

APIONIDAE OF THE FRANCESCO VITALE COLLECTION (INSECTA: COLEOPTERA)

CARLO GIUSTO ^a AND COSIMO BAVIERA ^{b*}

ABSTRACT. The Francesco Vitale Sicilian collection of Apionidae is critically revised. *Hoplopodapion poupillieri* (Wencker, 1864), *Ischnopterapion (Ischnopterapion) aeneomicans nothum* (Desbrochers des Loges, 1897) and *Pseudoprotapion dumei* (A. Hoffmann, 1957) are recorded for the first time from Sicily and Italy; *Omphalapion laevigatum* (Paykull, 1792) is recorded for the first time from Sicily, whereas the presence on the island of *Aizobius sedi* (Germar, 1818) and *Acentrotypus brunnipes* (Boheman, 1839), until now considered doubtful, is confirmed. All species quoted from Sicily by Vitale are listed and commented. In addition, the previous citation of *Ceratapion (Echinostroma) basicorne* (Illiger, 1807) from Cyprus is attributed to *Ceratapion (Echinostroma) curtii* (Wagner, 1920) and *C. curtii* is recorded for the first time from this country. Brief comments on our current knowledge of the apionid fauna of Sicily are also included.

1. Introduction

Francesco Vitale (Messina, September 17, 1861 – Messina, February 9, 1953) was an enthusiastic amateur entomologist whose field work was of great importance for the knowledge of the Sicilian beetle fauna. From 1881 to 1942 he published about 100 scientific works, many of which dedicated to the study of the superfamily Curculionoidea. In 1889 he published his first note on the then genus *Apion*, a report full of biological and chorological data on the 52 species collected by him from 1884 to 1888 in the surroundings of Messina, and including some considerations on the 72 species of Apionidae then reported from the whole of Sicily. Thanks to his inexhaustible researches, in a span of few years he collected almost 100 apionid species from the surroundings of Messina, but, unfortunately, part of that material was lost in the earthquake that destroyed Messina on December 28, 1908 (Baviera 2004b). The apionid collection consists of 638 specimens stored in the boxes n° 22, 72 and 73, belonging to 91 species whose taxonomic, biological and chorological data are discussed in the first part of this study when necessary. The second part of the text deals with further 17 species not present in his collection, but cited by Vitale in his publications. Further studies on beetles of the Vitale collection concern: Coccinellidae (Baviera 2004a), Carabidae (Facchini and Baviera 2004), Cerambycidae and Buprestidae

(Baviera and Sparacio 2004), Histeridae (Vienna and Baviera 2007), other Curculionoidea (Caldara *et al.* 2010; Baviera and Bellò 2016).

2. Materials and methods

All the specimens stored in the boxes n° 22, 72 and 73 were maintained in their original positions. Material has been determined in part by the late Carlo Pesarini and in part by the first author of this note. When necessary, specimens have been dissected and genitalia were preserved in pure glycerol inside micro-vials pinned beneath the specimen. In the main list, species are ordered alphabetically inside genera, as are genera within the respective tribes; in the second list, species are listed alphabetically. For each taxon, in addition to the current name, the following data are added:

- list of bibliographic sources: the names of the taxa used by Vitale are followed by the relative bibliographic references (year of publication and number of page). Any incorrect spellings or wrong indications of the authors are followed by the abbreviation “[sic]”, from the Latin “sic erat scriptum” (so it was written);
- original identification: the original identification is that written on the rectangular label placed on the left of the specimens;
- list of localities: the locality labels are quoted as they are; printed words are enclosed in quotation marks while parts added to the original text are indicated in square brackets;
- number of specimens;
- remarks: only for some taxa, taxonomy and biology are discussed. When relevant, identification labels pinned under the specimens have been quoted and commented, in particular those handwritten by Schatzmayr who checked and corrected Vitale’s identifications as stated by Vitale himself (Vitale 1927a).

As already evident from the title, in this work apionids are treated as a family, following Wanat (2001) who submitted Brentidae *sensu lato* to an accurate phylogenetic analysis, disregarding the hyper-broad and overgeneralized concept of Brentidae Billberg, 1820 by Oberprieler (2014), where apionids are downgraded to subfamily rank. Plants nomenclature follows that proposed in *IPFI* (2021).

3. Results

List of the species

Family APIONIDAE Schoenherr, 1823

Subfamily Apioninae Schoenherr, 1823

Tribe Apionini Schoenherr, 1823

Genus *Apion* Herbst, 1797***Apion cruentatum* (Walton, 1844)**

ORIGINAL IDENTIFICATION – *Apion* Herbst – *frumentarium* a. *cruentatum* Walt.

LOCALITIES – no data

SPECIMENS – 3

Remarks. Vitale never quoted this species in his publications. Probably its correct recognition — almost certainly previously identified as *Apion haematodes haematodes* Kirby, 1808, sub *Apion frumentarium* (Linnaeus, 1758) — and the correct placement of the specimens in the collection occurred after the examination of the material by Schatzmayr.

***Apion frumentarium* (Linnaeus, 1758)**

Apion miniatum; Vitale (1893, p. 159); Vitale (1900, p. 48); Vitale (1927b, p. 112)

ORIGINAL IDENTIFICATION – *Apion* Herbst – *miniatum* Germ.

LOCALITIES – “Messina”, “F. Vitale [leg.]”; Bauso, 19.V.1921, F. Vitale [leg.]

SPECIMENS – 7

Remarks. Vitale mentioned this species generically from Sicily, following Ragusa (1882a) and upon a specimen identified by Schatzmayr.

***Apion haematodes haematodes* Kirby, 1808**

Apion frumentarium; Vitale (1889, p. 152); Vitale (1893, p. 159); Vitale (1900, pp. 14, 15, 49); Vitale (1901, pp. 423, 449); Vitale (1905a, pp. 122, 123); Vitale (1927b, p. 112)

ORIGINAL IDENTIFICATION – *Apion* Herbst – *longithorax* Desb. - *frumentarium* Payk. [sic]

LOCALITIES – “Messina”, “F. Vitale [leg.]”; “Sicilia”, “F. Vitale [leg.]”; Castanea, 11.IV.1929, F. Vitale [leg.]; Castanea, 7.X.1916, F. Vitale [leg.]; Castanea, 9.VI.1930, F. Vitale [leg.]; Tremonti, X.1911, F. Vitale [leg.]; Messina, 1930, F. Vitale [leg.]; Messina, [19]04, F. Vitale [leg.]; Gravitelli, 13.V.1928, F. Vitale [leg.]

SPECIMENS – 16

***Apion longithorax* Desbrochers des Loges, 1889**

ORIGINAL IDENTIFICATION – *Apion* Herbst – *longithorax* Desb.

LOCALITIES – “Messina”, “F. Vitale [leg.]”; “Sicilia”, “F. Vitale [leg.]”; Messina, XI.1918

SPECIMENS – 6

Remarks. Known from Morocco, Algeria, Tunisia, Italy and Albania, never quoted by Vitale in his publications.

Tribe Aplemonini Kissinger, 1968

Genus *Aizobius* Alonso-Zarazaga, 1990

Aizobius sedi (Germar, 1818) (Fig. 1)

Apion sedi; Vitale (1905b, p. 168); Vitale (1906, p. 207)

ORIGINAL IDENTIFICATION – *Apion* Herbst – *sedi* Germar

LOCALITIES – M[ont]Albano [Elicona], 11.VI.[19]05, F. Vitale [leg.]

SPECIMENS – 1

Remarks. Central European element, widespread from France to western Russia and from South Scandinavia to Italy, from where is quoted by Abbazzi and Maggini (2009) from Aosta Valley, Piedmont, Trentino-Alto Adige, Friuli-Venezia Giulia, Veneto, Liguria, Tuscany, Marche, Umbria, Latium, Abruzzes and doubtfully from Sicily. The specimen from Montalbano Elicona, Messina Province, confirms the presence of this species in Sicily. Vitale reported its finding on meadows. Larvae of this species are associated to Crassulaceae belonging to the genera *Sedum* L. and *Sempervivum* L.

Genus *Helianthemapion* Wagner, 1930

Helianthemapion velatum (Gerstaecker, 1854) (Fig. 2)

ORIGINAL IDENTIFICATION – *Apion* Herbst – *velatum* Gerst. – *sinum* Germar

LOCALITIES – Leone, 17.V.1928, F. Vitale [leg.]; “Sicilia”, “F. Vitale [leg.]”

SPECIMENS – 2

Remarks. Species never quoted by Vitale in his publications. The specimens stored in Vitale collection are two males, clearly conspecific. The first from “Sicilia”, in addition to the locality label, bears two labels with the following indications: “*velatum*, *Vitalei* m., Schatzmayr det.” and “*Helianthemapion*, nov. sp. prope, *velatum* Gerst., det. C. Pesarini 2001”; the second, from “Leone”, shows the following label: “*Helianthemapion*, *velatum* Gerst., det. C. Pesarini 2001”.

Genus *Hoplopodapion* F. Solari, 1933

Hoplopodapion poupillieri (Wencker, 1864) (Fig. 3)

ORIGINAL IDENTIFICATION – *Apion* Herbst – *tamarisci* Gyllen.

LOCALITIES – Rodia, 12.VI.1916, F. Vitale [leg.]

SPECIMENS – 1

Remarks. Mediterranean-Sindian species so far known from Spain, Morocco, Algeria, Tunisia, Libya, Chad, Egypt, Cyprus, Israel, Jordan and Saudi Arabia. The single specimen from Rodia (Messina Province), previously identified by Vitale as *Apion tamarisci*, represents the first record of this species and also of the genus *Hoplopodapion* F. Solari, 1933 for

Italy (Sicily).

Genus *Onychapion* Schilsky, 1901

Onychapion tamarisci (Gyllenhal, 1839)

Apion tamaricis [sic]; Vitale (1893, p. 156); Vitale (1900, p. 45); Vitale (1906, p. 206)

ORIGINAL IDENTIFICATION – *Apion* Herbst – *tamarisci* Gyllen.

LOCALITIES – Messina, 1909, F. Vitale [leg.]; Sinnaro, 7.VI.1920, F. Vitale [leg.]

SPECIMENS – 2

Remarks. Mediterranean-Sindian species so far known from Tunisia, Algeria, Morocco, Portugal, Spain, France, Italy (Sardinia and Sicily), Greece, Egypt, Jordan, Azerbaijan, Iran, Afghanistan and India. Its distribution to the east of the Mediterranean Sea, thus far based just on a few specimens, deserves further study. The first indication about the presence of this species in Sicily dates back to 1868 when Tournier described *Apion gautardi* (synonym of *O. tamarisci*) upon an unspecified number of specimens from Messina.

Genus *Perapion* Wagner, 1907

Perapion (Perapion) hydrolapathi (Marsham, 1802)

Apion hydrolapathi; Vitale (1889, p. 153); Vitale (1893, p. 160); Vitale (1900, pp. 15, 49); Vitale (1901, p. 449)

ORIGINAL IDENTIFICATION – *Apion* Herbst – *hydrolapathi* Marsh. – *violaceum* Kirby

LOCALITIES – “Sicilia”, “Palermo”, 13.V.[1]911, L.T.; Ficuzza, 26.IV.[1]919, A. Dodero [leg.]; Trapani, Santa Ninfa; Messina, Faro, 11.V.[1]916, F. Vitale [leg.]

SPECIMENS – 4

Remarks. The findings of this species on *Malva nicaeensis* All., *Malva parviflora* L. (sub *Malva microcarpa* Desf.) and *Malva setigera* K.F. Schimp. & Spenn. (sub *Althea hirsuta* L.) (Vitale 1900) must be considered incorrect or occasional; *P. hydrolapathi* is associated to some *Rumex* species, in particular *Rumex hydrolapathum* Hudson and *Rumex obtusifolius* L.

Perapion (Perapion) ilvense (Wagner, 1905)

Apion humile; Vitale (1889, pp. 148, 153); Vitale (1900, p. 15); Vitale (1902b, p. 40); Vitale (1905b, p. 169); Vitale (1927b, p. 113)

Apion burdigalense; Vitale (1889, p. 153)

Apion semicyaneum; Vitale (1889, p. 153); Vitale (1901, p. 449)

Apion curtirostre [sic]; Vitale (1893, p. 160)

Apion curtirostre; Vitale (1900, p. 49); Vitale (1901, p. 449)

Apion curtirostre var. *marseuli*; Vitale (1900, p. 49)

Apion humi [sic]; Vitale (1905a, p. 123)

ORIGINAL IDENTIFICATION – *Apion* Herbst – *sedi* Germar – *curtirostre* Germar – *ilvense* Wagner
 LOCALITIES – “Messina”, “F. Vitale [leg.]”; Messina, 1930, F. Vitale [leg.]; M[ont]Albano [Elicon], 20.III.[19]04, F. Vitale [leg.]; Sicilia, C[ontrada]. Paradiso [Messina], [19]09; Miano, Mes[sina], 27.VI.[19]29, F. Vitale [leg.]; Colla, 1929, F. Vitale [leg.]; Naso, 24.V.[19]32, F. Vitale [leg.]; Stidda, 24.VI.[19]30, F. Vitale [leg.]; Calamarà, 19.V.[19]36, F. Vitale [leg.]; Calamarà, 14.III.[19]31, F. Vitale [leg.]
 SPECIMENS – 17

Remarks. Vitale (1893) quoted the name of this species as “*curvirostre*” and that error meant that since then some authors erroneously mentioned *Alocentron curvirostre* (Gyllenhal, 1833) among the species of the Italian fauna. Also the presence in Sicily of *Perapion marseuli* (Wencker, 1864), quoted as variety of *Apion curtirostre* on indication of Baudi di Selve (in litteris) (Vitale 1900), is clearly incorrect. *Perapion marseuli* is a Mediterranean-Sindian species exclusively associated with *Calligonum comosum* L. — plant absent in Italy — so far known from Morocco, Algeria, Tunisia, Libya, Israel, Saudi Arabia, Qatar, United Arab Emirates and Iran. Finally, also the Vitale’s quotations of *Apion burdigalense* and *Apion semicyaneum* are to be referred to *Perapion ilvense*: Vitale (1889), mentioned three specimens of *Apion burdigalense* from Castanea (Messina Province) found on *Rumex* sp., and one specimen of *Apion semicyaneum* found on *Rumex bucephalophorus* L. In addition, to corroborate his observation about the host plant of *Apion semicyaneum*, he quoted Aubé (1866) pointing out that the French author found that species very common in a swamp near Béziers (France) where *Rumex* plants were abundant. Vitale not considered Aubé’s remark about the great “analogie” among *Apion semicyaneum* from one side and *Apion violaceum* and *Apion hydrolapathi* from the other side, but our current knowledge confirms our hypothesis about its identification with *Perapion ilvense*. This last is a Mediterranean species, in the past often confused with *Apion curtirostre* Germar, 1817 as also demonstrated by the citations of Vitale. According to literature, in Italy *Perapion curtirostre* is recorded from all regions, but the examination of about 500 Italian specimens revealed that it is absent in Sicily and Sardinia (Giusto, unpublished data).

***Perapion (Perapion) violaceum violaceum* (Kirby, 1808)**

Apion violaceum; Vitale (1889, p. 152); Vitale (1893, p. 160); Vitale (1900, p. 49); Vitale (1901, p. 449); Vitale (1902a, p. 139); Vitale (1927b, p. 113)

ORIGINAL IDENTIFICATION – *Apion* Herbst – *violaceum* Kirby – *hydrolapathi* Marsh.

LOCALITIES – [Monte] Ciccìa, 30.VIII.1931, F. Vitale [leg.]; “Messina”, “F. Vitale [leg.]”; Messina, 21.VI.[19]03, F. Vitale [leg.]; Dintorni Messina, IV–VI.1930, F. Vitale [leg.]; Gradeonova [?], 14.V.1910, F. Vitale [leg.]; Annunziata, 13.VI.[19]33, F. Vitale [leg.]; Stidda, 25.V.[19]30, F. Vitale [leg.]

