orchards and crop-areas with e.g. *Catapion pubescens*, *Ceratapion gibbirostre*, *Ceutorhynchus duvali*, *Microplontus rugulosus* (localities 3, 11) (Fig. 8).
8. Riparian halophytic vegetation with *Otiorhynchus championi*, *Perapion violaceum* and *Coniatus tamarisci*, *Dieckmanniellus nitidulus* on *Tamarix* sp. (locality 15) (Fig. 9).

Endemism

There are some remarkable island endemics on Kefalonia, the vast majority belonging to the subfamily Entiminae. The genus *Otiorhynchus* is represented by *O. cephalonicus* Pic, 1902 (Fig. 10), *Otiorhynchus graecus graecoinsularis* Reitter, 1914 (Fig. 11; before its description listed as *O. armatus* as e.g. in Miller 1862), *Otiorhynchus picimanus picimanus* Stierlin, 1861 - which however was not re-found during the present excursion - and most likely *Polydrusus cephalonicus* Apfelbeck, 1922 (Fig. 12), while records from Cyprus as given in Alonso-Zarazaga et al. (2017) are for sure wrong. The only endemic species from the subfamily Curculioninae is *Styphlidius brevisetis* Osella, 1981 (Fig. 13).

Otiorhynchus concavirostris Reitter, 1912 (Fig. 15) is definitely not endemic to Kefalonia, as the morphological comparison with specimens from Peloponnese showed that they belong to the same species. The same stands for *O. gravidus* Stierlin, 1872 (Fig. 14) which is also known from Corfu. The apionid species *Exapion winkleri* (Wagner, 1912) (Fig. 16) was described from Kefalonia and Zakynthos by Wagner (1912), recent records from Peloponnese (see Germann et al. 2018) suggest even a wider distribution. Two more species present to Kefalonia, are endemic to the Ionian Islands: *Minyops insularis* Osella & Bellò, 2010 and *Polydrusus moricei* Pic, 1903 (Fig. 17).

Remarkable species, comments and observations

Kefalonia is a type locality of four species with a larger distribution: *Chiloneus jonicus* Kraatz, 1859 - not re-found during the present excursion - described based on specimens collected close to Argostoli (Kraatz 1859) with records from Achaia and Rhodes (Germann et al. 2018), *Orchestes hirtellus* Miller, 1862, *Phyllobius insulanus* Schilsky, 1911, and *Ph. montanus* Miller, 1862. Interestingly, *Ph. montanus* originally described by Miller (1862) from Mount Enos of Kefalonia was not found, but *Ph. insulanus* was collected instead. This species was also described from Kefalonia by Schilsky (1911), but seems to have a wider distribution too, as the attributed (and hereby confirmed) synonym *vagus* Schilsky, 1911 was mentioned by the author himself from several Greek Islands as Corfu (1 ex. Val di Ropa, leg. O. Leonhard, MFN), Zante (= Zakynthos; 13 exx. leg. O. Leonhard, and additional 3 syntypes of *Ph. vagus*, MFN) and Samos (1 ex. "Samos Pic", MFN) far more in the East, omitted by Germann et al. (2015), and Germann (2017). The considerable differences between *Ph. montanus* and *Ph. insulanus* could be studied in detail, based furthermore on the examination of the syntype series of the latter (Figs 19-20), consisting of 5 syntypes (Kephallenia 1905 Megalo Vuno, leg. O. Leonhard, conserved in the Schilsky-collection in the MFN).

Unfortunately no specimens of *Hemitrichapion montanum* Miller, 1862 were collected. Miller (1862) described *H. montanum* from Mount Enos of Kefalonia. The species is at present a synonym of *H. waltoni* (Stephens, 1839) (or *H. juniperi* Boheman, 1839, depending on the acceptance of the validity of the species, which is controversial).

On *Ephedra* sp. growing from the walls of the Agios Georgios castle, the very colourful magnificent *Neoxyonyx strigatirostris* (Hochhuth, 1847) (Fig. 23) was collected in more than a dozen of specimens.

A remarkable number of Cryptorhynchinae was recorded for the first time from Kefalonia using the sifting method, among them four species of the genus *Echinodera*: *E. brisouti* Reitter, 1885 and *E. corcyrensis* Stüben, 2008, both described from Corfu (Reitter 1885, Stüben 2008), *E. ingowolffi* Stüben, 1998 described from Epirus (Stüben 1998) and *E. soumasi* described from both, Peloponnese and Epirus (Germann et al. 2015). It is remarkable that these four species can co-occur on a single island.

