

**BETLES DIVERSITY AND DISTRIBUTION IN VULCANO ISLAND  
(SICILY: AEOLIAN ARCHIPELAGO)**COSIMO BAVIERA <sup>a\*</sup> AND GIANLUCA LA ROCCA <sup>a</sup>

**ABSTRACT.** The ongoing biodiversity disappearance on islands worldwide is alarming. Without an accurate biodiversity assessment, it is impossible to stop the loss of the world's islands irreplaceable natural heritage. To assess biodiversity in terrestrial habitats, beetle monitoring is pivotal. Volcanic islands in Archipelagos can be considered oceanic islands at different ontogenetic phases, which are very useful for studying the dynamics of colonization and extinction in different beetle species. This research updates the current knowledge of the beetle species living on Vulcano Island (Aeolian Archipelago). The results of the study summarize bibliographic data in conjunction with the specimens recently collected. The specimens collected during the research belong to 267 species, 119 of which are new records on Vulcano Island. Together with the unpublished data from private collections, a total of 138 species are reported for the first time on Vulcano Island. Among these, 76 species and 14 genera are new records in the Aeolian Archipelago, with six families of beetles never previously reported on Vulcano. These include Ciidae (also a new record from the Archipelago), Ptiliidae, Scaptiidae, Leiodidae, Eucinetidae, and Dytiscidae. The Lyctinae (Bostrichidae) are recorded for the first time in the Aeolian Archipelago. *Uloma culinaris* (Linnaeus, 1758) is the first Tenebrionidae of the tribe Ulomini recorded in the Aeolian Archipelago. Members of the Dermestidae of the Thorictinae and Attageninae subfamilies, were recorded for the first time on Vulcano Island. The number of beetle species known on Vulcano Island thus rises to 551, matching that of Lipari, which has the highest number of species for a single island in the Archipelago. The total number of beetle species in the Aeolian Archipelago is currently 940. Five endemic and subendemic species are new records for Vulcano: the Italian endemic *Pseudomeira obscura* (A. Solari and F. Solari, 1907), the Italian subendemic *Enoplium doderoi* Luigioni, 1926, the Sicilian endemics *Dichillus subtilis* Kraatz, 1862 and *Pachybrachis siculus* Weise, 1891, the northeastern Sicilian endemic *Caulostrophus zancleanus* Pesarini et Baviera, 2006. The Latridiidae species *Dienerella elegans* (Aubé, 1850) and the Bostrichidae *Lyctus brunneus* (Stephens, 1830) were reported for the first time from Sicily. The Neotropical Nitidulidae *Phenolia picta* (MacLeay, 1825) is recorded for the second time from Italy and is the first Nitidulinae recorded on Vulcano. One of the commonly collected species, rapidly spreading in the Mediterranean, is the imported *Ozognathus cornutus* (LeConte, 1859), confirmed on Vulcano Island. This extremely polyphagous species was reared, for the first time, from carpophores collected from various species of trees. Three Sicilian endemic species need to be excluded from the fauna of Vulcano: *Ottiorhynchus (Arammichnus) ocellifer* Reitter, 1912, *Anoxia (A.) scutellaris sicula* Motschulsky, 1860, and *Protaetia (Potosia) hypocrita* (Ragusa, 1905).

## 1. Introduction

Islands contribute only 6.7% of Earth's land surface area. However they harbor approximately 20% of the Earth's biodiversity. Among this 20% also falls roughly 50% of the threatened species and 75% of the known extinctions on Earth (Fernández-Palacios *et al.* 2021). Insects, the most numerous group of animals on Earth, play essential roles in ecosystems. Their vast diversity allows them to perform a wide array of ecological functions, such as pollination, decomposition, soil formation, and contributing to trophic webs, with some species even acting as biological control agents in human-modified ecosystems (Yang 2014; Scudder 2017). Biological invasions are a major threat to global biodiversity with particularly strong implications for island biodiversity (Lenzner *et al.* 2020). In island ecosystems, where isolation and unique evolutionary paths shape biodiversity, insects often hold even more critical roles than on the mainland (Simberloff 1986). In recent years, a global decline in insect populations has been observed, causing widespread disruption of food webs, hindering plant reproduction, affecting human health, and compromising ecosystem stability. This global trend threatens island ecosystems, as their isolated insect communities may be even more vulnerable to drastic declines. Island insects, often limited to small geographic ranges and highly specialized roles, face increased extinction risks if habitats or food sources disappear. Gaining a deeper understanding of island insect communities is essential for identifying threats and creating focused conservation strategies. With almost 400,000 species formally described so far, beetles is a fundamental group for the knowledge of biological diversity (Ashby, Shaw, and Kokko 2020). As proposed for the darkling beetle *Pimelia rugulosa* in the Aeolian Archipelago, it is hypothesised that beetle specimens were often transported either among logs of wood or intermixed in the soil used to ballast sailing vessels on their way back to Sicily (Stroscio *et al.* 2011). The high level of COII fragmentation observed for these darkling beetle populations of different islands in the Archipelago can be interpreted in terms of the complex geological history of it (Gübitz, Roger, and Malhotra 2005; Bloor, Kemp, and Brown 2008). The study of this apterous species makes it possible to find separate lineages of *P. rugulosa* in each island. This fragmentation was explained by volcanism, which caused the independent emergence of different islands in succession over approximately the last 400 kyr, and shaped an extremely fragmented environment. Volcanism may also explain the observed intra-island diversity. Repeated eruptive periods could determine a decline of populations that could lead to local extinctions (Emerson and Oromi 2000; Contreras-Diaz *et al.* 2003; Emerson 2003). A positive correlation between haplotype diversity of the studied species and tenebrionid diversity was found for most islands. Human movement was the principal factor responsible for dispersal of plant and animal species in the circum-Sicilian islands (Pimentel 2001; Forcina *et al.* 2015). Human activity profoundly altered the natural assets of all Eolian Islands due to the human impact of agriculture, particularly with the destruction of most of their original woods. In terms of cultivated area, Vulcano Island is the third in the Aeolian Archipelago (Fattorini 2011). Humans have inhabited and navigated the Archipelago for over 7,000 years, so passive transport mediated by human activity could have occurred, especially through trade. For instance, the current large coprophagous beetle faunas of Vulcano have originated through dispersal mediated by human settlements (Agoglietta *et al.* 2006; Tonelli *et al.* 2016; Lo Cascio 2020). This contribution aims to improve the knowledge of the

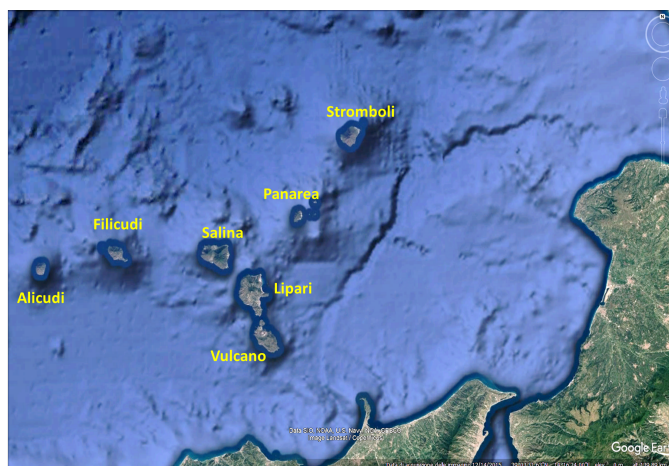


FIGURE 1. The Aeolian Archipelago (image source: Google Earth Pro, 2023)

presence and distribution of beetle fauna of Vulcano Island, providing new data on beetle species that contribute to more reliable assessments of the biogeographical origins of the fauna of this territory with special regard for the endemic species.

## 2. Materials and Methods

**2.1. Study Area.** The Aeolian Archipelago consists of seven main islands: Lipari, Salina, Stromboli, Panarea, Alicudi, Filicudi and Vulcano (the closest to the Sicilian shores) forming an outer belt, as well as many seamounts, small islands, and rocks. Based on Wallace's classification (Wallace 1876), the Aeolian Islands can be considered oceanic islands at different ontogenetic phases (Fig. 1). The Aeolian Archipelago is separated from Sicily by a sea channel of about 1000–2000 m depth (Allen and Morelli 1971), and thus they have always been separated from Sicily, even during Pleistocene sea level falls. The islands of Vulcano and Lipari were separated by less than 1 Km, with a water depth of less than 100 m and might have merged into a single larger island during the Pleistocene glacial maxima. Vulcano is the third largest island of the archipelago with a surface of 21 km<sup>2</sup>, it is the nearest to Sicily at 19.5 Km, and lies just 0.9 km from Lipari, the largest island in the Archipelago. Vulcano is 74 Km away from Calabria (the fourth closest island in the Aeolian Archipelago) and has one of the lowest maximum elevations in the Archipelago (500 m a.s.l.), higher only than Panarea. Vulcano Island is one of the most recent island as the oldest lava was dated 120 Kyr (sensu Peccerillo 2005) and the most recent volcanic activity was the eruption of 1890. Although considered “cataclysmic”, this eruption is unlikely to have wiped out all animal populations on the island as often proposed, due to the high number of known species of Coleoptera living on this Island and the number of endemic and subendemic species (Muscarella and Baragona 2017). Vulcano Island, dedicated to the god Hephaestus, is of considerable geomorphological and naturalistic interest due to its volcanic structure, which is still active with fumaroles. The name derives from the Roman god, formerly called *Hierà*, is made up of four volcanoes: Vulcanello, which rises to 120

meters, the result of an eruption in the 2nd century BC, and connected to the northern tip of the island by a narrow strip of land formed by the debris of lava flows. Gran Cratere or Fossa Grande, rises over 380 meters, and currently shows limited fumarolic activity; in fact, the last eruption, which destroyed the entire town, dates to 1888/1890. Monte Saraceno (481 m), and finally, to the south, Monte Aria (499 m), the highest peak of the entire island of Vulcano. Between the first and second craters lie the spectacular bays of Porto Levante and Porto Ponente, famous and very popular beaches, characterized by very warm waters due to the presence of submarine sulfurous springs emitting hot gases from the seabed. The most important sandy beach with a dune system is located on the western side of the Isthmo. The Isthmo also hosts one of two small coastal wetlands currently found on the Aeolian Islands: the “Pantano dell’Isthmo”, the other being Salina Lagoon. Between the two ports this coastal marshy area with characteristic sulphurous waters is indicated as “ME0702 - Laghetto di Vulcanello” in the register of Italian wetlands (see [www.infs-acquatici.it](http://www.infs-acquatici.it)). The origin of this area dates back to the end of the 19th century, probably after the last eruption of 1888-90 (Salvator 1893). Nowadays it represents an important refuge for several migratory waterbirds which have been recorded or confirmed exclusively for this site within the boundaries of the SPA ITA03004 (Lo Cascio 2012). The formation of the island of Vulcano was characterized by an alternation of construction phases (usually seven are recognised) and subsequent demolition of the volcanic buildings caused by caldera collapses. The south-eastern sector of the island is the oldest and derives from 113,000 years of volcanic activity with alternating lava flows and pyroclastic deposits. At the end of this phase, the Piano caldera was formed due to the collapse of the volcanic edifice whose borders are marked by the major elevations of the island: Mount Aria (500 m, the highest peak), Serra dei Pisani (466 m) and Mount Saraceno (481 m). Around 50,000 years ago numerous intracalderic emission centers filled the Piano caldera. The “Piano” area is a notably green plateau, cultivated with orchards and vineyards. The Fossa caldera originated between 15,000 and 14,000 years ago from a new caldera collapse of the northern sectors of the primordial volcano and the formation of reliefs such as Monte Lentia, Punta Luccia, Punta Roia. The current structure of the Fossa cone with its 391 m height originates around 13,000 years ago (De Astis *et al.* 2013). The climatic regime is similar throughout the Aeolian Archipelago, studies on the Aeolian Archipelago (Piantelli *et al.* 1990) reported a substantial uniformity of climatic regime and habitat types. Like the other larger Aeolian Islands Vulcano hosts a complex mosaic of xeric grasslands, garrigues and maquis belonging to the alliances *Oleo sylvestris-Ceratonion siliquae* Br.-Bl. ex Guinochet and Drouineau and *Erico arboreae-Quercion ilicis* Brullo *et al.*, with well-structured patches of the latter occurring in the Piano and Gelso areas. During the second half of the 20th century large areas of Vulcano were reforested with allochthonous species (*Eucalyptus* sp.pl., *Acacia* sp. pl. and *Pinus* sp. pl.). In the Isthmus swamp there are *Ruppia drepanensis* Tineo (Pasta and Lo Cascio 2002), *Phragmites australis* (Cav.), *Juncus acutus* L. and *Juncus bufonius* L. (Lo Cascio 2012). Vulcano has the highest number of land cover categories (five) among all the circum-Sicilian Islands (Fattorini 2011), with “Broad-leaved and Mixed Forests” cover category (CORINE Land Cover 311) recorded only on Vulcano in the Aeolian Archipelago. Vulcano is an R.N.O. (Oriented Natural Reserve) since the publication of the founding decree 797/44 (28/12/2000) protected as part of the SIC (ITA03002 Isola di Vulcano) and ZPS (ITA 030044 Arcipelago dell’Eolie – area terrestre).

**2.2. Beetles on Vulcano.** Data collected over the last decades on the diversity and distribution of beetles in the Aeolian Archipelago, merged with published data, has recently been very well summarized by Lo Cascio, Altadonna, and Ponel (2022) in a landmark publication in the knowledge of this group of insects from the Archipelago. This last report added numerous species to the beetle biodiversity of the Aeolian Archipelago with 162 new species added to Vulcano Island alone and shows that about 50% of all the species recorded for the Archipelago occur in only one island. Six species of Chrysomelidae Bruchinae have been recently added to the fauna of Vulcano by Baviera (2024). The only beetle species strictly endemic to Vulcano is the Scarabaeidae *Anoxia (Mesanoxia) moltonii* (Sabatinelli, 1976). Four other endemic species from the Aeolian Archipelago live on Vulcano including the Tenebrionidae *Nalassus pastai* Aliquò, Leo et Lo Cascio 2006 (described from Vulcano and recently collected in Salina and Stromboli Lo Cascio, Altadonna, and Ponel (2022)) the Tenebrionidae *Leptoderis zelmerloewae* Ferrer, 2015, the Curculionidae *Pseudomeira aeolica* Bellò, Pesarini et Pierotti, 1997 (recorded throughout the Aeolian Archipelago, except on Panarea), and *Otiorhynchus (Arammichnus) meligunensis* Magnano, 1992 (distributed throughout the islands of the Aeolian Archipelago). It has been proposed that the repeated “bottleneck” effects have triggered and accelerated the birth of many of the endemic species present in a volcanic island (Fattorini 2009; Lo Cascio and Sparacio 2010). This may also explain the origin of some taxa such as *A. moltonii*, a narrowly endemic of Vulcano similar to the widespread *Anoxia (Mesanoxia) matutinalis* Laporte de Castelnau, 1832 living in Calabria, Sicily and the nearby islands of Lipari and Salina. Many Sicilian endemic species were also recorded on Vulcano such as the Italian endemic *Aplidia hirticollis* Burmeister, 1855, *Ocytus (Pseudocytyus) mus transadriaticus* (G. Müller, 1926) and *Catapion calabricum* (A. Solari and F. Solari, 1922), *Erodius siculus neapolitanus* Solier, 1834 endemic to the Tyrrhenian and Ionian coasts of southern Italy (excluding Sicily), the Sicilian subendemic *Chrysolina (Stichoptera) variolosa* (Petagna, 1819), the Sicilian endemic *Psylliodes caneparii* Leonardi, 2007, *Anoxia (Anoxia) scutellaris sicula* Motschulsky, 1860 and *Protaetia (Potosia) hypocrita* (Ragusa, 1905) (these last two taxa are probably extinct on Vulcano).

**2.3. Data collection.** Beetles were collected using various techniques during three periods. Sampling was carried out from 7 to 9 July 2023, from 18 to 20 September 2023, and from 27 to 29 December 2023. On the island, beetles were collected at twenty sites within seven sampling zones (Fig. 2) characterized by diverse habitats and substrate ages (Table 1). A variety of active collecting methods were employed (developed over many years of research on Sicilian beetles of different families (Baviera 2007, 2008, 2010; Baviera and Liberti 2010; Baviera and Magnano 2010; Baviera 2015; Bellò, Osella, and Baviera 2017; Baviera and Platia 2018; Baviera and Vienna 2019; Bellò, Osella, and Baviera 2019; Baviera and Caldara 2020), including the use of a sweeping net for grass, a butterfly net for arboreal specimens, a net for water beetles, an insect-beating tray (“Japanese umbrella”) for the capture of beetles on trees and shrubs, and a reducer for soil insects and leaf litter. The reducer net ranges from 6 to 12 mm, the soil was collected from the first 5 to 10 cm in depth and was then placed in laboratory, for about a month, in a Winkler apparatus, followed by two months in a Berlese funnel. Xylophagous, saproxylophagous, and mycetophagous species were also reared from wood and fungal carpophores. Passive collecting methods were also

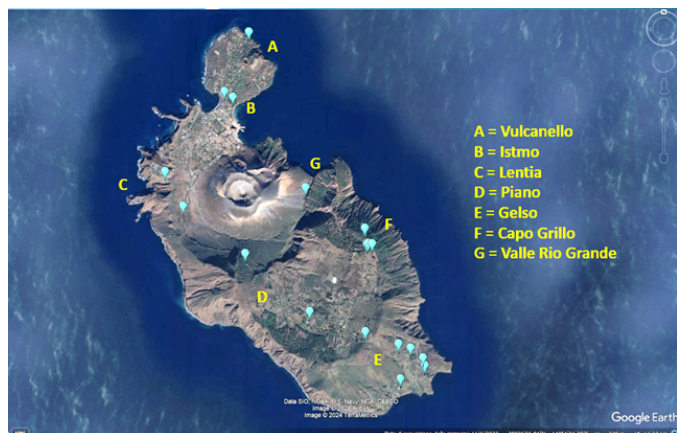


FIGURE 2. Sampling areas and sites on Vulcano Island. A: Vulcanello; B: Istmo; C: Lentia; D: Piano; E: Gelso; F: Piani di Luccia; G: Valle Rio Grande (image source: Google Earth Pro, 2023)

TABLE 1. Ages of different areas on Vulcano Island (data from De Astis *et al.* (2013))

Areas	AGE (ka = 1000 years)
Gran Cratere	AD 1888–1900
Vulcanello	0.397 ka $\pm$ 0.097 ka
Lentia	13.0 ka $\pm$ 1.0 ka / 15.5 ka $\pm$ 1.0 ka
Valle Roia	13.0 ka $\pm$ 3.0 ka / 14.0 ka $\pm$ 6.0 ka
Gelso	22.0 ka $\pm$ 4.0 ka / 27–24 ka
Piano	48.5 ka $\pm$ 2.4 ka / 52.0 ka $\pm$ 4.0 ka
Piani di Luccia	101.0 ka $\pm$ 2.0 ka / 117.0 ka $\pm$ 2.4 ka

used, such as pitfall traps, window traps, and fermenting bait traps. Beetle sampling on Vulcano began with the summer 2023 initiative on beetle biodiversity organized by the association “La fucina di Efesto”. All the collected specimens are deposited in the author’s collection. Some data came from Cosimo Baviera and Giuseppe Osella collections.

**2.4. Data report.** All the collected specimens are prepared and taxonomically identified. Systematics and nomenclature follow the references adopted in the recent Checklist of Lo Cascio, Altadonna and Ponel (2022) as well as the “Catalogue of Palaearctic Coleoptera” (I. Löbl and D. Löbl 2003; I. Löbl and Smetana 2013a,b; I. Löbl and D. Löbl 2015, 2016; Danilevsky 2020) and the “Cooperative Catalogue of Palaearctic Coleoptera Curculionioidea” (Alonso-Zarazaga *et al.* 2017), updated (Deidun *et al.* 2011; Yus Ramos 2013; Vondráček

*et al.* 2018; Leo, Garagnani, and Sabatinelli 2021). Species are listed in taxonomic order. For each species, the chorotype and trophic category are provided, with chorotypes assigned according to the categories proposed by Vigna-Taglianti *et al.* (1992, 1999) and Biondi, Urbani, and D'Alessandro (2013) for endemic distribution types. All toponyms follow the IGM nomenclature.

### **CHOROTYPES CODES**

- 0.01 COS = Cosmopolitan
- 0.02 SCO = Sub-Cosmopolitan
- 1.01 OLA = Olearctic
- 1.02 PAL = Palearctic
- 1.03 WPA = West-Palearctic
- 1.04 ASE = Asiatic-European
- 1.05 SIE = Sibiric-European
- 1.06 CEM = Central-European-Mediterranean
- 1.07 CAE = Central-Asiatic-European
- 1.08 CAM = Central-Asiatic-Mediterranean
- 1.09 TEM = Turanic-European-Mediterranean
- 1.10 TUE = Turanic-European
- 1.12 EUM = European-Mediterranean
- 2.01 EUR = European
- 2.03 CEU = Central-European
- 2.04 SEU = South-European
- 2.05 WEU = West-European
- 2.06 EEU = Est-European
- 3.01 MED = Mediterranean
- 3.02 WME = West-Mediterranean
- 3.03 EME = East-Mediterranean
- 3.04 NAF = North African
- 4.02 AFM = Afrotropical-Mediterranean
- 4.03 INM = Indian-Mediterranean

### **ENDEMIC DISTRIBUTION TYPES CODES**

- APPE = Apennine
- SICI = Sicilian

### **TROPHIC CATEGORY CODES (Mainly preferred food during span life of the species)**

- PRE = Predator
- PHY = Phytophagous (including Xylophagous)

MYC = Mycetophagous

SAP = Saprophagous (including Coprophagous, Necrophagous and Saproxyllophagous)

### 3. Results

In the three sampling periods a total of 267 species of beetles were collected (151 in July, 104 in September and 136 in December). Data of 21 species came from Cosimo Baviera and Giuseppe Osella collections.

## CHECKLIST

### SUBORDER ADEPHAGA

#### CARABIDAE

There are 92 species recorded from Aeolian Archipelago with 39 species on Vulcano (19 shared with Lipari, 14 with Salina, 7 with Stromboli, 5 with Panarea, 8 with Filicudi, 10 with Alicudi).

#### Nebrinae

*Nebria (Nebria) andalusia* Rambur, 1837

Chorotype – NAF

Trophic category – PRE

**Notes.** This species was recorded from Vulcano (Magistretti 1971) (sub *N. andalusiaca*). Also recorded in Panarea and Lipari (Magistretti 1971) (sub *N. andalusiaca*).

*Notiophilus quadripunctatus* Dejean, 1826

Chorotype – WME

Trophic group – PRE

**Notes.** This species was recorded on Vulcano: Valle Rio Grande (Lo Cascio, Altadonna, and Ponel 2022).

#### Cicindelinae

*Calomera littoralis nemoralis* (Olivier, 1790)

Chorotype – CEM

Trophic category – PRE

**Notes.** This taxon was recorded on Vulcano: Gelso beach (Lo Cascio 2017).

### Carabinae

*Carabus (Macrothorax) morbillosus bruttianus* Born, 1906

Chorotype – WME

Trophic category – PRE

**Notes.** A species recorded on Vulcano by Bruno (1966) sub *C. morbillosus alternans*, Palliardi 1825), by a single big specimen collected between Porto Levante and Scoglio di Mastro Minico (15.IV.1966).

### Scaritinae

*Dyschiriodes apicalis* (Putzeys, 1846)

Chorotype – MED

Trophic category – PRE

New records – Aeolian Archipelago: Vulcano Island, Porto Levante, sifting under beach vegetation, 07.VII.2023, Leg. Baviera C.

**Notes.** This alobius and psammobius species was recently recorded for the first time on Vulcano (Pantano: Lo Cascio, Altadonna, and Ponel (2022)).

*Parallelomorphus laevigatus* (Fabricius, 1792)

Chorotype – MED

Trophic category – PRE

**Notes.** This species was generically recorded from “Vulcano” (Magistretti 1971) (sub *Scarites*). Recently reported from Ponente beach (Lo Cascio, Altadonna, and Ponel 2022).