SPECIMENS – 13

Genus *Phrissotrichum* Schilsky, 1901

***Phrissotrichum (Phrissotrichum) sicanum* Ehret, 1997**

Apion tubiferum var. *sicanum*; Vitale (1889, p. 143); Vitale (1893, p. 155); Vitale (1900, pp. 15, 45);

Vitale (1901, p. 445); Vitale (1902b, p. 40); Vitale (1927b, p. 110)

ORIGINAL IDENTIFICATION – *Apion* Herbst – [*tubiferum*] a. *sicanum* Venk. [sic]

LOCALITIES – “Messina”, “F. Vitale [leg.]”; “Sicilia”, “F. Vitale [leg.]”; Messina, [19]04, F. Vitale [leg.]

SPECIMENS – 6

Remarks. Taxon already known in 1864 when Wencker described it as a green-bluish variety of *Apion tubiferum* Gyllenhal, 1833 (unavailable infrasubspecific name) and later validated by Ehret (1997) who raised it to species providing, however, diagnosis and description absolutely inadequate to allow its clear distinction from the allied *Phrissotrichum tubiferum*. Due to their strong similarity, surely in the past the two species have been misidentified by many authors and so, according to the bibliographic sources, at present it is not possible to clearly delineate the two distribution areas, nor to obtain reliable information on the respective host plants. Also indications by Vitale (1889, 1900, 1927b) about the finding localities and host plants of both species (often found in syntopy on *Cistus salviifolius* L. and *Cistus crispus* L.) are useless.

***Phrissotrichum (Phrissotrichum) tubiferum* (Gyllenhal, 1833)**

Apion tubiferum; Vitale (1889, p. 142); Vitale (1893, p. 155); Vitale (1900, p. 45); Vitale (1901, p. 445); Vitale (1902b, p. 39); Vitale (1903b, p. 54); Vitale (1903d, p. 67); Vitale (1913, p. 142); Vitale (1927b, p. 110)

ORIGINAL IDENTIFICATION – *Apion* Herbst – *tubiferum* Gyll.

LOCALITIES – Cavaliere, 7.V.[19]03, F. Vitale [leg.]; Colla, 7.I.[19]31, F. Vitale [leg.]; Calamarà, 17.IV.[19]30, F. Vitale [leg.]; Scala, 17.III.[1]936, F. Vitale [leg.]; Scala, 11.V.[19]30, F. Vitale [leg.]; Castanea, 24.I.[19]30, F. Vitale [leg.]; Castanea, V.[1]917, F. Vitale [leg.]; “Sicilia”, “F. Vitale [leg.]”; Colla, 1930, F. Vitale [leg.]; Colla, 7.I.[19]31, F. Vitale [leg.]; “Messina”, “F. Vitale [leg.]”

SPECIMENS – 12

Genus *Pseudoperapion* Wagner, 1930

***Pseudoperapion brevirostre* (Herbst, 1797)**

ORIGINAL IDENTIFICATION – *Apion* Herbst – *brevirostre* Herbst

LOCALITIES – Faro, 11.V.[1]916, F. Vitale [leg.]

SPECIMENS – 3

Genus *Pseudostenapion* Wagner, 1930

***Pseudostenapion simum* (Germar, 1817)**

Apion simum; Vitale (1889, p. 153); Vitale (1901, p. 449)

ORIGINAL IDENTIFICATION – *Apion* Herbst – *simum* Germar

LOCALITIES – [Contrada] Paradiso, Mess[ina], III.[19]09; Messina, VI.[19]37, F. Vitale [leg.]

SPECIMENS – 4

Tribe Aspidapiini Alonso-Zarazaga, 1990

Genus *Aspidapion* Schilsky, 1901

Aspidapion (Aspidapion) radiolus (Marsham, 1802)

Apion radiolus; Vitale (1889, 146 (in part)); Vitale (1893, p. 157); Vitale (1900, p. 47); Vitale (1901, p. 446); Vitale (1903d, p. 67); Vitale (1927b, p. 111)

ORIGINAL IDENTIFICATION – *Apion* Herbst – *radiolus* Kirby

LOCALITIES – Villa Sperlinga, 11.IX.[19]12, F. Vitale [leg.]

SPECIMENS – 1

Remarks. Vitale (1889) declared to possess only three specimens of this species and added that one of them was perfectly corresponding to Wencker's diagnosis while the remaining two specimens, donated by a friend and collected in Contrada Gravitelli (Messina), had almost glabrous and dark bluish elytra. Since these characters are typical of *Aspidapion soror*, Vitale's quotation is here partly attributed to *A. soror* and partly to *A. radiolus*. It is worth noting that the single specimen belonging to *A. radiolus* bears a label with the indication "*Apion leprieuri*". *Ischnopterapion leprieuri* (Wencker, 1864), North-African species so far known from Algeria and Tunisia, has been dubiously quoted for the first time from Sicily by Ragusa (1906) on Baudi di Selve's recommendation (in litteris). In the box n° 72 of the Vitale collection there is the identification label "*Leprieuri* Wenck.", but no specimen is present.

Aspidapion (Aspidapion) soror (Rey, 1895)

Apion radiolus; Vitale (1889, 146 (in part))

ORIGINAL IDENTIFICATION – *Apion* Herbst – *radiolus* Kirby

LOCALITIES – "Messina", "F. Vitale [leg.]"

SPECIMENS – 12

Remarks. No quotation of this specie in Vitale's publications, the placement of all specimens near the label "*radiolus* Kirby" and the determination label pinned under one of them with the indication "*radiolus*" suggest that Vitale surely misidentified the two species.

Aspidapion (Koestlinia) aeneum (Fabricius, 1775)

Apion aeneum; Vitale (1889, p. 146); Vitale (1893, p. 157); Vitale (1900, p. 47); Vitale (1901, p. 446); Vitale (1903d, p. 67)

ORIGINAL IDENTIFICATION – *Apion* Herbst – *aeneum* Fab.

LOCALITIES – "Messina", "F. Vitale [leg.]"

SPECIMENS – 8

Tribe Catapiini Alonso-Zarazaga, 1990**Genus *Catapion* Schilsky, 1906*****Catapion burdigalense* (Wencker, 1859)**

ORIGINAL IDENTIFICATION – *Apion* Herbst – *sedii* Germar – *burdigalense* Wenck.

LOCALITIES – Mitta (Mes[sina]), 11.VI.1916, F. Vitale [leg.]; S. Teresa, 1915; “Messina”, “F. Vitale [leg.]”

SPECIMENS – 11

Remarks. Considering that Vitale (1889) mentioned as *Apion burdigalense* and *Apion semicyaneum* specimens belonging to *Perapion ilvense* (see the remarks below the latter species), it is not excluded that the correct collocation in the box n° 72 of 10 of the 11 specimens near the identification label “*burdigalense* Wenck.” (one is stored in the box n° 22 near the label “*sedii* Germar”) is due to their subsequent correct identification by Schatzmayr.

***Catapion calabricum* (A. Solari & F. Solari, 1922)**

Apion calabricum; Vitale (1927a, p. 54)

ORIGINAL IDENTIFICATION – *Apion* Herbst – [*corsicum*] a. *calabricum* Solari – *pubescens* Kirby

LOCALITIES – Gravitelli, 12.V.[19]29, F. Vitale [leg.]; Castanea, 7.X.1916, F. Vitale [leg.]; Calamara, 18.VII.[19]30, F. Vitale [leg.]; Messina, 1930, F. Vitale [leg.]; Messina, 1904, F. Vitale [leg.]; “Messina”, “F. Vitale [leg.]”; “Sicilia”, “F. Vitale [leg.]”

SPECIMENS – 7

Remarks. Vitale (1927a) recorded for the first time this species from Sicily (Messina) upon a specimen determined by Schatzmayr.

***Catapion corsicum* (Desbrochers des Loges, 1888)**

ORIGINAL IDENTIFICATION – *Apion* Herbst – *seniculus* Kirby

LOCALITIES – Siracusa, III.[19]06, F. Vitale [leg.]; Castanea, 1930, F. Vitale [leg.]; “Sicilia”, “F. Vitale [leg.]”

SPECIMENS – 7

Remarks. Species never quoted in Vitale’s publications. One of the seven specimens has been identified by Schatzmayr as “*corsicum*”.

***Catapion curtulum* (Desbrochers des Loges, 1870)**

Apion curtulum; Vitale (1893, p. 157); Vitale (1900, p. 47); Vitale (1901, p. 447)

ORIGINAL IDENTIFICATION – *Apion* Herbst – *curtulum* Desbr. – *pubescens* Kirby

LOCALITIES – Stidda, 24.V.1930, F. Vitale [leg.]; Messina, 1930, F. Vitale [leg.]; “Messina”, “F. Vitale [leg.]”; “Sicilia”, “F. Vitale [leg.]”; Messina, 1904, F. Vitale [leg.]

SPECIMENS – 13

Catapion pubescens (Kirby, 1811)

Apion pubescens; Vitale (1889, p. 148); Vitale (1893, p. 157); Vitale (1900, p. 47); Vitale (1901, p. 447); Vitale (1902b, pp. 2, 39)

ORIGINAL IDENTIFICATION – *Apion* Herbst – *pubescens* Kirby

LOCALITIES – Castanea, 2.VI.1930, F. Vitale [leg.]; “Messina”, “F. Vitale [leg.]”

SPECIMENS – 5

Catapion seniculus (Kirby, 1808)

Apion seniculus; Vitale (1889, p. 148); Vitale (1893, p. 157); Vitale (1900, p. 47); Vitale (1901, p. 447); Vitale (1903c, p. 20)

Apion natricis; Vitale (1930, p. 136); Vitale (1932, p. 40)

ORIGINAL IDENTIFICATION – *Apion* Herbst – *seniculus* Kirby – *corsicum* Desbr. – *loti* Kirby

LOCALITIES – Messina, 24.II.[19]04, F. Vitale [leg.]; Calamarà, 3.XI.[19]30, F. Vitale [leg.]; Calamarà, 2.X.[19]31, F. Vitale [leg.]; Calamarà, 24.IV.[19]31, F. Vitale [leg.]; [Monte] Ciccìa, 25.VIII.[19]37, F. Vitale [leg.]; Colla, 16.IV.[19]03, F. Vitale [leg.]; Campo Inglese, 19.V.[19]21, F. Vitale [leg.]; “Messina”, “F. Vitale [leg.]”; “Sicilia”, “F. Vitale [leg.]”

SPECIMENS – 13

Remarks. Since the single specimen with the label “*natricis*? Occorre piú materiale” was placed together with the specimens of *Catapion seniculus*, we attribute to the latter species the quotation of Vitale (1930, 1932) of *Apion natricis*. Furthermore, the exclusion of *Catapion natricis* from the Sicilian fauna is justified by the absence on the island of *Ononis natrix natrix* L., its host plant.

Catapion seriatosetosulum (Wencker, 1864)

Apion seriatosetosulum; Vitale (1893, p. 157); Vitale (1900, p. 47); Vitale (1901, p. 447)

ORIGINAL IDENTIFICATION – *Apion* Herbst – *seriatosetosulum* Wenck.

LOCALITIES – “Messina”, “F. Vitale [leg.]”

SPECIMENS – 6

Tribe Ceratapiini Alonso-Zarazaga, 1990**Genus *Acentrotypus* Alonso-Zarazaga, 1990*****Acentrotypus brunnipes*** (Boheman, 1839) (Fig. 4)

Apion laevigatum; Vitale (1906, p. 206)

ORIGINAL IDENTIFICATION – *Apion* Herbst – *brunnipes* Bohm.

LOCALITIES – Colla (Cast[anea].), 1911, F. Vitale [leg.]

SPECIMENS – 2

Remarks. Species recorded for the first time from Italy (Sicily, Messina), as *Apion laevigatum*, by Vitale (1906). Since then, its presence in Sicily has been quoted, although doubtfully, only by Osella and Magnano (1986) and Abbazzi and Maggini (2009). Thanks to the examination of the two specimens in the Vitale collection, it is possible to confirm the presence on the island of this species. In addition to the Sicilian record, *A. brunnipes* has been quoted from Italy exclusively from Apulia (Cagnano Varano, Foggia Province) (Osella and Magnano 1986). The old quotation for Friuli-Venezia Giulia, based on a single specimen found in Bosco Siana near Pula, now a Croatian locality (Schatzmayer 1925), has been subsequently rectified by Osella and Magnano (1986). *A. brunnipes* is a Turanic-European-Mediterranean element whose northeastern limit of its distribution roughly corresponding to the northern coasts of the ancient Tethys Sea need further field researches; so far it is known from Tunisia, Algeria, Morocco, Portugal, Spain, France, Great Britain, Belgium, The Netherlands, Germany, Poland, Czech Republic, Hungary, Switzerland, Italy (Apulia and Sicily), Croatia, Bosnia-Herzegovina, Bulgaria, Greece, Cyprus, Turkey, Georgia and Iran. No biological data are available for the Italian specimens. Among its host plants present and widely distributed in Italy, namely *Filago germanica* (L.) Huds., *Helichrysum luteoalbum* (L.) Rchb., *Logfia gallica* (L.) Cosson & Germ., *Logfia minima* (Sm.) Dumort and *Omalotheca sylvatica* (L.) Sch. Bip. & F.W., only the first three live in Sicily and Apulia.

Genus *Ceratapion* Schilsky, 1901

Ceratapion (*Acanephodus*) *onopordi onopordi* (Kirby, 1808)

Ceratapion onopordi; Vitale (1889, p. 144); Vitale (1900, p. 46)

ORIGINAL IDENTIFICATION – *Apion* Herbst – *onopordi* Kirby

LOCALITIES – “Messina”, “F. Vitale [leg.]”

SPECIMENS – 1

Ceratapion (*Ceratapion*) *carduorum* (Kirby, 1808)

Apion carduorum; Vitale (1893, p. 156); Vitale (1901, p. 445); Vitale (1903c, p. 20)

ORIGINAL IDENTIFICATION – *Apion* Herbst – *carduorum* Kirby

LOCALITIES – Castanea, VII.[1]934, F. Vitale [leg.]

SPECIMENS – 1

Remarks. As pointed out by Wanat (1995), since most of the 19th and 20th century literature data on *Ceratapion carduorum* refer to *Ceratapion gibbirostre* (Gyllenhal, 1813) or *Ceratapion damryi* (Desbrochers des Loges, 1894), interpretations of Vitale’s quotations about these three species have been deduced, as far as possible, from the biological data provided by the Sicilian author. It is necessary to specify that, while all the quotations related to specimens found on *Cynara cardunculus* L. (sub *Cynara horrida* Aiton) or *Cynara scolymus* L. have been attributed with certainty to *Ceratapion damryi*, the attributions to *C. carduorum* or *C. gibbirostre* have been more problematic due to the still too confused knowledge about their host plants. Since in Sicily larvae of *C. carduorum* have been observed associated exclusively to *Carduus nutans* L. whilst those of *C. gibbirostre* have been

found in stems of *Carduus pycnocephalus* L., and adults of the latter species have also been collected on *Galactites tomentosa* Moench (Giusto, unpublished data), all Vitale's records referred to plants belonging to the genera *Galactites* Moench and *Cirsium* Miller or those expressly attributed to *Apion carduorum* "var. *galactidis*" have been ascribed to *C. gibbirostre*. Finally, the only three reports attributed to *Apion carduorum* without any indication about the host plant were tentatively considered correct.

Ceratapion (Ceratapion) damryi (Desbrochers des Loges, 1894)

Apion carduorum; Vitale (1889, 143 (in part)); Vitale (1900, pp. 8, 45); Vitale (1927b, 111 (in part))
Apion carduorum var. *meridianum*; Vitale (1889, p. 143); Vitale (1893, p. 156); Vitale (1900, p. 45);
 Vitale (1901, p. 445)

Apion corduorum [sic]; Vitale (1900, p. 14)

Apion damryi; Vitale (1927b, p. 111)

ORIGINAL IDENTIFICATION – *Apion* Herbst – *carduorum* Kirby - *damryi* Desbr.

LOCALITIES – S. Licandro, 22.VI.[19]30, F. Vitale [leg.]; Rometta, 10.VIII.[1]917, F. Vitale [leg.];
 "Messina", "F. Vitale [leg.]"