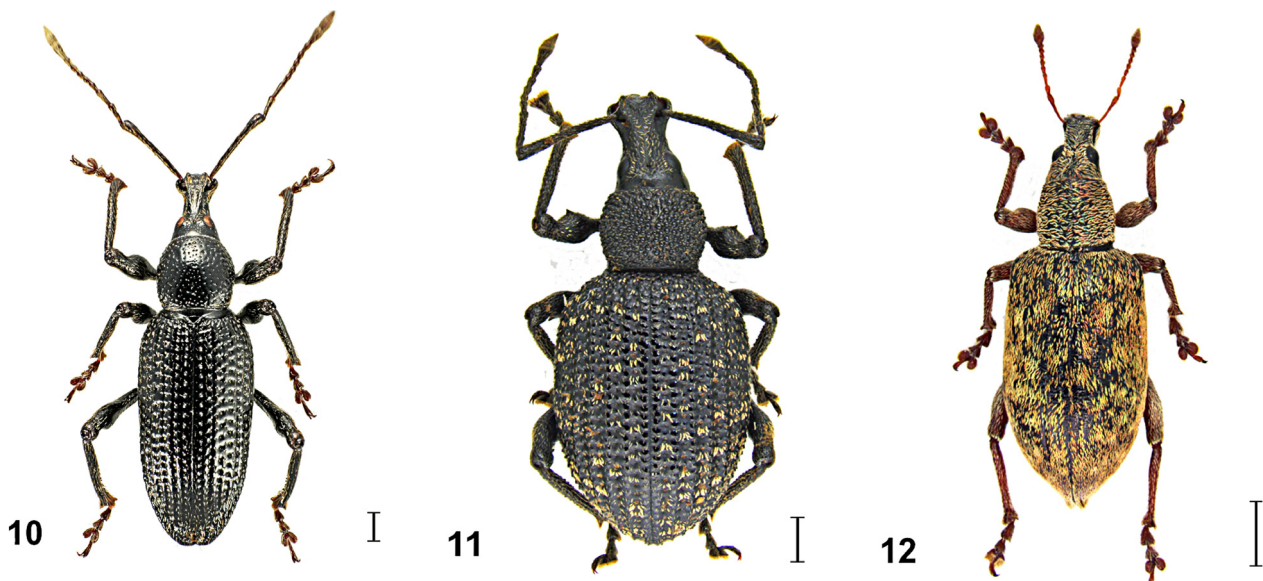
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Numerous larvae of *Donus cyrtus* (Germar, 1821) were collected from *Lamium purpureum* (Fig. 24) which was growing between rocks at locality 9. The breeding was unfortunately not very successful, as the host plant was not available for feeding the larvae, and the *Mentha* sp. that was provided instead, provoked some digestive problems that killed most of the larvae, with only three specimens managing to reach adult stage.

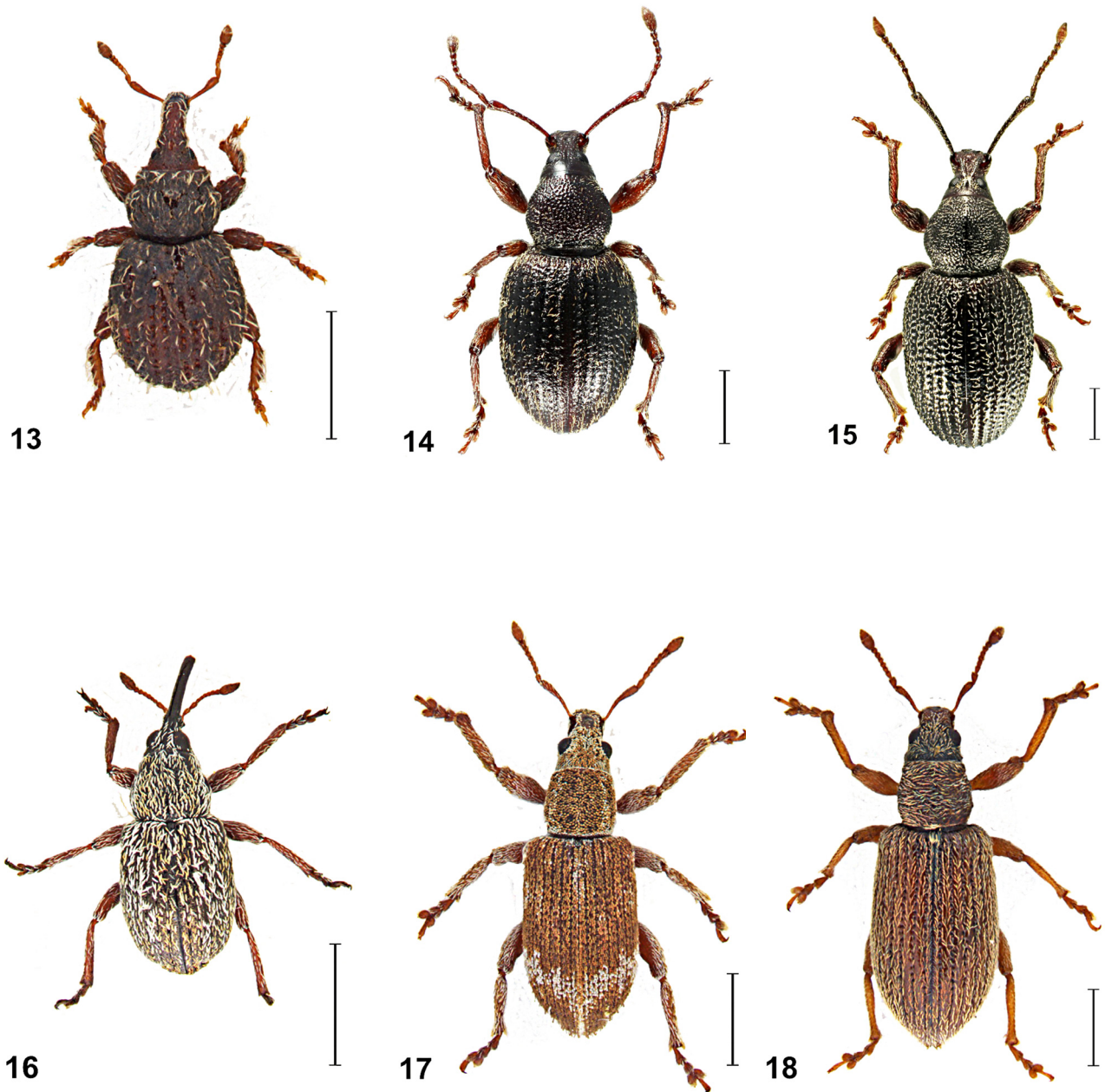
Otiorhynchus scabrosoides Stierlin, 1877 was recorded erroneously from Kefalonia, the species is endemic to Sicily. We assume that Von Oertzen (1886) mentioned under this name *O. championi* Reitter, 1912, whose presence in Kefalonia is confirmed by our recent find of one specimen at locality 14.