*Parallelomorphus terricola terricola* (Bonelli, 1813)

Chorotype – PAL

Trophic category – PRE

Ecological category - E (sa-me)

**Notes.** This species was recently recorded on Vulcano: Porto (Lo Cascio, Altadonna, and Ponel 2022).

*Scarites (Scallophorites) buparius* (Forster, 1771) (O. G. Costa, 1839)

Chorotype – MED

Trophic category – PRE

New records – Aeolian Archipelago: Vulcano Island, Gelso, at night sub *Q. ilex*, 90m a.s.l., Leg. Baviera C.; Piano, 350m a.s.l., 07.VII.2023 at night, Leg. Baviera C.

**Notes.** Since 1967, this species has been recorded on “Vulcano” (Magistretti 1967). On Vulcano *S. buparius* appears to be a nocturnal psammophile species, able to live very far from the seashore, not only near sea level, but even at higher altitudes. During the research this species was collected far to very far from seashore at night in Piano and Gelso (up to 350m above sea level).

*Bembidion (Emphanes) normannum normannum* (Dejean, 1831)

Chorotype – MED

Trophic category – PRE

**Notes.** This species was recently recorded for the first time from Aeolian Archipelago on Vulcano: Pantano (sub *E. normannus*) (Lo Cascio, Altadonna, and Ponel 2022) .

## Trechinae

*Philochthus vicinus* (Lucas, 1846)

Chorotype – MED

Trophic category – PRE

New records – Aeolian Archipelago: Vulcano Island, Piani di Luccia, sifting *Ulmus*, 20.IX.2023, Leg. Baviera C.

**Notes.** This species was recorded in the Aeolian Archipelago, only from “Vulcano” (Magistretti 1971) sub *Bembidion*).

*Pogonus gilvipes* Dejean, 1828

Chorotype – MED

Trophic category – PRE

New records – Aeolian Archipelago: Vulcano Island, Piani di Luccia, sifting *Ulmus*, 20.IX.2023, Leg. Baviera C.

**Notes.** This species was recorded in the Aeolian Archipelago, only from “Vulcano” (Magistretti 1971) sub *Bembidion*).

## Platyninae

*Olisthopus elongatus* Wollaston, 1854

Chorotype – WME

Trophic category – PRE

**Notes.** This species was recorded on Vulcano: near Pantano (Lo Cascio, Altadonna, and Ponel 2022).

*Olisthopus fuscatus* Dejean, 1828

Chorotype – MED

Trophic category – PRE

**Notes.** This species was recorded on Vulcano by (Magistretti 1971) (sub *Odontonyx*)

*Calathus cinctus* Motschulsky, 1850

Chorotype – WPA

Trophic category – PRE

New records – Aeolian Archipelago: Vulcano Island, Piani di Luccia, sifting *Ulmus*, 20.IX.2023, Leg. Baviera C.; Portella Gelso, on *Cistus* at night, 29.XII.2023, Leg. Baviera C.; Vulcano, 09-10.V.2007, Leg. Baviera C.

**Notes.** This species was recorded only from “Vulcano” (Magistretti 1971) (sub *Calathus* (*Neocalathus*) *mollis* (Marsham, 1802)).

*Laemostenus (Pristonychus) algerinus algerinus* (Gory, 1833)

Chorotype – WME

Trophic category – PRE

**Notes.** A species only recently recorded for the first time from Aeolian and on Vulcano (Capo Grillo) (Lo Cascio, Altadonna, and Ponel 2022).

## Chlaeniinae

*Chlaenius (Chlaeniellus) vestitus* (Paykull, 1780)

Chorotype – EUM

Trophic category – PRE

**Notes.** This is the only species of this genus from Aeolian Archipelago, recently recorded on Vulcano: Pantano (Lo Cascio, Altadonna, and Ponel 2022).

## Pterostichinae

*Amara (Amara) anthobia* A. Villa and G.B. Villa, 1833

Chorotype – EUR

Trophic category – PRE

New records – Aeolian Archipelago: Vulcano Island, Piano, 300m a.s.l. 24-29.VII.2001, Leg. Baviera C.

**Notes.** A species never recorded before from Aeolian Archipelago.

*Amara (Amara) aenea* (De Geer, 1774)

Chorotype – PAL

Trophic category – PRE

New records – Aeolian Archipelago: Vulcano Island, Piani di Luccia, sifting *Ulmus*, 20.IX.2023, Leg. Baviera C.; same locality, 29.XII.2023; Piano, belvedere, 300m a.s.l. sifting *Cistus*, 29.XII.2023, Leg. Baviera C.

**Notes.** A species only recently recorded on Vulcano in Piano and Piani di Luccia (Lo Cascio, Altadonna, and Ponel 2022). This species was recorded for the first time from Aeolian Archipelago from Lipari and Alicudi in 1998 (Lo Cascio and Magrini 1998).

*Amara (Celia) montana* Dejean, 1828

Chorotype – MED

Trophic category – PRE

**Notes.** This species was recorded for the first time on Vulcano in 1998 (Lo Cascio and Magrini 1998). Magistretti (1971) recorded this species from Lipari and Salina.

*Pterostichus (Feronidius) melas italicus* (Dejean, 1828)

Chorotype – EUR

Trophic category – PRE

**Notes.** This species was recently recorded on Vulcano: Piano (Lo Cascio, Altadonna, and Ponel 2022).

## Harpalinae

*Acinopus picipes* (Olivier, 1795)

Chorotype – TUE

Trophic category – PRE

New records – Aeolian Archipelago: Vulcano Island, Piani di Luccia, light trap, 08.VII.2023, Leg. Baviera C.

**Notes.** A species recently recorded on Vulcano (Piano: (Lo Cascio, Altadonna, and Ponel 2022)).

*Pseudoophonus rufipes* (De Geer, 1774)

Chorotype – PAL

Trophic category – PRE

New records – Aeolian Archipelago: Vulcano Island, Piano, 350m a.s.l., sifting *Q. ilex*, 08.VII.2023, Leg. Baviera C.; same locality, in yellows traps, 18-21.IX.2023, Leg. Baviera C.; Piano, 24-29.VII.2001, Leg. Baviera C.

**Notes.** A species recorded on Vulcano from Piano and Piani di Luccia, (Lo Cascio, Altadonna, and Ponei 2022)).

*Cryptophonus tenebrosus* (Dejean, 1829)

Chorotype – WPA

Trophic category – PRE

New records – Aeolian Archipelago: Vulcano Island, Lentia Mount, night, 20.IX.2023, Leg. Baviera C.

**Notes.** A new record on Vulcano. This species was recorded from Aeolian Archipelago until now, from Filicudi (Magistretti 1971) (sub *Harpalus*) Salina, Lipari and Stromboli (Cecchi, Lo Cascio, and Magrini 1999).

*Harpalus anxius* (Duftschmidt, 1812)

Chorotype – PAL

Trophic category – PRE

**Notes.** This species was recorded from Aeolian Archipelago only on Vulcano (Magistretti 1971) (sub *H. anxius pumilus*).

*Harpalus attenuatus* Stephens, 1828

Chorotype – MED

Trophic category – PRE

**Notes.** This species was recorded from “Vulcano” (Vigna-Taglianti 1994). Also known from Lipari (Vigna-Taglianti 1994) and Salina (Magistretti 1967).

*Harpalus rubripes* (Duftschmidt, 1812)

Chorotype – ASE

Trophic category – PRE

**Notes.** This species was recorded from “Vulcano” (Magistretti 1971).

*Harpalus sulphuripes sulphuripes* Germar, 1824

Chorotype – EUM

Trophic category – PRE

**Notes.** This species was recorded on Vulcano: Piano (Lo Cascio, Altadonna, and Ponel 2022).

*Pangus scaritides* (Sturm, 1818)

Chorotype – TUE

Trophic category – PRE

**Notes.** This species was very recently recorded for the first time from Aeolian Archipelago (and from Italy) by a specimen collected on Vulcano: Piano by Lo Cascio, Altadonna, and Ponel (2022).

*Stenolophus mixtus* (Herbst, 1784)

Chorotype – PAL

Trophic category – PRE

**Notes.** This species was recently recorded on Vulcano: Pantano (Lo Cascio, Altadonna, and Ponel 2022).

*Bradycellus distinctus* (Dejean, 1829)

Chorotype – MED

Trophic category – PRE

New records – Aeolian Archipelago: Vulcano Island, Porto Levante, sifting beach vegetation, 07.VII.2023, Leg. Baviera C.

**Notes.** Has long been recorded on Vulcano (Lo Cascio and Magrini 1998).

*Bradycellus lusitanicus* (Dejean, 1829)

Chorotype – WME

Trophic category – PRE

New records – Aeolian Archipelago: Vulcano Island, Porto Levante, sifting beach vegetation, 07.VII.2023, Leg. Baviera C.

**Notes.** A species only recently recorded on Vulcano (Lo Cascio, Altadonna, and Ponel 2022), recorded for the first time from Aeolian Archipelago from Lipari and Alicudi (Lo Cascio and Magrini 1998).

## Lebinae

*Paradromius (Manodromius) linearis* (Olivier, 1795)

Chorotype – EUM

Trophic category – RHI

New records – Aeolian Archipelago: Vulcano Island, crossroads for Lentia, sifting *Ulmus*, 20.IX.2023, Leg. Baviera C.; same locality, Lentia, beating on *Nerium oleander*, 07.VII.2023, Leg. Baviera C.; same locality, Piano, 350m a.s.l., on flowers, 08.VII.2023, Leg. Baviera C.; Portella Gelso, on *Cistus* at night, 29.XII.2023, Leg. Baviera C.

**Notes.** This species was generically recorded from “Vulcano” (Vigna-Taglianti 1994). Also recorded on Lipari (Magistretti 1971) (sub *Dromius*), Alicudi (Vigna-Taglianti 1994), Filicudi and Panarea (Lo Cascio, Altadonna, and Ponel 2022).

*Dromius meridionalis* Dejean, 1825

Chorotype – SIE

Trophic category – PRE

New records – Aeolian Archipelago: Vulcano Island, street to Gelso, beating *Q. ilex*, 08.VII.2023, Leg. Albano M.

**Notes.** This species was recently recorded on Vulcano: western slope of Gran Cratere and near Gelso, (Lo Cascio, Altadonna, and Ponel 2022). A species also recorded from Stromboli (Lo Cascio, Altadonna, and Ponel 2022).

*Philorhizus melanocephalus* Dejean, 1825

Chorotype – TEM

Trophic category – PRE

**Notes.** This species was recorded on Vulcano: Valle Rio Grande (Lo Cascio, Altadonna, and Ponel 2022).

*Syntomus impressus* (Dejean, 1825)

Chorotype – MED

Trophic category – PRE

New records – Aeolian Archipelago: Vulcano Island, Piano, 350m a.s.l., sifting *Q. ilex*, 08.VII.2023, Leg. Baviera C.; same locality, Piani di Luccia, sifting *Ulmus*, 20.IX.2023, Leg. Baviera C.

**Notes.** This species was recorded from “Vulcano” (Magistretti 1967) (sub *Metabletus*). It seems very common on Vulcano, especially during the Autumn.

*Apristus europaeus* Mateu, 1981

Chorotype – SEU

Trophic category – PRE

**Notes.** A species only recently recorded for the first time from Aeolian and from “Vulcano” (Lo Cascio, Altadonna, and Ponel 2022).

*Microlestes levipennis longipennis* Motschulsky, 1859

Chorotype – NAF

Trophic category – PRE

**Notes.** This species was recorded from “Vulcano” by (Cecchi, Lo Cascio, and Magrini 1999).

*Microlestes luctuosus* Holdhaus in Apfelbeck, 1904

Chorotype – TUM

Trophic category – PRE

New records – Aeolian Archipelago: Vulcano Island, Piani di Luccia, sifting *Ulmus*, 28.XII.2023, Leg. Baviera C.

**Notes.** A new record on Vulcano. This species was recorded in the Aeolian Archipelago until now, from Lipari (Lo Cascio and Magrini 1998), Panarea (Magistretti 1971), Alicudi (Vigna-Taglianti 1994), and Filicudi (Lo Cascio and Magrini 1998).

*Metadromius nanus* (A. Fiori, 1914)

Chorotype – WME

Trophic category – PRE

New records – Aeolian Archipelago: Vulcano Island, Piani di Luccia, sifting *Ulmus*, 29.XII.2023, Leg. Baviera C.; Piano, belvedere, 300m a.s.l. sifting *Cistus*, 29.XII.2023, Leg. Baviera C.; Vulcanello, Valle dei Mostri, sifting, 29.XII.2023, Leg. Baviera C.

**Notes.** A new record on Vulcano. This species was recorded from Aeolian Archipelago, until now, from Lipari (Cecchi, Lo Cascio, and Magrini 1999), Salina (Poggi 1981), Stromboli (Lo Cascio *et al.* 2006), Alicudi and Filicudi (Magistretti 1971) (sub *M. myrmidon*).

## DYTISCIDAE

This family is recorded for the first time on Vulcano Island with four species all collected in the sulphuric water of Palude dell’Istmo (one species is shared with Lipari).

*Hydroglyphus geminus* (Fabricius, 1792)

Chorotype – PAL

Trophic category – PRE

New records – Aeolian Archipelago: Vulcano Island, Palude dell’Istmo, 7-8.VII.2023, Leg. Baviera C. (PC)

**Notes.** This species was recorded, in Aeolian Archipelago, only from Lipari (Terzani and Lo Cascio 1997) (sub *Guignotus pusillus*). A new record on Vulcano.

*Hydaticus leander* (Rossi, 1790)

Chorotype – AFM

Trophic category – PRE

New records – Aeolian Archipelago: Vulcano Island, Palude dell'Istmo, 7-8.VII.2023, Leg. Baviera C. (PC)

**Notes.** This species wasn't recorded until now from Aeolian Archipelago.

*Hydrovatus cuspidatus* (Kunze, 1818)

Chorotype – TEM

Trophic category – PRE

New records – Aeolian Archipelago: Vulcano Island, Palude dell'Istmo, 7-8.VII.2023, Leg. Baviera C.

**Notes.** This species wasn't recorded until now from Aeolian Archipelago.

*Rhantus suturalis* (W.S. Macleay, 1825)

Chorotype – SCO

Trophic category – PRE

New records – Aeolian Archipelago: Vulcano Island, Palude dell'Istmo, 18.IX.2023, Leg. Baviera C.

**Notes.** This species wasn't recorded until now from Aeolian Archipelago.

## Suborder POLYPHAGA

### HYDROPHILIDAE

Of this family fourteen species were recorded from Aeolian Archipelago: eight species on Vulcano (one shared with Lipari and three with Salina)

#### Hydrophilinae

*Berosus hispanicus* Küster, 1847

Chorotype – MED

Trophic category – PRE

New records – Aeolian Archipelago: Vulcano Island, Palude dell'Istmo, 18.IX.2023, Leg. Baviera C.

**Notes.** This species was recorded on Vulcano (Rocchi 2005).

*Cercyon haemorrhoidalis* (Fabricius, 1775)

Chorotype – CEM

Trophic category – PRE

New records – Aeolian Archipelago: Vulcano Island, Palude dell’Istmo, 18.IX.2023, Leg. Baviera C.

**Notes.** This species was recently recorded from “Vulcano” (Lo Cascio, Altadonna, and Ponel 2022).

*Cercyon quisquilis* (Linnaeus, 1761)

Chorotype – CEM

Trophic category – PRE

New records – Aeolian Archipelago: Vulcano Island, Palude dell’Istmo, 18.IX.2023, Leg. Baviera C.

**Notes.** This species was recently recorded on Vulcano: Piano (Lo Cascio, Altadonna, and Ponel 2022).

*Coelostoma hispanicum* (Küster, 1848)

Chorotype – EME

Trophic category – PRE

**Notes.** This species was recently recorded on Vulcano: Piano (Lo Cascio, Altadonna, and Ponel 2022).

*Enochrus bicolor* (Fabricius, 1792)

Chorotype – PAL

Trophic category – PRE

New records – Aeolian Archipelago: Vulcano Island, Palude dell’Istmo, 7-8.VII.2023, Leg. Baviera C.; same locality, 18.IX.2023, Leg. Baviera C.

**Notes.** This species was recorded, from Aeolian Archipelago, only from Salina (Focarile 1972).

*Enochrus ater* (Kuwert, 1888)

Chorotype – TUM

Trophic category – PRE

New records – Aeolian Archipelago: Vulcano Island, Palude dell’Istmo, 7-8.VII.2023, Leg. Baviera C.; same locality, 18.IX.2023 Leg. Baviera C.

**Notes.** This species was recorded for the first time from Italy only recently (Ribera, Schödl, and Hernando 1997), and wasn’t recorded before from Aeolian Archipelago.

## Sphaeridiinae

*Sphaeridium bipustulatum* Fabricius, 1781

Chorotype – EUM

Trophic category – PRE

**Notes.** This species was recently recorded for the first time on Vulcano in Piano (Lo Cascio, Altadonna, and Ponel 2022).

*Sphaeridium substriatum* Faldermann, 1838

Chorotype – EUM Trophic category – PRE

**Notes.** This species was recently recorded for the first time on Vulcano in Piano (Lo Cascio, Altadonna, and Ponel 2022).

## HISTERIDAE

Nineteen species of this family were recorded from Aeolian Archipelago and fourteen species on Vulcano (three shared with Lipari; two with Salina; one with Panarea, Stromboli and Alicudi).

*Atholus bimaculatus* (Linnaeus, 1758)

Chorotype – SCO

Trophic category – PRE

Ecological category - O (sm-me)

**Notes.** This species was recorded on Vulcano: Piano (Penati and Vienna, 2005).

*Atholus duodecimstriatus* (Schrank, 1781)

Chorotype – WPA

Trophic category – PRE

**Notes.** This species was recorded on Vulcano: Piano (Penati and Vienna 2005). Previously recorded from “Vulcano” (Vienna 1971).

*Atholus siculus* (Tournier, 1869)

Chorotype – TUE

Trophic category – PRE

**Notes.** A species was recorded on Vulcano: Capo Grillo, (Lo Cascio, Altadonna, and Ponel 2022). This is a rare species recorded in Italy only from few Sicilian sites (Baviera and Vienna 2019).

*Chalcionellus aemulus* (Illiger, 1807)

Chorotype – MED

Trophic category – PRE

**Notes.** This species was recorded on Vulcano: Piano (Penati and Vienna 2005; Lo Cascio *et al.* 2006).

*Halacritus punctum* (Aubé, 1842)

Chorotype – MED

Trophic category – PRE

**Notes.** This species was recently recorded on Vulcano: Ponente beach, (Lo Cascio, Altadonna, and Ponel 2022).

*Hister illigeri* Duftschmidt, 1805

Chorotype – CAE

Trophic category – PRE

**Notes.** This species was recorded on Vulcano: Piano (Penati and Vienna 2005; Lo Cascio *et al.* 2006).

*Hypocaccus (Baeckmanniolus) dimidiatus* (Illiger, 1807)

Chorotype – MED

Trophic category – PRE

**Notes.** This species was recorded on Vulcano: Gelso beach (Penati and Vienna 2005; Lo Cascio *et al.* 2006).

*Margarinotus (Ptomister) brunneus* (Fabricius, 1775)

Chorotype – SIE

Trophic category – PRE

**Notes.** This species was recorded on Vulcano: near Gelso, (Lo Cascio, Altadonna, and Ponel 2022).

*Pachylister inaequalis* (Olivier, 1789)

Chorotype – CAE

Trophic category – PRE

**Notes.** This species was recorded on Vulcano: Piano (Penati and Vienna 2005; Lo Cascio *et al.* 2006).

*Pactolinus major* (Linnaeus, 1767)

Chorotype – MED

Trophic category – PRE

New records – Aeolian Archipelago: Vulcano Island, Gelso, at night sub *Q. ilex*, 90m a.s.l., 08.VII.2023, Leg. Baviera C.; Gran Cratere, 01.V.2024 Capillo G. and Albano M.

**Notes.** A species recorded, until now, on Vulcano: Piani di Luccia and Piano (Lo Cascio, Altadonna, and Ponel 2022).

*Saprinus calatravensis* Fuente, 1899

Chorotype – CAM

Trophic category – PRE

New records – Aeolian Archipelago: Vulcano Island, Gelso, at night sub *Q. ilex*, 90m a.s.l., 08.VII.2023, Leg. Baviera C.; Gran Cratere, 01.V.2024 Capillo G. and Albano M.

**Notes.** A species recorded on Vulcano: Piano (Lo Cascio, Altadonna, and Ponel 2022).

*Saprinus georgicus* Marseul, 1862

Chorotype – CEM

Trophic category – PRE

**Notes.** A species recorded from “Vulcano” (Lo Cascio, Altadonna, and Ponel 2022).

*Saprinus politus* (Brahm, 1790)

Chorotype – SEU

Trophic category – PRE

**Notes.** This species was recorded on Vulcano: Piano (Penati and Vienna 2005; Lo Cascio *et al.* 2006).

*Saprinus subnitescens* Bickhardt, 1909

Chorotype – CEM

Trophic category – PRE

**Notes.** This species was recorded on Vulcano: Piano d'Aligheri (Penati and Vienna 2005; Lo Cascio *et al.* 2006).

## STAPHYLINOIDEA

### SILPHIDAE

Four species of this family were recorded from Aeolian Archipelago: only one species on Vulcano, shared with Lipari.

*Silpha olivieri* Bedel, 1887

Chorotype – MED

Trophic category – PRE

**Notes.** This species was recorded on Vulcano: Vallonazzo (Lo Cascio, Altadonna, and Ponel 2022).

### STAPHYLINIDAE

Of this family were recorded eighty-six species from Aeolian Archipelago: fortyfour species on Vulcano (eighteen shared with Lipari; seven with Salina; one with Panarea, four with Stromboli, nine with Alicudi, four with Filicudi).

#### Pselaphinae

*Faronus lafertei* Aubé, 1844

Chorotype – WME

Trophic category – PRE

New records – Aeolian Archipelago: Vulcano Island, Piano, belvedere, 300m a.s.l. sifting *Cistus*, 29.XII.2023, Leg. Baviera C.

**Notes.** This is the first Staphylinidae Pselaphinae recorded on Vulcano Island. This species was recorded from Filicudi (Sabella 1993), Lipari and Panarea (Poggi and Sabella 2005).

#### Scaphidiinae

*Scaphium immaculatum* (Olivier, 1790)

Chorotype – EUM

Trophic category – PRE

**Notes.** This species was recorded on Lipari and Vulcano (Tamanini 1969).

### Microlepinae

*Micropeplus staphylinoides* (Marsham, 1802)

Chorotype – EUM

Trophic category – PRE

**Notes.** A species generically recorded from “Vulcano” (Bordoni 1973).

*Tachyporus (Palporus) nitidulus* (Marsham, 1802)

Chorotype – PAL

Trophic category – PRE

New records – Aeolian Archipelago: Vulcano Island, Portella Gelso, sweeping net at night, 29.XII.2023, Leg. Baviera C.; Piani di Luccia, 410m a.s.l., sifting *Ulmus*, 28.XII.2023, Leg. Baviera C.; Piano, on flowers, 08.VII.2023, Leg. Baviera C.

**Notes.** This species was recently recorded for the first time from “Vulcano” (Lo Cascio, Altadonna, and Ponel 2022).

*Tachyporus (Tachyporus) pusillus* Gravenhorst, 1806

Chorotype – PAL

Trophic category – PRE

New records – Aeolian Archipelago: Vulcano Island, Piano, 300m a.s.l., at light, 08.VII.2023, Leg. Baviera C.; Vulcano, street to Gelso, 09.V.2007, sifting *Quercus ilex*, Leg. Baviera C.

**Notes.** This species was recorded from “Vulcano” (Bordoni 1973) (sub *T. macropterus*).

*Tachinus flavolimbatus* Pandellé, 1869

Chorotype – WME

Trophic category – PRE

New records – Aeolian Archipelago: Vulcano Island, Piani di Luccia, 410m a.s.l., sifting *Ulmus*, 28.XII.2023, Leg. Baviera C.

**Notes.** This species was recorded from “Vulcano” (Bordoni 1973).

### Aleocharinae

*Aleochara (Coprochara) cfr. binotata* Kraatz, 1856

Chorotype – PAL

Trophic category – PRE

New records – Aeolian Archipelago: Vulcano Island, Piano, 350m a.s.l., sifting *Q. ilex*, 08.VII.2023, Leg. Baviera C.; Vulcanello, Valle dei Mostri, sifting, 29.XII.2023, Leg. Baviera C.