SPECIMENS – 7

Remarks. See the remarks under *Ceratapion carduorum*.

Ceratapion (Ceratapion) gibbirostre (Gyllenhal, 1813)

Apion carduorum; Vitale (1889, 143 (in part)); Vitale (1927b, 111 (in part))

Apion carduorum var. *galactitis* [sic]; Vitale (1889, p. 143); Vitale (1927b, p. 111)

Apion carduorum var. *galactites* [sic]; Vitale (1893, p. 156); Vitale (1900, p. 45); Vitale (1901, p. 445);
 Vitale (1903d, p. 67)

ORIGINAL IDENTIFICATION – *Apion* Herbst – *carduorum* Kirby - [*carduorum*] a. *basicorne* Toms.
 [sic] - [*carduorum*] v. *galactitis* [sic] Wenck.

LOCALITIES – Messina, 1930, F. Vitale [leg.]; Messina, 1900, Vitale [leg.]; Messina, [19]04, Vitale [leg.]; Leone (Siracusa), 8.IV.[19]10, F. Vitale [leg.]; Colla, 7.VII.[19]26, F. Vitale [leg.]; Colla (Mess[ina]), 16.V.1925, F. Vitale [leg.]; "Messina", "F. Vitale [leg.]"; "Sicilia", "F. Vitale [leg.]"

SPECIMENS – 14

Remarks. See the remarks under *Ceratapion carduorum*.

Ceratapion (Clementiellus) robusticorne (Desbrochers des Loges, 1866)

Apion insolitum; Vitale (1893, p. 156); Vitale (1900, p. 46)

ORIGINAL IDENTIFICATION – *Apion* Herbst – *brunnipes* Bohm.

LOCALITIES – "Messina", "F. Vitale [leg.]"

SPECIMENS – 1

Remarks. In the Vitale collection this species, quoted as *Apion insolitum* Desbrochers des Loges, 1870, is represented by a single specimen placed in the box n° 72, in correspondence with the label "*brunnipes* Bohm", between two specimens of *Acentrotypus brunnipes* and two specimens of *Omphalapion laevigatum* (Kirby, 1808). It is curious to note that in the

box n° 73 there is no specimen near the label with the indication “robusticorne Desbr.”. *Ceratapion robusticorne* is a West-Mediterranean species so far known from Portugal, Spain, Morocco, Algeria, Tunisia, Malta and Italy. Its Italian distribution coincides with that of *Acentrotypus brunnipes*; *Ceratapion robusticorne*, in fact, is known from Apulia (Foggia Province: Peschici) (Giusto 1986; Abbazzi and Osella 1992) (sub Gargano), (Abbazzi and Maggini 2009) (sub Promontorio del Gargano), Taranto Province: Circummarpiccolo (Wanat 1995; Abbazzi and Maggini 2009), Taranto env. (Giusto, unpublished record), river mouth of Fiume Lato (Giusto, unpublished record), and Sicily (Palermo Province: Palermo) (Wanat 1995), Palermo, loc. Arenella-Torre del Rotolo (Schatzmayer 1925; Giusto 1986; Abbazzi and Maggini 2009), Siracusa Province: 5 km E of Sortino, 570 m a.s.l. (Giusto, unpublished record).

***Ceratapion (Echinostroma) curtii* (Wagner, 1920)**

Apion carduorum var. *basicorne*; Vitale (1893, p. 156); Vitale (1900, p. 45); Vitale (1901, p. 445)

Apion subcaviceps [sic]; Vitale (1927a, p. 54)

ORIGINAL IDENTIFICATION – *Apion* Herbst – [*carduorum* Kirby] a. *basicorne* Thoms. [sic]

LOCALITIES – “Messina”, “F. Vitale [leg.]”

SPECIMENS – 1

Remarks. Most likely, the single specimen bearing the label “*subcaviceps* Desb.” (incorrect spelling for *subcavifrons*) is that found in Contrada Calamarà and examined by Schatzmayer, as stated by Vitale (1927a). It is curious to note that in the box n° 72 there is no specimen near the identification label “*curtii* Wagner”. *Ceratapion curtii* is a Mediterranean species so far known from southern France, Italy (Lazio and Sicily), Croatia and Greece (Crete). To these countries we also add Cyprus (new record) since, due to a misidentification, all the specimens quoted as *Ceratapion basicorne* (Illiger, 1807) by Giusto (Stüben *et al.* 2012) turned out to belong to this species. Sicilian specimens from Messina Province: southern slopes of Monte Castellazzo, 1.200 m a.s.l. and Siracusa Province: 5 km E of Sortino, 570 m a.s.l. (Giusto, unpublished data) and all Cypriot specimens have been found exclusively on *Crupina crupinastrum* (Moris) Vis.

***Ceratapion (Echinostroma) scalptum scalptum* (Mulsant & Rey, 1859)**

Apion scalptum; Vitale (1889, p. 144); Vitale (1893, p. 156); Vitale (1900, p. 46); Vitale (1901, p. 445)

ORIGINAL IDENTIFICATION – *Apion* Herbst – *scalptum* Rey [sic]

LOCALITIES – Castanea, 11.IV.1924, F. Vitale [leg.]; “Messina”, “F. Vitale [leg.]”; “Sicilia”, “F. Vitale [leg.]”

SPECIMENS – 9

Genus *Diplapion* Reitter, 1916

***Diplapion confluens* (Kirby, 1808)**

Apion confluens; Vitale (1893, p. 156); Vitale (1900, p. 46); Vitale (1901, p. 446)

ORIGINAL IDENTIFICATION – *Apion* Herbst – *confluens* Kirby – *stolidum* Germ.

LOCALITIES – Alcantara, 2.VII.[19]31, F. Vitale [leg.]; C[astel]Vetrano, X.[19]10, F. Vitale [leg.]; Calamarà, 2.VI.[19]30, F. Vitale [leg.]; Castanea, 1927, F. Vitale [leg.]; “Messina”, “F. Vitale [leg.]”;

“Sicilia”, “F. Vitale [leg.]”

SPECIMENS – 12

Remarks. In the past, recognition of *Diplapion confluens*, *Diplapion detritum* and *Diplapion stolidum* created great problems for entomologists and, often, it was a source of errors. Vitale himself misidentified in part these species, as evidenced by the original identification labels positioned in the box n° 72 and the specimens placed near them. Due to these errors, the correct interpretation of some bibliographic citations was also difficult, as to be impossible for those referred to *D. stolidum* to attribute them to the correct taxa (Vitale 1889, 1893, 1900, 1901). With regard to *D. stolidum*, due to the lack of available material, it is not possible to confirm the presence of this species in Sicily. Our decision is supported by the fact that *Leucanthemum vulgare* (Vaill.) Lam. (on which the larvae surely develop) is an allochthonous plant on the island and that all the efforts to collect *Diplapion stolidum* in Sicily on other possible host plants (i.e. *Anthemis arvensis* L., *Cota tinctoria* (L.) J. Gay and *Matricaria chamomilla* L.) were unsuccessful.

Diplapion detritum (Mulsant & Rey, 1859)

Apion detritum; Vitale (1893, p. 156); Vitale (1900, p. 46); Vitale (1901, p. 445); Vitale (1927b, p. 110)

Apion detritum var. *ragusae*; Vitale (1893, p. 156); Vitale (1900, p. 46)

ORIGINAL IDENTIFICATION – *Apion* Herbst – *detritum* Rey [sic] – [*detritum*] a. *ragusai* [sic] Everts – *stolidum* Germ.

LOCALITIES – Gesso, 27.IV.[1]917, F. Vitale [leg.]; Bauso, 11.V.[1]917, F. Vitale [leg.]; Bauso, 19.V.[1]921, F. Vitale [leg.]; Piano Torre, Mess[ina]., IV.[1]909, F. Vitale [leg.]; Margi, 12.IV.1916, F. Vitale [leg.]; Gesso, 9.I.[19]29, F. Vitale [leg.]; Giostra, 25.III.[19]33, F. Vitale [leg.]; “Messina”, “XI.1902”; “Messina”, “F. Vitale [leg.]”; “Sicilia”, “F. Vitale [leg.]”

SPECIMENS – 12

Remarks. The finding of this species on *Tuberaria inconspicua* (Pers.) Willk. (Vitale 1927b), sub *Helianthemum guttatum* var. *plantagineum*) was certainly accidental.

Genus *Omphalapion* Schilsky, 1901

Omphalapion dispar (Germar, 1817)

Apion dispar; Vitale (1893, p. 156); Vitale (1900, p. 46); Vitale (1906, p. 206)

ORIGINAL IDENTIFICATION – *Apion* Herbst – *dispar* Germ.

LOCALITIES – M[ont]Albano [Elicona], VII.[19]04, Vitale [leg.]; “Sicilia”, “F. Vitale [leg.]”; “Messina”, “F. Vitale [leg.]”

SPECIMENS – 4

Omphalapion laevigatum (Paykull, 1792) (Fig. 5)

ORIGINAL IDENTIFICATION – *Apion* Herbst – *brunnipes* Bohm.

LOCALITIES – “Sicilia”, “F. Vitale [leg.]”; Sicilia, 1907, F. Vit[ale] leg].

SPECIMENS – 2

Remarks. The two specimens of *Omphalapion laevigatum* stored in the Vitale collection are positioned in correspondence with the label “*brunnipes* Bohm.” while near the determination label “*laevigatum* Payk.” there is no specimen. They represent the first and so far the unique finding in Sicily. This species, widespread from Portugal to Kazakhstan throughout Europe, is present in almost all Italian regions (it is not yet recorded only from Aosta Valley, Veneto, Apulia and Sardinia). Its presence in Sicily was therefore expected.

Tribe Exapiini Alonso-Zarazaga, 1990**Genus *Exapion* Bedel, 1887*****Exapion subparallelum*** (Desbrochers des Loges, 1888)

Apion fuscirostre; Vitale (1889, p. 145); Vitale (1893, p. 156); Vitale (1900, pp. 9, 15, 46); Vitale (1901, pp. 422, 424, 446); Vitale (1905a, p. 122)

Apion fuscirostre var. *subparallelum*; Vitale (1927b, p. 111)

ORIGINAL IDENTIFICATION – *Apion* Herbst – *subparallelum* Desbr.

LOCALITIES – Scala, 3.IV.1936, F. Vitale [leg.]

SPECIMENS – 1

Exapion ulicis (Forster, 1771)

Apion uliciperda; Vitale (1906, p. 207)

ORIGINAL IDENTIFICATION – *Apion* Herbst – *ulicis* Forst. – *uliciperda* Pandel.

LOCALITIES – “Messina”, “F. Vitale [leg.]”; “Sicilia”, “F. Vitale [leg.]”

SPECIMENS – 10

Remarks. Vitale (1906) quotation of this species, as *Apion uliciperda*, is the first and hitherto unique in Sicily. *Exapion ulicis*, distributed in most of Central and West-Europe, in Italy is cited only from Piedmont, Liguria, Tuscany and Sicily. It is noteworthy to observe that larvae of this species are associated to *Ulex* spp. (including *Ulex europaeus* L., the unique Italian species belonging to this genus), but that no *Ulex* species is nowadays present in Piedmont (where its presence seems unlikely) and in Sicily. However, cannot be excluded that over a century ago *U. europaeus* L. was present at least in Sicily.

Genus *Lepidapion* Schilsky, 1906***Lepidapion (Lepidapion) argentatum argentatum*** (Gerstaecker, 1854)

Apion squamigerum; Vitale (1889, p. 145); Vitale (1893, p. 157); Vitale (1900, pp. 15, 46); Vitale (1901, pp. 423, 446); Vitale (1903d, p. 67); Vitale (1904, p. 46); Vitale (1905a, p. 122)

Apion argentatum; Vitale (1893, p. 157); Vitale (1900, p. 46); Vitale (1904, p. 46); Vitale (1927b, p. 112)

ORIGINAL IDENTIFICATION – *Apion* Herbst – *argentatum* Germ.

LOCALITIES – “Messina”, “F. Vitale [leg.]”; “Sicilia”, “F. Vitale [leg.]”; Palermo, Colla, 17.IV.[19]30, F. Vitale [leg.]; Palermo, Colla, XII.[1]919, F. Vitale [leg.]; Ciaramita, 19.V.[19]37, F. Vitale [leg.]; Sicilia, (Mess[ina]), 1919, F. Vitale [leg.]; Cudduttà, Messina, 24.IV.1911, F. Vitale [leg.]

SPECIMENS – 11

Remarks. Vitale (1889) misidentified this species with *Lepidapion squamigerum* (Jacquelin du Val, 1854) and only in 1904 he recognized that the two species were different (the former quotations about the presence of *Apion argentatum* in Sicily (Vitale 1893, 1900) were accepted by Wencker). The host plant *Genista monspessulana* (L.) L.A.S. Johnson, quoted as *Cystus* [sic] *monspessulanus* L. (Vitale 1927b), confirms the correct identification of this Apionidae by the Sicilian author.

Tribe Ixapiini Alonso-Zarazaga, 1990

Genus *Trichopterapion* Wagner, 1930

Trichopterapion holosericeum (Gyllenhal, 1833)

Apion holosericeum; Vitale (1889, p. 144)

ORIGINAL IDENTIFICATION – *Apion* Herbst – *holosericeum* Gyll.

LOCALITIES – “Messina”, “F. Vitale [leg.]”; “Sicilia”, “Ficuzza”, 15–18.V.[1]911, L.T.”; Ficuzza, 7.IX.[1]910, F. Vitale [leg.]; Ficuzza, XI.1915, F. Vitale [leg.]

SPECIMENS – 9

Remarks. The finding of this species on *Rumex bucelocephalus* L. (Vitale 1889) was certainly accidental.

Tribe Kalcapiini Alonso-Zarazaga, 1990

Genus *Kalcapion* Schilsky, 1906

Kalcapion semivittatum (Gyllenhal, 1833)

Apion pallipes; Vitale (1889, pp. 146, 150); Vitale (1893, p. 157); Vitale (1900, p. 46); Vitale (1901, p. 446); Vitale (1903d, p. 67); Vitale (1927a, p. 54)

Apion semivittatum; Vitale (1893, p. 157); Vitale (1900, p. 46); Vitale (1901, p. 446); Vitale (1927a, p. 54); Vitale (1927b, p. 112)

Apion semivittatum var. *centromaculatum* [unavailable name]; Vitale (1900, p. 46); Vitale (1901, p. 446)

ORIGINAL IDENTIFICATION – *Apion* Herbst – *semivittatum* Gyll. – *uliciperda* Pandel.

LOCALITIES – “Messina”, “F. Vitale [leg.]”; “Sicilia”, “F. Vitale [leg.]”; Castanea, 11.IV.1929, F. Vitale [leg.]; Castanea, 9.V.1930, F. Vitale [leg.]; Castanea, 16.IX.1937, F. Vitale [leg.]; Scala (Mes[sina].), 28.VII.1915, F. Vitale [leg.]

SPECIMENS – 12

Remarks. All the previous citations by Vitale of *Apion pallipes* were attributed to *Apion semivittatum* by Vitale (1927a). Migration on trees is a widespread phenomenon among Apionidae to protect themselves from solar radiation especially in summer and autumn. The finding of few specimens on *Quercus robur* L. and *Corylus avellana* L. (Vitale 1889) confirms this habit also for *K. semivittatum*, monophagous on *Mercurialis annua* L.

Genus *Melanapion* Wagner, 1930

Melanapion (Melanapion) minimum (Herbst, 1797)

Apion minimum; Vitale (1893, p. 159); Vitale (1900, p. 48)

ORIGINAL IDENTIFICATION – *Apion* Herbst – *minimum* Herbst

LOCALITIES – “Messina”, “F. Vitale [leg.]”; Stidda, 31.V.1929, F. Vitale [leg.]; Camaro, 28.V.1924, F. Vitale [leg.]; San Filippo Archi, su *Tamarix*, 10.VII.[1]902, F. Vitale [leg.]; Rodia, 10.VII.[19]02, F. Vitale [leg.]; Gravitelli, 12.V.[19]29, F. Vitale [leg.]; Naso, 16.VIII. 1928, F. Vitale [leg.]