The historical record of *Lixomorphus algirus* (Linnaeus, 1758) (= *ocularis* Fabricius, 1792) - mentioned for the first time from Greece - has apparently been forgotten since then, as Greece is not listed in the recent catalogues. Miller (1862) collected a specimen under the following circumstances: „Unter Steinen, Sehr selten. An der Strasse gegen Lixuri“ [Under stones, very rare. Beside the road towards Lixuri]. As the species is very characteristic, a misidentification is highly unlikely. On the opposite, the record by Von Oertzen (1886) of *Cycloderes fritillum* (Panzer, 1794) is definitively incorrect due to misidentification. The species only occurs on the Iberian peninsula. Only further collections will help to clear the true identity of the species, but most likely it is the widespread *C. canescens* (Rossi, 1792).

As some species have been rarely collected and were hardly ever depicted, we provide an image gallery containing furthermore the species *Polydrusus elegantulus* (Fig. 18), *P. jucundus* (Fig. 21), *Donus capiomonti* (Fig. 22) and *Neoprohinus cinnamomeus* (Schultze, 1897) (Fig. 25). The species reported here as new to the Greek fauna, have a rather wide distribution and they were simply not yet mentioned for Greece in the latest catalogue of the Palaearctic weevils (Alonso-Zarazaga et al. 2017). The first record of *Pachyrrhinus lethierryi* (Desbrochers des Loges, 1875) from Greece based on two specimens beaten of from *Cupressus* sp. at locality 3 is also not surprising, considering the recent records from Turkey (Çerçi 2016) and regarding its distribution (e.g. Germann et al. 2005, Germann 2013).