**Notes.** A species recently recorded from “Vulcano”: (Lo Cascio, Altadonna, and Ponel 2022).

*Aleochara (Aleochara (Polychara) laevigata* Gyllenhal, 1810

Chorotype – PAL

Trophic category – PRE

**Notes.** A species recorded from “Vulcano” (Bordoni 1973).

*Tinotus morion* (Gravenhorst, 1802)

Chorotype – EUM

Trophic category – PRE

New records – Aeolian Archipelago: Vulcano Island, Portella Gelso, 400m a.s.l., sifting *Ulmus*, *Cistus*, *Solanum*, 28.XII.2023, Leg. Baviera C.

**Notes.** This species wasn’t recorded before on Vulcano or Aeolian Archipelago.

*Anotylus inustus* (Gravenhorst, 1806)

Chorotype – CEM

Trophic category – PRE

New records – Aeolian Archipelago: Vulcano Island, Valle Rio Grande, beating *Ulmus*, 7.VII. 2023, Leg. Baviera C.

**Notes.** This species was recently recorded on Vulcano in Valle Rio Grande (Lo Cascio, Altadonna, and Ponel 2022).

*Astenus (Astenopleuritus) melanurus* Küster, 1853

Chorotype – WME (with extention to Maghreb)

Trophic category – PRE

**Notes.** A species recorded from “Vulcano” (Bordoni 1973).

*Astenus (Astenus) lyonessius* (Joy, 1908)

Chorotype – EUM

Trophic category – PRE

New records – Aeolian Archipelago: Vulcano Island, Piano, belvedere, 300m a.s.l. sifting *Cistus*, 29.XII.2023, Leg. Baviera C.; Piani di Luccia, 410m a.s.l., sifting *Ulmus*, 28.XII.2023, Leg. Baviera C.; same locality, 20.IX.2023, Leg. Baviera C.

**Notes.** A species never recorded before from Sicily.

*Astenus (Eurysunius) cfr. schatzmayri* Bernhauer, 1929

Chorotype – SICI

Trophic category – PRE

**Notes.** This species was recorded on Vulcano: western slope of Gran Cratere, (Lo Cascio, Altadonna, and Ponel 2022).

*Atheta (Dimetrota) atramentaria* (Gyllenhal, 1810)

Chorotype – PAL

Trophic category – PRE

**Notes.** A species recorded from “Vulcano” (Bordoni 1973).

*Atheta (Atheta) oblita* (Erichson, 1839)

Chorotype – EUM

Trophic category – PRE

New records – Aeolian Archipelago: Vulcano Island, Piano, 350m a.s.l., sifting *Q. ilex*, 08.VII.2023, Leg. Baviera C.; same locality, at lighth, 07.VII.2023, Leg. Baviera C.

**Notes.** A species never recorded before on Vulcano, until now recorded only from Lipari in the Aeolian Archipelago (Bordoni 1973).

*Atheta (Mocyta) fungi* (Gravenhorst, 1806)

Chorotype – SIE

Trophic category – PRE

New records – Aeolian Archipelago: Vulcano Island, Piano, belvedere, 300m a.s.l. sifting *Cistus*, 29.XII.2023, Leg. Baviera C.

**Notes.** A species recorded from “Vulcano” (Bordoni 1973).

*Atheta (Mocyta) orbata* (Erichson, 1837)

Chorotype – CEM

Trophic category – PRE

New records – Aeolian Archipelago: Vulcano Island, Piano, belvedere, 300m a.s.l. sifting *Cistus*, 29.XII.2023, Leg. Baviera C.

**Notes.** A species recorded on Vulcano: seashore (Bordoni 1973).

*Pella funesta* (Gravenhorst, 1806)

Chorotype – EUR

Trophic category – PRE

New records – Aeolian Archipelago: Vulcano Island, Piano, 350m a.s.l., at light, 08.VII.2023, Leg. Baviera C.

**Notes.** A species never recorded before from Aeolian Archipelago.*Bledius* sp.

Trophic category – PRE

**Notes.** This species was recorded from basal belt of Gran Cratere on Vulcano (Lo Cascio *et al.* 2006).*Lordithon thoracicus* (Fabricius, 1777)

Chorotype – ASE

Trophic category – PRE

New records – Aeolian Archipelago: Vulcano Island, Piano, 300m a.s.l., sifting *Quercus ilex*, 28.XII.2023, Leg. Baviera C.**Notes.** A species never recorded before on Vulcano and Aeolian Archipelago.*Cafius (Pseudoremus) xantholoma* (Gravenhorst, 1806)

Chorotype – TEM

Trophic category – PRE

**Notes.** This species was recorded on Vulcano: Ponente beach, (Lo Cascio, Altadonna, and Ponel 2022).*Cafius (Creophilus) maxillosus* (Linnaeus, 1758)

Chorotype – COS

Trophic category – PRE

**Notes.** This species was recorded on Vulcano: Piano (Lo Cascio, Altadonna, and Ponel 2022).*Mycetoporus angularis* Mulsant and Rey, 1853

Chorotype – EUM

Trophic category – PRE

New records – Aeolian Archipelago: Vulcano Island, Piano, belvedere, 300m a.s.l. sifting *Cistus*, 29.XII.2023, Leg. Baviera C.; Piano, on flowers, 08.VII.2023, Leg. Baviera C.

**Notes.** A species never recorded before from Aeolian Archipelago.

*Mycetoporus baudueri* Mulsant and Rey, 1875

Chorotype – EUM

Trophic category – PRE

New records – Aeolian Archipelago: Vulcano Island, Piano, belvedere, 300m a.s.l. sifting *Cistus*, 29.XII.2023, Leg. Baviera C.; Piani di Luccia, 410m a.s.l., sifting *Ulmus*, 28.XII.2023, Leg. Baviera C.

**Notes.** A species recorded on Vulcano (Bordoni 1973).

*Nehemitropia lividipennis* (Mannerheim, 1830)

Chorotype – PAL

Trophic category – PRE

**Notes.** A species recorded on Vulcano (Bordoni 1973) (sub *Atheta sordida*).

## Staphylininae

*Ocypus (Ocypus) olens* (O.F. Müller, 1764)

Chorotype – WME

Trophic category – PRE

**Notes.** A species recorded on Vulcano: Serra Felcicchie and Mount Luccia (Bordoni 1973).

*Ocypus (Pseudocypus) fortunatarum* Wollaston, 1871

Chorotype – WME

Trophic category – PRE

**Notes.** A species recorded on Vulcano: Mount Luccia (Bordoni 1973) (sub *Pseudocypus*).

*Ocypus (Pseudocypus) sericeicollis* Menetries, 1832

Chorotype – EUR

Trophic category – PRE

**Notes.** A species recorded on Vulcano: Mount Luccia (Bordoni 1973) (sub *Pseudocypus cupreus*).

*Ocypus (Pseudocypus) mus transadriaticus* (G. Müller, 1926)

Chorotype – APPE (TUE)

Trophic category – PRE

New records – Aeolian Archipelago: Vulcano Island, Piani di Luccia, 410m a.s.l., sifting *Ulmus*, 28.XII.2023, Leg. Baviera C.; Piano, belvedere, 300m a.s.l. sifting *Cistus*, 29.XII.2023, Leg. Baviera C.

**Notes.** This species was recently recorded on Vulcano: Piano (Lo Cascio, Altadonna, and Ponel 2022). This is an appenninic endemic subspecies of a Turanic-European species.

*Ontholestes murinus* (Linnaeus, 1758)

Chorotype – ASE

Trophic category – PRE

**Notes.** A species recorded on Vulcano: Piano (Bordoni 2014).

*Othius laeviusculus* Stephens, 1832

Chorotype – MED

Trophic category – PRE

**Notes.** This species was generically recorded from “Vulcano” (Bordoni 1973).

*Philonthus (Philonthus) ebeninus* (Gravenhorst, 1802)

Chorotype – EUM

Trophic category – PRE

**Notes.** This species was recently recorded from “Vulcano” (Lo Cascio, Altadonna, and Ponel 2022).

*Philonthus (Philonthus) jurgans* Tottenham, 1937

Chorotype – EUM

Trophic category – PRE

**Notes.** A species recorded on Vulcano: Serra Felcicchie (Bordoni 1973).

*Philonthus (Philonthus) spinipes* Sharp, 1874

Chorotype – PAL

Trophic category – PRE

**Notes.** This species was recorded on Vulcano: Piano (Bordoni 2014).

*Philonthus (Spatulonthus) longicornis* Stephens, 1832

Chorotype – EUM

Trophic category – PRE

**Notes.** This species was generically recorded from “Vulcano” (Bordoni 1973) (sub *Spatulonthus*).

*Quedius (Quedius) laevicollis* (Brullé, 1832)

Chorotype – SEU

Trophic category – PRE

**Notes.** A species recorded on Vulcano: Mount Luccia (Bordoni 1973) (sub *Q. tristis*).

*Quedius (Quedius) pallipes* (Lucas, 1849)

Chorotype – WEU

Trophic category – PRE

New records – Aeolian Archipelago: Vulcano Island, Porto Ponente beach, sabbie nere, 07.VII.2023, Leg. Baviera C.

**Notes.** A species never recorded before on Vulcano and Aeolian Archipelago.

*Quedius (Distichalius) cinctus* (Paykull, 1790)

Chorotype – EUM

Trophic category – PRE

New records – Aeolian Archipelago: Vulcano Island, Piano, belvedere, 300m a.s.l. sifting *Cistus*, 29.XII.2023, Leg. Baviera C.; Gelso, 200m a.s.l., sifting *Olea*, 29.XII.2023, Leg. Baviera C.; Piani di Luccia, 410m a.s.l., sifting *Ulmus*, 28.XII.2023, Leg. Baviera C.; Porto Levante, black sand, fumaroles, 07.VII.2023, Leg. Baviera C.

**Notes.** A species never recorded before on Vulcano, until now recorded only from Lipari (Bordoni 1973), in the Aeolian Archipelago.

*Quedius (Raphirus) humeralis* Stephens, 1832

Chorotype – TEM

Trophic category – PRE

New records – Aeolian Archipelago: Vulcano Island, Piano, belvedere, 300m a.s.l. sifting *Cistus*, 29.XII.2023, Leg. Baviera C.; Gelso, 200m a.s.l., sifting *Olea*, 29.XII.2023, Leg. Baviera C.; Piani di Luccia, 410m a.s.l., sifting *Ulmus*, 28.XII.2023, Leg. Baviera C.; Porto Levante, black sand, fumaroles, 07.VII.2023, Leg. Baviera C.

**Notes.** A species recorded on Vulcano (Bordoni 1973) (sub *Q. obliteratus*).

*Remus sericeus* Holme, 1837

Chorotype – CEM

Trophic category – PRE

**Notes.** A species recorded on Vulcano: Ponente beach (Lo Cascio, Altadonna, and Ponel 2022).

*Sepedophilus nigripennis* (Stephens, 1832)

Chorotype – EUM

Trophic category – PRE

New records – Aeolian Archipelago: Vulcano Island, Piani di Luccia, sifting *Ulmus*, 20.IX.2023, Leg. Baviera C.; same locality, 28.XII.2023, Leg. Baviera C.; Porto Levante, black sand, fumaroles, 07.VII.2023, Baviera C.; Piano, on flowers, 08.VII.2023, Leg. Baviera C.; Gelso, 200m a.s.l., sifting *Olea*, 29.XII.2023, Leg. Baviera C.

**Notes.** A species recorded on Vulcano: Valle Rio Grande (Lo Cascio, Altadonna, and Ponel 2022).

*Sepedophilus pedicularius* (Gravenhorst, 1802)

Chorotype – PAL

Trophic category – PRE

**Notes.** This species was recorded from “Vulcano” (Bordoni 1973) (sub *Conosoma*).

*Sepedophilus testaceus* (Fabricius, 1792)

Chorotype – CEM

Trophic category – PRE

**Notes.** This species was recorded from “Vulcano” (Bordoni 1973) (sub *Conosoma*).

*Stenus atratulus* Erichson, 1839

Chorotype – EUM

Trophic category – PRE

New records – Aeolian Archipelago: Vulcano Island, Porto Levante, sabbie nere, fumaroles, 07.VII.2023, Leg. Baviera C.

**Notes.** A genus never recorded before from Aeolian Archipelago.

*Tasgius pedator siculo* (Aubé, 1842)

Chorotype – EUM

Trophic category – PRE

**Notes.** This species was recently recorded for the first time on Vulcano: Vallonazzo (Lo Cascio, Altadonna, and Ponel 2022).

*Thinobius longipennis* (Heer, 1841)

Chorotype – EUR

Trophic category – PRE

**Notes.** This species was recorded on Vulcano: basal belt of Gran Cratere (Lo Cascio *et al.* 2006).

*Xantholinus linearis* (Olivier, 1795)

Chorotype – PAL

Trophic category – PRE

New Records – Aeolian Archipelago: Vulcano Island, Gelso, 200m a.s.l., sifting *Quercus ilex*, 29.XII.2023, Leg. Baviera C.; same locality, 09.V.2007, Leg. Baviera C.; Piano, 300m a.s.l., sifting *Quercus ilex*, 28.XII.2023, Leg. Baviera C.; Piani di Luccia, 410m a.s.l., sifting *Ulmus*, 28.XII.2023, Leg. Baviera C.; Piano, belvedere, 300m a.s.l. sifting *Cistus*, 29.XII.2023, Leg. Baviera C.

**Notes.** This species was recorded on Vulcano: Serra Felcicchie (Bordoni 1973).

## PTILIIDAE

Species of this family was never recorded until now on Vulcano Island.

*Actidium aterrimum* (Motschulsky, 1845)

Chorotype – CEU

Trophic category – MYC

New Records - Aeolian Archipelago: Vulcano Island, Piani di Luccia, sifting *Ulmus*, 20.IX.2023, Baviera C.

**Notes.** This genus wasn't recorded before from Aeolian Archipelago.

*Acrotichis grandicollis* (Mannerheim, 1844)

Chorotype – EUM

Trophic category – MYC

New Records - Aeolian Archipelago: Vulcano Island, Piani di Luccia, sifting *Ulmus*, 20.IX.2023, Leg. Baviera C.

**Notes.** This genus wasn't recorded before from Aeolian Archipelago.

*Ptiliolium spencei* (Allibert, 1844)

Chorotype – EUR

Trophic category – MYC

New Records - Aeolian Archipelago: street to Gelso, 260m a.s.l., sifting in *Q. ilex*, 28.XII.2023, Leg.

Baviera C.; Piani di Luccia, sifting *Ulmus*, 27.XII.2023, Leg. Baviera C.

**Notes.** This genus wasn't recorded before from Aeolian Archipelago.

## SCARABAEOIDEA

### GEOTRUPIDAE

Three species of this family were recorded in the Aeolian Archipelago, two on Vulcano (all shared with Lipari and Salina, and one with Panarea, Stromboli, Alicudi and Filicudi)

*Jekelius intermedius* (O.G. Costa, 1839)

Chorotype – WME

Trophic category – SAP

New Records - Aeolian Archipelago: street to Gelso, 260m a.s.l., sifting in *Q. ilex*, 28.XII.2023, Leg. Baviera C.; Piani di Luccia, sifting *Ulmus*, 27.XII.2023, Leg. Baviera C.

**Notes.** This very common species in NE Sicily, was recorded on Vulcano on Luccia Mount (Carpaneto 1985) (sub *Thorectes*) and from Cugni di Molinello (Lo Cascio 2020).

*Sericotrupes niger* (Marshall, 1802)

Chorotype – WEU

Trophic category – SAP

New Records - Aeolian Archipelago: street to Gelso, 260m a.s.l., sifting in *Q. ilex*, 28.XII.2023, Leg. Baviera C.; Piani di Luccia, sifting *Ulmus*, 27.XII.2023, Leg. Baviera C.

**Notes.** This species was recorded for the first time on Vulcano by (Rastelli 2000) and after from Cugni di Molinello (Lo Cascio 2020).

### TROGIDAE

Two species of this family were recorded in the Aeolian Archipelago, two on Vulcano (all shared with Lipari and Salina, and one with Alicudi).

*Trox litoralis* Pittino, 1991

Chorotype – MED

Trophic group – PRE

**Notes.** This species was recorded from “Vulcano” without more data (Pittino 1991).

*Trox niger* Rossi, 1792

Chorotype – TUE

Trophic group – PRE

**Notes.** This species was recently recorded for the first time on Vulcano: Piano and Grotte dei Rossi, (Lo Cascio, Altadonna, and Ponel 2022).

## SCARABAEIDAE

This family is represented by 59 species in the Aeolian Archipelago, 46 species recorded on Vulcano, the greatest number among islands of the Aeolian Archipelago (25 shared with Lipari; 8 with Salina; 4 with Panarea; 12 with Stromboli and Alicudi, and 10 with Filicudi)

### Aphodinae

*Aphodius cardinalis* Reitter, 1892

Chorotype – PAL

Trophic category – SAP

**Notes.** This species was cited on from “Vulcano” (Lo Cascio, Altadonna, and Ponel 2022).

*Aphodius fimetarius* (Linnaeus, 1758)

Chorotype – PAL

Trophic category – SAP

**Notes.** A species recorded from “Vulcano” (Carpaneto 1985) and, after, from Cugni di Molinello (Lo Cascio 2020). *A. cardinalis* and *A. fimetarius* are very similar (see Fery and Rössner 2015), some of the records of a species could be partially referred to the other.

*Aphodius foetidus* (Herbst, 1783)

Chorotype – EUM

Trophic category – SAP

**Notes.** This species was recorded from “Vulcano” (Carpaneto 1985) and, after, from Cugni di Molinello (Lo Cascio 2020).

*Agrilinus ibericus* (Harold, 1874)

Chorotype – MED

Trophic category – SAP

**Notes.** This species was recorded for the first time from “Vulcano” (Dellacasa 1987) (sub *Aphodius*).

*Agrilinus hydrochaeris* (Fabricius, 1798)

Chorotype – SIE

Trophic category – SAP

**Notes.** This species was recorded from “Vulcano” (Dellacasa 1987) (sub *Aphodius* and, after, from Cugni di Molinello (Lo Cascio 2020).

*Bodiloides ictericus ghardimaouensis* (Balthasar, 1929)

Chorotype – TUM

Trophic category – SAP

**Notes.** This species was recorded from “Vulcano” (Dellacasa 1987) (sub *Aphodius* and, after, from Cugni di Molinello (Lo Cascio 2020).

*Bodilus lugens* (Creutzer, 1799)

Chorotype – CAE

Trophic category – SAP

**Notes.** This species was recorded on Vulcano (Arnone, Lo Cascio, and Nistri 2001) (sub *Aphodius*)

*Calamosternus granarius* (Linnaeus, 1767)

Chorotype – PAL

Trophic category – SAP

**Notes.** This species was recorded on Vulcano (Carpaneto 1985) (sub *Aphodius*), and from Cugni di Molinello (Lo Cascio 2020).

*Calamosternus mayeri* (Pilleri, 1953)

Chorotype – WME

Trophic category – SAP

**Notes.** This species was recorded on Vulcano (Dellacasa 1987) (sub *Aphodius*).

*Chilo thorax lineolatus* (Illiger, 1803)

Chorotype – TUM

Trophic category – SAP

Aeolian Archipelago: Vulcano Island, Piani di Luccia, 410m a.s.l., sifting *Ulmus*, 28.XII.2023, Leg. Baviera C.

**Notes.** This species was recorded on Vulcano since 1985 (Carpaneto 1985) (sub *Aphodius*), and from Cugni di Molinello (Lo Cascio 2020).

*Coloboferus erraticus* (Linnaeus, 1758)

Chorotype – ASE

Trophic category – SAP

**Notes.** This species was recorded on Vulcano (Dellacasa 1987) (sub *Aphodius*), and from Cugni di Molinello (Lo Cascio 2020).

*Ateuchetus laticollis* (Linnaeus, 1767)

Chorotype – WME

Trophic category – SAP

**Notes.** This species was recorded on Vulcano (Arnone, Lo Cascio, and Nistri 2001) (sub *Scarabaeus*).

*Euorodalus tersus* (Erichson, 1848)

Chorotype – WME

Trophic category – SAP

**Notes.** This species was recorded on Vulcano (Carpaneto 1985) (sub *Aphodius*), and from Cugni di Molinello (Lo Cascio 2020).

*Labarrus lividus* (Olivier, 1789)

Chorotype – MED

Trophic category – SAP

**Notes.** This species was recorded on Vulcano (Arnone, Lo Cascio, and Nistri 2001) (sub *Aphodius*), and from Cugni di Molinello (Lo Cascio 2020).

*Esymus merdarius* (Fabricius, 1775)

Chorotype – CAE

Trophic category – SAP

**Notes.** This species was recorded on Vulcano (Carpaneto 1985) (sub *Aphodius*).

*Otophorus haemorrhoidalis* (Linnaeus, 1758)

Chorotype – PAL

Trophic category – SAP

**Notes.** This species was recorded on Vulcano (Dellacasa 1987) (sub *Aphodius*), and from Cugni di Molinello (Lo Cascio 2020).

*Phalacrothous quadrimaculatus quadrimaculatus* (Linnaeus, 1761)

Chorotype – SIE

Trophic category – SAP

**Notes.** This species was recorded on Vulcano (Dellacasa 1987) (sub *Aphodius*).

*Subrinus sturmi* (Harold, 1870)

Chorotype – CEM

Trophic category – SAP

**Notes.** This species was recorded from Cugni di Molinello (Lo Cascio 2020).

*Trichonotulus scrofa* (Fabricius, 1787)

Chorotype – CAE

Trophic category – SAP

**Notes.** This species was recorded on Vulcano (Dellacasa 1987) (sub *Aphodius*).

*Platytomus tibialis* (Fabricius, 1798)

Chorotype – TUM

Trophic category – PHY

**Notes.** A species recorded on Vulcano: Piano, (Lo Cascio, Altadonna, and Ponel 2022).

*Pleurophorus caesus* (Creutzer, 1796)

Chorotype – PAL

Trophic category – PHY

New Records – Aeolian Archipelago: Vulcano Island, Vulcanello, Valle dei Mostri, sifting, 29.XII.2023, Leg. Baviera C.

**Notes.** This species had never been recorded on Vulcano Island.

*Rhyssemus plicatus* (Germar, 1817)

Chorotype – WME

Trophic category – PHY

New Records – Aeolian Archipelago: Vulcano Island, Gelso, 200m a.s.l., sifting *Olea*, 29.XII.2023, Leg. Baviera C.; Vulcanello, Valle dei Mostri, sifting, 29.XII.2023, Leg. Baviera C.

**Notes.** A species recently recorded on Vulcano: Piano, (Lo Cascio, Altadonna, and Ponel 2022)

### **Scarabeinae**

*Scarabaeus (Scarabaeus) sacer* Linnaeus, 1758

Chorotype – TUM

Trophic category – SAP

**Notes.** A species recorded only from “Vulcano” (Salvator 1893) (sub *Ateuchus*); (Carpaneto 1985) and from Cugni di Molinello (Lo Cascio 2020).

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

Chorotype – CAE

Trophic category – SAP

**Notes.** A species recorded on Vulcano by Agoglitta *et al.* (2006) and from Cugni di Molinello (Lo Cascio 2020).

*Ateuchetus semipunctatus* (Fabricius, 1792)

Chorotype – WME

Trophic category – SAP

**Notes.** A species recorded on “Vulcano” (Arnone, Lo Cascio, and Nistri 2001) (sub *Scarabaeus*).

*Sisyphus schaefferi schaefferi* (Linnaeus, 1785)

Chorotype – EUR

Trophic category – SAP

**Notes.** A species recorded on “Vulcano” (Arnone, Lo Cascio, and Nistri 2001).

*Euoniticellus fulvus* (Goeze, 1777)

Chorotype – CEM

Trophic category – SAP

**Notes.** A species recorded on Vulcano (Carpaneto 1985), and from Cugni di Molinello (Lo Cascio 2020).

*Euoniticellus pallipes* (Fabricius, 1781)

Chorotype – CEM

Trophic category – SAP

**Notes.** A species recorded on Vulcano (Aliquò, Massa, and Mignani 1973), and from Cugni di Molinello (Lo Cascio 2020).