SPECIMENS – 11

Genus *Squamapion* Bokor, 1923

Squamapion flavimanum (Gyllenhal, 1833)

Apion flavimanum Vitale (1889, p. 145); Vitale (1893, p. 156); Vitale (1900, p. 46); Vitale (1901, p. 446)

ORIGINAL IDENTIFICATION – *Apion* Herbst – *flavimanum* Gyll.

LOCALITIES – Colla, 4.IV.1926, F. Vitale [leg.]

SPECIMENS – 3

Squamapion leucophaeatum (Wencker, 1864)

Apion elongatum; Vitale (1893, p. 157); Vitale (1900, p. 47); Vitale (1901, p. 447)

ORIGINAL IDENTIFICATION – *Apion* Herbst – *leucophaeatum* Wenck.

LOCALITIES – “Messina”, “F. Vitale [leg.]”; Gesso, 21.V.[1]937, F. Vitale [leg.]; P[onte] Schiavo, 21.V.[1]928, F. Vitale [leg.]; Ficuzza, V.1913, F. Vitale [leg.]

SPECIMENS – 4

Squamapion vicinum (Kirby, 1808)

Apion atomarium; Vitale (1889, p. 144); Vitale (1932, p. 40)

Apion vicinum; Vitale (1893, p. 156); Vitale (1900, p. 46); Vitale (1901, p. 446)

Apion consors; Vitale (1930, p. 136); Vitale (1932, p. 40)

ORIGINAL IDENTIFICATION – *Apion* Herbst – *vicinum* Kirby – *consors* Desbr. – *atomarium* Kirby
 LOCALITIES – Ritiro, 14.VII.[19]21, F. Vitale [leg.]
 SPECIMENS – 11

Remarks. Since the presence on the island of *Squamapion consors consors* (Desbrochers des Loges, 1875) is due to a clear misidentification with *Squamapion vicinum* (Kirby, 1808), the Sardo-Corsican species must be definitively removed from the Sicilian fauna.

Genus *Taeniapion* Schilsky, 1906

Taeniapion rufescens (Gyllenhal, 1833)

Apion rufescens; Vitale (1889, p. 146); Vitale (1893, p. 157); Vitale (1900, p. 46); Vitale (1901, p. 446); Vitale (1903d, p. 67); Vitale (1927b, p. 111)
 ORIGINAL IDENTIFICATION – *Apion* Herbst – *rufescens* Gyll. – *urticarium* Herbst
 LOCALITIES – Messina”, “F. Vitale [leg.]”; “Sicilia”, “F. Vitale [leg.]”; Sicilia, Contr[ada]. Paradiso, [Messina], II.[19]09, F. Vitale [leg.]
 SPECIMENS – 9

Taeniapion rufulum (Wencker, 1864)

Apion rufulum; Vitale (1900, p. 46); Vitale (1901, p. 446)
Apion urticarium; Vitale (1927b, 111 (in part))
 ORIGINAL IDENTIFICATION – *Apion* Herbst – *rufulum* Herbst. – *urticarium* Herbst
 LOCALITIES – “Sicilia”, “F. Vitale [leg.]”; San Michele, 07.IX.[19]29, F. Vitale [leg.]
 SPECIMENS – 3

Remarks. The note about the presence of larvae inside the stems of *Urtica membranacea* Poir. (Vitale 1927b) refers to *Taeniapion rufulum* which, at least in Italy, seems to be the only Apionidae associated with this *Urtica* species.

Taeniapion urticarium urticarium (Herbst, 1784)

Apion vernale; Vitale (1889, pp. 146, 150)
Apion urticarium; Vitale (1893, p. 157); Vitale (1900, p. 46); Vitale (1901, p. 446); Vitale (1927b, 111 (in part))
 ORIGINAL IDENTIFICATION – *Apion* Herbst – *urticarium* Herbst – *rufescens* Gyll.
 LOCALITIES – “Messina”, “F. Vitale [leg.]”; “Sicilia”, “F. Vitale [leg.]”; Gazzi, 03.V.[1]921, F. Vitale [leg.]
 SPECIMENS – 5

Remarks. See the remarks under *Taeniapion rufulum*.

Tribe Malvapiini Alonso-Zarazaga, 1990

Genus *Malvapion* A. Hoffmann, 1958***Malvapion malvae* (Fabricius, 1775)**

Apion malvae; Vitale (1889, p. 152); Vitale (1893, p. 159); Vitale (1900, pp. 15, 49); Vitale (1901, p. 449); Vitale (1903d, p. 67); Vitale (1927b, p. 112)

ORIGINAL IDENTIFICATION – *Apion* Herbst – *malvae* Fabr.

LOCALITIES – Api (Mes[sina].) 19.IV.[19]33, F. Vitale [leg.]; Api (Mes[sina].) 13.IV.[19]32, F. Vitale [leg.]; Ritiro, 21.IV.[19]30, F. Vitale [leg.]; Scala, 11.V.1929, F. Vitale [leg.]; “Messina”, “F. Vitale [leg.]”

SPECIMENS – 9

Genus *Pseudapion* Schilsky, 1906***Pseudapion rufirostre* (Fabricius, 1775)**

Apion rufirostre; Vitale (1889, p. 148); Vitale (1893, p. 158); Vitale (1900, p. 47); Vitale (1927b, p. 112)

Apion rufirostre var. *De Stefani* Vitale (1889, p. 148); Vitale (1893, p. 158); Vitale (1900, p. 47); Vitale (1901, p. 447)

Apion rufirostre [sic]; Vitale (1901, p. 447)

ORIGINAL IDENTIFICATION – *Apion* Herbst – *rufirostre* Fabr. – [*rufirostre*] a. *Stephani* [sic] Vitale

LOCALITIES – Madonna Via, 14.IV.[19]06, G. Coniglio [leg.]; Spadafora, 26.III.[1]919, F. Vitale [leg.]; Sicilia, F. Vitale [leg.]; Messina, F. Vitale [leg.]

SPECIMENS – 10

Remarks. In 1889 Vitale described *Apion rufirostre destefanii* (sub *Apion* [*rufirostre*] var. *De Stefani*) upon a single male found in April 1886 on mosses from Contrada Gravitelli (Messina). Although in the Vitale collection no specimen can clearly be identified with the holotype of this taxon, since there is no doubt about the synonymy with *Pseudapion rufirostre*, no neotype is here designated, as it is not necessary (International Commission on Zoological Nomenclature 1999).

Tribe Metapiini Alonso-Zarazaga, 1990**Genus *Metapion* Schilsky, 1906*****Metapion candidum candidum* (Wencker, 1864)**

Apion candidum; Vitale (1893, p. 156); Vitale (1900, p. 46); Vitale (1927b, p. 112)

ORIGINAL IDENTIFICATION – *Apion* Herbst – *candidum* Wenck.

LOCALITIES – Rometta, 27.V.1921, F. Vitale [leg.]; Stidda, 24.V.1930, F. Vitale [leg.]

SPECIMENS – 8

Tribe Oxystomatini Alonso-Zarazaga, 1990

Genus *Cyanapion* Bokor, 1923

Cyanapion (Bothryorrhynchapion) afer (Gyllenhal, 1833)

ORIGINAL IDENTIFICATION – *Apion* Herbst – *platalea* Germ.

LOCALITIES – “Messina”, “F. Vitale [leg.]”; “Sicilia”, “F. Vitale [leg.]”

SPECIMENS – 7

Remarks. Species never mentioned in any of the Vitale publications, not even under the name *Apion platalea* Germar, 1817, taxon with which in the past it was often confused. The presence of *Cyanapion platalea* (Germar, 1817) in Sicily, certainly referring to *C. afer*, has been reported for the first time by Ragusa (1906), but the possibility to find this species on the island is all but sure. The host plant *Lathyrus tuberosus* L., with which *C. platalea* is surely associated (Dieckmann 1977, Giusto: unpublished data) is not present in Sicily. When its apparent poliphagy on *Lathyrus latifolius* L., *Lathyrus sylvestris* L., *Vicia cracca* L. and *Vicia villosa* Roth will be confirmed, then its presence on the island could also be confirmed. At present, we consider *C. platalea* as not occurring in Sicily.

Cyanapion (Bothryorrhynchapion) gyllenhalii (Kirby, 1808)

Apion unicolor; Vitale (1900, p. 48); Vitale (1901, p. 448)

ORIGINAL IDENTIFICATION – *Apion* Herbst – *gyllenhali* [sic] Kirby

LOCALITIES – Ucria, 12.III.1909, F. Vitale [leg.]

SPECIMENS – 1

Genus *Eutrichapion* Reitter, 1916

Eutrichapion (Cnemapion) vorax (Herbst, 1797)

Apion vorax; Vitale (1889, p. 152); Vitale (1893, p. 159); Vitale (1900, p. 48); Vitale (1901, p. 449)

ORIGINAL IDENTIFICATION – *Apion* Herbst – *minimum* Herbst – *vorax* Herbst

LOCALITIES – Camaro, 28.V.1924, F. Vitale [leg.]; “Messina”, “F. Vitale [leg.]”

SPECIMENS – 8

Remarks. The findings of this species on *Castanea sativa* Mill., *Corylus avellana* L. and *Quercus robur* L. (Vitale 1889) can be traced back to its migration habits, whereas the specimens found on *Sulla coronaria* (L.) Medik. (sub *Hedysarum coronarium* L.) (Vitale 1889) are certainly accidental.

Eutrichapion (Eutrichapion) viciae (Paykull, 1800)

Apion viciae; Vitale (1889, p. 148); Vitale (1893, p. 158); Vitale (1900, p. 47); Vitale (1901, p. 447);

Vitale (1903d, p. 67)

ORIGINAL IDENTIFICATION – *Apion* Herbst – *viciae* Payk.

LOCALITIES – Stidda, 24.V.[19]30, F. Vitale [leg.]; Colla, 26.IV.[19]30, F. Vitale [leg.]; Calamarà, 22.VI.[19]32, F. Vitale [leg.]; Annunziata, 27.IV.[19]30, F. Vitale [leg.]; Messina, 1930, F. Vitale [leg.]; Favorita, 29.IX.[19]12, F. Vitale [leg.]

SPECIMENS – 6

Remarks. Species that often migrates on trees, as observed by Vitale (1889) who reported its presence on *Corylus avellana* L. and *Quercus robur* L.

***Eutrichapion (Psilocalymma) facetum* (Gyllenhal, 1839)**

Apion perspicax; Vitale (1889, p. 152)

ORIGINAL IDENTIFICATION – *Apion* Herbst – *facetum* Gyll. – [*haetiops*] s. *antennale* Auctor.

LOCALITIES – Scala, 25.IV.[19]30, F. Vitale [leg.]; Calamarà, 27.V.[19]37, F. Vitale [leg.]; “Messina”, “F. Vitale [leg.]”; [Contrada] Paradiso, [Messina], 7.VI.[19]32, F. Vitale [leg.]

SPECIMENS – 4

***Eutrichapion (Psilocalymma) punctiger* (Paykull, 1792)**

Apion punctigerum; Vitale (1889, p. 151); Vitale (1893, p. 159); Vitale (1900, p. 156); Vitale (1901, p. 448); Vitale (1903d, p. 67); Vitale (1927b, p. 113)

ORIGINAL IDENTIFICATION – *Apion* Herbst – *platalea* Germ. – *punctigerum* Payk.

LOCALITIES – 3-Monti, 3.V.[19]27, F. Vitale [leg.]; Messina, II.1919, F. Vitale [leg.]; Tortorici, 14.XI.[19]08, F. Vitale [leg.]; “Messina”, “F. Vitale [leg.]

SPECIMENS – 8

Remarks. The huge invasion of specimens belonging to this species on a *Rubus* shrub observed in May, 1923 in Contrada Portella di Stagno (Vitale 1927b) must be attributed, almost certainly, to *Holotrichapion pisi* (Fabricius, 1801) whose “famous mass invasions” are described and documented in many publications (e.g. Girard 1880; Marchal 1894; Clermont 1902; Schatzmayr 1925; Dieckmann 1977; Stüben *et al.* 2018). On the contrary, apart from the aforementioned observation by Vitale, there are no reports about mass invasions by *Eutrichapion punctiger*.

Genus *Hemitrichapion* Voss, 1959

***Hemitrichapion (Dimesomyops) pavidum* (Germar, 1817)**

Apion pavidum; Vitale (1900, p. 48); Vitale (1906, p. 207)

ORIGINAL IDENTIFICATION – *Apion* Herbst – *pavidum* Germ. – *ochropus* Germ. – *elegantulum* Germ.

LOCALITIES – “Messina”, “F. Vitale [leg.]”; Scala, 5.VI.[19]29; F. Vitale [leg.]

SPECIMENS – 5

Genus *Holotrichapion* Györfy, 1956

Holotrichapion (Apiops) pisi (Fabricius, 1801)

Apion pisi; Vitale (1889, p. 151); Vitale (1893, p. 159); Vitale (1900, pp. 15, 48); Vitale (1901, p. 448); Vitale (1903d, p. 67)

Apion pisi var. *cyaneipenne* [sic]; Vitale (1893, p. 159)

Apion pisi var. *cyanipenne*; Vitale (1900, p. 48)

ORIGINAL IDENTIFICATION – *Apion* Herbst – *pisi* Fabr.

LOCALITIES – Colla, 1.IV.[19]29, F. Vitale [leg.]; Colla, 19.VII.[19]31, F. Vitale [leg.]; Ritiro, 21.IV.[19]30, F. Vitale [leg.]; “Messina”, “F. Vitale [leg.]”; “Sicilia”, “F. Vitale [leg.]”

SPECIMENS – 5

Remarks. See the remarks under *Eutrichapion punctiger*.

Holotrichapion (Holotrichapion) saturnium (Normand, 1937)

Apion ononis; Vitale (1893, p. 159); Vitale (1900, p. 48); Vitale (1901, p. 448)

ORIGINAL IDENTIFICATION – *Apion* Herbst – *ononis* Kirb.

LOCALITIES – Castanea, 4.VII.1910, F. Vitale [leg.]; Castanea, 17.VII.[19]37, F. Vitale [leg.]; Ficuzza, V.1913, F. Vitale [leg.]; Gesso, 21.V.[19]37, F. Vitale [leg.]

SPECIMENS – 5

Remarks. Species whose distribution is still incomplete due to some misidentification on the past with *Apion umbrinum* Wollaston, 1864, a synonym of *Holotrichapion ononis* (Kirby, 1808). It is so far recorded from Spain, Morocco, Algeria, Tunisia, Italy, Lybia and Iran. In Italy its presence is sure in Sardinia and Sicily.

Holotrichapion (Legaricapion) antennale (Desbrochers des Loges, 1896)

Apion aethiops; Vitale (1893, p. 159); Vitale (1900, p. 48); Vitale (1901, p. 448)

ORIGINAL IDENTIFICATION – *Apion* Herbst – *aethiops* – [*aethiops*] s. *antennale* Auctor.

LOCALITIES – Trapani, 20.V.[19]39, F. Vitale [leg.]; Annunziata, 26.IV.[19]20, F. Vitale [leg.]; Condò (Mes[sina].), 3.III.[19]26, F. Vitale [leg.]; “Messina”, “F. Vitale [leg.]”; Scala, 14.V.[19]30, F. Vitale [leg.]

SPECIMENS – 11

Remarks. To date, only specimens belonging to *Holotrichapion antennale* and *Holotrichapion gracilicolle* (Gyllenhal, 1839) were examined among the many Sicilian Apionidae ones. Thus, we attribute with reasonable certainty Vitale (1893, 1900, 1901) quotations of *Apion aethiops* to *H. antennale* and we confirm the correctness of those referring to *H. gracilicolle*.

Holotrichapion (Legaricapion) gracilicolle (Gyllenhal, 1839)

Apion gracilicolle; Vitale (1893, p. 159); Vitale (1900, p. 48); Vitale (1906, p. 207)

ORIGINAL IDENTIFICATION – *Apion* Herbst – *gracilicolle* Gyll.

LOCALITIES – Scoppo, 21.IV.[19]29, F. Vitale [leg.]; Calamarà, 24.XII.[19]32, F. Vitale [leg.]; Messina, V.[19]31, F. Vitale [leg.]; “Messina”, “F. Vitale [leg.]”; “Sicilia”, “F. Vitale [leg.]”