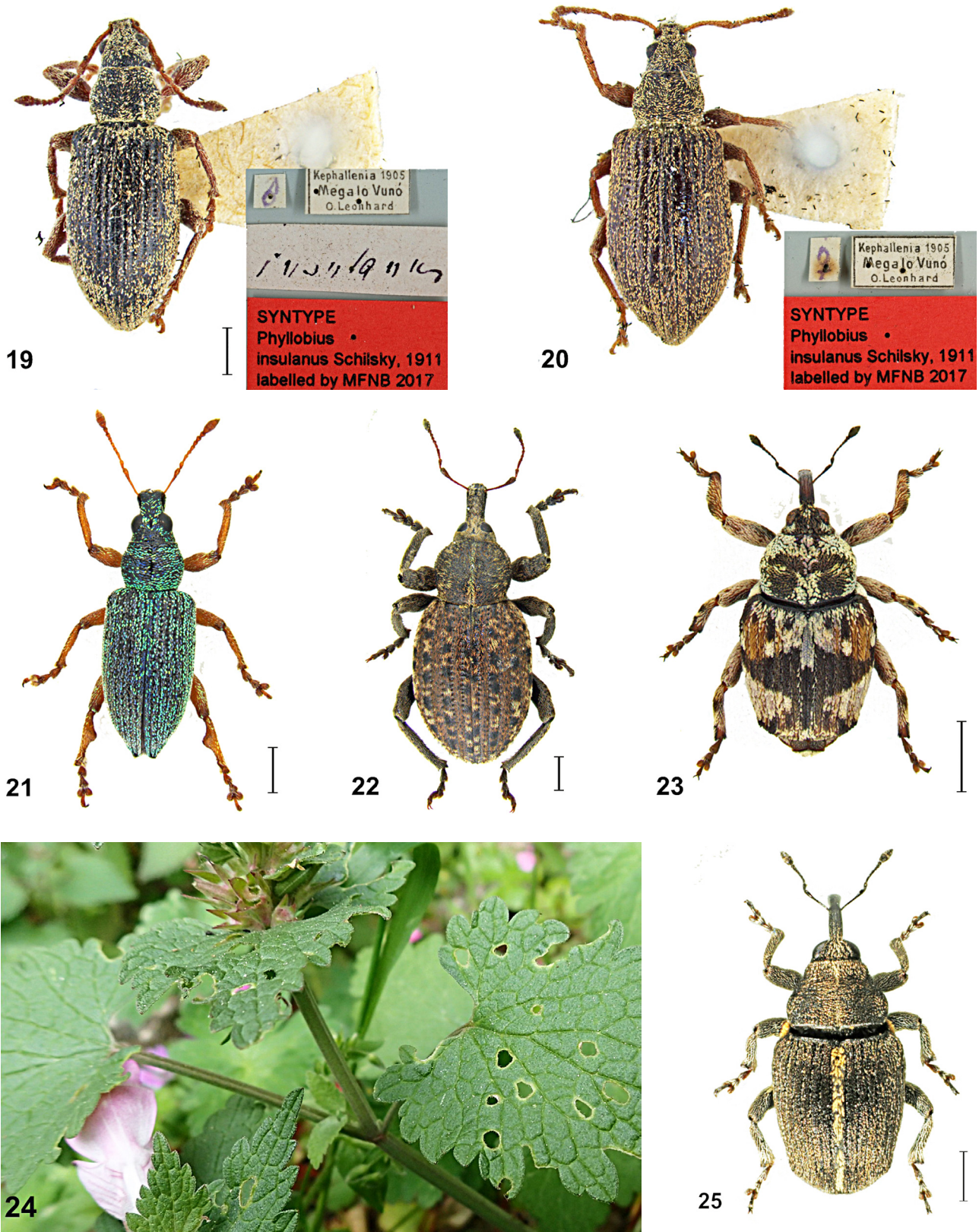


Figs 10-12. 10. *Otiorhynchus cephalonicus* Pic, 1902. 11. *Otiorhynchus graecus graecoinsularis* Reitter, 1914. 12. *Polydrusus cephalonicus* Apfelbeck, 1922, scale bar 1 mm.



Figs 13-18. 13. *Styphlidius brevisetis* Osella, 1981. 14 *Otiorhynchus gravidus* Stierlin, 1872. 15. *O. concavirostris* Boheman, 1842. 16. *Exapion winkleri* (Wagner, 1912). 17. *Polydrusus moricei* Pic, 1903. 18. *Polydrusus elegantulus* (Boheman, 1840), scale bar 1 mm.

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Figs 19-25. 19. Syntype male and 20. female of *Phyllobius insulanus* Schilsky, 1911. 21. *Polydrusus jucundus* Miller, 1862. 22. *Donus capiomonti* (Petri, 1901). 23. *Neoxyonyx strigatirostris* (Hochhuth, 1847). 24. Feeding traces of larvae of *Donus cyrtus* (Germar, 1821) on *Lamium purpureum*. 25. *Neoprohinus cinnamomeus* (Schultze, 1897), scale bar 1 mm.

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Appendix

Checklist of recorded Curculionoidea from Kefalonia. * most probably misidentified; ** new record for Greece; *** (Island) endemic species; Refs: A: Miller 1862; B: Kiesenwetter 1864; C: Von Oertzen 1886; D: Wagner 1912; E: Osella & Bello 2010; F: Borovec & Germann 2013; G: Germann 2017; H: Germann et al. 2018; I: Pic 1902; J: Schilsky 1911; K: Apfelbeck 1922; L: Caldara 1990. All synonyms used in relevant faunistic literature are given.

Family/Genus/Species	Nr.	Ref
<u>Anthribidae</u>		
<i>Anthribus fasciatus</i> Forster, 1770	9	A,C
<i>Bruchela pygmaea</i> (Gyllenhal, 1833) *		A,C
<i>Pseudeuparius centromaculatus</i> (Gyllenhal, 1833)	1,4,5	
<u>Apionidae</u>		
<i>Apion frumentarium</i> Linnaeus, 1758		C
<i>Apion haematodes</i> Kirby, 1808		A
<i>Aspidapion aeneum</i> (Fabricius, 1775)	7,8,23	