*Copris hispanus cavolinii* (Petagna, 1792)

Chorotype – EME

Trophic category – SAP

**Notes.** A species recorded only from “Vulcano” (Carpaneto 1985), and from Cugni di Molinello (Lo Cascio 2020).

*Bubas bison* (Linnaeus, 1767)

Chorotype – WME

Trophic category – SAP

**Notes.** A species recorded only from “Vulcano” (Carpaneto 1985), and from Cugni di Molinello (Lo Cascio 2020).

*Chironitis irroratus* (Rossi, 1790)

Chorotype – WME

Trophic category – SAP

**Notes.** A species recorded (sub *Cheironitis ungaricus hirroratus*) only from “Vulcano” (Martín-Piera 1987).

*Caccobius schreberi* (Linnaeus, 1767)

Chorotype – CEM

Trophic category – SAP

**Notes.** A species recorded only from “Vulcano” (Arnone, Lo Cascio, and Nistri 2001).

*Mecynodes striatulus* (Waltl, 1935)

Chorotype – MED

Trophic category – SAP

**Notes.** This species was recorded (sub *Aphodius*) on Vulcano (Dellacasa 1987), and from Cugni di Molinello (Lo Cascio 2020).

*Onthophagus (Onthophagus) taurus* (Schreber, 1759)

Chorotype – TEM

Trophic category – SAP

**Notes.** A species recorded from “Vulcano” (Carpaneto 1985), and from Cugni di Molinello (Lo Cascio 2020).

*Onthophagus (Palaeonthophagus) opacicollis* Reitter, 1893

Chorotype – MED

Trophic category – SAP

New records – Aeolian Archipelago: Vulcano Island, Piano, belvedere, 300m a.s.l. sifting *Cistus*, 29.XII.2023, Leg. Baviera C.

**Notes.** This species was recorded (sub *Onthophagus similis*) only from “Vulcano” (Palestrini 1981). Later recorded from Luccia Mount (Carpaneto 1985) and Cugni di Molinello (Lo Cascio 2020).

*Onthophagus (Palaeonthophagus) massai* (Baraud, 1975)

Chorotype – SICI

Trophic category – SAP

**Notes.** The validity of this species was recently confirmed (Angus and Falahee 2010), so to this species should be referred all the Sicilian records of *O. fracticornis*. Recorded (sub *Onthophagus fracticornis*) from “Vulcano” by (Agoglitta *et al.* 2006).

*Onthophagus (Palaeonthophagus) grossepunctatus* Reitter, 1905

Chorotype – SEU

Trophic category – SAP (NEC)

**Notes.** This species was recorded (sub *Onthophagus similis*) on Vulcano (Palestrini 1981).

*Onthophagus (Palaeonthophagus) ruficapillus* Brullé, 1832

Chorotype – CAE

Trophic category – SAP (NEC)

**Notes.** This species was recorded on Vulcano Piano (Arnone, Lo Cascio, and Nistri 2001).

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

Chorotype – TEM

Trophic category – SAP (NEC)

**Notes.** This species was recorded on Vulcano (Zunino 1981) and (sub *Palaeonthophagus*) from Cugni di Molinello (Lo Cascio 2020).

## Melolonthinae

*Aplidia hirticollis* Burmeister, 1855

Chorotype – APPE

Trophic category – PHY

New records – Aeolian Archipelago: Vulcano Island, Piano, at light, 07.VII.2023, Leg. Baviera C.

**Notes.** This is an Appenninic endemic species, the most common of the genus *Aplidia* in Sicily (Baviera *et al.* 2024) recorded (sub *Haplidia hirticollis*) from “Vulcano” (Arnone, Lo Cascio, and Nistri 2001).

[*Anoxia (Anoxia) scutellaris sicula* Motschulsky, 1860]

Chorotype – SICI

Trophic category – PHY

**Notes.** This species, endemic of Northern Sicily, was probably now extinct as it was not recollected in the last 22 years. It was introduced on Vulcano before the summer 2012 when some specimens were collected at Piano (Lo Cascio, Altadonna, and Ponel 2022).

*Anoxia (Mesanoxia) moltonii* (Sabatinelli, 1976)

Chorotype – SICI

Trophic category – PHY

New records – Aeolian Archipelago: Vulcano Island, Piano, 350m a.s.l., 08-09.VII.2023, Leg. Baviera C.; Gelso, 70m a.s.l., 09.VII.2023, Leg. Baviera C.

**Notes.** This species is a narrow endemic species of Vulcano Island (Leo, Garagnani, and Sabatinelli 2021), observed as very common from Piano to Gelso. Described by Sabatinelli (1976) as an endemic subspecies of *Anoxia matutinalis*, was recorded also from Vulcanello (Carpaneto 1985).

## Rutelinae

*Anomala ausonia* Erichson, 1847

Chorotype – WME

Trophic category – PHY

New records – Aeolian Archipelago: Vulcano Island, Valle Rio Grande, dead specimen, 08.VII.2023, Leg. Baviera C.

**Notes.** This species was recorded from “Vulcano” (Carpaneto 1985) and Lentia Mount, slopes of Gran Cratere, Gelso (Arnone, Lo Cascio, and Nistri 2001).

### **Dynastinae**

*Pentodon bidens punctatus* (Villiers, 1789)

Chorotype – MED

Trophic category – PHY

**Notes.** A species recorded on Vulcano: Piano, Piano Mandra (Arnone, Lo Cascio, and Nistri 2001)

*Phyllognathus excavatus* (Forster, 1771)

Chorotype – TUM

Trophic category – PHY

New records – Aeolian Archipelago: Vulcano Island, Porto ponente, 08.VII.2023, Leg. Baviera C.

**Notes.** A species recorded (sub *P. silenus*) on Vulcano (Focarile 1970), Piano, and Gelso (Arnone, Lo Cascio, and Nistri 2001), Luccia Mount (Carpaneto 1985).

*Oryctes nasicornis grypus* Illiger, 1803

Chorotype – WME

Trophic category – PHY

New records – Aeolian Archipelago: Vulcano Island, Piano, at light, 07.VII.2023, Baviera C. Leg

**Notes.** A species recorded on Vulcano: Piano, and Gelso (Arnone, Lo Cascio, and Nistri 2001).

### **Cetoniinae**

*Protaetia (Potosia) hypocrita* (Ragusa, 1905)

**Notes.** A Sicilian endemic species (Vondráček *et al.* 2018); recorded only by a specimen collected in 2017 (Vulcano: Piano) (Lo Cascio, Altadonna, and Ponel 2022) never recollected thereafter. The occurrence of this species in Vulcano requires further confirmation.

*Oxythyrea funesta funesta* (Poda, 1761)

Chorotype – CEM

Trophic category – PHY

New records – Aeolian Archipelago: Vulcano Island, Piano, at light, 07.VII.2023, Baviera C. Leg

**Notes.** This species was recorded on Vulcano, Ginestra and Vulcanello (Carpaneto 1985); Pendici Gran Cratere (Arnone, Lo Cascio, and Nistri 2001).

*Tropinota squallida squallida* (Scopoli, 1783)

Chorotype – EUM

Trophic category – PHY

New records – Aeolian Archipelago: Vulcano Island, Piano, at light, 07.VII.2023, Baviera C. Leg

**Notes.** This species was recorded (sub *Epicometis squalida*) only from “Vulcano” (Carpaneto 1985).

## SCIRTOIDEA

### EUCINETIDAE

Only a species of this family from Aeolian Archipelago, recorded on Lipari and now also on Vulcano.

*Eucinetus haemorrhoidalis* (Germar, 1818)

Chorotype – TEM

Trophic category – MYC

New records – Aeolian Archipelago: Vulcano Island, Piani di Luccia, sifting *Ulmus*, 28.XII.2023, Leg. Baviera C.

**Notes.** A new recorded family for Vulcano (Lo Cascio *et al.* 2006).

## BUPRESTOIDEA

### BUPRESTIDAE

Seventeen species were recorded from Aeolian Archipelago, five on Vulcano (all shared with Lipari; four with Salina and Stromboli; one with Panarea; one with Alicudi and two with Filicudi)

*Acmaeoderella (Omphalothorax) adpersula* (Illiger, 1803)

Chorotype – MED

Trophic category – PHY

**Notes.** A species recorded on Vulcano: Gelso (Lo Cascio *et al.* 2006).

*Anthaxia (Anthaxia) impunctata* Abeille de Perrin, 1909

Chorotype – APPE

Trophic category – PHY

**Notes.** A species recorded (sub *A. nereis*) on Vulcano (Curletti 1994).

*Anthaxia (Anthaxia) cfr. mendizabali* Cobos, 1965

Chorotype – WME

Trophic category – PHY

**Notes.** A species recorded on Vulcano (Bily 2006).

*Anthaxia (Haplantaxia) millefolii polychloros* Abeille de Perrin, 1894

Chorotype – WME

Trophic category – PHY

**Notes.** This species was recorded from “Vulcano (Lo Cascio *et al.* 2006)” by Lo Cascio, Altadonna, and Ponel (2022), but it isn’t present among the species recorded in the cited paper. This species is widespread in the Aeolian Islands, but the presence on Vulcano needs to be confirmed.

*Anthaxia (Haplantaxia) umbellatarum* (Fabricius, 1787)

Chorotype – EME

Trophic category – PHY

New records – Aeolian Archipelago: Vulcano Island, near Gelso, IV. 2024, reared from *Quercus ilex* collected on 18-20.IX.2023; Porto Ponente, sabbie nere, 07.VII.2023, Baviera C.

**Notes.** A new record on Vulcano. This species was recorded until now, in the Aeolian Archipelago, only from Lipari, Salina (Curletti 1994) and Alicudi (Lo Cascio *et al.* 2006).

## ELATEROIDEA

### ELATERIDAE

Eleven species recorded from Aeolian Archipelago, five on Vulcano (all shared with Lipari; four with Salina and Stromboli; one with Panarea; one with Alicudi and two with Filicudi).

*Cardiophorus eleonora* (Géné, 1836)

Chorotype – SEU

Trophic category – PHY

New records – Aeolian Archipelago: Vulcano Island, near Gelso, IV. 2024, reared from *Quercus ilex* collected on 18-20.IX.2023; Porto Ponente, sabbie nere, 07.VII.2023, Baviera C.

**Notes.** A species recorded on Vulcano in street to Gelso (sifting *Q. ilex*) (Baviera and Platia 2018).

*Cardiophorus ulcerosus* (Géné, 1836)

Chorotype – NAF

Trophic category – PHY

New records – Aeolian Archipelago: Vulcano Island, near Gelso, 200m a.s.l., under bark of *Eucaliptus*, 28.XII.2023, Leg. Baviera C.; Vulcanello Valle dei Mostri, sifting, 29.XII.2023, Leg. Baviera C.; Piano, at light, 08.VII.2023, Leg. Baviera C.

**Notes.** A species recorded on Vulcano (Platia 2005).

*Drasterius bimaculatus* (Rossi, 1790)

Chorotype – TEM

Trophic category – PHY (SAP)

New records – Aeolian Archipelago: Vulcano Island, Piani di Luccia, sifting *Ulmus*, 28.XII.2023, Leg. Baviera C.; same locality, 20.IX.2023, Leg. Baviera C.; Lentia, sifting *Ammophila*, 28.XII.2023, Leg. Baviera C.; near Gelso, 18-21.IX.2023, in wine and fruit trap on *Q. ilex*, Leg. Baviera C.

**Notes.** This species is probably by far the most common and widespread species of this family in Sicily. Also known from Lipari, Vulcano and Filicudi (Lo Cascio *et al.* 2006). During the research many specimens of very different colors and sizes were collected.

*Melanotus dichrous* (Erichson, 1841)

Chorotype – NAF

Trophic category – PHY (SAP)

New records – Aeolian Archipelago: Vulcano Island, Piani di Luccia at light, 08.VII.2023, Baviera C. Leg.; Lentia at light, 08.VII.2023, Baviera C.

**Notes.** A species recorded on Vulcano (Lo Cascio *et al.* 2006)

*Melanotus tenebrosus* (Erichson, 1841)

Chorotype – EUR

Trophic category – PHY (SAP)

New records – Aeolian Archipelago: Vulcano Island, Piani di Luccia at light, 08.VII.2023, Baviera C. Leg.; Lentia at light, 08.VII.2023, Baviera C.

**Notes.** A species recorded on Vulcano (Lo Cascio *et al.* 2006).

## **BOSTRICOIDEA**

### **DERMESTIDAE**

Fourteen species recorded from Aeolian Archipelago: twelve species on Vulcano (seven shared with Lipari; four with Salina, three with Stromboli, six with Alicudi, one with Panarea and Filicudi).

#### **Dermestinae**

*Dermestes (Dermestinus) frischii* Kugelann, 1792

Chorotype – COS

Trophic category – SAP

New records – Aeolian Archipelago: Vulcano Island, Piani di Luccia at light, 08.VII.2023, Baviera C. Leg.; Lentia at light, 08.VII.2023, Baviera C.

**Notes.** A species recorded on “Vulcano” by Lo Cascio *et al.* (2006).

*Dermestes (Dermestinus) undulatus* Brahm, 1790

Chorotype – OLA

Trophic category – SAP

New records – Aeolian Archipelago: Vulcano Island, Piani di Luccia at light, 08.VII.2023, Baviera C. Leg.; Lentia at light, 08.VII.2023, Baviera C.

**Notes.** A species recorded on Vulcano: Piano, (Lo Cascio, Altadonna, and Ponel 2022).

#### **Thorictinae**

*Thorictus grandicollis* Germar, 1817

Chorotype – TUM

Trophic category – SAP

New records – Aeolian Archipelago: Vulcano Island, Piani di Luccia, sifting *Ulmus*, 27.XII.2023, Leg. Baviera C.

**Notes.** This is the first record of this subfamily for Vulcano, in the Aeolian Archipelago this species was recorded from Salina (Focarile 1972), Lipari and Alicudi (Lo Cascio *et al.* 2006) as well.

## Attageninae

*Attagenus (Attagenus) unicolor unicolor* (Brahm, 1790)

Chorotype – COS

Trophic category – SAP

New records – Aeolian Archipelago: Vulcano Island, 7-9.VII. 2023, Leg. Baviera C. ; Piano, on *Daucus carota* 07.VII.2023, Leg. Baviera C.

**Notes.** This species belonging to a subfamily never recorded before on Vulcano.

## Megatominae

*Anthrenus (Anthrenus) delicatus* Kiesenwetter, 1851

Chorotype – MED

Trophic category – SAP

New records – Aeolian Archipelago: Vulcano Island, 09-10.V.2024, Leg. Baviera C.

**Notes.** This species was recently recorded on Vulcano: surrounding of Gran Cratere and Piano, (Lo Cascio, Altadonna, and Ponel 2022).

*Anthrenus (Anthrenus) goliath* Saulcy in Mulsant and Rey, 1868

Chorotype – MED

Trophic category – SAP

New records – Aeolian Archipelago: Vulcano Island, 09-10.V.2024, Leg. Baviera C.

**Notes.** This species was recorded on Vulcano in 2006 (Lo Cascio *et al.* 2006).

*Anthrenus (Anthrenus) pimpinellae pimpinellae* (Fabricius, 1775)

Chorotype – COS

Trophic category – SAP

New records – Aeolian Archipelago: Vulcano Island, 09-10.V.2024, Leg. Baviera C.

**Notes.** This species was recorded on Vulcano, basal belt of Gran Cratere (Lo Cascio *et al.* 2006).

*Anthrenus (Nathrenus) biskrensis* Reitter, 1887

Chorotype – NAF

Trophic category – SAP

New records – Aeolian Archipelago: Vulcano Island, Palude dell'Istmo, 8.VII. 2023, Leg. Baviera C.; Piano, on *Daucus* flowers, 07.VII.2023, Leg. Baviera C.

**Notes.** A species recorded until now from the Aeolian Archipelago only from Lipari (Hàva and Hermann 2020) and Alicudi (Lo Cascio, Altadonna, and Ponel 2022).

*Anthrenus (Nathrenus) verbasci* (Linnaeus, 1767)

Chorotype – COS

Trophic category – SAP

New records – Aeolian Archipelago: Vulcano Island, Valle Rio Grande, beating *Ulmus*, 7.VII. 2023, Leg. Baviera C.; Piano, on flowers, 08.VII.2023, Leg. Baviera C.; Vulcano Island, 09-10.V.2024, Leg. Baviera C.

**Notes.** A species never recorded before on Vulcano. Up until now this species was recorded from Aeolian Archipelago from Lipari (Lo Cascio *et al.* 2006), Salina and Filicudi (Lo Cascio, Altadonna, and Ponel 2022).

*Globicornis variegata* (Küster, 1851)

Chorotype – SEU

Trophic category – SAP

New records – Aeolian Archipelago: Vulcano Island, Valle Rio Grande, beating *Ulmus*, 7.VII. 2023, Leg. Baviera C.; Piano, on flowers, 08.VII.2023, Leg. Baviera C.; Vulcano Island, 09-10.V.2024, Leg. Baviera C.

**Notes.** This species was recently recorded on Vulcano: Piano, Piani di Luccia, Capo Grillo (Lo Cascio, Altadonna, and Ponel 2022).

*Globicornis bifasciata* (Perris, 1866)

Chorotype – WME

Trophic category – SAP

New records – Aeolian Archipelago: Vulcano Island, Piano, belvedere, 300m a.s.l. sifting *Cistus*, 29.XII.2023, Leg. Baviera C.; Vulcano Island, 09-10.V.2024, Leg. Baviera C.

**Notes.** This is the first record of this species in the Aeolian Archipelago.

*Globicornis picta* (Küster, 1851)

Chorotype – SEU

Trophic category – SAP

New records – Aeolian Archipelago: Vulcano Island, street to Gelso, 260m a.s.l., sifting in *Q. ilex*, 08.VII.2023, Leg. Baviera C.

**Notes.** This species is a new record on Vulcano and the Aeolian Archipelago.

*Trogoderma inclusum* LeConte, 1854

Chorotype – COS

Trophic category – SAP

New records – Aeolian Archipelago: Vulcano Island, near Gelso, 18-21.IX.2023, in wine and fruit trap on *Q. ilex*, Leg. Baviera C.

**Notes.** This species was recorded (sub *Trogoderma* sp.) on Vulcano: Piano (Lo Cascio *et al.* 2006; Lo Cascio, Altadonna, and Ponel 2022).

## **BOSTRICHIDAE**

Six species of this family from Aeolian Archipelago, three recorded on Vulcano (one shared with Lipari and Stromboli and two with Salina).

### **Bostrichinae**

*Scobicia chevrieri* (A. Villa and J. B. Villa, 1835)

Chorotype – MED

Trophic category – PHY

**Notes.** This species was recorded on Vulcano: Serro Pisani, Piano, Lentia, Gelso (Lo Cascio, Altadonna, and Ponel 2022).

*Trogoxylon impressum* (Comolli, 1837)

Chorotype - MED

Trophic category - PHY

**Notes.** This species was recently recorded on Vulcano: Gelso (Lo Cascio, Altadonna, and Ponel 2022).

### **Lyctinae**

Until now Bostrichidae of Lyctinae subfamily had not been recorded in Aeolian Archipelago.

*Lyctus brunneus* (Stephens, 1830)

Chorotype – COS

Trophic category – PHY

New records – Aeolian Archipelago: Vulcano Island, Vulcano Island, Street to Gelso, VI. 2024, reared from *Q. ilex*, collected 18-20.IX.2023, Leg. Baviera C.

**Notes.** A species native to Asia which has been established throughout Europe for more than 150 years (Denux and Zagatti 2010). This species was recently confirmed in Malta (Nardi and Mifsud 2015). In the nearby countries, the species was never recorded from

Sicily (Denux and Zagatti 2010; Nardi and Mifsud 2015). New record for Sicily.

## PTINIDAE

Twenty-five species of this family were recorded from Aeolian Archipelago: sixteen species on Vulcano (seven shared with Lipari; three with Salina, five with Stromboli, one with Alicudi and Panarea, and two with Filicudi).

### Anobiinae

*Gastrallus laevigatus* (Olivier, 1790)

Chorotype – EUM

Trophic category – PHY

New records – Aeolian Archipelago: Vulcano Island, Piano, 20.IX.2023, Leg. Baviera C.; same locality, on flowers, 08.VII.2023, Leg. Baviera C.; same locality, at light, 20.IX.2023, Leg. Baviera C.; Piani di Luccia, beating *Quercus ilex*, 38°22'39.31"N 14°59'41.57"E, 08.VII.2023, Leg. Baviera C.; loc. Piano belvedere, on *Ulmus*, 08.VII.2023, Baviera C.; loc. Lentia, 07.VII.2023, on *Nerium oleander*, Baviera C.

**Notes.** A species recorded on Vulcano by Lo Cascio *et al.* (2006).

*Gastrallus corsicus* (Schilsky, 1898)

Chorotype – TEM

Trophic category – PHY

**Notes.** A species recorded on Vulcano by Lo Cascio *et al.* (2006).

*Stegobium paniceum* (Linnaeus, 1758)

Chorotype – COS

Trophic category – PHY

**Notes.** A species recorded on Vulcano by Lo Cascio *et al.* (2006).

*Dryophilus* sp.

Trophic category - PHY

**Notes.** This genus was recently recorded for the first time on Vulcano: Valle Rio Grande, (Lo Cascio, Altadonna, and Ponei 2022).

*Dryophilus longicollis* (Mulsant and Rey, 1853)

Chorotype – EUM

Trophic category – PHY

**Notes.** A species recorded on Vulcano (Lo Cascio *et al.* 2006).

*Ernobius* sp.

Trophic category – PHY

**Notes.** A single female of this genus, a new record on Vulcano and Aeolian Archipelago.

*Mesocoelopus collaris* (Mulsant and Rey, 1864)

Chorotype – WEU

Trophic category – PHY

New records – Aeolian Archipelago, Vulcano Island, Lentia crossroad, at light, 08.VII.2023, Baviera C.

**Notes.** This species in the Aeolian Archipelago, was recorded from Stromboli (Lo Cascio *et al.* 2006). New record on Vulcano.

*Lasioderma redtenbacheri* (Bach, 1852)

Chorotype – CEM

Trophic category – PHY

New records – Aeolian Archipelago: Vulcano Island, Lentia, at light, 20.IX.2023, Leg. Baviera C.

**Notes.** This species was recorded only from Lipari in the Aeolian Archipelago (Lo Cascio *et al.* 2006). New record on Vulcano.

*Lasioderma serricorne* (Fabricius, 1792)

Chorotype – COS

Trophic category – PHY

New records – Aeolian Archipelago: Vulcano Island, Piano, 20.IX.2023, Leg. Baviera C.

**Notes.** This species is a new record from the Aeolian Archipelago.

*Metholcus phoenicis* (Fairmaire, 1859)

Chorotype – EUM

Trophic category – PHY

New records – Aeolian Archipelago, Vulcano Island, Porto Ponente, sabbie nere, 07.VII.2023, Leg. Baviera C.

**Notes.** This species in the Aeolian Archipelago, was recorded (sub *M. cylindricus*) from Stromboli, Lipari and Salina (Lo Cascio *et al.* 2006). A new record on Vulcano.

## Ernobiinae

### *Ozognathus cornutus* (LeConte, 1859)

Chorotype – SCO

Trophic category – SAP, MYC

New records – Aeolian Archipelago, Vulcano Island, Lentia crossroad, sifting, 20.IX.2023, Baviera C.; same locality, 27.XII.2023, Baviera C.; loc. Lentia, 07.VII.2023, on *Nerium oleander*, Baviera C.; same locality, 27.XII.2023, Baviera C.; Piani di Luccia, sifting *Ulmus*, 20.IX.2023, Baviera C.; Lentia crossroad, VII.2024, reared from carpophore of *Inonotus hispidus* collected on *Populus* sp., coll. 27.XII.2023, Leg. Baviera C.; Vulcano Porto, VI-X.2024, reared from carpophore of *Fuscoporia torulosa* collected on *Morus* sp. Leg. Baviera C.

**Notes.** This Nearctic species is in rapid expansion in Europe and Italy and was the most common collected Anobiinae (and one of the most frequently collected species) during the samples. This species was found for the first time in the Palaearctic Region, on Madeira Island, in 1996, later in 2003 on Malta and in 2004 in Tunisia (Zahradník and Mifsud 2005). In Italy *O. cornutus* was collected for the first time in 2011 in Campania and in Sicily (Cusimano *et al.* 2014). The rapid spread of this species in Mediterranean is related to the enormous trophic plasticity of this species (Cerasa and Lo Verde 2021). Since 1950 in California, where the species was collected on dead flower stalks and dried twig tips of Avocado tree *Persea americana* Mill. (Pence 1950), in many countries this species was collected on different plants life and dead organic materials. In Spain, Yus Ramos, Verdugo Páez, and Coello García (2019) have found *O. cornutus* on stems of *Eryngium campestre* L. and define for the first times the feeding regime of the species as saproxylophagous. In Malta *O. cornutus* adults were obtained from decaying seaweed (Zahradník and Mifsud 2005), in Germany and in France in dried almonds (*Prunus dulcis* L.) (Allemand *et al.* 2008). Moreover, in many different countries *O. cornutus* adults were obtained from galls on different trees, like *Quercus* sp. or *Tamarix* sp. like in Sicily (Cerasa and Lo Verde 2021). During the research this species was commonly collected on *Nerium oleander* flowers, many hundreds of specimens were reared from carpophore of *Fuscoporia torulosa* (Pers.) T. Wagner and M. Fisch. 2001 collected on a mulberry tree near Vulcano Porto Levante and from *Inonotus hispidus* (Bull. : Fr.) Karst. 1879 on *Populus* sp. collected at Lentia. This is the first record of this extreme polyphagous species on carpophore of Basidiomycetes. *Inonotus hispidus* is a species of Basidiomycetes widespread common in Mediterranean since many years. This species was recently recorded for the first time from many different sites on Vulcano: Gran Cratere, Valle Rio Grande, Vallonazzo, western slope of Gran Cratere, near Gelso (Lo Cascio, Altadonna, and Ponel 2022).