SPECIMENS – 9

Genus *Ischnopterapion* Bokor, 1923***Ischnopterapion (Chlorapion) virens* (Herbst, 1797)***Apion virens*; Vitale (1893, p. 159); Vitale (1900, p. 48); Vitale (1901, p. 448)*Apion virens* ab. *atratus*; Vitale (1905c, p. 207); Vitale (1906, pp. 181, 195) [unavailable, infrasub-specific name]ORIGINAL IDENTIFICATION – *Apion* Herbst – *virens* Herbst – [*virens*] a. *atratum* Vitale

LOCALITIES – Furnari, 04.VI.1930, F. Vitale [leg.]; Pezzolo, 09.VI.[19]31, F. Vitale [leg.]; Messina, 1930, F. Vitale [leg.]; Calamarà, 14.V.1935, F. Vitale [leg.]; Camaro, 9.IV.[19]26, F. Vitale [leg.]; [Monte] Ciccìa, 4.VII.[19]32, F. Vitale [leg.]; Patti, Messina, X.1909, F. Vitale [leg.]

SPECIMENS – 11

Ischnopterapion (Ischnopterapion) aeneomicans nothum* (Desbrochers des Loges, 1897) (Figs 6–7)Apion aeneomicans*; Vitale (1900, pp. 13, 48)ORIGINAL IDENTIFICATION – *Apion* Herbst – *aeneomicans* Wenck.

LOCALITIES – Ucria, VII.[1]910, F. Vitale [leg.]

SPECIMENS – 4

Remarks. New record for Italy (Sicily) for this North-African taxon to date note only from Algeria and Tunisia. Like the nominal subspecies, also lives on *Lotus dorycnium* L. (Vitale (1901) sub *Dorycnium suffruticosum* Vill.). The correct identification of this taxon allows to exclude from the Sicilian fauna the nominal subspecies, *Ischnopterapion aeneomicans aeneomicans* (Wencker, 1864).

Ischnopterapion (Ischnopterapion) modestum* (Germar, 1817)Apion loti*; Vitale (1893, p. 159); Vitale (1900, p. 48); Vitale (1901, p. 448)ORIGINAL IDENTIFICATION – *Apion* Herbst – *loti* Kirby – [*loti*] v. *sicardi* Desbr.

LOCALITIES – Salice (Mes[sina].), 6.IV.[1]919, F. Vitale [leg.]; Castanea, 9.II.[1]920, F. Vitale [leg.]; Castanea, 11.IV.[19]29, F. Vitale [leg.]; Castanea, 11.IV.[19]39, F. Vitale [leg.]; 3-Monti, 9.IV.[19]30, F. Vitale [leg.]; Gesso, 23.IV.[1]917, F. Vitale [leg.]; Annunziata, 26.IV.[19]30, F. Vitale [leg.]; “Messina”, “F. Vitale [leg.]”; Calamarà, 31.V.[19]32, F. Vitale [leg.]

SPECIMENS – 9

Genus *Oryxolaemus* Alonso-Zarazaga, 1990***Oryxolaemus croceifemoratus* (Gyllenhal, 1839)***Apion flavofemoratum* [sic] var. *croceifemoratum*; Vitale (1889, p. 146); Vitale (1893, p. 157); Vitale (1900, p. 46); Vitale (1901, p. 446)ORIGINAL IDENTIFICATION – *Apion* Herbst – [*flavofemoratum* [sic]] v. *croceifemoratum* [sic] Gyll.

LOCALITIES – “Messina”, “F. Vitale [leg.]”

SPECIMENS – 1

***Oryxolaemus scabiosus* (Weise, 1889)**

Apion flavofemoratum [sic]; Vitale (1889, p. 146); Vitale (1893, p. 157); Vitale (1900, pp. 15, 46); Vitale (1901, p. 446); Vitale (1903d, p. 67); Vitale (1913, p. 142)

ORIGINAL IDENTIFICATION – *Apion* Herbst – [*flavofemoratum* [sic]]

LOCALITIES – Ritiro, 8.IV.[19]05, F. Vitale [leg.]; [Monte] Ciccina, 22.V.[19]30, F. Vitale [leg.]; “Messina”, “F. Vitale [leg.]”

SPECIMENS – 4

Remarks. Until the middle of the 20th century, this taxon has been confused with *Oryxolaemus flavifemoratum*, species not yet found in southern Italy (Giusto 1997). In Sicily, larvae of *O. scabiosus* live on *Cytisus infestus* (C. Presl) Guss. and *Cytisus laniger* DC. (synonym of *Cytisus villosus* (Poir.) Link). Its findings on *Castanea sativa* Mill. (sub *Castanea vesca* Gaertn.), *Corylus avellana* L., *Quercus robur* L. (Vitale 1889) and *Vicia* sp. (Vitale 1900) were certainly accidental.

Genus *Oxystoma* Dumeril, 1805

***Oxystoma craccae* (Linnaeus, 1767)**

Apion craccae; Vitale (1889, p. 142); Vitale (1900, p. 45); Vitale (1901, p. 445)

ORIGINAL IDENTIFICATION – *Apion* Herbst – *craccae* Linn.

LOCALITIES – “Messina”, “F. Vitale [leg.]”

SPECIMENS – 6

***Oxystoma dimidiatum* (Desbrochers des Loges, 1897)**

ORIGINAL IDENTIFICATION – *Apion* Herbst *ochropus* Germ. – *ochropus* Germ. – *cerdo* Gerst. – *gyllenhali* [sic] Kirby

LOCALITIES – “Messina”, “F. Vitale [leg.]”; Castanea, 11.IV.[19]29, F. Vitale [leg.]; Calamarà, 30.VI.[19]32, F. Vitale [leg.]; Camaro, 5.IV.[19]26, F. Vitale [leg.]; M[onte]. Ciccina (Mes[sina].), 10.X.[19]26, F. Vitale [leg.]

SPECIMENS – 8

Remarks. *Apion dimidiatum* Desbrochers des Loges, 1897 was almost universally confused with *Apion cerdo* Gerstaecker, 1854 till Dieckmann (1971) described *Apion pseudocerdo*, later considered synonym of *Oxystoma dimidiatum*. This confusion led to the publication of a huge amount of incorrect data about the distribution of *Oxystoma cerdo* and its allied *O. dimidiatum* and so, according to the literature, it is not possible to define their actual distribution. Since all the about 200 Sicilian specimens examined from 48 localities (Giusto, unpublished data) turned out to be *O. dimidiatum*, we exclude *O. cerdo* from the apionid fauna of the island.

***Oxystoma ochropus* (Germar, 1818)**

Apion ochropus; Vitale (1889, p. 142); Vitale (1893, p. 90); Vitale (1900, p. 45); Vitale (1901, p. 445)

ORIGINAL IDENTIFICATION – *Apion* Herbst – *ochropus* Germ.

LOCALITIES – Ficuzza, 23–28.IV.19[06], F. Vitale [leg.]; “Messina”, “F. Vitale [leg.]”; Ficuzza, 5.V.[1]912, F. Vitale [leg.]; [Monte] Ciccica, 4.VII.[19]32, F. Vitale [leg.]

SPECIMENS – 11

***Oxystoma pomonae* (Fabricius, 1798)**

Apion pomonae; Vitale (1889, p. 142); Vitale (1893, p. 90); Vitale (1900, p. 45); Vitale (1901, p. 445); Vitale (1913, p. 142)

ORIGINAL IDENTIFICATION – *Apion* Herbst – *cerdo* Gerst. – [*cerdo*] v. *dimidiatum* Desbr. – [*cerdo*] a. *conspicuum* Desbr. – *pomonae* Fabr.

LOCALITIES – Calamarà, 30.VI.1932, F. Vitale [leg.]; Calamarà, 23.VI.[19]32, F. Vitale [leg.]; Camaro, 5.IV.[19]16, F. Vitale [leg.]; Catarratti, 16.VII.[1]927, F. Vitale [leg.]; “Messina”, “F. Vitale [leg.]”; “Sicilia”, “F. Vitale [leg.]”; M[onte]. Ciccica (Mess[ina].), 10.X.[1]926, F. Vitale [leg.]

SPECIMENS – 12

Genus *Protopirapion* Alonso-Zarazaga, 1990***Protopirapion atratum* (Germar, 1817)**

Apion striatum; Vitale (1893, p. 157); Vitale (1900, p. 47); Vitale (1901, p. 447)

ORIGINAL IDENTIFICATION – *Apion* Herbst – *striatum* Marsh. – *immune* Kirby

LOCALITIES – “Messina” “F. Vitale [leg.]”; “Sicilia” “F. Vitale [leg.]”

SPECIMENS – 8

***Protopirapion kraatzii* (Wencker, 1859)**

Apion kraatzi [sic]; Vitale (1903a, p. 9); Vitale (1905b, p. 167); Vitale (1906, p. 207); Vitale (1927b, p. 113)

ORIGINAL IDENTIFICATION – *Apion* Herbst – *kraatzi* [sic] Wencker

LOCALITIES – Camaro, 4.V.[19]24, F. Vitale [leg.]; Messina, 1905, F. Vitale [leg.]; Ciaramita, 6.VI.[19]34, F. Vitale [leg.]; Castanea, 2.V.[19]27, F. Vitale [leg.]; Scala, 19.III.[19]16, F. Vitale [leg.]; Scala, 20.IV.[19]29, F. Vitale [leg.]; “Messina”, “F. Vitale [leg.]”

SPECIMENS – 12

Remarks. Western Mediterranean species known from Tunisia, Algeria, Portugal, Spain, France and Italy. Italian specimens are quoted from Lombardy, Piedmont, Liguria, Tuscany, Latium, Campania, Calabria and Sicily. In Italy, larvae and adults are associated to *Cytisus laniger* DC. (synonym of *Cytisus villosus* (Poir.) Link), as observed by Vitale (1905b, 1927b), (sub *Cytisus triflorus* Lam.), while adults can also be found on *Cytisus spinosus* (L.) Lam. and *Cytisus infestus* (C. Presl.) Guss.

Genus *Stenoptirapion* Bokor, 1923

***Stenopterapion (Stenopterapion) tenue* (Kirby, 1808)**

Apion tenue; Vitale (1889, p. 151); Vitale (1893, p. 158); Vitale (1900, p. 48); Vitale (1901, p. 448)

ORIGINAL IDENTIFICATION – *Apion* Herbst – *tenue* Kirby

LOCALITIES – Castanea, 27.IX.1927, F. Vitale [leg.]; [Contrada] Paradiso, [Messina], 16.V.[19]31, F. Vitale [leg.]; Calamarà, 31.V.[19]32, F. Vitale [leg.]; 5.VI.[19]34, F. Vitale [leg.]; Messina, 1930, F. Vitale [leg.]; “Messina”, “F. Vitale [leg.]”

SPECIMENS – 10

Tribe Piezotrachelini Voss, 1959**Genus *Protapion* Schilsky, 1908*****Protapion angusticolle* (Gyllenhal, 1833)**

Apion angusticolle; Vitale (1893, p. 158); Vitale (1900, p. 47)

ORIGINAL IDENTIFICATION – *Apion* Herbst – *angusticolle* Gyll.

LOCALITIES – Gualtieri, 14.VI.[19]32, F. Vitale [leg.]; Massa San Giovanni, 8.VII.[19]35, F. Vitale [leg.]

SPECIMENS – 2

***Protapion apricans* (Herbst, 1797)**

Apion fagi; Vitale (1889, p. 150)

Apion apricans; Vitale (1893, p. 158); Vitale (1900, p. 47); Vitale (1901, p. 447)

ORIGINAL IDENTIFICATION – *Apion* Herbst – *aestivum* Germ. – [*aestivum*] v. *mediterraneum* Wagn. – *apricans* Herbst – *assimile* Kirby – *ononicola* Bach

LOCALITIES – Castanea, 2.VI.[19]25, F. Vitale [leg.]; “Messina”, “F. Vitale [leg.]”

SPECIMENS – 7

***Protapion assimile assimile* (Kirby, 1808)**

Apion assimile; Vitale (1893, p. 158); Vitale (1900, p. 47); Vitale (1901, p. 447); Vitale (1927b, p. 113)

Apion incertum; Vitale (1906, p. 207)

ORIGINAL IDENTIFICATION – *Apion* Herbst – *assimile* Kirby – *ononicola* Bach

LOCALITIES – Naso, 2.V.[19]32, F. Vitale [leg.]; Messina, [19]04, F. Vitale [leg.]; “Messina”, “F. Vitale [leg.]”

SPECIMENS – 8

***Protapion dentipes* (Gerstaecker, 1854)**

Apion dentipes; Vitale (1889, p. 149); Vitale (1893, p. 158); Vitale (1900, p. 47); Vitale (1901, p. 447); Vitale (1927b, p. 113)

Apion tubicen; Vitale (1889, p. 150)

Apion dentipes var. *tubicen*; Vitale (1893, p. 158); Vitale (1900, p. 47); Vitale (1901, p. 447)

ORIGINAL IDENTIFICATION – *Apion* Herbst – *dentipes* Gerst.

LOCALITIES – Calamarà, 15.V.[19]34, F. Vitale [leg.]; Gravitelli, 30.V.[19]31, F. Vitale [leg.]; Gravitelli, 13.V.[19]28, F. Vitale [leg.]; Altolia, 19.IV.[19]26, F. Vitale [leg.]; Annunziata, 3.VI.[19]31,

F. Vitale [leg.]; Massa Santa Lucia, 17.VI.[19]30, F. Vitale [leg.]; Camaro, Pineta, 29.VI.[19]30, F. Vitale [leg.]; “Messina”, “F. Vitale [leg.]”

SPECIMENS – 10

Remarks. Vitale (1889) cited *Apion tubicen* Wencker, 1864 as a valid species while later Vitale (1893, 1900, 1901) considered it as a variety of *Apion dentipes*. Although in the past *A. tubicen* has been almost universally quoted as synonym of *Protapion dentipes* and, at the moment, it is considered a “species dubia” provisionally attributed to the genus *Protapion* Schilsky, 1908 (Alonso-Zarazaga *et al.* 2017) we believe we are not wrong in attributing Vitale’s quotations to *P. dentipes*.

Protapion difforme (Germar 1818)

Apion difforme; Vitale (1889, p. 149); Vitale (1893, p. 158); Vitale (1900, p. 47); Vitale (1901, p. 447)

ORIGINAL IDENTIFICATION – *Apion* Herbst – *difforme* Ahr.

LOCALITIES – S. Stefano, 10.VI.[19]32, F. Vitale [leg.]; “Messina”, “F. Vitale [leg.]”

SPECIMENS – 2

Protapion dissimile (Germar 1817)

Apion dissimile; Vitale (1889, p. 149); Vitale (1893, p. 158); Vitale (1900, pp. 14, 47); Vitale (1901, p. 447); Vitale (1927b, p. 113)

ORIGINAL IDENTIFICATION – *Apion* Herbst – *dissimile* Germ. – *apricans* Herbst

LOCALITIES – Camaro, 24.V.1924, F. Vitale [leg.]; [Monte] Ciccìa, 1.VIII.[19]31, F. Vitale [leg.]; Sinnaro, 12.VI.[19]30, F. Vitale [leg.]; Castanea, VII.[1]934, F. Vitale [leg.]; “Messina”, “F. Vitale [leg.]”

SPECIMENS – 12

Protapion fulvipes fulvipes (Geoffroy in Fourcroy, 1785)

Apion coxale; Vitale (1906, p. 207)

ORIGINAL IDENTIFICATION – *Apion* Herbst – *flavipes* Payk. – [*flavipes*] a. *coxale* Desbr.

LOCALITIES – Salice, 5.V.[19]22, F. Vitale [leg.]; Calamarà, 07.V.[19]35, F. Vitale [leg.]; [Monte] Ciccìa, 2.IX.[19]32, F. Vitale [leg.]; Sicilia, Messina, 1929, F. Vitale [leg.]; Salice, 5.V.[19]22, F. Vitale [leg.]