Parnassiana Archives 6

<i>Aspidapion radiolus</i> (Marsham, 1802)	23	
<i>Catapion corsicum</i> (Desbrochers des Loges, 1888)	1,3,11,12,14,15,16,18,23	
<i>Catapion pubescens</i> (Kirby, 1811)	1,15,22,23	
<i>Ceratapion gibbirostre</i> (Gyllenhal, 1813)	15,16,22,23,24	
<i>Diplapion confluens</i> (Kirby, 1808)	1,3,14,16	
<i>Eutrichapion facetum</i> (Gyllenhal, 1839)	1,3,4,6,8,11,22	H
<i>Eutrichapion viciae</i> (Paykull, 1800)	1,10,12,14,15,18,20,22	C,H
<i>Eutrichapion vorax</i> (Herbst, 1797)	2,19,23	A
<i>Exapion compactum</i> (Desbrochers des Loges, 1888)		H
<i>Exapion winkleri</i> (Wagner, 1912)	1,4,7,8,11,23	D
<i>Hemitrichapion pavidum</i> (Germar, 1817)	1,3,7,9,11,14,15,22,23	C,H
<i>Hemitrichapion waltoni</i> (Stephens, 1839)		A,C
= <i>montanum</i> Miller, 1862		
<i>Holotrichapion aethiops</i> (Herbst, 1797)		A,C
<i>Holotrichapion gracilicolle</i> (Gyllenhal, 1839)	1,4,9,12,16,19,22,23	
<i>Holotrichapion pisi</i> (Fabricius, 1801)	1,7,9,11,16,19	H
<i>Ischnopterapion cognatum</i> (Hochhuth, 1851)	14	
<i>Ischnopterapion fallens</i> (Marseul, 1888)	1	
<i>Ischnopterapion subglabrum</i> (Desbrochers des Loges, 1870)	9	
<i>Kalcapion semivittatum</i> (Gyllenhal, 1833)	1,2,3,8,9,12,14,15,22,23	H
<i>Malvapion malvae</i> (Fabricius, 1775)	11,19	
<i>Omphalapion dispar</i> (Germar, 1817)	1,3,4,7,12,15,16,17,20,22,23	H
<i>Oryxolaemus croceifemoratus</i> (Gyllenhal, 1839)		A
<i>Oryxolaemus scabiosus</i> Weise, 1889	4,5,7,9,11,23	
<i>Oxystoma pomonae</i> (Fabricius, 1798)		A,C
<i>Phrissotrichum tubiferum</i> (Gyllenhal, 1833)	16	
<i>Perapion oblongum</i> (Gyllenhal, 1839) **	16,22	
<i>Perapion violaceum</i> (Kirby, 1808)	1,15,24	
<i>Protapion brenskei</i> (Desbrochers des Loges, 1895)	1,2,3,4,5,14,15,16,24	
<i>Protapion dentipes</i> (Gerstaecker, 1854)	4,14,23,24	
<i>Protapion difforme</i> (Germar, 1818)	1,3,4,5,11,16,21,24	
<i>Protapion nigritarse</i> (Kirby, 1808)	1,15,23	
<i>Protapion ononidis</i> (Gyllenhal, 1827)	24	H
<i>Protapion trifolii</i> (Linnaeus, 1768)	1,3,4,5,11,12,15,16,23,24	H
<i>Protapion truquii</i> (Reiche & Saulcy, 1858)		H
<i>Protapion varipes</i> (Germar, 1817)	1,24	H
<i>Rhopalapion longirostre</i> (Olivier, 1807)	19	
<i>Stenopterapion tenue</i> (Kirby, 1808)	1,2,11,12,14,15,16,23,24	
<i>Squamapion delagrangi</i> (Desbrochers des Loges, 1895)	24	
<i>Taeniapion rufescens</i> (Gyllenhal, 1833)	15,19	
<i>Taeniapion rufulum</i> (Wencker, 1864)	12	
<u>Brachyceridae</u>		
<i>Brachycerus cinereus</i> Olivier, 1807		C
<i>Brachycerus lutosus</i> Gyllenhal, 1833	9	
<i>Brachycerus muricatus</i> Olivier, 1790	1	
<i>Brachycerus sinuatus</i> Olivier, 1807	6,20,24	
<i>Brachycerus undatus</i> Fabricius, 1798		A,C