## Dorcatominae

### *Dorcatoma (Pilosodorcatoma) chrysomelina* Sturm, 1837

Chorotype – EUR

Trophic category – PHY

New records - Aeolian Archipelago, Vulcano Island, 08.VII.2023, Piano, at light, Leg. Baviera C.

**Notes.** This species is a new record from Aeolian Archipelago.

*Stagetus byrrhoides* (Mulsant and Rey, 1861)

Chorotype – TEM

Trophic category – PHY

New records – Aeolian Archipelago: Vulcano Island, Lentia, sifting *Ammophila*, 28.XII.2023, Leg. Baviera C.

**Notes.** A species recorded on Vulcano: Piano, reared from *Cytisus aeolicus*, (Lo Cascio, Altadonna, and Ponel 2022).

## Ptininae

A subfamily never recorded until now on Vulcano Island.

*Ptinus (Ptinus) pilosus* P.W.J. Müller, 1821

Chorotype – EUR

Trophic category – PHY

New records – Aeolian Archipelago: Vulcano Island, Gelso, 09.V.2007, Leg. Baviera C.

**Notes.** This species is a new record on Vulcano and Aeolian Archipelago.

*Ptinus (Ptinus) obesus* Lucas, 1849

Chorotype – EUM

Trophic category – PHY

New records – Aeolian Archipelago: Vulcano Island, Piani di Luccia, sifting *Ulmus*, 20.IX.2023, Leg. Baviera C.; Gelso, 260m a.s.l., sifting in *Q. ilex*, 28.XII.2023, Baviera C.

**Notes.** This species, new record on Vulcano, was recorded only from Lipari (Lo Cascio, Altadonna, and Ponel 2022).

*Ptinus (Ptinus) perplexus* Mulsant and Rey, 1868 (= *clavipes*)

Chorotype – SEU

Trophic category – PHY

New records – Aeolian Archipelago: Vulcano Island, Gelso, 200m a.s.l., sifting *Q. ilex*, 38°22'39.31"N 14°59'41.57"E, 28.XII.2023, Baviera C.

**Notes.** This species is a new record on Vulcano and Aeolian Archipelago.

## CLEROIDEA

### TROGOSSITIDAE

This family is recorded for a single species collected only on Vulcano.

*Nemosoma elongatum* (Linnaeus, 1761)

Chorotype – EUR

Trophic category – PRE

**Notes.** A species recorded, in the Aeolian Archipelago (sub *Nemosoma elongatum*), only on Vulcano: Piano reared from *Cytisus aeolicus*, Lo Cascio, Altadonna, and Ponel (2022)).

### CLERIDAE

Nine species of this family is recorded from Aeolian Archipelago: seven species on Vulcano (four shared with Lipari; one with Salina and Filicudi; two with Stromboli).

*Denops albofasciatus* (Charpentier, 1825)

Chorotype – EUM

Trophic category – PRE

**Notes.** A species recorded on Vulcano: Serro dei Pisani (Cecchi and Lo Cascio 1999).

*Enoplium doderoi* Luigioni, 1926

Chorotype – MED

Trophic category – PRE

New records – Aeolian Archipelago: Vulcano Island, Valle Rio Grande, on *Ulmus*, 07.VII.2023, Leg. Baviera C.

**Notes.** This species was considered, since a long time, a rare Tyrrhenian endemic, but was recently recorded also for Crete (I. Löbl and Smetana 2013b). It is categorized as Endangered species in the IUCN Red list of Italian saproxylic beetles (Audisio *et al.* 2014) and Vulnerable in the Red list of Mediterranean saproxylic beetles (García *et al.* 2018). A new record on Vulcano, until now recorded on Lipari and Stromboli (Cecchi and Lo Cascio 1999), and recently, from Salina and Filicudi (Lo Cascio, Altadonna, and Ponel 2022). In Aeolian this species seem quite common.

*Necrobia rufipes* (De Geer, 1775)

Chorotype – COS

Trophic category – SAP

**Notes.** A species recorded on “Vulcano” by Lo Cascio *et al.* (2006).

*Opilo domesticus* (Sturm, 1837)

Chorotype – EUR

Trophic category – PRE

New records – Aeolian Archipelago, Vulcano Island, loc. Piano, 24-29.VI.2001, 300m a.s.l., Baviera C.

**Notes.** This species was recently recorded on Vulcano: Portella della Trovatina, (Lo Cascio, Altadonna, and Ponei 2022).

*Tilloidea transversalis* (Charpentier, 1825)

Chorotype – SEU

Trophic category – PRE

**Notes.** A species widely distributed on Vulcano. Recorded from: Piano, Gran Cratere slopes and Lenti Mount (Cecchi and Lo Cascio 1999).

*Thanasimus formicarius* (Linnaeus, 1758)

Chorotype – EUR

Trophic category – PRE

**Notes.** A species recorded on Vulcano (Lo Cascio, Altadonna, and Ponei 2022).

*Trichodes alvearius* (Fabricius, 1792)

Chorotype – EUR

Trophic category – PRE

New records – Aeolian Archipelago: Vulcano Island, Piano, on *Daucus carota* flowers, 07.VII.2023, Leg. Baviera C.

**Notes.** This species was recorded on Vulcano: Piano and Gran Cratere slopes (Cecchi and Lo Cascio 1999).

## MELYRIDAE

Twenty-two species recorded from Aeolian Archipelago: eight species on Vulcano (three shared with Lipari and Filicudi; five with Salina; two with Panarea and Stromboli, four with Alicudi).

*Aplocnemus pectinatus* (Küster, 1849)

Chorotype – WME

Trophic category – PRE

New records – Aeolian Archipelago: Vulcano Island, Piano, on *Daucus carota* flowers, 07.VII.2023, Leg. Baviera C.**Notes.** A species recorded on Vulcano: Piano (Lo Cascio *et al.* 2006).*Axinotarsus* sp.

Trophic category – PRE

**Notes.** A species recorded on Vulcano (Lo Cascio, Altadonna, and Ponei 2022).*Colotes (Antidipnis) punctatus* Erichson, 1840

Chorotype – EUM

Trophic category – PRE

New records – Aeolian Archipelago: Vulcano Island, Porto Ponente, sabbie nere, 08.VII.2023, Leg. Baviera C.; near Gelso, 200m a.s.l., 18-21.IX.2023, in wine and fruit trap on *Q. ilex*, Leg. Baviera C.; Piani di Luccia, sifting *Ulmus*, 20.IX.2023, Baviera C.**Notes.** A new recorded species from Vulcano, from Aeolian Archipelago it had been recorded only from Salina (Lo Cascio, Altadonna, and Ponei 2022).*Colotes (Colotes) maculatus* (Castelnau, 1836)

Chorotype – EUM

Trophic category – PRE

New records – Aeolian Archipelago: Vulcano Island, Porto Ponente, sabbie nere, 08.VII.2023, Leg. Baviera C.; Vulcano, 09-10.V.2007, Leg. Baviera C.

**Notes.** A new recorded species from Vulcano, and Aeolian Archipelago.*Dasytes (Mesodasytes) nigroaeneus* Küster, 1850

Chorotype – MED

Trophic category – PRE

New records – Aeolian Archipelago: Vulcano Island, 09-10.V.2007, Baviera C.

**Notes.** This species was recorded on Vulcano: Piano (Lo Cascio 2004).*Hypebaeus (Hypebaeus) flavicollis* (Erichson, 1840)

Chorotype – MED

Trophic category – PRE

**Notes.** This species was recorded on Vulcano: Piano (Lo Cascio, Altadonna, and Ponel 2022).

*Psilothrix melanostoma* (Brullé, 1832)

Chorotype – SEU

Trophic category – PRE

New records – Aeolian Archipelago: Vulcano Island, 09-10.V.2007, Baviera C.

**Notes.** This species was recorded (sub *P. aureola*) on Vulcano (Lo Cascio *et al.* 2006).

*Psilothrix viridicoerulea* (Geoffroy, 1785)

Chorotype – NAF

Trophic category – PRE

New records – Aeolian Archipelago: Vulcano Island, 09-10.V.2007, Baviera C.

**Notes.** This species was recorded on Vulcano: Serro Felicicchie (Lo Cascio *et al.* 2006).

## CUCUJOIDEA

## EROTYLIDAE

Three species of this family recorded from Aeolian Archipelago all on Vulcano and Lipari (one shared with Stromboli and Alicudi).

### Cryptophilinae

*Cryptophilus integer* Heer, 1841

Chorotype – SCO

Trophic category – MYC

**Notes.** A species reported from Vulcano Island since 2006 (Lo Cascio *et al.* 2006).

### Xenoscelinae

*Leucohimatium arundinaceum* (Forskål, 1775)

Chorotype – SCO

Trophic category – MYC

New records – Aeolian Archipelago: Vulcano Island, 09-10.V.2007, Leg. Baviera C.; Lentia, sifting *Ammophila*, 28.XII.2023, Leg. Baviera C.

**Notes.** This species is a new record from Vulcano Island, in the Aeolian Archipelago recorded until now only from Lipari and Basiluzzo (Lo Cascio *et al.* 2006).

*Setariola sericea* (Mulsant and Rey, 1863)

Chorotype – SEU

Trophic category – MYC

New records – Aeolian Archipelago: Vulcano Island, Portella Gelso, 400m a.s.l., sifting *Ulmus*, *Cistus*, *Solanum*, 28.XII.2023, Leg. Baviera C.; Piani di Luccia, sifting *Ulmus*, 29.XII.2023, Leg. Baviera C.; Gelso, 200m a.s.l., sifting *Olea*, 29.XII.2023, Leg. Baviera C.; Piano, belvedere, 300m a.s.l. sifting *Cistus*, 29.XII.2023, Leg. Baviera C.

**Notes.** This species is a new record from Vulcano Island, in the Aeolian Archipelago recorded until now only from Lipari (Lo Cascio *et al.* 2006).

## MONOTOMIDAE

Only one species of this family recorded from Aeolian Archipelago on Vulcano and Stromboli.

*Monotoma picipes* Herbst, 1793

Chorotype – COS

Trophic category – MYC

New records – Aeolian Archipelago: Vulcano Island, Portella Gelso, 400m a.s.l., sifting *Ulmus*, *Cistus*, *Solanum*, 28.XII.2023, Leg. Baviera C.; Piani di Luccia, sifting *Ulmus*, 29.XII.2023, Leg. Baviera C.; Gelso, 200m a.s.l., sifting *Olea*, 29.XII.2023, Leg. Baviera C.; Piano, belvedere, 300m a.s.l. sifting *Cistus*, 29.XII.2023, Leg. Baviera C.

**Notes.** This species was recently recorded on Vulcano: Piano (Lo Cascio, Altadonna, and Ponei 2022).

## CRYPTOPHAGIDAE

Ten species of this family recorded from Aeolian Archipelago, nine from Vulcano Island (two shared with Lipari and Stromboli, one with Alicudi and Filicudi).

### Atomariinae

*Atomaria (Anchicera) turgida* Erichson, 1846

Chorotype – EUR

Trophic category – MYC

New records - Aeolian Archipelago: Vulcano Island, Lentia, on *Nerium oleander*, 27.XII.2023, Leg. Baviera C.

**Notes.** This species is a new record from Vulcano, already recorded from Stromboli (Lo Cascio *et al.* 2006).

*Atomaria (Anchicera) munda* Erichson, 1846

Chorotype – CEM

Trophic category – MYC

New records - Aeolian Archipelago: Vulcano Island, Piano, on flowers, 20.IX.2023, Leg. Baviera C.

**Notes.** This species is a new record for Aeolian Archipelago.

## Cryptophaginae

*Cryptophagus badius* Sturm, 1845

Chorotype – EUR

Trophic category – MYC

New records – Aeolian Archipelago, Vulcano Island, Lentia crossroad, reared from carpophore of *Inonotus hispidus* collected on *Populus* sp., 27.XII.2023-VII.2024, Leg. Baviera C.

**Notes.** This species is a new record from Aeolian Archipelago.

*Cryptophagus dentatus* (Herbst, 1793)

Chorotype – CEM

Trophic category – MYC

New records – Aeolian Archipelago, Vulcano Island, Lentia crossroad, reared from carpophore of *Inonotus hispidus* collected on *Populus* sp., 27.XII.2023-VII.2024, Leg. Baviera C.

**Notes.** A species recorded on Vulcano for the first time in 2006 (Lo Cascio *et al.* 2006).

*Cryptophagus pallidus* Sturm, 1845

Chorotype – EUM

Trophic category – MYC

New records – Aeolian Archipelago, Vulcano Island, Lentia crossroad, VII.2024, reared from carpophore of *Inonotus hispidus* collected on *Populus* sp., 27.XII.2023, Leg. Baviera C.; Piano, beating *Polypodium*, 28.XII.2023, Leg. Baviera C.

**Notes.** This species is a new record from Aeolian Archipelago.

*Cryptophagus micaceus* Rey, 1889

Chorotype – EUM

Trophic category – MYC

New records – Aeolian Archipelago: Vulcano Island, Piano, on flowers, 20.IX.2023, Leg. Baviera C.; Lentic crossroad, VII.2024, reared from carpophore of *Inonotus hispidus* collected on *Populus* sp., 27.XII.2023, Leg. Baviera C.

**Notes.** This species is a new record from Aeolian Archipelago.

*Cryptophagus reflexus* Rey, 1889

Chorotype – CEM

Trophic category – MYC

New records – Aeolian Archipelago: Vulcano Island, Piano, on flowers, 20.IX.2023, Leg. Baviera C.; Lentic crossroad, VII.2024, reared from carpophore of *Inonotus hispidus* collected on *Populus* sp., 27.XII.2023-, Leg. Baviera C.

**Notes.** This species was recorded (sub *C. thomsoni*) for the first time from Vulcano by Angelini (2005).

*Cryptophagus uncinatus* Stephens, 1830 (= *postpositus* J. Sahlberg, 1903)

Chorotype – EUR

Trophic category – MYC

New records – Aeolian Archipelago, Vulcano Island, Lentic crossroad, VII.2024, reared from carpophore of *Inonotus hispidus* collected on *Populus* sp., coll. 27.XII.2023, Leg. Baviera C.

**Notes.** This species is a new record from Aeolian Archipelago.

*Micrambe ulicis* (Stephens, 1830)

Chorotype – EUM

Trophic category – MYC

New records – Aeolian Archipelago, Vulcano Island, Lentic crossroad, VII.2024, reared from carpophore of *Inonotus hispidus* collected on *Populus* sp., coll. 27.XII.2023, Leg. Baviera C.

**Notes.** A species recently recorded for the first time from Vulcano: Valle Rio Grande and Vallonazzo (Lo Cascio, Altadonna, and Ponel 2022).

**SILVANIDAE**

Three species of this family recorded from Aeolian Archipelago two on Vulcano (one shared with Lipari).

*Oryzaeophilus surinamensis* (Linnaeus, 1758)

Chorotype – COS

Trophic category – PHY

New records - Aeolian Archipelago: Vulcano Island, Gelso, 260m a.s.l., sifting in *Q. ilex*, 08.VII.2023, Baviera C.; same locality sifting under *Q. ilex*, 08.VII.2023, Baviera C.; Piani di Luccia, sifting *Ulmus*, 20.IX.2023, Baviera C.

**Notes.** This species was recently recorded on Vulcano: near Gelso, (Lo Cascio, Altadonna, and Ponei 2022). Specimens of var. *bicornis* was collected inside the tree of a centenary *Quercus ilex* of the same site where there was collected the typical form soil. Moreover, this species was extremely common in leaf litter of *Q. ilex* tree as typical form, but no specimen of var. *bicornis* among over 100 specimens collected were found. On Vulcano Island this species was collected in huge number in leaf litter of *Quercus ilex* in Gelso but not in other sites with the same tree. In Southern Italy and Sicily, the var. *bicornis* was recorded as more common in the wild, where it lives under bark and in leaf litter in forests or of Mediterranean Maquis. In Northern Italy, where *O. surinamensis* lives, the males of var. *bicornis* are very rare where the temperatures are too low for wintering outside and in all anthropic environments (houses, mills, warehouses)(Ratti 2007).

*Oryzaeophilus meicator* (Fauvel, 1889)

Chorotype – COS

Trophic category – PHY

New records – Aeolian Archipelago, Vulcano Island, Lentia crossroad, sifting, 20.IX.2023, Baviera C.; near Gelso, 200m a.s.l., 18-21.IX.2023, in wine and fruit trap on *Q. ilex*, Leg. Baviera C.; Vulcanello Valle dei Mostri, sifting, 29.XII.2023, Leg. Baviera C.

**Notes.** A new record from Vulcano and Aeolian Archipelago.

**LAEMOPHLOEIDAE**

Four species of this family recorded from Aeolian Archipelago: all on Vulcano (one shared with Lipari, Panarea and Stromboli).

*Cryptolestes (Cryptolestes) spartii* (Curtis, 1834)

Chorotype – EUR

Trophic category – MYC

**Notes.** This species was recorded on Vulcano by Ratti (2000).

*Cryptolestes (Cryptolestes) ferrugineus* (Stephens, 1831)

Chorotype – COS

Trophic category – MYC

New records – Aeolian Archipelago: Vulcano Island, near Gelso, IV. 2024, reared from *Quercus ilex* collected on 18-20.IX.2023.

**Notes.** A new record from Vulcano and Aeolian Archipelago.

*Cryptolestes (Cryptolestes) fractipennis* (Motschulsky, 1845)

Chorotype – SEU

Trophic category – MYC

New records – Aeolian Archipelago: Vulcano Island, near Gelso, IV. 2024, reared from *Quercus ilex* collected on 18-20.IX.2023.

**Notes.** A new record from Vulcano and Aeolian Archipelago.

*Cryptolestes (Leptophloeus) juniperi* (Grouvelle, 1874)

Chorotype – SEU

Trophic category – MYC

New records – Aeolian Archipelago: Vulcano Island, near Gelso, IV. 2024, reared from *Quercus ilex* collected on 18-20.IX.2023.

**Notes.** This species was recorded on Vulcano by Ratti (2000).

## PHALACRIDAE

Ten species of this family recorded from Aeolian Archipelago: nine species on Vulcano (six shared with Lipari; one with Panarea and Salina).

*Olibrus aenescens* Küster, 1852

Chorotype – MED

Trophic category – PHY

New records – Aeolian Archipelago: Vulcano Island, near Gelso, IV. 2024, reared from *Quercus ilex* collected on 18-20.IX.2023.

**Notes.** A species recorded on Vulcano (Lo Cascio *et al.* 2006).

*Olibrus affinis* (Sturm, 1807)

Chorotype – EUM

Trophic category – PHY

New records – Aeolian Archipelago: Vulcano Island, Valle Rio Grande, on *Ulmus*, 07.VII.2023, Baviera C.

**Notes.** A new record from Vulcano, in the Aeolian Archipelago recorded only from Lipari (Lo Cascio *et al.* 2006).

*Olibrus bicolor* (Fabricius, 1792)

Chorotype – EUM

Trophic category – PHY

New records – Aeolian Archipelago, Vulcano Island, Piani di Luccia, sifting *Ulmus*, 20.IX.2023, Leg. Baviera C.; Valle Rio Grande, on *Ulmus*, 07.VII.2023, Baviera C.

**Notes.** A new record from Vulcano, and the Aeolian Archipelago.

*Olibrus bimaculatus* Küster, 1848

Chorotype – EUM

Trophic category – PHY

New records – Aeolian Archipelago, Vulcano Island, Lentia crossroad, sifting, 20.IX.2023, Leg. Baviera C.; Piani di Luccia, sifting *Ulmus*, 27.XII.2023, Leg. Baviera C.; same locality 20.IX.2023, Leg. Baviera C.

**Notes.** A species recorded on Vulcano: Piano, 20.iv.2009, PLC and FG.

*Olibrus corticalis* (Panzer, 1792)

Chorotype – EUM

Trophic category – PHY

New records – Aeolian Archipelago, Vulcano Island, 09-10.V.2007, Leg. Baviera C.; Piano belvedere, on *Ulmus*, 08.VII.2023, Baviera C.

**Notes.** A new record from Vulcano, in the Aeolian Archipelago recorded only from Lipari (Lo Cascio *et al.* 2006).

*Olibrus flavicornis* (Sturm, 1807)

Chorotype – EUR

Trophic category – PHY

New records – Aeolian Archipelago, Vulcano Island, 09-10.V.2007, Leg. Baviera C.; Porto Ponente, sabbie nere, 08.VII.2023, Leg. Baviera C.; Lentia crossroad, sifting, 20.IX.2023, Leg. Baviera C.; Piano, 20.IX.2023, Leg. Baviera C.; Lentia, 07.VII.2023, on *Nerium oleander*, Baviera C.

**Notes.** This species is a new record from Aeolian Archipelago.

*Olibrus pygmaeus* (Sturm, 1807)

Chorotype – EUM

Trophic category – PHY

New records – Aeolian Archipelago, Vulcano Island, Lentia, sifting *Ammophila*, 28.XII.2023, Leg. Baviera C.

**Notes.** A species recorded on Vulcano, Valle Rio Grande, western slope of Gran Cratere.

*Olibrus castaneus* Baudi, 1870

Chorotype – MED

Trophic category – PHY

New records – Aeolian Archipelago, Vulcano Island, Porto Ponente, sabbie nere, 08.VII.2023, Baviera C.; Piani di Luccia, on *Mimosa*, *Cistus*, 28.XII.2023, Leg. Baviera C.; Piano, on flowers, 07.VII.2023, Leg. Baviera C.; Piano, belvedere, 300m a.s.l. sifting *Cistus*, 29.XII.2023, Leg. Baviera C.; Piani di Luccia, sifting *Ulmus*, 20.IX.2023, Leg. Baviera C.; Piano belvedere, on *Ulmus*, 08.VII.2023, Baviera C.; Piano, on *Daucus carota* flowers, 07.VII.2023, Leg. Baviera C.

**Notes.** A new record from Vulcano and Aeolian Archipelago.

*Phalacrus corruscus* (Panzer, 1792)

Chorotype – CEM

Trophic category – PHY

New records – Aeolian Archipelago, Vulcano Island, Lentia crossroad, sifting, 20.IX.2023, Leg. Baviera C.; Lentia, 07.VII.2023, on *Nerium oleander*, Baviera C.; Vulcano, 09-10.V.2007, Leg. Baviera C.

**Notes.** A species recorded on Vulcano: Vallonazzo (Lo Cascio, Altadonna, and Ponel 2022)

## KATERETIDAE

Only one species of this family recorded from Aeolian Archipelago on Vulcano.

*Brachypterolus antirrhini* (Murray, 1864)

Chorotype – MED

Trophic category – PHY

New records – Aeolian Archipelago, Vulcano Island, Lentia crossroad, sifting, 20.IX.2023, Leg. Baviera C.; Lentia, 07.VII.2023, on *Nerium oleander*, Baviera C.; Vulcano, 09-10.V.2007, Leg. Baviera C.

**Notes.** This species was recently recorded on Vulcano: Valle Rio Grande (Lo Cascio, Altadonna, and Ponel 2022).

## NITIDULIDAE

Twenty species of this family recorded from Aeolian Archipelago: thirteen species on Vulcano (four shared with Lipari; two with Salina one with Panarea; two with Stromboli and Alicudi).

## Carpophilinae

*Carpophilus bipustulatus* (Heer, 1841)

Chorotype – CEM

Trophic category – PHY

New records – Aeolian Archipelago, Vulcano Island, Lentia crossroad, VII.2024, reared from carpophore of *Inonotus hispidus* collected on *Populus* sp., 27.XII.2023, Leg. Baviera C.