SPECIMENS – 18

Protapion interjectum interjectum (Desbrochers des Loges, 1895)

Apion trifolii var. *ruficrus*; Vitale (1893, p. 158); Vitale (1900, p. 48); Vitale (1901, p. 448)

ORIGINAL IDENTIFICATION – *Apion* Herbst – *aestivum* Germ. – [*aestivum*] v. *ruficrus* Germ. – [*aestivum*] s. *interjectum* Desbr. – *apricans* Herbst – *assimile* Kirby

LOCALITIES – 3-Monti, X.[19]11, F. Vitale [leg.]; Castanea, 9.II.[19]30, F. Vitale [leg.]; “Messina”, “F. Vitale [leg.]”; “Sicilia, Ficuzza, 15–16.V.[1]911, L.T.”; Messina, [19]04, F. Vitale [leg.]

SPECIMENS – 14

***Protapion laevicolle* (Kirby, 1811)**

Apion laevicolle; Vitale (1889, pp. 149, 150); Vitale (1893, p. 158); Vitale (1900, pp. 14, 47); Vitale (1901, p. 447); Vitale (1902b, p. 4); Vitale (1903b, p. 54); Vitale (1903d, p. 67); Vitale (1903c, p. 20); Vitale (1905a, p. 122); Vitale (1927b, p. 113)

ORIGINAL IDENTIFICATION – *Apion* Herbst – *laevicolle* Kirby

LOCALITIES – Calamarà (Mess[ina].), 12.II.[1]920, F. Vitale [leg.]; Calamarà (Mess[ina].), 23.VI.[19]32, F. Vitale [leg.]; Calamarà (Mess[ina].), 11.III.1917, F. Vitale [leg.]; Messina, Sic[ilia]., XI.[19]08, F. Vitale [leg.]; Messina, XI.[1]918, F. Vitale [leg.]; Ficuzza, XII.1913, F. Vitale [leg.]; “Messina”, “F. Vitale [leg.]”

SPECIMENS – 11

Remarks. Species associated to *Trifolium repens* L. Its findings on *Sulla coronaria* (L.) Medik. (sub *Hedysarum coronarium* L.) (Vitale 1900, 1927b) is certainly accidental.

***Protapion nigrirtarse* (Kirby, 1808)**

Apion nigrirtarse; Vitale (1889, p. 151); Vitale (1893, p. 158); Vitale (1900, p. 48); Vitale (1901, p. 448); Vitale (1902b, pp. 2, 3); Vitale (1903d, p. 67); Vitale (1903c, p. 20); Vitale (1913, p. 142); Vitale (1927b, p. 113)

ORIGINAL IDENTIFICATION – *Apion* Herbst – *nigrirtarse* Kirby – *aestivum* Germ. – [*aestivum*] s. *interjectum* Desbr.

LOCALITIES – Rodia, 9.X.[19]32, F. Vitale [leg.], “Sicilia”, “F. Vitale [leg.]”, “Messina”, “F. Vitale [leg.]”

SPECIMENS – 5

Remarks. Oligophagous on *Trifolium* spp. The findings of this species on *Castanea sativa* Mill., *Citrus x limon* (L.) Osbeck, *Corylus avellana* L. and *Quercus robur* L. (Vitale 1889) can be traced back to the migration, while the specimens found on *Sulla coronaria* (L.) Medik. (sub *Hedysarum coronarium* L.) (Vitale 1927b) are certainly accidental.

***Protapion ononidis* (Gyllenhal, 1827)**

Apion ononicola; Vitale (1893, p. 158); Vitale (1900, p. 47); Vitale (1901, p. 447); Vitale (1927b, p. 113)

ORIGINAL IDENTIFICATION – *Apion* Herbst – *ononicola* Bach

LOCALITIES – “Messina”, “F. Vitale [leg.]”

SPECIMENS – 3

Remarks. Oligophagous on *Ononis* spp. The finding on *Sulla coronaria* (L.) Medik. (sub *Hedysarum coronarium* L.) (Vitale 1927b) was accidental.

***Protapion schoenherri* (Boheman, 1839)**

Apion schönherri; Vitale (1900, p. 47)

ORIGINAL IDENTIFICATION – *Apion* Herbst – *schöenherri* Bohm.

LOCALITIES – Castanea, 2. VI.[19]19, F. Vitale [leg.]; Castanea, 2.VI.[19]25, F. Vitale [leg.]; Calamarà, 5.VI.[19]19, F. Vitale [leg.]

SPECIMENS – 8

Protapion trifolii (Linnaeus, 1768)

Apion trifolii; Vitale (1889, p. 150); Vitale (1893, p. 158); Vitale (1900, p. 48); Vitale (1901, p. 448); Vitale (1902b, p. 3)

Apion aestivum; Vitale (1927b, p. 113)

ORIGINAL IDENTIFICATION – *Apion* Herbst – *angusticolle* Gyll.

LOCALITIES – “Messina”, “F. Vitale [leg.]”

SPECIMENS – 1

Protapion varipes (Germar, 1817)

Apion varipes; Vitale (1889, p. 150); Vitale (1893, p. 158); Vitale (1900, p. 47); Vitale (1906, p. 207); Vitale (1927b, p. 113)

ORIGINAL IDENTIFICATION – *Apion* Herbst – *varipes* Germ.

LOCALITIES – Rometta, 2. V.[19]33, F. Vitale [leg.]; “Messina”, “F. Vitale [leg.]”

SPECIMENS – 2

Remarks. Oligophagous on *Trifolium* spp. Its presence on *Sulla coronaria* (L.) Medik. sub *Hedysarum coronarium* L. by Vitale (1927b) was accidental.

Genus *Pseudoprotapion* Ehret, 1990***Pseudoprotapion dumei*** (A. Hoffmann, 1957) (Fig. 8)

Apion astragali; Vitale (1889, p. 147); Vitale (1900, p. 14); Vitale (1913, p. 142); Vitale (1927b, p. 113)

Apion saeculare; Vitale (1893, p. 157); Vitale (1900, p. 47); Vitale (1901, p. 446); Vitale (1903d, p. 67); Vitale (1905a, p. 122)

Apion astragali var. B.; Vitale (1889, p. 147)

Apion astragali var. C.; Vitale (1889, p. 147)

ORIGINAL IDENTIFICATION – *Apion* Herbst – *astragali* Payk.

LOCALITIES – Spartà, 14.V.[19]36, F. Vitale [leg.]; “Messina”, “F. Vitale [leg.]”

SPECIMENS – 4

Remarks. The revision of the genus *Pseudoprotapion* Ehret, 1990 in the Iberian peninsula (Russell and Velázquez de Castro 2015) partly clarified the systematics of the genus allowing the recognition of three further species in addition to *Pseudoprotapion astragali* (Paykull, 1800) and *Pseudoprotapion elegantulum* (Germar, 1818), leaving however unresolved some problems about the correct interpretation of the bibliographic citations of *P. astragali* “... beyond the borders of Europe...” or to the recognition of some still undescribed species from Sicily, Greece and Turkey. Despite this, on the ground of diagnostic characters utilized by the above two authors (long thin legs, pronounced anterior collar of pronotum and large size), all specimens stored in the Vitale collection as *Apion astragali* are provisionally attributed to *P. dumei* (A. Hoffmann, 1957). Since to date *P. dumei* was known only

from Morocco, Portugal and Spain, its occurrence in Sicily represents the first record for the island and for Italy. Recorded exclusively from *Erophaca baetica baetica* (L.) Boiss. (Russell and Velázquez de Castro 2015); in Sicily, the larvae of this species are associated to *Sulla coronaria* (L.) Medik., as already observed by Vitale (1889, 1900, 1905a, 1927b) sub *Hedysarum coronarium* L.. Findings on *Castanea sativa* Mill., *Corylus avellana* L. and *Quercus robur* L. (Vitale 1889) were certainly accidental.

***Pseudoprotapion elegantulum* (Germar, 1818)**

Apion elegantulum; Vitale (1889, p. 147); Vitale (1893, p. 157); Vitale (1900, p. 47); Vitale (1901, p. 447)

ORIGINAL IDENTIFICATION – *Apion* Herbst – *elegantulum* Germ.

LOCALITIES – [Monte] Ciccia, 04.VI.[19]32, F. Vitale [leg.]; Colla, 05.VI.[19]29, F. Vitale [leg.]; “Messina”, “F. Vitale [leg.]”

SPECIMENS – 5

List of the species not present in the Vitale collection

***Apion rubens* Walton, 1837**

Apion rubens; Vitale (1889, p. 152); Vitale (1893, p. 159); Vitale (1900, pp. 16, 49); Vitale (1901, p. 449)

Remarks. The absence of identification label, that of specimen in the collection and the indication of *Rumex bucephalophorus* L. as host plant (Vitale 1889, 1900) suggest that the quotations related to *Apion rubens* must be instead attributed to *A. haematodes haematodes* (species common on this plant in the Mediterranean region). *Apion rubens* seems exclusively associated to *Rumex acetosella*. However, the presence in Sicily of *A. rubens*, so far doubtful (Abbazzi and Osella 1992; Abbazzi *et al.* 1995; Colonnelli 2003; Abbazzi and Maggini 2009) can be confirmed thanks to the discovery of two specimens labelled: Monte Antennammare (Messina Province), 1,120 m a.s.l., 17.X.2002, C. Baviera leg. (1 ex. coll. C. Giusto, Recco; 1 ex. coll. C. Baviera, Messina).

***Ceratapion (Echinostroma) penetrans caullei* (Wencker, 1858)**

Apion caullei; Vitale (1900, p. 46)

Remarks. *Ceratapion penetrans caullei* is currently known only from France, Belgium, The Netherlands, Germany and Switzerland. Therefore, its presence in Sicily is not plausible. Most likely, Vitale confused this taxon with *Ceratapion curtii*, species recognized and described by Hans Wagner twenty years later.

***Ceratapion (Echinostroma) penetrans penetrans* (Germar, 1817)**

Apion penetrans; Vitale (1893, p. 156); Vitale (1900, p. 46)

Remarks. Ragusa (1882b) mentioned for the first time this taxon for Sicily and only later Vitale listed it in his catalogues of Sicilian weevils. As in the case of *Ceratapion penetrans caullei* (see above), it cannot be excluded that the Ragusa's quotation must be referred to *Ceratapion curtii*. *Ceratapion penetrans penetrans* is widely distributed in central Europe, and in Italy it is recorded from almost all northern and peninsular regions. Its presence in Sicily, although not confirmed here, is however plausible since both *Centaurea cyanus* L. (allochthonous naturalized plant) and *Centaurea jacea* L., two of its probable larval hosts (Wanat 1995), occur in Sicily.

Cyanapion (Cyanapion) alcyoneum (Germar, 1817)

Apion alcyoneum var. *hispanicum*; Vitale 1900: 48

Remarks. Vitale mentioned *Apion alcyoneum hispanicum* on Baudi di Selve (in litteris) communication. Considering that the only larval host plant so far ascertained is *Lathyrus pannonicus* (Jacq.) Garcke, and that this plant does not occur in Sicily, *C. alcyoneum* must be excluded from the Sicilian fauna.

Eutrichapion (Eutrichapion) ervi (Kirby, 1808)

Apion ervi; Vitale (1900, pp. 15, 48)

Remarks. Asiatic-European species distributed from Portugal to Japan and quoted in North Africa only from Algeria. In Italy it is recorded from all regions. Vitale mentioned its presence in Sicily on Baudi di Selve (in litteris) communication. According to literature, *E. ervi* is associated with Fabaceae belonging to the genera *Lathyrus* L. and *Vicia* L., some of them growing in Sicily. However, no Sicilian specimen has been studied to date. Therefore, we provisionally consider *E. ervi* as not occurring in Sicily.

Eutrichapion (Phalacrolobus) melancholicum (Wencker, 1864)

Apion melancholicum; Vitale (1893, p. 159); Vitale (1900, p. 48)

Remarks. Species widely distributed from France to western Siberia across much of Europe. In Italy it is recorded from almost all northern and peninsular regions. Vitale (1893) mentioned this species on the advice of Baudi di Selve (in litteris). Although some of the plants on which adults live are present in Sicily (i.e. *Lathyrus sylvestris* L. and *Lathyrus latifolius* L.), thus far we could not study any Sicilian specimen. The presence of *E. melancholicum* on the island is not confirmed.

Exapion difficile (Herbst, 1797)

Apion difficile; Vitale (1900, p. 15)

Remarks. According to the literature, *Exapion difficile* is oligophagous on *Genista sagittalis* L., *Genista anglica* L., *Genista germanica* L., *Genista pilosa* L., *Genista sardoa* Vals. (=

Genista acanthoclada DC.) and *Genista tinctoria* L. Since none of these plants lives in Sicily, it is not possible to confirm the presence of this weevil on the island.

Exapion genistae (Kirby, 1808)

Apion bivittatum; Vitale (1893, p. 156); Vitale (1900, p. 46)

Apion genistae; Vitale (1893, p. 157)

Remarks. Vitale (1893) mentioned this species from Sicily after a personal communication by Baudi di Selve. *Exapion genistae* is a West-European species to date surely present in Portugal, Spain, France, Great Britain and Germany, whereas its presence in Greece and Algeria need confirmation. Since the larvae are strictly associated with *Genista anglica* L., a plant absent in Sicily, the presence of this insect on the island is excluded.

Loborhynchapion amethystinum (Miller, 1857)

Apion amethystinum; Vitale (1889, p. 151)

Remarks. Sibero-european species distributed from Central Europe to Russian Far East not present either in peninsular Italy or in Sicily.

Mesotrichapion punctirostre (Gyllenhal, 1839)

Apion punctirostre; Vitale (1900, p. 48)

Remarks. Centrasiatic-European element widespread from Spain to China and Mongolia whose presence in Italy has been only ascertained in Piedmont and Trentino-Alto Adige (Abbazzi and Maggini 2009). Its presence in Sicily is excluded.

Omphalapion hookerorum (Kirby, 1808)

Apion hookeri [sic]; Vitale (1889, p. 145); Vitale (1900, p. 46)

Remarks. Species widely distributed in the Palaearctic Region from Portugal to western Siberia through the whole of Europe. In Italy it is quoted from the northern regions and from Latium and Calabria. It is not possible to confirm its presence in Sicily because the only plant in Italy on which the larvae develop, *Tripleurospermum inodorum* (L.) Sch. Beep. (= *Tripleurospermum perforatum* (Mérat) Lafnz), does not occur on the island.

Oxystoma opeticum (Bach, 1854)

Apion opeticum; Vitale (1893, p. 90); Vitale (1900, pp. 15, 45)

Remarks. Sibero-European species distributed from France to Russian Far East. In Italy it is recorded in the northern regions and reaches Calabria towards the south. It is not possible to confirm the presence of *O. opeticum* in Sicily because *Lathyrus vernus* (L.)

Bernh., plant on which the larvae develop in the Italian peninsula, is absent on the island. Also the indication that this weevil feeds on seeds of *Vicia* spp. (Vitale 1900) points to a misidentification and supports our hypothesis.

Oxystoma subulatum (Kirby, 1808)

Apion subulatum; Vitale (1893, p. 90); Vitale (1900, p. 45)

Remarks. Vitale mentioned *O. subulatum* in accordance with a personal communication by Baudi di Selve. Although the plants on which adults are to be found in Italy also live in Sicily (*Lathyrus cicera* L., *Lathyrus latifolius* L., *Lathyrus pratensis* L. and *Lathyrus sylvestris* L.), to date no specimens have been examined from the island. Therefore, while considering its presence in Sicily plausible, this species is provisionally unconfirmed in Sicily.

Perapion (Perapion) marchicum (Herbst, 1797)

Apion marchicum; Vitale (1889, p. 153)

Remarks. Vitale (1889) wrote that he found only one specimen in Contrada Scoppo, on mosses. Afterwards, he never mentioned this species in any of his publications, possibly because he made himself aware of a misidentification. The presence of *P. marchicum* in Sicily is thus not confirmed.