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Curculionidae

Subfamily Bagoinae

Bagous robustus H. Brisout de Barneville, 1863 24

Subfamily Baridinae

Aulacobaris angusta (Brullé, 1832) 11,12,16

Aulacobaris coerulescens (Scopoli, 1763) 16

Labiaticola atricolor (Boheman, 1844) A
= *jonicus* Miller, 1862

Malvaevora timida (Rossi, 1792) 11,23

Melanobaris laticollis (Marsham, 1802) A,C
= *nitens* Fabricius, 1792

Subfamily Ceutorhynchinae

Calosirus apicalis (Gyllenhal, 1827) 1,21

Calosirus orientalis (Hustache, 1915) 4,14,23

Calosirus terminatus (Herbst, 1795) 4,15,19,22

Ceutorhynchus assimilis (Paykull, 1792) 11 H

Ceutorhynchus chalybaeus Germar, 1823 2,8,14,16,22

Ceutorhynchus contractus (Marsham, 1802) 9,19,22

Ceutorhynchus duvali C. N. F. Brisout de Barneville, 1869 14,15

Ceutorhynchus erysimi (Fabricius, 1787) 16 A,C

Ceutorhynchus cf. griseus C.N.F. Brisout de Barneville, 1869 7,22

Ceutorhynchus lukei Tyl, 1914 5,7

Ceutorhynchus pallidactylus (Marsham, 1802) 11,24

Ceutorhynchus pectoralis Weise, 1895 ** 14,22,23

Ceutorhynchus picitarsis Gyllenhal, 1837 12 A,C

Ceutorhynchus sulcicollis (Paykull, 1800) 12,13

Ceutorhynchus typhae (Herbst, 1795) 22,23

Coeliodes transversealbofasciatus (Goeze, 1777) 7

Hadroplontus litura (Fabricius, 1775) 22,23 H

Microplontus rugulosus (Herbst, 1795) 1,3,4,5,11,14,16

Mogulones austriacus (C. Brisout, 1869) 1

Mogulones beckeri (Schultze, 1900) 24

Mogulones cynoglossi (Frauenfeld, 1866) H

Mogulones geographicus (Goeze, 1777) 1,5,6

Nedyus quadrimaculatus (Linnaeus, 1758) A,C

= *didymus* Fabricius, 1781

Neoprohinus cinnamomeus (Schultze, 1897) 22

Neoxyonyx strigatirostris (Hochhuth, 1847) 23 H

Oprohinus consputus (Germar, 1824) 4,16,22

Prisistus obsoletus (Germar, 1824) A,C

Ranunculiphilus obscurus (C. N. F. Brisout de Barneville, 1869) 22

Sirocalodes depressicollis (Gyllenhal, 1813) 23

Sirocalodes mixtus (Mulsant & Rey, 1859) 23

Stenocarus cardui (Herbst, 1784) A,C

= *guttula* Fabricius, 1787

Trichosirocalus campanella (Schultze, 1895) 1,3,4,14,22

Trichosirocalus rufulus (Dufour, 1851) 1,3,4,14,16,20,22

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Subfamily Cossoninae		
<i>Brachytemnus porcatus</i> (Germar, 1824)		H
Subfamily Cryptorhynchinae		
<i>Acallocrates denticollis</i> (Germar, 1823)	12,13,18,21	
<i>Echinodera brisouti brisouti</i> Reitter, 1885	4,8,18,19,21	
<i>Echinodera corcyrensis</i> Stüben, 2008	3,12,13,17,18,19	
<i>Echinodera ingowolffi</i> Stüben, 1998	9,10	
<i>Echinodera soumasi</i> Germann, Wolf & Schütte, 2015	10,13,19,21	
<i>Torneuma deplanatum deplanatum</i> (Hampe, 1864)		H
Subfamily Curculioninae		
<i>Anthonomus multifasciatus</i> Pic, 1926	4,11,14,21,22	
= <i>amygdali</i> Hustache, 1930		
<i>Anthonomus pomorum</i> Linnaeus, 1758	1,11,16,21	
<i>Archarius pyrrhoceras</i> (Marsham, 1802)	5,16	
<i>Cionus balianii</i> Solari, 1932	19	
<i>Cionus olivieri</i> Rosenschoeld, 1838		A,C
<i>Cionus pulverosus</i> Guérin-Méneville, 1833	7	A,C
<i>Cleopomiarus graminis</i> (Gyllenhal, 1813)		H
<i>Cleopus solani</i> (Fabricius, 1792)	7,23	
<i>Curculio glandium</i> Marsham, 1802	1,5,18	
<i>Gymnetron veronicae</i> (Germar, 1821)	24	
<i>Mecinus pascuorum</i> (Gyllenhal, 1813)	14	
<i>Mecinus pyraster</i> (Herbst, 1795)	1,11	
<i>Mecinus simus</i> (Mulsant & Rey, 1859)	14,16	
<i>Miarus rotundicollis</i> Desbrochers, 1893	4	
<i>Orchestes hirtellus</i> Miller, 1862	1,7,15	A,C
<i>Orchestes pilosus</i> (Fabricius 1781)	5	
<i>Pachytychius hordei grandicollis</i> Waltl, 1835	24	A,C,H
= <i>squamosus</i> Gyllenhal, 1835		
<i>Pseudostyphlus pillumus</i> (Gyllenhal, 1835)		A,C
<i>Rhinusa bipustulata</i> (Rossi, 1792)	7,19	
<i>Rhinusa comosa</i> (Rosenschoeld, 1838)		A,C
<i>Rhinusa tetra</i> (Fabricius, 1792)	7,15,16	A,C
= <i>plagiella</i> Gyllenhal, 1838		
<i>Rhinusa verbasci</i> (Rosenschoeld, 1838)	7,16,19,23	
<i>Sibinia attalica</i> (Gyllenhal, 1835)	4,14,15,16,23	A,C
<i>Sibinia aureofulva</i> Desbrochers des Loges, 1875		H
<i>Smicronyx jungermanniae</i> (Reich, 1797)	14,20,22	A,C
= <i>cicus</i> Gyllenhal, 1835		
= <i>variegatus</i> Gyllenhal, 1835		
<i>Smicronyx pauperculus</i> Wollaston, 1864	5,7,14	
<i>Smicronyx syriacus</i> Faust, 1887	7,14,16	
<i>Styphlidius brevisetis</i> Osella, 1981 ***	9,13	H
<i>Styphlus jonicus</i> (Reitter, 1899)	3,8,9	
<i>Tychius balcanicus</i> Caldara, 1990		L
<i>Tychius cuprifer</i> (Panzer, 1799)	24	
<i>Tychius exiguus</i> Faust, 1889	4	L