**Notes.** This species was recently recorded on Vulcano: Piano (Lo Cascio, Altadonna, and Ponei 2022).

*Carpophilus dimidiatus* (Fabricius, 1792)

Chorotype – COS

Trophic category – PHY

New records – Aeolian Archipelago, Vulcano Island, Lentia crossroad, VII.2024, reared from carpophore of *Inonotus hispidus* collected on *Populus* sp., 27.XII.2023, Leg. Baviera C.

**Notes.** This species was recently recorded on Vulcano: Piano (Lo Cascio, Altadonna, and Ponei 2022).

*Carpophilus hemipterus* (Linnaeus, 1758)

Chorotype – COS

Trophic category – PHY

New records – Aeolian Archipelago, Vulcano Island, Lentia crossroad, VII.2024, reared from carpophore of *Inonotus hispidus* collected on *Populus* sp., 27.XII.2023, Leg. Baviera C.

**Notes.** A new record from Aeolian Archipelago.

*Carpophilus quadrisignatus* Erichson, 1843

Chorotype – COS

Trophic category – PHY

New records – Aeolian Archipelago, Vulcano Island, Street to Gelso, Wine and fruit trap on *Quercus ilex*, 18-21.IX.2023, Leg. Baviera C.

**Notes.** A new record from Vulcano and Aeolian Archipelago.

*Carpophilus nepos* Murray, 1864

Chorotype – COS

Trophic category – PHY

New records – Aeolian Archipelago, Vulcano Island, Lentia crossroad, VII.2024, from carpophore of *Inonotus hispidus* collected on *Populus* sp., 27.XII.2023, Leg. Baviera C.

**Notes.** A new record from Vulcano and Aeolian Archipelago.

*Urophorus humeralis* Fabricius, 1798

Chorotype – COS

Trophic category – PHY

New records – Aeolian Archipelago, Vulcano Island, Palude dell'Istmo, Wine and fruit trap, 18-21.IX.2023, Leg. Baviera C.

**Notes.** A new record from Vulcano, from Aeolian Archipelago recorded, until now, only from Lipari and Alicudi (Lo Cascio, Altadonna, and Ponei 2022).

### **Epuracinae**

*Epuraea (Haptoncus) luteolus* (Erichson, 1843)

Chorotype – COS

Trophic category – PHY

New records – Aeolian Archipelago, Vulcano Island, Street to Gelso, Wine and fruit trap on *Quercus ilex*, 18-21.IX.2023, Leg. Baviera C.

**Notes.** An invasive species probably native to Central America, recorded for Sicily from specimens collected since 1998, also on Vulcano: Piano (Baviera and Audisio 2014).

### **Meligethinae**

*Pria dulcamarae* (Scopoli, 1763)

Chorotype – PAL

Trophic category – PHY

New records – Aeolian Archipelago, Vulcano Island, Vulcano Island, 09-10.V.2007, Leg. Baviera C.

**Notes.** This genus is a new record from Aeolian Archipelago.

*Meligethinus pallidulus* (Erichson, 1843)

Chorotype – WME

Trophic category – PHY

New records – Aeolian Archipelago, Vulcano Island, Vulcanello Valle dei Mostri, sifting, 29.XII.2023, Leg. Baviera C.

**Notes.** A new record from Vulcano and Aeolian Archipelago.

*Genistogethes immundus* (Kraatz, 1858)

Chorotype – MED

Trophic category – PHY

**Notes.** This species was recorded (sub *Meligethes*) on Vulcano: Piano (Lo Cascio 2004).

*Genistogethes punctatus* (Brisout de Barneville, 1863)

Chorotype – MED

Trophic category – PHY

**Notes.** This species was recorded from “Vulcano” (Baviera and Audisio 2014).

*Afrogethes planiusculus* (Heer, 1841)

Chorotype – WPA

Trophic category – PHY

New records – Vulcano Island, 09-10.V.2007, Leg. Baviera C.; Vulcanello Valle dei Mostri, sifting, 29.XII.2023, Leg. Baviera C.; Piani di Luccia, on *Mimosa*, *Cistus*, 28.XII.2023, Leg. Baviera C.; Piani di Luccia, sifting *Ulmus*, 27.XII.2023, Leg. Baviera C.; Piano, belvedere, 300m a.s.l. sifting *Cistus*, 29.XII.2023, Leg. Baviera C.; Lentia, 07.VII.2023, on *Nerium oleander*, Baviera C.

**Notes.** This species was recently recorded for the first time from Vulcano (Lo Cascio, Altadonna, and Ponel 2022).

*Brassicogethes aeneus* (Fabricius, 1775)

Chorotype – OLA

Trophic category – PHY

New records – Aeolian Archipelago: Vulcano, Portella Gelso, sweeping net at night, 29.XII.2023, Leg. Baviera C.

**Notes.** A new record from Vulcano. This species was recorded in the Aeolian Archipelago, until now, only from Salina (Baviera and Audisio 2014).

## Nitidulinae

*Phenolia (Lasiodites) picta* (MacLeay, 1825)

Chorotype – SCO (ORR)

Trophic category – PHY

New records – Aeolian Archipelago, Vulcano Island, Street to Gelso, Wine and fruit trap on *Quercus ilex*, 18-21.IX.2023, Leg. Baviera C.

**Notes.** This neotropical species was recorded in Italy only from Western Sicily (Mazara del Vallo) (Sparacio, Ditta, and Surdo 2020). This is the first record from Eastern Sicily and the second in Italy. *P. picta* has been also introduced into Spain, France, Greece, and Turkey (**JelinekAudisio:2007**). This saprophagous species seems to prefer the anthropogenic habitats, like orchards, where it feeds on ripening and rotten fruits (Rattu *et al.* 2021). *Phenolia picta* feeds on fruits of many species including *Citrus* spp., *Ficus carica*, *Opuntia* spp., *Vitis*

*vinifera*, *Prunus* spp. (Serri, Moradi, and Audisio 2023). Recently in China this species was recorded inside the hive of the Eastern honey bee (*Apis cerana*) (Du *et al.* 2024)

## CYBOCEPHALIDAE

This is the first record of this family from Vulcano with the only species, until now, recorded from Aeolian Archipelago in Lipari.

*Cybocephalus rufifrons* Reitter, 1874

Chorotype – SEU

Trophic category – PRE

New records – Aeolian Archipelago, Vulcano Island, Gelso, 09.V.2007, Baviera C.

**Notes.** A new family and species from Vulcano, until now recorded, in the Aeolian Archipelago, only recently, from Lipari (Lo Cascio, Altadonna, and Ponel 2022).

## COCCINELLIDAE

Twenty-nine species recorded from Aeolian Archipelago: twenty-three species on Vulcano (fifteen shared with Lipari; eleven with Salina; eight with Stromboli; five with Panarea; two with Filicudi; three with Alicudi).

### Coccinellinae

*Stethorus (Stethorus) gilvifrons* Mulsant, 1850

Chorotype – INM

Trophic category – PRE

New records – Aeolian Archipelago, Vulcano Island, Lentia crossroad, sifting, 20.IX.2023, Baviera C.

**Notes.** The citation for Aeolian Archipelago in Baviera (2025) refers to this specimen. A new species, and genus, from Vulcano and Aeolian Archipelago.

*Hippodamia (Adonia) variegata variegata* (Goeze, 1777)

Chorotype – PAL

Trophic category – PRE

New records – Aeolian Archipelago, Vulcano Island, 09-10.V.2007, Leg. Baviera C.

**Notes.** The citation for Aeolian Archipelago in Baviera (2025) refers to this specimen. A new species from Vulcano, until now recorded, from Aeolian Archipelago, (sub *Adonia*) only from Lipari (Della Beffa 1913).

*Adalia bipunctata bipunctata* (Linnaeus, 1758)

Chorotype – PAL

Trophic category – PRE

New records – Aeolian Archipelago, Vulcano Island, 09-10.V.2007, Leg. Baviera C.

**Notes.** This species was recorded on Vulcano: basal belt of Gran Cratere (Lo Cascio *et al.* 2006).

*Adalia decempunctata* (Linnaeus, 1758)

Chorotype – PAL

Trophic category – PRE

New records – Aeolian Archipelago, Vulcano Island, 08.VII.2023, on *Quercus ilex*, Baviera C.; Gelso, 260m a.s.l., sifting in *Q. ilex*, 28.XII.2023, Baviera C.

**Notes.** This species was recorded on Vulcano: surrounding Gran Cratere and Piano (Lo Cascio, Altadonna, and Ponel 2022). Four distinct colour patterns were collected together.

*Coccinella septempunctata* Linnaeus, 1758

Chorotype – PAL

Trophic category – PRE

New records – Aeolian Archipelago, Vulcano Island, Gelso near seashore, 28.XII.2023, Leg. Baviera C.; loc. Piano, 07.VII.2023, on *Daucus carota*, Baviera C.; Gran Cratere, 01.V.2024 Capillo G. and Albano M.

**Notes.** This species is very common on the island but was only recently recorded for the first time from Vulcano: Piano (Lo Cascio, Altadonna, and Ponel 2022).

*Harmonia axyridis* (Pallas, 1773)

Chorotype – SCO

Trophic category – PRE

New record – Gelso, church external wall, 27.XII.2023, Leg. Baviera C.

**Notes.** This polyphagous predator, recently recorded as new from Vulcano: Piano (Lo Cascio, Altadonna, and Ponel 2022), has been introduced from Eastern Asia in many countries for biological control. In Italy recorded since 1990 and recently also in Sicily (Menchetti *et al.* 2016). The presence of this species could be dangerous for biodiversity, especially in a small island such as Vulcano (Baviera 2025).

*Harmonia quadripunctata* (Pontoppidan, 1763)

Chorotype – PAL

Trophic category – PRE

**Notes.** This species was recorded on Vulcano: Gelso (Lo Cascio *et al.* 2006).

*Myrrha octodecimguttata* (Linnaeus, 1758)

Chorotype – CEM

Trophic category – PRE

New records – Aeolian Archipelago, Vulcano Island, 08.VII.2023, on *Quercus ilex*, Baviera C.; Palude dell'Ismo, 18-21.IX.2023 in yellow trap, Baviera C.

**Notes.** A species recently recorded for the first time from Vulcano (sub *M. octodecimguttata formosa* (Costa, 1849): Piano (Lo Cascio, Altadonna, and Ponel 2022).

*Psyllobora vigintiduopunctata* (Linnaeus, 1758)

Chorotype – PAL

Trophic category – MYC

**Notes.** A species recently recorded for the first time from Vulcano: Piano (Lo Cascio, Altadonna, and Ponel 2022).

*Novius cardinalis* (Mulsant 1850)

Chorotype – COS

Trophic category – PRE

New record – Gelso near seashore, 28.XII.2023, Leg. Baviera C.; same locality, 08.VII.2023, Leg. Baviera C.; Piano, 28.XII.2023, Leg. Baviera C.; Piani di Luccia, on *Mimosa*, *Cistus*, 28.XII.2023, Leg. Baviera C.

**Notes.** This species, recently recorded (sub *Rodolia*) for the first time from Vulcano: Val-lonazzo (Lo Cascio, Altadonna, and Ponel 2022), has been introduced from Australia in all the world for biological control of *Icerya purchasi* Maskell, 1879.

*Nephus (Bipunctatus) kiesenwetteri* (Mulsant 1850)

Chorotype – MED

Trophic category – PRE

New record – Gelso near seashore, 28.XII.2023, Leg. Baviera C.; same locality, 08.VII.2023, Leg. Baviera C.; Piano, 28.XII.2023, Leg. Baviera C.; Piani di Luccia, on *Mimosa*, *Cistus*, 28.XII.2023, Leg. Baviera C.

**Notes.** A species recently recorded for the first time from “Vulcano” (Lo Cascio, Altadonna, and Ponel 2022).

*Nephus (Nephus) schatzmayri* Canepari and Tedeschi, 1977

Chorotype – SEU

Trophic category – PRE

New record – Gelso near seashore, 28.XII.2023, Leg. Baviera C.; same locality, 08.VII.2023, Leg. Baviera C.; Piano, 28.XII.2023, Leg. Baviera C.; Piani di Luccia, on *Mimosa*, *Cistus*, 28.XII.2023, Leg. Baviera C.

**Notes.** This species was recently recorded for the first time from Aeolian Archipelago, from Vulcano and Stromboli (Baviera 2025). To this species is probably to be referred the citation of *Nephus (N.)* gr. *quadrimaculatus* (Herbst, 1783) from Panarea (Lo Cascio, Altadonna, and Ponel 2022).

*Scymnus (Pullus) subvillosus* (Goeze, 1777)

Chorotype – EUM

Trophic category – PRE

New records – Aeolian Archipelago, Vulcano Island, Piano belvedere, on *Ulmus*, 08.VII.2023, Baviera C.; Valle Rio Grande, on *Ulmus*, 07.VII.2023, Baviera C.; loc. Lentia, 07.VII.2023, on *Nerium oleander*, Baviera C.; Piani di Luccia, sifting *Ulmus*, 20.IX.2023, Baviera C.

**Notes.** This species was recently recorded as new from Vulcano: Valle Rio Grande (Lo Cascio, Altadonna, and Ponel 2022).

*Scymnus (Scymnus) apetzi* Mulsant, 1846

Chorotype – EUM

Trophic category – PRE

New records – Aeolian Archipelago, Vulcano Island, Piano 24-29, VII.2001, Leg. Baviera C.

**Notes.** This species is recorded for the first time from Vulcano. The citation for Aeolian Archipelago in Baviera (2025) refers to this specimen.

*Scymnus (Scymnus) apetzi* Mulsant, 1846

Chorotype – MED

Trophic category – PRE

New records – Aeolian Archipelago, Vulcano Island, loc. Piano, 24-29.VI.2001, 300m a.s.l., Baviera C.; same locality, 20.IX.2023, Baviera C.; same locality, 08.VII.2023, Baviera C.; same locality, 18-21.IX.2023, yellow trap, Baviera C.; Lentia, on *Nerium oleander*, 07.VII.2023, Baviera C.; same locality, crossroad, sifting, 20.IX.2023, Baviera C.; Piani di Luccia, sifting *Ulmus*, 20.IX.2023, Baviera C.; Gelso, sifting *Q. ilex*, 08.VII.2023, Baviera C.

**Notes.** A new record from Vulcano, until now recorded only from Salina and Lipari (Canepari 1983).

*Scymnus (Scymnus) bivulnerus* Capra and Fürsch, 1967

Chorotype – MED

Trophic category – PRE

New records – Aeolian Archipelago, Vulcano Island, loc. Piano, 08.VII.2023, Baviera C.; Lentia, sifting *Nerium oleander*, 20.IX.2023, Baviera C.; Piani di Luccia, sifting *Ulmus*, 20.IX.2023, Baviera C.

**Notes.** A new record from Vulcano, until now recorded only from Salina (Lo Cascio, Altadonna, and Ponel 2022) and Lipari (Lo Cascio *et al.* 2006). The citation for Aeolian Archipelago in Baviera (2025) refers to this specimen.

*Scymnus (Scymnus) interruptus* (J. A. E. Goeze, 1777)

Chorotype – PAL

Trophic category – PRE

New records – Aeolian Archipelago, Vulcano Island, Porto Ponente, sabbie nere, 08.VII.2023, Baviera C.; Lentia, 27.XII.2023, on *Nerium oleander*, Baviera C.

**Notes.** This species is a new record from Aeolian Archipelago. The citation for Aeolian Archipelago in Baviera (2025) refers to this specimen.

*Scymnus (Scymnus) marginalis* (Rossi, 1794)

Chorotype – CEM

Trophic category – PRE

New records – Aeolian Archipelago, Vulcano Island, Porto Ponente, sabbie nere, sfalcio, 07.VII.2023, Baviera C.

**Notes.** A new record from Vulcano, until now recorded only from Panarea (Lo Cascio, Altadonna, and Ponel 2022) and Stromboli (Lo Cascio *et al.* 2006). The citation for Vulcano Island in Baviera (2025) refers to this specimen.

*Scymnus (Scymnus) nubilus* Mulsant, 1850

Chorotype – COS

Trophic category – PRE

New records – Aeolian Archipelago, Vulcano Island, Lentia, sifting *Nerium oleander*, 20.IX.2023, Baviera C.

**Notes.** A new record from Vulcano, until now recorded, in Aeolian Archipelago, from Lipari (Lo Cascio *et al.* 2006) and Stromboli (Lo Cascio, Altadonna, and Ponel 2022),

*Scymnus (Scymnus) rufipes rufipes* (Fabricius, 1798)

Chorotype – WME

Trophic category – PRE

New records – Aeolian Archipelago, Vulcano Island, Porto Ponente, sabbie nere, sfalcio, 07.VII.2023, Baviera C.

**Notes.** A new record from Vulcano, until now recorded only from Stromboli and Lipari (Lo Cascio *et al.* 2006). The citation for Aeolian Archipelago in Baviera (2025) refers to this specimens.

*Hyperaspis stigma* Olivier, 1808

Chorotype – TEM

Trophic category – PRE

New records – Aeolian Archipelago, Vulcano Island, Porto Ponente, sabbie nere, sfalcio, 07.VII.2023, Baviera C.

**Notes.** A species recently recorded (sub *H. chevrolati*) for the first time from Vulcano: Piano (Lo Cascio, Altadonna, and Ponel 2022).

*Chilocorus bipustulatus* (Linnaeus, 1758)

Chorotype – PAL

Trophic category – PRE

New records – Aeolian Archipelago, Vulcano Island, Lentia on *Nerium oleander*, 07.VII.2023, Baviera C.; same locality Piano belvedere, on *Ulmus*, 20.IX.2023, Baviera C.

**Notes.** This species was recorded on Vulcano: Gelso (Lo Cascio *et al.* 2006).

*Lindorus lophanthae* (Blaisdell, 1892)

Chorotype – SCO

Trophic category – PRE

New records – Aeolian Archipelago, Vulcano Island, 08.VII.2023, Piano, at light. Baviera C.

**Notes.** A species used in biological control for many years, recently recorded for the first time from Vulcano: western slope of Gran Cratere (Lo Cascio, Altadonna, and Ponel 2022).

*Rhyzobius litura* (Fabricius, 1787)

Chorotype – EUM

Trophic category – PRE

New records – Aeolian Archipelago, Vulcano Island, Piani di Luccia, sifting *Ulmus*, 20.IX.2023, Leg. Baviera C.; same locality, 27.XII.2023, Leg. Baviera C.

**Notes.** This species was of the most common ladybeetle collected on Vulcano Island. Recorded on Vulcano: basal belt of Gran Cratere in 2006 (Lo Cascio *et al.* 2006).

## CORYLOPHIDAE

Eight species of this family in Aeolian Archipelago, all on Vulcano, one shared with Lipari, Stromboli and Alicudi.

### Corylophinae

*Arthrolips convexiuscula* (Motschulsky, 1849)

Chorotype – EUM

Trophic category – MYC

**Notes.** For this species the known localities from Vulcano are Valle Rio Grande and Vallonazzo (Lo Cascio, Altadonna, and Ponel 2022).

*Arthrolips obscura* (Sahlberg, 1817)

Chorotype – EUM

Trophic category – MYC

New records – Aeolian Archipelago, Vulcano Island, Porto Ponente, sabbie nere, on flowers, 07.VII.2023, Baviera C.; Piano, on flowers, 07.VII.2023, Leg. Baviera C.; Piano, 20.IX.2024, Leg. Baviera C.; Piani di Luccia, sifting *Ulmus*, 27.XII.2023, Leg. Baviera C.; near Gelso, 200m a.s.l., 18-21.IX.2023, in wine and fruit trap on *Q. ilex*, Leg. Baviera C.; Piano, belvedere, 300m a.s.l. sifting *Cistus*, 29.XII.2023, Leg. Baviera C.; Vulcano, 09-10.V.2007, Leg. Baviera C.

**Notes.** This is the first record of this species from Vulcano and Aeolian Archipelago.

*Arthrolips picea* (Comolli, 1837)

Chorotype – CAE

Trophic category – MYC

New records – Aeolian Archipelago, Vulcano Island, Porto Ponente, sabbie nere, on flowers, 07.VII.2023, Baviera C.; Piano, on flowers, 07.VII.2023, Leg. Baviera C.; Portella Gelso, 400m a.s.l., sifting *Ulmus*, *Cistus*, *Solanum*, 28.XII.2023, Leg. Baviera C.; Piani di Luccia, sifting *Ulmus*, 27.XII.2023, Leg. Baviera C.

**Notes.** A new record from Vulcano, until now recorded, from Aeolian Archipelago, only from Alicudi (Lo Cascio, Altadonna, and Ponel 2022).

*Sericoderus brevicornis* Matthews, 1890

Chorotype – SCO

Trophic category – MYC

New records – Aeolian Archipelago, Vulcano Island, Piani di Luccia, sifting *Ulmus*, 20.IX.2023, Leg. Baviera C.; Vulcanello Valle dei Mostri, sifting, 29.XII.2023, Leg. Baviera C.

**Notes.** This Australian species, recently expanding its range in Europe, was recently recorded for the first time from Italy on Vulcano: Valle Rio Grande and Stromboli in Aeolian Archipelago (Lo Cascio, Altadonna, and Ponel 2022).

*Sericoderus lateralis* (Gyllenhal, 1827)

Chorotype – COS

Trophic category – MYC

New records – Aeolian Archipelago, Vulcano Island, street to Gelso, 200m a.s.l., 28.XII.2023, in *Q. ilex*, Leg. Baviera C.

**Notes.** A new record from Vulcano, and Aeolian Archipelago.

## Orthoperinae

*Orthoperus atomus* (Gyllenhal, 1808)

Chorotype – EUM

Trophic category – MYC

New records – Aeolian Archipelago, Vulcano Island, Lentia crossroad, VII.2024, from carpophore of *Inonotus hispidus* collected on *Populus* sp., 27.XII.2023, Leg. Baviera C.

**Notes.** This is the first record of this genus from Vulcano and Aeolian Archipelago.

*Orthoperus pilosiusculus* Jacquelin du Val, 1857

Chorotype – CEM

Trophic category – MYC

New records – Aeolian Archipelago, Vulcano Island, Piani di Luccia, sifting *Ulmus*, 27.XII.2023, Leg. Baviera C.

**Notes.** This is the first record of this genus from Vulcano and Aeolian Archipelago.

*Peltinus* sp.

Trophic category – MYC

New records – Aeolian Archipelago, Vulcano Island, Piani di Luccia, sifting *Ulmus*, 27.XII.2023, Leg. Baviera C.

**Notes.** An unidentified specimen was recorded on Vulcano (Lo Cascio *et al.* 2006).

## LATRIDIIDAE

Ten species of this family recorded from Aeolian Archipelago: eight species on Vulcano (six shared with Lipari; two with Stromboli and Alicudi).

*Dienerella separanda* (Reitter, 1887)

Chorotype – NAF

Trophic category – MYC

New records – Aeolian Archipelago, Vulcano Island, near Gelso, 200m a.s.l., 28.XII.2023, in *Q. ilex*, Leg. Baviera C.; same locality, 08.VII.2023, Leg. Baviera C.; Vulcano, Gelso, 09.V.2007, Leg. Baviera C.

**Notes.** A new record from Vulcano, until now recorded from Aeolian Archipelago, only from Lipari (Lo Cascio *et al.* 2006).

*Dienerella elegans* (Aubé, 1850)

Chorotype – TEM

Trophic category – MYC

New records – Aeolian Archipelago: Vulcano Island, Lentia, sifting *Ammophila*, 28.XII.2023, Leg. Baviera C.

**Notes.** This species is a new record from Sicily.

*Enicmus transversus* (Olivier, 1790)

Chorotype – EUM

Trophic category – MYC

New records – Aeolian Archipelago: Vulcano Island, Vulcanello Valle dei Mostri, sifting, 29.XII.2023, Leg. Baviera C.; Piani di Luccia, sifting *Ulmus*, 27.XII.2023, Leg. Baviera C.; Piano, sifting *Quercus ilex*, 08.VII.2023, Leg. Baviera C.; Portella Gelso, 400m a.s.l., sifting *Ulmus*, *Cistus*, *Solanum*, 28.XII.2023, Leg. Baviera C.

**Notes.** This species was recently recorded for the first time from Vulcano: Ponente beach (Lo Cascio, Altadonna, and Ponel 2022).