Phrissotrichum (Schilskyapion) rugicolle (Germar, 1817)

Apion rugicolle; Vitale (1889, p. 143); Vitale (1903b, p. 54); Vitale (1903d, p. 67); Vitale (1906, p. 206)

Remarks. Central-European species present in Italy only in the northern regions and surely not occurring in Sicily. The brief description of the single specimen found on mosses in Contrada Scoppo by Vitale (1889) does not allow us to establish to which species it really belongs.

Pseudapion fulvirostre (Gyllenhal, 1833)

Apion fulvirostre; Vitale (1893, p. 158); Vitale (1900, p. 47)

Remarks. Species listed by Vitale (1893) among the apions of Sicily on the basis of the quotation formerly published by Ragusa (1882a). Although no specimen is present in the Vitale collection, its presence in Sicily is confirmed thanks to the finding of 3 specimens in Cerami (Enna Province), 970 m a.s.l., 6.VI.2018, C. Giusto leg. / on *Althaea officinalis* L. (coll. C. Giusto, Recco).

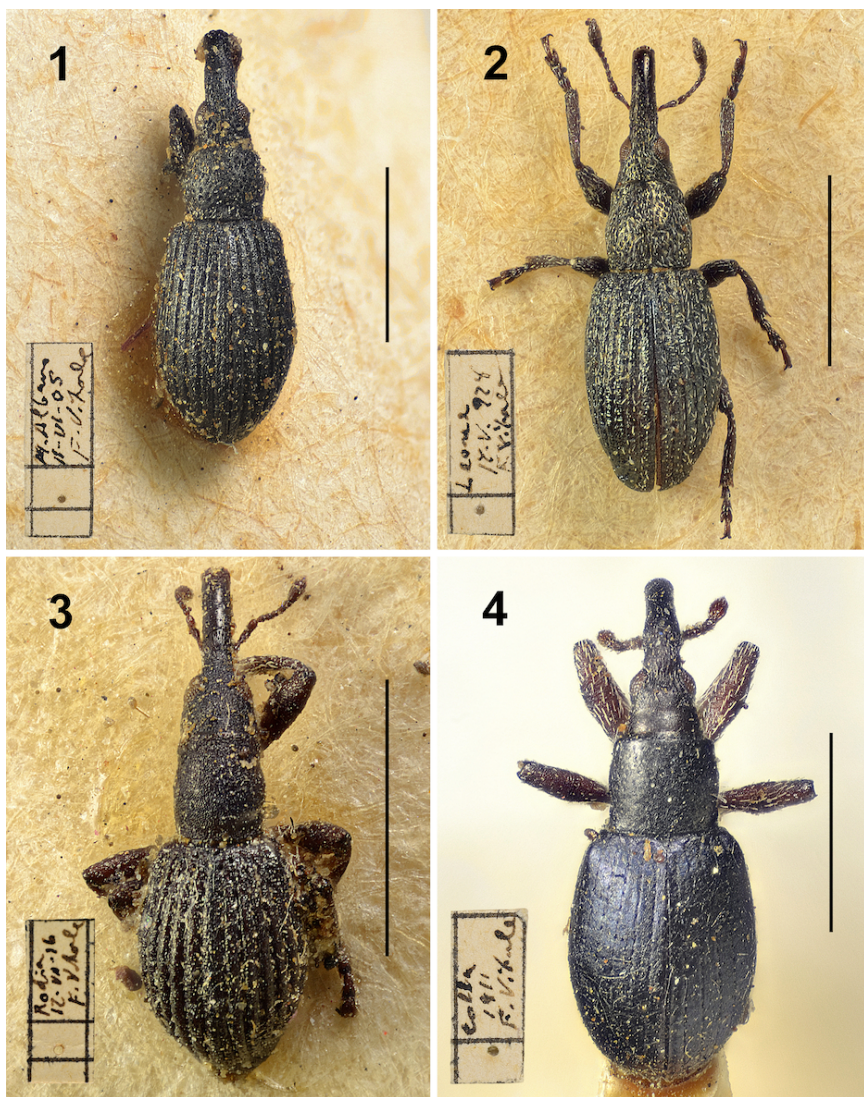
***Stenopterapion (Stenopterapion) meliloti* (Kirby, 1808)**

Apion meliloti; Vitale (1893, p. 159); Vitale (1900, p. 48)

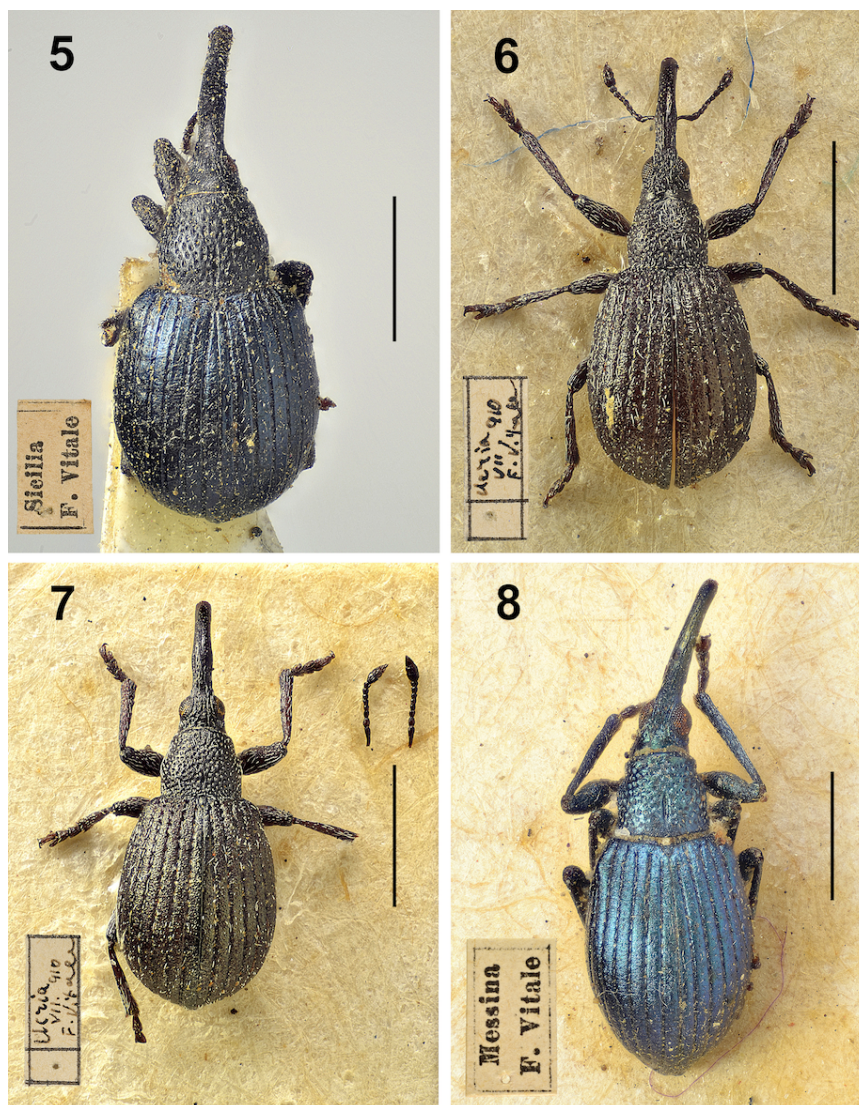
Remarks. Vitale mentioned *Apion meliloti* on Baudi di Selve information. Since neither Vitale nor Ragusa ever claimed to possess at least one specimen of this species and since no Sicilian specimen has so far been examined, *Stenopterapion meliloti* is provisionally excluded from the Sicilian fauna. Despite this, given its enormous distribution (from Portugal to the Russian Far East and recently introduced in the Nearctic Region) and considering that its host plants (*Trigonella albus* (Medik.) Coulot & Rabaute, *Trigonella altissima* (Thuill.) Coulot & Rabaute, *Trigonella dentata* (Waldst. & Kit.) Coulot & Rabaute Desf. and *Trigonella officinalis* (L.) Coulot & Rabaute) are present in Sicily, its presence on the island is not excluded.

4. Conclusions and final remarks

The careful examination of the Francesco Vitale collection has shown once again how important the study of historical collections is. The material stored in it has allowed us to check our knowledge on the apionid fauna of Sicily and to correct some erroneous past citations which, repeated up to date, have been confusing. In the latest available list of Italian Curculionoidea (Abbazzi and Maggini 2009; Abbazzi and Zinetti 2013) 129 apionid species are quoted from Sicily, 7 of which are doubtfully reported. Since our corrections of old erroneous citations have resulted in the exclusion from the Sicilian fauna of 23 taxa (corresponding to the 17.8% of the species mentioned so far), the number of species is reduced to 106. However, adding the four taxa reported here as new for Sicily — *Hoplopodapion poupillieri*, *Ischnopterapion aeneomicans nothum*, *Pseudoprotapion dumei* and *Omphalapion laevigatum* — the currently ascertained Apionidae from Sicily number to 110 taxa, corresponding to the 52.6% of Italian Apionidae (209 total species: 206 listed by Alonso-Zarazaga *et al.* (2017) to which must be added *Hoplopodapion poupillieri*, *Ischnopterapion aeneomicans nothum* and *Pseudoprotapion dumei*, reported here as new for Italy). The Vitale collection, therefore, with its 91 species represents the 82.7% of the entire Sicilian fauna of Apionidae. This last figure testifies once again the great skill of Francesco Vitale in collecting insects, pointing also out that almost all his species were found in the surroundings of Messina, although in habitats surely today much less natural. For sure, specialized researches will ascertain the presence of some species that we have provisionally excluded from the Sicilian fauna (e.g. *Eutrichapion ervi*, *Eutrichapion melancholicum*, *Oxystoma subulatum*, etc.) or discover species never found before. The component of Apionidae with a prevalent North African distribution (currently close to the 10% of the total fauna) will be probably enriched with additional species (e.g. *Helianthemapion kefense* (Normand, 1921), *Ischnopterapion leprieuri* (Wencker, 1864), etc.) and, surely, further new taxa will be discovered. This study is part of the still in progress researches aiming at a better knowledge of the Sicilian Coleoptera e.g. (Baviera 2007, 2008, 2010; Baviera and Liberti 2010; Baviera and Magnano 2010; Bellò and Baviera 2011; Magrini and Baviera 2011; Stroschio *et al.* 2011; Toševski *et al.* 2011, 2014; Baviera 2015; Toševski *et al.* 2015; Bellò *et al.* 2017, 2019; Baviera and Caldara 2020).



FIGURES 1–4. Habitus (scale bar: 1 mm): (1) *Aizobius sedi* (Germar, 1818) from Montalbano Eliconia; (2) *Helianthemapion velatum* (Gerstaecker, 1854) from Leone; (3) *Hoplopodapion poupillieri* (Wencker, 1864) from Rodia; (4) *Acentrotypus brunnipes* (Boheman, 1839) from Colla.



FIGURES 5–8. Habitus (scale bar: 1 mm): (5) *Omphalapion laevigatum* (Paykull, 1792) from “Sicilia”; (6) *Ischnopterapion* (*Ischnopterapion*) *aeneomicans nothum* (Desbrochers des Loges, 1897) from Ucria; (7) Habitus of *Ischnopterapion* (*Ischnopterapion*) *aeneomicans nothum* (Desbrochers des Loges, 1897) from Ucria; (8) Habitus of *Pseudoprotapion dumei* (A. Hoffmann, 1957) from Messina.

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References

- Abbazzi, P., Colonnelli, E., Masutti, L., and Osella, G. (1995). "Coleoptera Polyphaga XVI (Curculionoidea)". In: *Checklist delle specie della fauna italiana*. Ed. by A. Minelli, S. Ruffo, and S. La Posta. Fascicolo #61. Bologna: Calderini. URL: <https://www.comitato.faunaitalia.it/Volpubb2.html>.
- Abbazzi, P. and Maggini, L. (2009). "Elenco sistematico-faunistico dei Curculionoidea italiani, Scolytidae e Platypodidae esclusi (Insecta, Coleoptera)". *Aldrovandia* **5**, 29–216.
- Abbazzi, P. and Osella, G. (1992). "Elenco sistematico-faunistico degli Anthribidae, Rhinomaceridae, Attelabidae, Apionidae, Brentidae, Curculionidae italiani (Insecta, Coleoptera, Curculionoidea). I Parte". *Redia* **75**, 267–414.
- Abbazzi, P. and Zinetti, F. (2013). "Elenco sistematico-faunistico dei Curculionoidea italiani, Scolytidae e Platypodidae esclusi (Insecta, Coleoptera). 2. Addenda e corrigenda". *Memorie della Società Entomologica Italiana* **90**(2), 89–104. DOI: [10.4081/MemorieSEI.2013.89](https://doi.org/10.4081/MemorieSEI.2013.89).
- Alonso-Zarazaga, M. A., Barrios, H., Borovec, R., Bouchard, P., Caldara, R., Colonnelli, E., Gültekin, L., Hlaváč, P., Korotyaev, B., Lyal, C. H. C., Machado, A., Meregalli, M., Pierotti, H., Ren, L., Sánchez-Ruiz, M., Sforzi, A., Silfverberg, H., Skuhrovec, J., Trýzna, M., Velázquez de Castro, A. J., and Yunakov, N. N. (2017). *Cooperative Catalogue of Palaearctic Coleoptera Curculionoidea*. Ed. by M. A. Alonso-Zarazaga. Vol. 8. Monografías electrónicas S.E.A. Zaragoza, Spain: Sociedad entomológica aragonesa. 729 pages. URL: <http://sea-entomologia.org/monoelec.html>.
- Aubé, C. (1866). "Nouveaux matériaux pour servir à l'étude des Apion." *Annales de la Société Entomologique de France* **(4)6**, 165–168.
- Baviera, C. (2004a). "I Contributo alla revisione della collezione coleotterologica di Francesco Vitale: Coleoptera Coccinellidae". *Il Naturalista Siciliano*. 4th ser. **28**(1), 983–1003. URL: http://www.sssn.it/PDF/PDF%20Nat.%20Sic.%202%202004/Baviera_983-1004.pdf.
- Baviera, C. (2004b). "La collezione di Coleotteri di Francesco Vitale". *Il Naturalista Siciliano*. 4th ser. **28**(1), 965–981. URL: http://www.sssn.it/PDF/PDF%20Nat.%20Sic.%202%202004/Baviera_965-982.pdf.
- Baviera, C. (2007). "First record of *Gonioctena* (Coleoptera Chrysomelidae, Chrysomelinae) in Sicily, with the description of *Gonioctena theae* n. sp." *Italian Journal of Zoology* **74**(4), 389–393. DOI: [10.1080/11250000701650719](https://doi.org/10.1080/11250000701650719).
- Baviera, C. (2008). "Prima segnalazione del genere *Aesalus*, Fabricius, 1801 in Sicilia con descrizione di *Aesalus scarabaeoides sculus* n. ssp. (Coleoptera Lucanidae: Aesalinae)". *Revue Suisse de Zoologie* **115**(3), 585–592. DOI: [10.5962/bhl.part.80447](https://doi.org/10.5962/bhl.part.80447).
- Baviera, C. (2010). "*Alaocyba ientilei* n. sp. (Coleoptera: Curculionoidea, Raymondionymidae) dell'Isola di Marettimo (Isole Egadi, Sicilia)". *Revue Suisse de Zoologie* **117**(1), 11–16. DOI: [10.5962/bhl.part.117584](https://doi.org/10.5962/bhl.part.117584).
- Baviera, C. (2015). "A review of the genus *Solariola* Flach, 1908 (Coleoptera: Curculionidae: Entiminae, Peritelini)". *Zootaxa* **3920**(3), 401–430. DOI: [10.11646/zootaxa.3920.3.1](https://doi.org/10.11646/zootaxa.3920.3.1).
- Baviera, C. and Bellò, C. (2016). "The Peritelini (Coleoptera: Curculionidae, Entiminae) of the Vitale collection". *Atti della Accademia Peloritana dei Pericolanti. Classe di Scienze Fisiche, Matematiche e Naturali* **94**(1), A1 [10 pages]. DOI: [10.1478/AAPP.941A1](https://doi.org/10.1478/AAPP.941A1).