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<i>Tychius naxiae</i> Faust, 1889	2,14,19,22,23	L
<i>Tychius ochraceus</i> Tournier, 1873		
<i>Tychius polylineatus</i> (Germar, 1823)	20	
<i>Tychius pusillus</i> Germar, 1842	3,12,16,19	
<i>Tychius rufipennis</i> Brisout de Barneville, 1863	19	L
<i>Tychius thoracicus</i> Boheman, 1843	4,16	L
<i>Tychius tibialis</i> Boheman, 1843	3,4,7,20	
Subfamily Entiminae		
<i>Auchmeresthes kiesenwetteri</i> Kraatz, 1862	9	A,C,H
<i>Charagmus variegatus</i> (Fåhraeus, 1840)		A,C
<i>Chiloneus jonicus</i> Kraatz, 1859		B,C
<i>Cycloderes fritillum</i> (Panzer, 1794) *		C
<i>Metadrosus bellus bellus</i> (Kraatz, 1859)	1,5,11,14	H
<i>Otiorhynchus anadolicus</i> Boheman, 1842	6,11,20	A,C
<i>Otiorhynchus aurifer</i> Boheman, 1842	8	
<i>Otiorhynchus brenskei</i> Reitter, 1884		H
<i>Otiorhynchus cephalonicus</i> Pic, 1902 ***	9,19,21	I
<i>Otiorhynchus championi</i> Reitter, 1912	15	
[= <i>Otiorhynchus scabrosoides</i> s. auct.]		
<i>Otiorhynchus concavirostris</i> Boheman, 1842	1,4,6,9,16,20,23	H
<i>Otiorhynchus graecus graecoinsularis</i> Reitter, 1914 ***	11,19	A,B,C,H
[= <i>Otiorhynchus armatus</i> s. auct.]		
<i>Otiorhynchus gravidus</i> Stierlin, 1872	1	H
<i>Otiorhynchus jovis</i> Miller, 1862	9	A,B,C
<i>Otiorhynchus lugens</i> (Germar, 1817)	1,3,4,6,11,12,15,16,19,20,22,23	A,H
<i>Otiorhynchus ovalipennis</i> Boheman, 1842	9,11	A,B,C
<i>Otiorhynchus picimanus picimanus</i> Stierlin, 1861 ***		B,C
<i>Pachyrrhinus lethierryi</i> (Desbrochers des Loges, 1875) **	3	
<i>Parascythopus apollinis</i> (Miller, 1862)	9	A,B,C
<i>Phyllobius dispar</i> Redtenbacher, 1847	9	
<i>Phyllobius insulanus</i> Schilsky, 1911	1,3,4,5,7,8,16,18,19	J
<i>Phyllobius montanus</i> Miller, 1862		A,B,C
<i>Phyllobius pallidus</i> (Fabricius, 1792)		H
<i>Polydrusus angustus</i> (Lucas, 1854)	1,11,12	
<i>Polydrusus armipes</i> Brullé, 1832	1,3,4,9,11,18,19,21	A,H
<i>Polydrusus bardus</i> Gyllenhal, 1834	1,6,18	G
<i>Polydrusus calabricus</i> (Faust, 1890)	11,14	G
<i>Polydrusus cephalonicus</i> Apfelbeck, 1922 ***	1,3,4,5,7,8,9,11,12,16,18,19	H,K
<i>Polydrusus cervinus</i> (Linnaeus, 1758) **	9	
<i>Polydrusus cocciferae</i> Kiesenwetter, 1864	9	
<i>Polydrusus elegantulus</i> (Boheman, 1840)	3	
<i>Polydrusus jucundus</i> Miller, 1862	3,4,6,7,8,16,17,18,19,21,22	A,C,H
<i>Polydrusus marcidus</i> Kiesenwetter, 1864	1,18	G
<i>Polydrusus moricei</i> Pic, 1903	1,3,4,5,8,9,18,19	F
<i>Psallidium spinimanum</i> Reiche, 1861	1	
<i>Sitona discoideus</i> Gyllenhal, 1834		A,C
<i>Sitona humeralis</i> Stephens, 1831	11,14,16,19,23	H