*Metopthalmus ragusae* Reitter, 1875

Chorotype – EME

Trophic category – MYC

New records – Aeolian Archipelago, Vulcano Island, Gelso, 260m a.s.l., sifting in *Q. ilex*, 28.XII.2023, Baviera C.

**Notes.** This species was never recorded before from Aeolian Archipelago.

*Melanophthalma (Cortilena) fuscipennis* (Mannerheim, 1844)

Chorotype – TEM

Trophic category – MYC

New records – Aeolian Archipelago, Vulcano Island, Piani di Luccia, sifting *Ulmus*, 27.XII.2023, Leg. Baviera C.; Portella Gelso, 400m a.s.l., sifting *Ulmus*, *Cistus*, *Solanum*, 28.XII.2023, Leg. Baviera C.; Lentia, sifting *Ammophila*, 28.XII.2023, Leg. Baviera C.; Porto ponente, 08.VII.2023, sabbie nere, Leg. Baviera C.; Piani di Luccia, beating *Mimosa* and *Cistus*, 28.XII.2023, Leg. Baviera C.; Vulcanello Valle dei Mostri, sifting, 29.XII.2023, Leg. Baviera C.

**Notes.** This species was recently recorded for the first time from Vulcano: Valle Rio Grande (Lo Cascio, Altadonna, and Ponel 2022).

*Melanophthalma (Melanophthalma) distinguenda* (Comolli, 1837)

Chorotype – TEM

Trophic category – MYC

New records – Aeolian Archipelago, Vulcano Island, Lentia crossroad, sifting, 20.IX.2023, Leg. Baviera C.; Piani di Luccia, sifting *Ulmus*, 27.XII.2023, Leg. Baviera C.; Lentia, sifting *Ammophila*, 28.XII.2023, Leg. Baviera C.; Piani di Luccia, beating *Mimosa* and *Cistus*, 28.XII.2023, Leg. Baviera C.

**Notes.** A new record from Vulcano, until now recorded, from Aeolian Archipelago, only from Lipari (Lo Cascio *et al.* 2006).

*Melanophthalma (Melanophthalma) sericea* (Mannerheim, 1844)

Chorotype – EUR

Trophic category – MYC

New records – Aeolian Archipelago, Vulcano Island, Piano, on flowers, 08.VII.2023, Leg. Baviera C.; Piani di Luccia, sifting *Ulmus*, 27.XII.2023, Leg. Baviera C.

**Notes.** A new record from Vulcano, until now recorded, in Sicily and Aeolian Archipelago, only from Lipari (Lo Cascio *et al.* 2006).

*Melanophthalma (Melanophthalma) taurica* (Mannerheim, 1844)

Chorotype – TUE

Trophic category – MYC

New records – Aeolian Archipelago, Vulcano Island, Lentia crossroad, 20.IX.2023, Leg. Baviera C.; Piano, 20.IX.2023, Leg. Baviera C.; same locality on flowers, 08.VII.2023, Leg. Baviera C.; Palude dell'Istmo, in yellow traps, 18-21.IX.2023, Leg. Baviera C.; near Gelso, 200m a.s.l., 18-21.IX.2023, in wine and fruit trap on *Q. ilex*, Leg. Baviera C.

**Notes.** A species recorded on Vulcano: basal belt of Gran Cratere and Piano (Lo Cascio *et al.* 2006). Not recorded from Italy in Catalogue of Palaearctic Coleoptera (I. Löbl and Smetana 2013b).

## LEIODIDAE

There are three species of this family recorded from Aeolian Archipelago, one on Vulcano.

*Leiodes (Leiodes) obscura* (Fairmaire, 1858)

Chorotype – NAF

Trophic category – MYC

New records – Aeolian Archipelago, Vulcano Island, street to Gelso, 28.XII.2023, sifting *Q. ilex*, Leg. Baviera C.

**Notes.** With the record of this species, the family Leiodidae is recorded for the first time from Vulcano.

## TENEBRIONOIDEA

## MYCETOPHAGIDAE

There are five species recorded from Aeolian Archipelago: four species on Vulcano (two shared with Lipari, Salina, Panarea and Alicudi, one with Stromboli).

*Berginus tamarisci* Wollaston, 1854

Chorotype – NAF

Trophic category – MYC

New records – Aeolian Archipelago, Vulcano Island, Lentia crossroad, sifting, 20.IX.2023, Baviera C.; Piani di Luccia, sifting *Ulmus*, 20.IX.2023, Leg. Baviera C.; same locality, 27.XII.2023, Leg. Baviera C.; Piano, on *Daucus carota*, 07.VII.2023, Leg. Baviera C.; Lentia, on *Nerium oleander*, 07.VII.2023, Leg. Baviera C.; Vulcanello Valle dei Mostri, sifting, 29.XII.2023, Leg. Baviera C.; Vulcano, 09-10.V.2007, Leg. Baviera C.

**Notes.** This is a very common species in Sicily and Aeolian Archipelago (Lipari (Lo Cascio *et al.* 2006), Alicudi, Stromboli, Panarea and Salina (Lo Cascio, Altadonna, and Ponel 2022)). Reported for the first time in the Aeolian Archipelago from Vulcano in Piano (Lo Cascio 2004).

*Typhaea stercorea* (Linnaeus, 1758)

Chorotype – COS

Trophic category – MYC

**Notes.** This is a common species in Sicily and Aeolian Archipelago, recently recorded for the first time from Vulcano: Vallonazzo (Lo Cascio, Altadonna, and Ponel 2022)

*Litargus connexus* (Geoffroy, 1785)

Chorotype – ASE

Trophic category – MYC

New records – Aeolian Archipelago, Vulcano Island, Lentia crossroad, VII.2024, from carpophore of *Inonotus hispidus* collected on *Populus* sp., 27.XII.2023-, Leg. Baviera C.

**Notes.** A new record from Vulcano and Aeolian Archipelago.

*Litargus coloratus* Rosenhauer, 1856

Chorotype – EUM

Trophic category – MYC

New records – Aeolian Archipelago, Vulcano Island, Lentia crossroad, VII.2024, from carpophore of *Fomes* sp. (cfr.) on *Populus* sp., coll. 27.XII.2023, Leg. Baviera C.; same locality, VII.2024, from carpophore of *Inonotus hispidus* on *Populus* sp., coll. 27.XII.2023, Leg. Baviera C.

**Notes.** A new record from Vulcano and Aeolian Archipelago.

## MORDELLIDAE

Four species of this family recorded from Aeolian Archipelago: two species on Vulcano (onw shared with Stromboli, Alicudi and Filicudi).

*Mordellistena brevicauda* (Bohemann, 1849)

Chorotype – ASE

Trophic category – PHY

New records – Aeolian Archipelago: Vulcano Island, Sabbie nere, on *Daucus carota* 07.VII.2023, Leg. Baviera C.; Piano, on *Daucus carota* 07.VII.2023, Leg. Baviera C.

**Notes.** This species was recently recorded for the first time from Vulcano: Piano (Lo Cascio, Altadonna, and Ponel 2022).

*Variimorda villosa* (Schrank, 1781)

Chorotype – EUR

Trophic category – PHY

New records – Aeolian Archipelago: Vulcano Island, Piano, on *Daucus carota* 07.VII.2023, Leg. Baviera C.; Porto di Ponente, on *Daucus carota* 07.VII.2023, Leg. Baviera C.; Piano, windows trap, 18-21.IX.2023, Leg. Baviera C.

**Notes.** A new record from Vulcano, until now reported in the Aeolian Archipelago, (sub *V. fasciata*) from Stromboli (Lo Cascio *et al.* 2006), Filicudi and Alicudi (Lo Cascio, Altadonna, and Ponel 2022).

## TENEBRIONIDAE

This is one of the best studied family of beetles in Aeolian Archipelago. 58 species were recorded from Aeolian Archipelago: 34 species on Vulcano (25 shared with Lipari; 16 with Salina; 19 with Stromboli; 17 with Panarea; 12 with Filicudi; 16 with Alicudi).

### Lagrinae

*Lagria hirta* (Linnaeus, 1758)

Chorotype – EUR

Trophic category – SAP

New records – Aeolian Archipelago: Vulcano Island, crossroads for Lentia, 20.IX.2023, 1 M., Leg. Baviera C.; same locality, Piano, 20.IX.2023, 1 M, 1 F., Leg. Baviera C.; Vulcano, 09-10.V.2007, Leg. Baviera C.

**Notes.** A species recorded very recently from Vulcano: Piano and Piani di Luccia (Lo Cascio, Altadonna, and Ponei 2022)

### Pimelinae

*Erodius siculus neapolitanus* Solier, 1834

Chorotype – EME

Trophic category – SAP

New records – Aeolian Archipelago: Vulcano Island, Porto ponente, 08.VII.2023, sabbie nere, Leg. Baviera C.

**Notes.** On Vulcano and Aeolian Archipelago lives this subspecies endemic of Tyrrhenian and Ionian coasts of S Italy, not occurring in Sicily (Aliquò, Leo, and Lo Cascio 2006). This taxon was recorded for the first time from Vulcano and Vulcanello by Marcuzzi (1970b).

*Tentyria grossa* Besser, 1832

Chorotype – WME

Trophic category – SAP

**Notes.** A species recorded on Vulcano: Passo del Piano, Vulcanello, Liccia Mount, Menichedda, (Marcuzzi 1970b).

*Tentyria laevigata laevigata* Steven, 1829

Chorotype – WME

Trophic category – SAP

New records – Aeolian Archipelago: Vulcano Island, 31.III.1994, Leg. Baviera C.; Lentia, 08.VII.2023,

Leg. Baviera C.; Strada per Gelso, 250 m a.s.l., 28.XII.2023, Leg. Baviera C.

**Notes.** A species recorded on Vulcano [no precise locality given] (Focarile 1969).

*Stenosis intermedia* (Solier, 1838)

Chorotype – SEU

Trophic category – SAP

New records – Aeolian Archipelago: Vulcano Island, Piani di Luccia, sifting *Ulmus*, 27.XII.2023, Leg. Baviera C.; Lentia, 08.VII.2023, Leg. Baviera C.; Gelso, 200m a.s.l., sifting *Olea*, 29.XII.2023, Leg. Baviera C.; Portella Gelso, 400m a.s.l., sifting *Ulmus*, *Cistus*, *Solanum*, 28.XII.2023, Leg. Baviera C.

**Notes.** A species recorded on Vulcano: Passo del Piano, Serra Felicchie, Piano d'Alighieri, Luccia Mount (Marcuzzi 1970b).

*Dichillus subtilis* Kraatz, 1862

Chorotype – SICI

Trophic category – SAP

New records – Aeolian Archipelago: Vulcano Island, Piani di Luccia, sifting *Ulmus*, 27.XII.2023, Leg. Baviera C.

**Notes.** This species had been recorded until now only from Alicudi in the Aeolian Archipelago (Aliquò, Leo, and Lo Cascio 2006).

*Leptoderis zelmerloewae* Ferrer, 2015

Chorotype – SICI

Trophic category – SAP

**Notes.** This is a narrow endemic species of the Aeolian Islands (Ferrer 2015), only recently recorded on Vulcano in Gelso (Lo Cascio, Altadonna, and Ponel 2022).

*Akis subterranea* Solier, 1836

Chorotype – WME

Trophic category – SAP

**Notes.** This species was recorded on Vulcano: Canneto beach (Canzoneri 1968).

*Pimelia rugulosa rugulosa* Germar, 1824

Chorotype – WME

Trophic category – SAP

New records – Aeolian Archipelago: Vulcano Island, Porto ponente, 08.VII.2023, sabbie nere, Leg. Baviera C.; Piano, 300m, 24-29.VII.2001, Leg. Baviera C.

**Notes.** This species was recorded on Vulcano: reeds on beach (Canzoneri 1968), Menichedda, Luccia Mount, Vulcanello (Marcuzzi 1970b). The research on COII of population of this species sampled a very high number of haplotypes on Vulcano island (seven different haplotype in ten specimens) (Stroscio *et al.* 2011). Of the four haplotypes collected in Gelso, one is shared with Piani di Luccia, one with Piano, one with Porto Levante, one is exclusive. Others two haplotypes are exclusive of Piano and one of Piani di Luccia. Moreover, one haplotype was shared with Salina and one with Lipari. The limited extent of such secondary mixing of haplogroups is noteworthy when compared to the distances among these three islands.

*Trachyderma lima* (Petagna, 1819)

Chorotype – MED

Trophic category – SAP

New records – Aeolian Archipelago: Vulcano Island, Porto ponente, 08.VII.2023, sabbie nere, Leg. Baviera C.; Piano, 300m, 24-29.VII.2001, Leg. Baviera C.

**Notes.** A species recorded (sub *Ocnera*) on Vulcano [no precise locality given] (Marcuzzi 1970b).

## Diaperinae

*Phaleria acuminata* Küster, 1852

Chorotype – MED

Trophic category – SAP

New records – Aeolian Archipelago: Vulcano Island, Porto ponente, 08.VII.2023, sabbie nere, Leg. Baviera C.; Piano, 300m, 24-29.VII.2001, Leg. Baviera C.

**Notes.** This species from Aeolian Archipelago was generically recorded on Vulcano and Lipari by Aliquò (1993). Marrone *et al.* (2014) recorded this species from Gelso beach.

*Phaleria bimaculata marcuzzii* Aliquò, 1993

Chorotype – SICI

Trophic category – SAP

New records – Aeolian Archipelago: Vulcano Island, Porto ponente, 08.VII.2023, sabbie nere, Leg. Baviera C.; Piano, 300m, 24-29.VII.2001, Leg. Baviera C.

**Notes.** This subspecies was described from “Vulcano” (Aliquò 1993) and considered (sub *P. bimaculata*) distributed also in Lipari, and Stromboli (Marcuzzi 1970a), Salina (Focarile 1969) and Panarea (sub *P. bimaculata* s.l.) by Lo Cascio, Altadonna, and Ponei (2022). The research of Marrone *et al.* (2014) shows two populations of *Phaleria* from Vulcano (Gelso and Ponente beach) which did not cluster together. One of them clustered within the *P. acuminata* populations (Gelso), and the second one clustered within the *P. bimaculata* s.l. populations (Ponente beach) belonging to a “Tyrrhenian sub-clade”.

*Trachyscelis aphodioides aphodioides* Latreille, 1809

Chorotype – AFM

Trophic category – SAP

New records – Aeolian Archipelago: Vulcano Island, Porto ponente, 08.VII.2023, sabbie nere, Leg. Baviera C.; Piano, 300m, 24-29.VII.2001, Leg. Baviera C.

**Notes.** A species recorded on “Vulcano” (Focarile 1969). Recently recorded from Ponente beach (Lo Cascio, Altadonna, and Ponei 2022).

*Diaperis boleti* (Linnaeus, 1758)

Chorotype – SIE

Trophic category – MYC

New records – Aeolian Archipelago: Vulcano Island, Porto ponente, 08.VII.2023, sabbie nere, Leg. Baviera C.; Piano, 300m, 24-29.VII.2001, Leg. Baviera C.

**Notes.** A very rare species in Sicily, from Aeolian Archipelago, until now, recorded only from Vulcano: Piano (Lo Cascio, Altadonna, and Ponei 2022).

**Opatrinae***Ammobius rufus* Lucas, 1849

Chorotype – MED

Trophic category – SAP

New records – Aeolian Archipelago: Vulcano Island, crossroads for Lentia Mount, sifting *Ulmus*, 20.IX.2023, Leg. Baviera C.; Vulcanello Valle dei Mostri, sifting, 29.XII.2023, Leg. Baviera C.

**Notes.** This species was recorded from “Vulcano” since the research of Focarile (1969). This species normally colonizes roots of plants of the first sandy dunes of beaches (Aliquò, Leo, and Lo Cascio 2006) and in of Ponente beach is recorded also by Lo Cascio, Altadonna, and Ponei (2022). Such as for *Scarites buparius*, in this research this species was found very far from the sea, as observed by Marcuzzi (1970b) that recorded many specimens (22) of this species far from the sea “probably for the presence of sand also inside the Island”.

*Cheirodes sardous sardous* (Géné, 1839)

Chorotype – AFM

Trophic category – SAP

New records – Aeolian Archipelago: Vulcano Island, Piano, at light, 7-8.VII.2023, Leg. Baviera C.; Piani di Luccia at light, 08.VII.2023, Leg. Baviera C.; Lentia, at light, 08.VII.2023, Leg. Baviera C.; crossroads for Lentia, sifting *Ulmus*, 20.IX.2023, Leg. Baviera C.

**Notes.** This quite rare species in Sicily, was very commonly at light at Vulcano in July. Recorded for the Island for the first time by (Aliquò, Leo, and Lo Cascio 2006) Vulcano: Gran Cratere slope, and Piano.

*Gonocephalum obscurum* (Küster, 1849)

Chorotype – AFM

Trophic category – SAP

New records – Aeolian Archipelago: Vulcano Island, Lentia, 08.VII.2023, at night, Leg. Baviera C.

**Notes.** This species was recorded (sub *G. prolixum*) on Vulcano: Luccia Mount, Piano d'Alighieri and beach by Marcuzzi (1970b) .

*Gonocephalum rusticum* (Olivier, 1811)

Chorotype – TUM

Trophic category – SAP

**Notes.** This species was recorded generically from “Vulcano” by Aliquò (1992). A species also known from Lipari (Marcuzzi 1970b), Salina (Aliquò 1995), Panarea (Focarile 1969), Stromboli and Lisca Bianca (Lo Cascio, Altadonna, and Ponel 2022), Strombolicchio (Aliquò, Leo, and Lo Cascio 2006).

*Opatrum verrucosum* Germar, 1817

Chorotype – EME

Trophic category – SAP

**Notes.** A species recorded on Vulcano: beach (Marcuzzi 1970b).

**Tenebrioninae***Allophylax picipes picipes* (Olivier, 1811)

Chorotype – WME

Trophic category – SAP

New records – Aeolian Archipelago: Vulcano Island, Lentia Mount, at light, 08.VII.2023, Leg. Baviera C.; same locality, 20.IX.2023, Leg. Baviera C.; Piani di Luccia, 08.VII.2023, Leg. Baviera C.

**Notes.** This species was recorded on Vulcano: Mount Luccia (Marcuzzi 1970b).

*Scaurus striatus* Fabricius, 1792

Chorotype – WME

Trophic category – SAP

New records – New records – Aeolian Archipelago: Vulcano Island, Lentia, 08.VII.2023, 1 ex. Leg. Baviera C.; Gelso, 250 m a.s.l., 28.XII.2023, Leg. Baviera C.; Gelso near seashore, 28.XII.2023, Leg. Baviera C.; Piano, 24-29.VI.2001, Leg. Baviera C.; Vulcano, 09-10.V.2007, Leg. Baviera C.

**Notes.** A species recorded on Vulcano: Piano d'Alighieri, Luccia Mount, Passo del Piano, Vulcanello (Focarile 1969).

*Blaps gibba* Laporte de Castelnau, 1840

Chorotype – SEU

Trophic category – SAP

New records – New records – Aeolian Archipelago: Vulcano Island, Lentia, 08.VII.2023, 1 ex. Leg. Baviera C.; Gelso, 250 m a.s.l., 28.XII.2023, Leg. Baviera C.; Gelso near seashore, 28.XII.2023, Leg. Baviera C.; Piano, 24-29.VI.2001, Leg. Baviera C.; Vulcano, 09-10.V.2007, Leg. Baviera C.

**Notes.** This species was recorded on Vulcano: Canneto spiaggia (Canzoneri 1968).

*Blaps gigas* (Linnaeus, 1767)

Chorotype – MED

Trophic category – SAP

New records – Aeolian Archipelago: Vulcano Island, Porto ponente, 08.VII.2023, sabbie nere, 1 ex. Leg. Baviera C.

**Notes.** This species was recorded on “Vulcano” by Focarile (1969).

*Blaps mucronata* Latreille, 1804

Chorotype – SEU

Trophic category – SAP

New records – Aeolian Archipelago: Vulcano Island, Porto ponente, 08.VII.2023, sabbie nere, 1 ex. Leg. Baviera C.

**Notes.** This species was recorded on Vulcano: Canneto spiaggia (Canzoneri 1968).

*Catomus rotundicollis* (Guérin-Méneville, 1825)

Chorotype – WME

Trophic category – SAP

New records – Aeolian Archipelago: Vulcano Island, Vulcanello, Valle dei Mostri, sifting, 29.XII.2023, Leg. Baviera C.; Lentia, sifting *Ammophila*, 28.XII.2023, Leg. Baviera C.; Gelso, 260m a.s.l., sifting in *Q. ilex*, 28.XII.2023, Baviera C.

**Notes.** A species recorded for the first time from “Vulcano” (Marcuzzi 1970b) and from Vulcano: Serro dei Pisani (Aliquò, Leo, and Lo Cascio 2006).

*Helops caeruleus* (Linnaeus, 1758)

Chorotype – EUR

Trophic category – SAP

**Notes.** This species was recorded generically (sub *H. coeruleus*) from “Vulcano” by Aliquò (1993), and Aliquò, Leo, and Lo Cascio (2006).

*Uloma culinaris* (Linnaeus, 1758)

Chorotype – SIE

Trophic category – SAP

New records – Aeolian Archipelago: Vulcano Island, Piani di Luccia, in *Pinus*, 08.VII.2023, Leg. Baviera C.

**Notes.** This species is the first of the Ulomini tribe recorded from Aeolian Archipelago.

*Gunarus parvulus* (Lucas, 1849)

Chorotype – WME

Trophic category – SAP

New records – Aeolian Archipelago: Vulcano Island, Vulcanello, Valle dei Mostri, sifting, 29.XII.2023, Leg. Baviera C.

**Notes.** This species is recorded for the first time from Vulcano. A species recorded on Lipari, Alicudi (Lo Cascio, Altadonna, and Ponel 2022), Stromboli (Aliquò, Leo, and Lo Cascio 2006), Panarea (Focarile 1969), Lisca Bianca and Strombolicchio (Aliquò, Leo, and Lo Cascio 2006) in the Aeolian Archipelago.

*Nalassus pastai* Aliquò, Leo et Lo Cascio 2006

Chorotype – SICI

Trophic category – SAP

New records – Aeolian Archipelago: Vulcano Island, near Gelso, 200m a.s.l., under bark of *Eucaliptus*, 38°22'39.31"N 14°59'41.57"E, 28.XII.2023, Leg. Baviera C.

**Notes.** This species was, until recently, considered a narrow endemic of Vulcano Island (Aliquò, Leo, and Lo Cascio 2006), recently also collected in Salina and Stromboli (Lo Cascio, Altadonna, and Ponel 2022).

*Xanthomus pallidus* (Curtis, 1830)

Chorotype – EUM

Trophic category – SAP

New records – Aeolian Archipelago: Vulcano Island, near Gelso, 200m a.s.l., under bark of *Eucaliptus*, 38°22'39.31"N 14°59'41.57"E, 28.XII.2023, Leg. Baviera C.

**Notes.** This species was recorded only recently on Vulcano in Ponente beach (Lo Cascio, Altadonna, and Ponel 2022).

## Alleculinae

*Isomira melanophthalma* (Lucas, 1846)

Chorotype – WME

Trophic category – SAP

New records – Aeolian Archipelago: Vulcano Island, 9-10.V.2007, Leg. Baviera C.

**Notes.** This species was recorded (sub *I. ferruginea*) on Vulcano in Piano (Lo Cascio *et al.* 2006).

*Omophlus (Odontomophlus) lepturoides* (Fabricius, 1787)

Chorotype – EUR

Trophic category – SAP

New records – Aeolian Archipelago: Vulcano Island, 9-10.V.2007, Leg. Baviera C.

**Notes.** A species only recently recorded from Vulcano: Piano. Also known from Lipari (Lo Cascio *et al.* 2006).

*Omophlus (Paromophlus) picipes* (Fabricius, 1792)

Chorotype – EUR

Trophic category – SAP

New records – Aeolian Archipelago: Vulcano Island, Gran Cratere, 01.V.2024 Capillo G. and Albano M.

**Notes.** A species recorded on Vulcano: “basal belt of Gran Cratere, in light trap (Lo Cascio *et al.* 2006). Also known from Lipari (Lo Cascio *et al.* 2006).

*Megischia curvipes* (Brullé, 1832)

Chorotype – SEU

Trophic category – SAP

**Notes.** Generically recorded for “Aeolian Archipelago” by Focarile (1974). After recorded on Vulcano: Piano (Lo Cascio *et al.* 2006).

## CIIDAE

A family never recorded before from Aeolian Archipelago.