- Baviera, C. and Caldara, R. (2020). "The Curculioninae (Coleoptera: Curculionidae) of Sicily: recent records and updated catalogue". *Atti della Accademia Peloritana dei Pericolanti. Classe di Scienze Fisiche, Matematiche e Naturali* **98**(1), A1 [79 pages]. DOI: [10.1478/AAPP.981A1](https://doi.org/10.1478/AAPP.981A1).
- Baviera, C. and Liberti, G. (2010). "Dasytidae of the Egadi Archipelago (Coleoptera, Cleroidea) with description of *Danacea hierena* n. sp." *Zootaxa* **2351**(1), 49–57. DOI: [10.11646/zootaxa.2351.1.5](https://doi.org/10.11646/zootaxa.2351.1.5).
- Baviera, C. and Magnano, L. (2010). "Contribution to the knowledge of the weevil subgenus *Aramichnus* Gozis, genus *Otiorhynchus* Germar (Coleoptera, Curculionidae) from Sicily and the Sicilian islands". *Zootaxa* **2432**(1), 45–58. DOI: [10.11646/zootaxa.2432.1.2](https://doi.org/10.11646/zootaxa.2432.1.2).
- Baviera, C. and Sparacio, I. (2004). "III Contributo alla conoscenza della collezione Francesco Vitale: Coleoptera Buprestidae et Cerambycidae". *Il Naturalista Siciliano*. 4th ser. **28**(1), 1051–1064. URL: http://www.sssn.it/PDF/PDF%20Nat.%20Sic.%202%202004/Baviera&Sparacio_1051-1064.pdf.
- Bellò, C. and Baviera, C. (2011). "On the Sicilian species of *Pseudomeira* Stierlin (Coleoptera: Curculionidae: Entiminae)". *Zootaxa* **3100**(1), 35–68. DOI: [10.11646/zootaxa.3100.1.2](https://doi.org/10.11646/zootaxa.3100.1.2).
- Bellò, C., Osella, G., and Baviera, C. (2017). "A taxonomic monograph of the genus *Dodomeira* Bellò & Baviera, a new genus of Peritelini from Sicily (Coleoptera: Curculionidae: Entiminae)". *Zootaxa* **4334**(1), 1–138. DOI: [10.11646/zootaxa.4334.1.1](https://doi.org/10.11646/zootaxa.4334.1.1).
- Bellò, C., Osella, G., and Baviera, C. (2019). "A taxonomic monograph of the genus *Solariola* Flach, 1908 (Coleoptera: Curculionidae: Entiminae)". *Zootaxa* **4676**(1), 1–261. DOI: [10.11646/zootaxa.4676.1.1](https://doi.org/10.11646/zootaxa.4676.1.1).
- Caldara, R., Pesarini, C., Colonnelli, E., and Baviera, C. (2010). "V Contributo alla revisione della collezione coleotterologica Francesco Vitale: Coleoptera Curculionoidea (Prima parte)". *Memorie della Società Entomologica Italiana* **89**, 229–257. DOI: [10.4081/memorieSEI.2010.229](https://doi.org/10.4081/memorieSEI.2010.229).
- Clermont, J. A. (1902). "Deux mots sur les moeurs d'«*Apion pisi*» Fab." *L'Échange. Revue Linnéenne* **17** (i.e. 18)(216), 83 (i.e. 93). URL: <https://www.biodiversitylibrary.org/item/112040#page/343/mode/1up>.
- Colonnelli, E. (2003). "A revised checklist of Italian Curculionoidea (Coleoptera)". *Zootaxa* **337**(1), 1–142. DOI: [10.11646/zootaxa.337.1.1](https://doi.org/10.11646/zootaxa.337.1.1).
- Dieckmann, L. (1971). "Revision der *Apion cerdo*-Gruppe (Col. Curculionidae)". *Entomologische Nachrichten* **15**(9–10), 93–99. URL: https://www.zobodat.at/pdf/EntBer_15_0093-0099.pdf.
- Dieckmann, L. (1977). "Beiträge zur Insektenfauna der DDR: Coleoptera - Curculionidae (Apioninae)". *Beiträge zur Entomologie* **27**(1), 7–143. DOI: [10.21248/contrib.entomol.27.1.7-143](https://doi.org/10.21248/contrib.entomol.27.1.7-143).
- Ehret, J. M. (1997). "Révision des espèces du sous-genre *Phrissotrichum* (s. str.) Schilsky 1901 et description d'une espèce nouvelle (Coleoptera Curculionidae Apioninae)". *Bulletin Mensuel de la Société Linnéenne de Lyon* **66**(4), 105–112. DOI: [10.3406/linly.1997.11167](https://doi.org/10.3406/linly.1997.11167).
- Facchini, S. and Baviera, C. (2004). "II Contributo alla revisione della collezione coleotterologica di Francesco Vitale: Coleoptera Carabidae". *Il Naturalista Siciliano*. 4th ser. **28**(1), 1005–1050. URL: http://www.sssn.it/PDF/PDF%20Nat.%20Sic.%202%202004/Facchini&Baviera_1005-1050.pdf.
- Girard, M. (1880). "Notes sur les moeurs de l'*Apion pisi*". *Le Naturaliste* **2**(19), 150. URL: <https://www.biodiversitylibrary.org/item/105816#page/150/mode/1up>.
- Giusto, C. (1986). "Segnalazioni faunistiche italiane (N° 100–102)." *Bollettino della Società Entomologica Italiana* **118**, 120.
- Giusto, C. (1997). "Revisione del genere *Oryxolaemus* Alonso-Zarazaga, 1990. (Coleoptera: Apionidae: Apioninae)". *Bollettino del Museo Regionale di Scienze Naturali (Torino)* **15**, 313–353.
- IPFI (2021). *Index Plantarum*. URL: <http://www.actaplantarum.org/flora/flora.php> (visited on 08/17/2021).
- International Commission on Zoological Nomenclature (1999). *International Code of Zoological Nomenclature. Fourth edition adopted by the International Union of Biological Sciences*. London:

- The International Trust for Zoological Nomenclature. xxix + 306 pages. URL: <https://www.iczn.org/the-code/the-international-code-of-zoological-nomenclature/the-code-online/>.
- Magrini, P. and Baviera, C. (2011). "Note sulle *Typhloreicheia* (Holdhaus, 1924) siciliane del gruppo *praecox* con descrizione di una nuova specie (Coleoptera Carabidae: Scaritinae)". *Revue Suisse de Zoologie* **118**(2), 329–343. DOI: [10.5962/bhl.part.117813](https://doi.org/10.5962/bhl.part.117813).
- Marchal, P. (1894). "Sur les mœurs d'*Apion pisi* Fab." *Bulletin des Séances et Bulletin Bibliographique de la Société Entomologique de France*, CXLIII. URL: <http://visualiseur.bnf.fr/CadresFenetre?O=30000063368637&M=notice>.
- Oberprieler, R. G. (2014). "3.6. Brentidae Billberg, 1820." In: *Coleoptera, Beetles. Volume 3: morphology and systematics (Phytophaga)*. Ed. by R. A. B. Leschen and R. G. Beutel. Vol. 3. Handbook of Zoology: Arthropoda: Insecta. Berlin/Boston: Walter de Gruyter, pp. 363–364.
- Osella, G. and Magnano, L. (1986). "I Coleotteri Attelabidi e Curculionidi a diffusione transadriatica". *Biogeographia – The Journal of Integrative Biogeography* **10**, 701–792. DOI: [10.21426/B610110254](https://doi.org/10.21426/B610110254).
- Ragusa, E. (1882a). "Elenco delle specie di *Apion* di Sicilia da me raccolti e posseduti". *Il Naturalista Siciliano* **1**(11), 254. URL: <https://www.biodiversitylibrary.org/item/42748#page/324/mode/1up>.
- Ragusa, E. (1882b). "*Apion* di Sicilia". *Il Naturalista Siciliano* **1**(12), 280. URL: <https://www.biodiversitylibrary.org/item/42748#page/360/mode/1up>.
- Ragusa, E. (1906). "Gli *Apion* di Sicilia". *Il Naturalista Siciliano* **18**(9-10), 211–218. URL: <https://www.biodiversitylibrary.org/item/42593#page/267/mode/1up>.
- Russell, M. I. and Velázquez de Castro, A. J. (2015). "A revision of the genus *Pseudoprotapion* Ehret, 1990 in the Iberian peninsula, with description of a new species". *Boletín de la Sociedad Entomológica Aragonesa* **57**, 1–18. URL: http://www.sea-socios.com/Boletines/PDF/Boletin57/001_018BSEA57Pseudoprotapion.pdf.
- Schatzmayer, A. (1925). "Gli Apionini italiani". *Memorie della Società Entomologica Italiana* **4**, 5–112.
- Stroscio, S., Baviera, C., Frati, F., Lo Paro, G., and Nardi, F. (2011). "Deep genetic divergence in the darkling beetle *Pimelia rugulosa* Germar, 1824 (Coleoptera, Tenebrionidae) reflects Plio-Pleistocene paleogeographic history of Sicily". *Journal of Zoological Systematics and Evolutionary Research* **49**(3), 196–203. DOI: [10.1111/j.1439-0469.2011.00617.x](https://doi.org/10.1111/j.1439-0469.2011.00617.x).
- Stüben, P. E., Bayer, C., Sprick, P., Braunert, C., and Behne, L. (2018). "Digital-Weevil-Determination for Curculionoidea of the West Palearctic: Transalpina: Apionidae IV - Oxystomatini pars (blue and greenish species)". *Snudebiller: Studies on Taxonomy, Biology and Ecology of Curculionoidea* **19**(268), 1–29. URL: <https://www.curci.de/?beitrag=268>.
- Stüben, P. E., Sprick, P., Behne, L., Alziar, G., Colonnelli, E., Giusto, C., Messutat, J., and Teodor, L. A. (2012). "The Curculionoidea (Coleoptera) of Cyprus. Results of a collecting journey on Cyprus by staff members of the Curculio Institute in April 2010". *Snudebiller: Studies on Taxonomy, Biology and Ecology of Curculionoidea* **13**(195), 80–137. URL: <https://www.curci.de/?beitrag=195>.
- Toševski, I., Caldara, R., Jović, J., Baviera, C., Hernández-Vera, G., Gassmann, A., and Emerson, B. C. (2014). "Revision of *Mecinus heydenii* species complex (Curculionidae): integrative taxonomy reveals multiple species exhibiting host specialization". *Zoologica Scripta* **43**(1), 34–51. DOI: [10.1111/zsc.12037](https://doi.org/10.1111/zsc.12037).
- Toševski, I., Caldara, R., Jović, J., Hernández-Vera, G., Baviera, C., Gassmann, A., and Emerson, B. C. (2011). "Morphological, molecular and biological evidence reveal two cryptic species in *Mecinus janthinus* Germar (Coleoptera, Curculionidae), a successful biological control agent of Dalmatian toadflax, *Linaria dalmatica* (Lamiales, Plantaginaceae)". *Systematic Entomology* **36**(4), 741–753. DOI: [10.1111/j.1365-3113.2011.00593.x](https://doi.org/10.1111/j.1365-3113.2011.00593.x).
- Toševski, I., Caldara, R., Jović, J., Hernández-Vera, G., Baviera, C., Gassmann, A., and Emerson, B. C. (2015). "Host associated genetic divergence and taxonomy in the *Rhinusa pilosa* Gyllenhal species

- complex: an integrative approach". *Systematic Entomology* **40**(1), 268–287. DOI: [10.1111/syen.12109](https://doi.org/10.1111/syen.12109).
- Vienna, P. and Baviera, C. (2007). "IV Contributo alla revisione della Collezione Coleotterologica di Francesco Vitale: Coleoptera Histeridae". *Il Naturalista Siciliano*. 4th ser. **31**(3-4), 229–239. URL: <http://www.sssn.it/PDF/PDF%20Nat.Sic.%203-4%202007/Vienna-Baviera.pdf>.
- Vitale, F. (1889). "Studii sull'entomologia messinese. Nota I gli *Apion*." *Bollettino della Società Entomologica Italiana* **21**, 141–156.
- Vitale, F. (1893). "Catalogo sinonimico e topografico dei Curculionidi di Sicilia". *Il Naturalista Siciliano* **12**, 82–90, 155–163.
- Vitale, F. (1900). "Rincofori siciliani. Catalogo generale sinonimico-topografico". *Atti e Rendiconti della Accademia dafnica di Acireale* **7**, 1–52.
- Vitale, F. (1901). "I rincofori messinesi". *Atti della Reale Accademia Peloritana* **15**, 417–454. URL: <http://cab.unime.it/mus/5565/>. (Anno XV, 1900/1901 – Memorie della Classe I).
- Vitale, F. (1902a). "Notizie di cacce entomologiche". *Bollettino del Naturalista collettore, allevatore, coltivatore, acclimatatore* **22**, 139.
- Vitale, F. (1902b). "Un giorno di caccia entomologica". *Rivista Italiana di Scienze Naturali* **22**, 1–4, 38–40. URL: <https://www.biodiversitylibrary.org/item/127830#page/5/mode/1up>.
- Vitale, F. (1903a). "I Rincofori Siciliani. Catalogo Generale. Primo supplemento". *Atti e Rendiconti della Accademia dafnica di Acireale* **10**, 1–10.
- Vitale, F. (1903b). "Noterelle di cacce entomologiche". *Bollettino del Naturalista collettore, allevatore, coltivatore, acclimatatore* **23**, 54.
- Vitale, F. (1903c). "Notizie di cacce entomologiche". *Bollettino del Naturalista collettore, allevatore, coltivatore, acclimatatore* **23**, 19–20.
- Vitale, F. (1903d). "Notizie di caccia. Le caccie dell'Aprile". *Bollettino del Naturalista collettore, allevatore, coltivatore, acclimatatore* **23**, 66–67.
- Vitale, F. (1904). "Rettificazioni e sinonimie". *Rivista coleotterologica italiana* **3**, 46–47.
- Vitale, F. (1905a). "Le somiglianze protettive nei Curculionidi. Nota I. Mimetismo". *Rivista Italiana di Scienze Naturali* **25**, 119–123.
- Vitale, F. (1905b). "Osservazioni su alcune specie di rincofori messinesi. Nota II". *Rivista italiana di Scienze Naturali* **17**, 165–172.
- Vitale, F. (1905c). "Specie e varietà nuove di Curculionidi siciliani". *Rivista coleotterologica italiana* **3**, 205–207.
- Vitale, F. (1906). "Di alcune nuove forme specifiche di Curculionidi siciliani". *Atti della Reale Accademia Peloritana* **20**(2), 175–209. URL: <http://cab.unime.it/mus/5617/>. (Anno XX, 1905/1906).
- Vitale, F. (1913). "Une heureuse excursion entomologique". *L'Échange, Revue linnéenne* **29**, 140–142.
- Vitale, F. (1927a). "Coleotteri nuovi o poco conosciuti di Sicilia". *Memorie della Società Entomologica Italiana* **6**, 44–45.
- Vitale, F. (1927b). "Di alcuni *Apion* siciliani e delle piante che li ospitano". *Bollettino della Società Entomologica Italiana* **59**, 109–113.
- Vitale, F. (1930). "Nuove aberrazioni di Coleotteri. Nota 1^o". *Bollettino della Società Entomologica Italiana* **62**, 135–137.
- Vitale, F. (1932). "Coleotteri nuovi o poco noti di Sicilia". *Bollettino della Società Entomologica Italiana* **64**, 35–40.
- Wanat, M. (1995). *Systematics and phylogeny of the tribe Ceratapiini (Coleoptera: Curculionoidea: Apionidae)*. Biologica Silesiae. 406 pages.
- Wanat, M. (2001). *Genera of Australo-Pacific Rhadinocybinae and Myrmacelinae with biogeography of the Apionidae (Coleoptera: Curculionoidea) and phylogeny of the Brentidae (s. lato)*. Mantis. 432 pages.

^a Via Milite Ignoto, 46/9, 16036 Recco (Genoa), Italy.

^b Università degli Studi di Messina
Dipartimento di Scienze Chimiche, Biologiche, Farmaceutiche e Ambientali
Contrada Papardo, 98166 Messina, Italy

* To whom correspondence should be addressed | email: cosimo.baviera@unime.it

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