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<i>Sitona lineatus</i> (Linnaeus, 1758)	15	H
<i>Sitona macularius</i> (Marsham, 1802)		A,C
= <i>crinitus</i> Herbst, 1795		
<i>Sitona ophtalmicus</i> Desbrochers des Loges, 1869	1,3,5,11,16,19,20,23	
<i>Sitona sulcifrons deubeli</i> Krauss, 1902	1,15	H
<i>Sitona verecundus</i> (Rossi, 1790)		H
<i>Strophomorphus albarius</i> (Reiche & Sauley, 1858)	1	
<i>Strophomorphus porcellus</i> (Schönherr, 1832)	1,6	A,C
= <i>hispidus</i> Boheman, 1833		
<i>Tanymecus dilaticollis</i> Gyllenhal, 1834		H
<i>Trachyphloeus laticollis</i> Boheman, 1842	23	
Subfamily Hyperinae		
<i>Brachypera crinita</i> (Boheman, 1834)	6	A,B,C,H
<i>Brachypera zoilus</i> (Scopoli, 1763)	1,8,20	A,C
= <i>punctata</i> Fabricius, 1775		
<i>Coniatus tamaricis</i> (Fabricius, 1787)	15	
<i>Donus capiomonti</i> (Petri, 1901)	9,15,20,22	
<i>Donus cyrtus</i> (Germar, 1821)	1,9,20,24	
<i>Hypera melancholica</i> (Fabricius, 1792)	1	A,B,C
= <i>murina</i> Fabricius, 1792		
<i>Hypera meles</i> (Fabricius, 1792)	1,5,16,19	H
<i>Hypera nigrirostris</i> (Fabricius, 1775)	1,5,24	
<i>Hypera postica</i> (Gyllenhal, 1813)	1,4,2,23	H
<i>Hypera venusta</i> (Fabricius, 1781)	4,16,23	
<i>Limobius borealis</i> (Paykull, 1792)	14,15,16,21	
Subfamily Lixinae		
<i>Bangasternus planifrons</i> (Brullé, 1832)	6	
<i>Coniocleonus excoriatus</i> (Gyllenhal, 1834)		C
<i>Coniocleonus nigrosuturatus</i> (Goeze, 1777)		A,C
= <i>obliquus</i> Fabricius, 1792		
[= <i>megalographus</i> s. auct.]		
<i>Cyphocleonus testatus</i> (Gyllenhal, 1834)		A,C
= <i>morbillosus</i> Fabricius, 1792		
<i>Larinus adspersus</i> Hochhuth, 1847		H
<i>Larinus carlinae</i> (Olivier, 1807)	12,16,19,22	
<i>Larinus iaceae</i> (Fabricius, 1775)		A,B,C
<i>Larinus latus</i> (Herbst, 1783)		A,C
= <i>cardui</i> Rossi, 1790		
<i>Larinus rusticanus</i> Gyllenhal, 1835	11,12	
<i>Larinus scolymi</i> (Olivier, 1807)		A,C,H
= <i>flavescens</i> Germar, 1824		
<i>Larinus syriacus</i> Gyllenhal, 1835	15	
<i>Larinus turbinatus</i> Gyllenhal, 1836	1,3,6	
<i>Larinus ursus</i> (Fabricius, 1792)	6,14	B,C
<i>Lixomorphus algirus</i> (Linnaeus, 1758) **		A,C
= <i>ocularis</i> Fabricius, 1792		
<i>Lixus angustus</i> (Herbst, 1795)	11,24	

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= <i>sanguineus</i> Rossi, 1792		
<i>Lixus cardui</i> (Olivier, 1807)	6	A,B,C
= <i>pollinosus</i> Germar, 1817		
<i>Lixus cinerascens</i> Schoenherr, 1832		C,H
= <i>elegantulus</i> Boheman, 1842		
<i>Lixus filiformis</i> (Fabricius, 1781)	1,3,23	H
<i>Lixus myagri</i> Olivier, 1807		A,B,C
<i>Lixus ochraceus</i> Boheman, 1843		H
<i>Lixus pulverulentus</i> (Scopoli, 1763)		H
= <i>algius</i> Fabricius, 1801		
<i>Lixus punctiventris</i> Boheman, 1836	24	
<i>Pseudocleonus cinereus</i> (Schrank, 1781)		A,C
<i>Rhinocyllus conicus</i> (Fröhlich, 1792)	5,7,11,12,16,22,23	H
Subfamily Molytinae		
<i>Liparus tenebrioides</i> (Pallas, 1781)	1	A,H
= <i>graecus</i> Brullé, 1832		
<i>Minyops insularis</i> Osella & Bellò, 2010		A,C,E
[= <i>Minyops carinatus</i> s.auct.]		
<i>Styphloderes exsculptus</i> (Boheman, 1843)		H
Subfamily Scolytinae		
<i>Coccotrypes dactyliperda</i> (Fabricius, 1801)	1,24	
<i>Cryphalus saltuarius</i> (Weise, 1891)		A,C
= <i>asperatus</i> Ratzeburg, 1837		
<i>Pityokteines curvidens</i> (Germar, 1824)		A,C
<i>Pityophthorus micrographus</i> (Linnaeus, 1758)		A,C
<u>Dryophthoridae</u>		
<i>Sphenophorus abbreviatus</i> (Fabricius, 1787)	23	
<i>Sphenophorus piceus</i> (Pallas, 1771)		A,C
<u>Nanophyidae</u>		
<i>Dieckmanniellus nitidulus</i> (Gyllenhal, 1838)		H
<u>Rhynchitidae</u>		
<i>Eomesauletes politus</i> (Lepelletier & Audinet-Serville, 1825)	7	
<i>Mecorhis ungarica</i> (Herbst, 1783)		A,C
<i>Rhodocyrtus cribripennis</i> (Desbrochers des Loges, 1869)	3	H
<i>Tatianaerhynchites aequatus</i> (Linnaeus, 1767)	9	H