*Cis villosulus* Marsham, 1802 (= *setiger*)

Chorotype – EUR

Trophic category – MYC

New records – Aeolian Archipelago: Vulcano Island, Valle Rio Grande, on *Ulmus*, 08.VII.2023, Leg. Baviera C.; New records – Aeolian Archipelago, Vulcano Island, Lentia crossroad, VII.2024, from carpophore of *Inonotus hispidus* on *Populus* sp., coll. 27.XII.2023, Leg. Baviera C.

**Notes.** This species wasn't recorded before from Aeolian Archipelago.

*Cis pygmaeus pygmaeus* Marsham, 1802

Chorotype – CEU

Trophic category – MYC

New records – Aeolian Archipelago, Vulcano Island, Piano, VII.2024, from carpophore of *Inonotus rickii* on *Ulmus* sp., coll. 28.XII.2023, Leg. Baviera C.

**Notes.** This species wasn't recorded before from Aeolian Archipelago. *Inonotus rickii* is a Basidiomycete typical of tropical and subtropical areas which, for several years now, has been used to bearing fruit, even if sporadically, in the Mediterranean regions with prevalent anamorphic growth.

*Xylographus bostrychoides* (Dufour, 1843)

Chorotype – TEM

Trophic category – MYC

New records – Aeolian Archipelago, Vulcano Island, Lentia crossroad, VII.2024, reared from carpophore of *Inonotus hispidus* collected on *Populus* sp., 27.XII.2023, Leg. Baviera C.

**Notes.** This species wasn't recorded before from Aeolian Archipelago. In I. Löbl and Smetana (2013c) catalogue, this species was recorded, in Italy, only from Sardinia.

## OEDEMERIDAE

Seven species of this family in Aeolian Archipelago. Five species on Vulcano (all shared with Lipari; two with Salina, Filicudi and Alicudi; one with Stromboli and Panarea).

*Oedemera atrata* Schmidt, 1846

Chorotype – SEU

Trophic category – PHY

New records – Aeolian Archipelago, Vulcano Island, Lentia crossroad, VII.2024, reared from carpophore of *Inonotus hispidus* collected on *Populus* sp., 27.XII.2023, Leg. Baviera C.

**Notes.** This species was recorded for the first time from Vulcano in 2006 (Lo Cascio *et al.* 2006).

*Oedemera barbara* (Fabricius, 1792)

Chorotype – MED

Trophic category – PHY

New records – Aeolian Archipelago, Vulcano Island, Lentia crossroad, VII.2024, reared from carphophore of *Inonotus hispidus* collected on *Populus* sp., 27.XII.2023, Leg. Baviera C.

**Notes.** This species was recorded for the first time from “Vulcano” in 1995 (Bologna 1995).

*Oedemera flavipes* (Fabricius, 1792)

Chorotype – EUM

Trophic category – PHY

New records – Aeolian Archipelago: Vulcano Island, Valle Rio Grande, on *Ulmus*, 08.VII.2023, Leg. Baviera C.; Gran Cratere, 01.V.2024 Capillo G. and Albano M.; Piano, on *Daucus carota* flowers, 07.VII.2023, Leg. Baviera C.

**Notes.** This species was recorded for the first time from “Vulcano” in 1995 (Bologna 1995).

*Oedemera nobilis* (Scopoli, 1763)

Chorotype – EUM

Trophic category – PHY

**Notes.** This species was recorded for Vulcano from the first time in 2006 (Lo Cascio *et al.* 2006).

*Oedemera simplex* (Linnaeus, 1767)

Chorotype – WME

Trophic category – PHY

**Notes.** This species was recorded on Vulcano: Piano (Lo Cascio, Altadonna, and Ponel 2022).

**MELOIDAE**

There are nine species in the Aeolian Archipelago, five species on Vulcano (all shared with Lipari; one with Salina; one with Filicudi; two with Alicudi).

**Meloinae***Meloe (Eurymeloe) mediterraneus* J. Müller, 1925

Chorotype – TUM

Trophic category – PHY (PRE as larva)

**Notes.** This species was recorded on “Vulcano” (Bologna 1995).

*Meloe (Eurymeloe) murinus* Brandt and Erichson, 1832

Chorotype – MED

Trophic category – PHY (PRE as larva)

**Notes.** This species was recorded on “Vulcano” (Bologna 1988).

*Meloe (Meloe) proscarabaeus* Linnaeus, 1758

Chorotype – ASE

Trophic category – PHY (PRE as larva)

**Notes.** This species was recorded on Vulcano: Piano (Lo Cascio, Altadonna, and Ponel 2022).

*Meloe (Taphromeloe) erythrocnemus* Pallas, 1782

Chorotype – TEM

Trophic category – PHY (PRE as larva)

**Notes.** This species was recorded on “Vulcano” (Bologna and Marangoni 1991).

## Nemognathinae

*Zonitis (Zonitis) immaculata* (Olivier, 1789)

Chorotype – TEM

Trophic category – PHY (PRE as larva)

**Notes.** This species was recorded on Vulcano: Piano (Lo Cascio, Altadonna, and Ponel 2022).

## SALPINGIDAE

*Salpingus planirostris* (Fabricius, 1787)

Chorotype – EUR

Trophic category – PHY (PRE as larva)

New records – Aeolian Archipelago, Vulcano Island, loc. Piano belvedere, on *Ulmus*, 08.VII.2023, Baviera C.

**Notes.** This species was recorded on Vulcano: Piano (Lo Cascio *et al.* 2006).

## ANTHICIDAE

Twenty species recorded from Aeolian Archipelago: ten on Vulcano (four shared with Lipari and Salina; two with Stromboli and Alicudi; one with Panarea; three with Filicudi)

### Anthicinae

*Anthicus crinitus* La Ferté-Sénéctère, 1849

Chorotype – SCO

Trophic category – PRE)

New records – Aeolian Archipelago, Vulcano Island, loc. Piano belvedere, on *Ulmus*, 08.VII.2023, Baviera C.

**Notes.** A species only recently recorded on Vulcano: Piano (Lo Cascio, Altadonna, and Ponel 2022). New record for Italy and Sicily in 2009 (Degiovanni and Baviera 2009).

*Anthicus fenestratus* W.L.E. Schmidt, 1842

Chorotype – MED

Trophic category – PRE)

New records – Aeolian Archipelago, Vulcano Island, Porto Ponente, sabbie nere, 08.VII.2023, Baviera C.

**Notes.** This species was recorded on Vulcano: Piano, Ponente beach (Lo Cascio, Altadonna, and Ponel 2022). In the Aeolian Archipelago also recorded from Salina and Stromboli (Bucciarelli 1971).

*Anthicus niger* (Olivier, 1811)

Chorotype – MED

Trophic category – PRE)

New records – Aeolian Archipelago: Vulcano Island, Piani di Luccia, sifting *Ulmus*, 27.XII.2023, Leg. Baviera C.; same locality, 20.IX.2023, Leg. Baviera C.

**Notes.** This species was recently recorded on Vulcano: Piano (Lo Cascio, Altadonna, and Ponel 2022).

*Anthicus tristis tristis* W.L.E. Schmidt, 1842

Chorotype – TUM

Trophic category – PRE)

New records – Aeolian Archipelago: Vulcano Island, Piani di Luccia, sifting *Ulmus*, 27.XII.2023, Leg. Baviera C.; same locality, 20.IX.2023, Leg. Baviera C.

**Notes.** A species recently recorded on Vulcano: Piano, Capo Secco (Lo Cascio, Altadonna, and Ponel 2022). Also recorded on Lipari and Alicudi in the Aeolian Archipelago (Bucciarelli 1971), Filicudi (Lo Cascio *et al.* 2006).

*Cyclodinus minutus minutus* (LaFerté-Sénéctère, 1842)

Chorotype – MED

Trophic category – PRE)

New records – Messina: Aeolian Archipelago, Isola di Vulcano, 09-10.V.2007, Baviera C.

**Notes.** A new record from Vulcano. In the Aeolian Archipelago this species was recorded only from Salina (Bucciarelli 1971).

*Hirticomus quadriguttatus* (Rossi, 1792)

Chorotype – TEM

Trophic category – PRE)

New records – Aeolian Archipelago: Vulcano Island, Piani di Luccia, sifting *Ulmus*, 27.XII.2023, Leg. Baviera C.; same locality, 20.IX.2023, Leg. Baviera C.; near Gelso, 200m a.s.l., 18-21.IX.2023, in wine and fruit trap on *Q. ilex*, Leg. Baviera C.

**Notes.** A species recorded on Vulcano: Piano, Serro Felicicchie (Lo Cascio, Altadonna, and Ponel 2022). In the Aeolian Archipelago also recorded (sub *Anthicus*) on Lipari (Bucciarelli 1971), Salina (Arnone 1992), Filicudi (Lo Cascio *et al.* 2006) and Panarea (Bucciarelli 1971).

*Omonadus bifasciatus* (Rossi, 1792)

Chorotype – TEM

Trophic category – PRE)

New records – Aeolian Archipelago: Vulcano Island, Piani di Luccia, sifting *Ulmus*, 27.XII.2023, Leg. Baviera C.; near Gelso, 200m a.s.l., 18-21.IX.2023, in wine and fruit trap on *Q. ilex*, Leg. Baviera C.; near Gelso, 200m a.s.l., sifting *Q. ilex*, 28.XII.2023, Leg. Baviera C.; Piano, in yellows traps, 18-21.IX.2023, Leg. Baviera C.; Palude dell'Istmo, in yellows traps, 18-21.IX.2023, Leg. Baviera C.

**Notes.** This was the most common collected species of Anthicidae recently recorded for the first time from Vulcano: Piano (Lo Cascio, Altadonna, and Ponel 2022). Also recorded, in Eolian Archipelago, (sub *Anthicus*) from Salina, Alicudi (Bucciarelli 1971) and Filicudi (Lo Cascio *et al.* 2006).

*Omonadus floralis* (Linnaeus, 1758)

Chorotype – COS

Trophic category – PRE)

**Notes.** A species only recently recorded from “Vulcano” (Lo Cascio, Altadonna, and Ponel 2022).

*Stricticomus transversalis transversalis* (A. Villa and J. B. Villa, 1833)

Chorotype – TUM

Trophic category – PRE)

**Notes.** A species that has long been recorded from Aeolian Archipelago. It was recorded on Vulcano (Arnone 1992). This species was also known from Lipari (Arnone 1992) and (sub *Anthicus*) Salina (Bucciarelli 1971).

### **Notoxinae**

*Notoxus appendicinus* Desbrochers des Loges, 1874

Chorotype – EUR

Trophic category – PRE)

New records – Aeolian Archipelago: Vulcano Island, Porto Ponente, sabbie nere, 08.VII.2023, Baviera C.; Gelso alla luce, 08.VII.2023, Baviera C.

**Notes.** A species recorded (sub *N. cavifrons appendicinus*) on Vulcano: basal belt of Gran Cratere, in light trap (Lo Cascio *et al.* 2006). In the Aeolian Archipelago also recorded from Stromboli (Lo Cascio *et al.* 2006).

*Notoxus trifasciatus* Rossi, 1792

Chorotype – TEM

Trophic category – PRE)

New records – Aeolian Archipelago, Vulcano Island, Porto Ponente, sabbie nere, 08.VII.2023, Baviera C.; Gelso on *Q. ilex*, 38°22'39.31"N 14°59'41.57"E, 08.VII.2023, Baviera C.; Valle Rio Grande, on *Ulmus*, 08.VII.2023, Leg. Baviera C. ; Lentia, on *Nerium oleander*, 07.VII.2023, Leg. Baviera C.; Piano, on flowers, 07.VII.2023, Leg. Baviera C. ; same locality, at light, 08.VII.2023, Leg. Baviera C.

**Notes.** A species reported, from Aeolian Archipelago, from Vulcano (Arnone 1992) and Lipari (Lo Cascio *et al.* 2006).

### **ADERIDAE**

*Aderus populneus* (Creutzer in Panzer, 1796)

Chorotype – EUR

Trophic category – PRE)

New records – Aeolian Archipelago: Vulcano Island, Gelso, 260m a.s.l., sifting in *Q. ilex*, 08.VII.2023, Baviera C.; from Fomes sp. Collected 27.XII.2023, adult V.2024, Baviera C.

**Notes.** A species recorded on Lipari (Lo Cascio *et al.* 2006), only recently from Vulcano (Lo Cascio, Altadonna, and Ponel 2022).

## SCRAPTIIDAE

*Anaspis (Anaspis) pulicaria* A. Costa, 1854

Chorotype – EUM

Trophic category – PRE)

**Notes.** Generically recorded for Aeolian Archipelago by Franciscolo (1988).

*Anaspis (Anaspis) ruficollis* (Fabricius, 1792)

Chorotype – EUR

Trophic category – PRE)

New records – Aeolian Archipelago: Vulcano Island, Valle Rio Grande, on *Ulmus*, 08.VII.2023, Leg. Baviera C.

**Notes.** A species never recorded before from Aeolian Archipelago.

## CHRYSOMELOIDEA

### CERAMBYCIDAE

38 species recorded from Aeolian Archipelago: twenty-nine species on Vulcano, the greatest number among Aeolian Archipelago (sixteen shared with Lipari; twelve with Salina; six with Stromboli; four with Panarea; seven with Filicudi; six with Alicudi).

#### Prioninae

*Ergates faber opifex* Mulsant, 1851

Chorotype – NAF (EUM)

Trophic category – PHY

New records – Aeolian Archipelago: Vulcano Island, Piani di Luccia, in *Pinus*, larva, 08.VII.2023, Leg. Baviera C.

**Notes.** This species was recorded on Vulcano: Piano, at light, Capo Grillo at night on *Pinus pinea*, Piani di Luccia (Lo Cascio 2017).

## Lepturinae

*Stictoleptura cordigera* (Fuessly, 1775)

Chorotype – TUE

Trophic category – PHY

**Notes.** This species was recorded (sub *Corymbia*) on Vulcano: between Gran Cratere slopes and Lentia Mount (Cecchi and Lo Cascio 2000). Generically recorded for “Aeolian Archipelago” by Sama (1988). Lipari (Cecchi and Lo Cascio 2000). Salina (Lo Cascio, Altadonna, and Ponel 2022), Filicudi (Lo Cascio *et al.* 2006).

*Stenurella (Nigrostenurella) nigra* (Linnaeus, 1758)

Chorotype – TUE

Trophic category – PHY

**Notes.** This species was recorded on Vulcano: Piano (Cecchi and Lo Cascio 2000), in Sicily known only for this site (Baviera *et al.* 2017).

## Spondylidinae

*Arhopalus ferus* (Mulsant, 1839)

Chorotype – PAL

Trophic category – PHY

**Notes.** This species was recorded on Vulcano by Lo Cascio *et al.* (2006).

*Arhopalus syriacus* (Reitter, 1895)

Chorotype – MED

Trophic category – PHY

**Notes.** This species was recorded (sub *Cephalocrius*) on Vulcano (Baviera *et al.* 2017).

*Oxypleurus nodieri* Mulsant, 1839

Chorotype – MED

Trophic category – PHY

**Notes.** This species was recorded on Vulcano: Piano (Lo Cascio, Altadonna, and Ponel 2022).

## Cerambycinae

*Cerambyx scopolii* Fuessly, 1775

Chorotype – TEM

Trophic category – PHY

**Notes.** This species was recorded from generically from “Vulcano” (Sama and Schurmann 1980). Also recorded on Lipari (Cecchi and Lo Cascio 2000).

*Phoracantha recurva* Newman, 1840

Chorotype – COS

Trophic category – PHY

**Notes.** This species was recorded on Vulcano: Piani di Luccia (Lo Cascio 2009).

*Phoracantha semipunctata* (Fabricius, 1775)

Chorotype – COS

Trophic category – PHY

**Notes.** A species recorded from Sicily since 1975 (Romano and Carapezza 1975) and widespread in Sicily (Baviera *et al.* 2017). This species was recently recorded on Vulcano: Piano (Lo Cascio, Altadonna, and Ponei 2022).

*Trichoferus holosericeus* (Rossi, 1790)

Chorotype – MED

Trophic category – PHY

**Notes.** This species was recorded on Vulcano: Gelso (Cecchi and Lo Cascio 2000).

*Trichoferus spartii* (Müller, 1948)

Chorotype – EEU

Trophic category – PHY

New records – Aeolian Archipelago: Vulcano Island, near Gelso, 18-21.IX.2023, in wine and fruit trap on *Q. ilex*, Leg. Baviera C.

**Notes.** A species never recorded before from Vulcano, until now recorded from Sicily only from Aeolian Archipelago (Baviera *et al.* 2017) (sub *T. fasciculatus*) on Lipari (Cecchi and Lo Cascio 2000) and Stromboli (Biscaccianti 2004).

*Trichoferus fasciculatus fasciculatus* (Faldermann, 1837)

Chorotype – TUM

Trophic category – PHY

New records – Aeolian Archipelago: Vulcano Island, near Gelso, VII. 2024, reared from *Quercus ilex* collected on VII.2023, Leg. Baviera C.

**Notes.** This species is a new record from Vulcano, until now recorded only from Salina (Sparacio, Bella, and Turrisi 2003).

*Penichroa fasciata* (Stephens, 1831)

Chorotype – TUM

Trophic category – PHY

New records – Aeolian Archipelago: Vulcano Island, near Gelso, VII. 2024, reared from *Quercus ilex* collected on VII.2023, Leg. Baviera C.

**Notes.** This species was recorded on Vulcano: “paese” at light (Cecchi and Lo Cascio 2000). In the Aeolian Archipelago also recorded only from Alicudi (Lo Cascio, 2022).

*Gracilia minuta* (Fabricius, 1781)

Chorotype – COS

Trophic category – PHY

New records – Aeolian Archipelago: Vulcano Island, Piani di Luccia, beating *Q. ilex*, 08.VII.2023, Leg. Baviera C.; Porto Levante, beating *Acacia*, 08.VII.2023, Leg. Baviera C.; Piano, belvedere, 300m a.s.l. on *Ulmus*, 29.XII.2023, Leg. Baviera C.

**Notes.** A very common, polyphagous species, recorded on “Vulcano” (Cecchi and Lo Cascio 1999).

*Stenopterus ater* (Linnaeus, 1767)

Chorotype – WME

Trophic category – PHY

New records – Aeolian Archipelago: Vulcano Island, Piano, on *Daucus carota* flowers 07.VII.2023, Leg. Baviera C.

**Notes.** A species recorded on Vulcano: Gelso (Cecchi and Lo Cascio 2000).

*Stenopterus rufus* (Linnaeus, 1767)

Chorotype – TUE

Trophic category – PHY

New records – Aeolian Archipelago: Vulcano Island, Piano, on *Daucus carota* flowers 07.VII.2023, Leg. Baviera C.

**Notes.** A species recorded on Vulcano (Sama 2005). Also recorded on Lipari (Sama 1988).

*Deilus fugax* (Olivier, 1790)

Chorotype – TUM

Trophic category – PHY

**Notes.** A species recorded on Vulcano: Serro dei Pisani ex *Spartium junceum* (Cecchi and Lo Cascio 2000).

*Hylotrupes bajulus* (Linnaeus, 1758)

Chorotype – PAL

Trophic category – PHY

**Notes.** A species recorded on Vulcano: Piano (Lo Cascio, Altadonna, and Ponel 2022).

*Phymatodes testaceus* (Linnaeus, 1758)

Chorotype – PAL

Trophic category – PHY

**Notes.** Only generically recorded from “Vulcano” (Baviera *et al.* 2017).

*Xylotrechus antilope* (Schönherr, 1817)

Chorotype – TUE

Trophic category – PHY

**Notes.** This species was recorded from “Vulcano” (Baviera *et al.* 2017).

*Xylotrechus stebbingi* Gahan, 1906

Chorotype – SCO

Trophic category – PHY

New records – Aeolian Archipelago: Vulcano Island, near Gelso, VII. 2024, reared from *Quercus ilex* collected on VII.2023, Leg. Baviera C.

**Notes.** This species was recorded from “Vulcano” (Baviera *et al.* 2017). Reared during the research from *Quercus ilex*.

*Chlorophorus glabromaculatus* (Goeze, 1777)

Chorotype – EUR

Trophic category – PHY

New records – Aeolian Archipelago: Vulcano Island, near Gelso, VII. 2024, reared from *Quercus ilex* collected on VII.2023, Leg. Baviera C.

**Notes.** This species was recorded (sub *C. pilosus glabromaculatus*) on Vulcano (Lo Cascio *et al.* 2006), Lipari (Cecchi and Lo Cascio 2000) and Stromboli (Lo Cascio, Altadonna, and Ponel 2022).

*Chlorophorus sartor* (Müller, 1766)

Chorotype – TUE

Trophic category – PHY

New records – Aeolian Archipelago: Vulcano Island, near Gelso, VII. 2024, reared from *Quercus ilex* collected on VII.2023, Leg. Baviera C.

**Notes.** This species was recorded on Vulcano: Gelso (Cecchi and Lo Cascio 2000), Salina and Filicudi (Lo Cascio, Altadonna, and Ponel 2022), Alicudi and Panarea (Lo Cascio *et al.* 2006).

*Chlorophorus varius* (Müller, 1766)

Chorotype – SIE

Trophic category – PHY

New records – Aeolian Archipelago: Vulcano Island, near Gelso, VII. 2024, reared from *Quercus ilex* collected on VII.2023, Leg. Baviera C.

**Notes.** This species was recorded on Vulcano: Piano, Monte Saraceno, Gelso (Lo Cascio, Altadonna, and Ponel 2022). Generically recorded for “Aeolian Archipelago” for the locality “Vallonazzo” by (Sama and Schurmann 1980; Sama 1988, 2005). Recorded from Lipari by (Cecchi and Lo Cascio 2000) and Salina (Lo Cascio *et al.* 2006).

**Lamiinae***Parmena pilosa inclusa* Mulsant, 1862

Chorotype – MED

Trophic category – PHY

New records – Aeolian Archipelago: Vulcano Island, Lentia Mount, at light, 08.VII.2023, Leg. Baviera C.

**Notes.** This species was recorded (sub *P. pubescens*) on Vulcano: Istmo, on *Echinophora spinosa* (Lo Cascio *et al.* 2006).

*Agapanthia (Agapanthia) cardui* (Linnaeus, 1767)

Chorotype – TUM

Trophic category – PHY

New records – Aeolian Archipelago: Vulcano Island, Lentia Mount, at light, 08.VII.2023, Leg. Baviera C.

**Notes.** This species was recorded on Vulcano: near Porto (Lo Cascio, Altadonna, and Ponel 2022). Recorded on Lipari (Lo Cascio *et al.* 2006), Alicudi (Cecchi and Lo Cascio 2000).

*Agapanthia (Agapanthia) suturalis* (Fabricius, 1787)

Chorotype – MED

Trophic category – PHY

**Notes.** This species was recorded from Vulcano (Baviera *et al.* 2017). Also collected in Lipari (Baviera *et al.* 2017) and Filicudi (Rapuzzi and Sama 2006).

*Calamobius filum* (Rossi, 1790)

Chorotype – MED

Trophic category – PHY

**Notes.** This species was recorded from Vulcano (Baviera *et al.* 2017).

*Niphona picticornis* Mulsant, 1839

Chorotype – MED

Trophic category – PHY

New records – Aeolian Archipelago: Vulcano Island, Piani di Luccia, beating *Q. ilex*, 08.VII.2023, Leg. Baviera C.

**Notes.** This Mediterranean wide polyphagous species was recently recorded for the first time from Vulcano: Piano, reared from *Cytisus aeolicus* (Lo Cascio, Altadonna, and Ponel 2022).

## CHRYSOMELIDAE

To this family belongs 89 species recorded from Aeolian Archipelago: fortythree species on Vulcano (twentyfour shared with Lipari; 8 with Salina; two with Stromboli; five with Panarea; three with Filicudi; seven with Alicudi).

### Bruchinae

*Bruchidius biguttatus* (Olivier, 1795)

Chorotype – CEM

Trophic category – PHY

New records – Aeolian Archipelago: Vulcano Island, Gelso, 260m a.s.l., sifting in *Q. ilex*, 08.VII.2023, Baviera C.; from Fomes sp. Collected 27.XII.2023, adult V.2024, Baviera C.

**Notes.** A species recently recorded for the first time from Vulcano: Piano (Baviera, 2024). From Aeolian Archipelago recorded also from Lipari (Lo Cascio *et al.* 2006).

*Bruchidius bimaculatus* (Olivier, 1795)

Chorotype – CEM

Trophic category – PHY

New records – Aeolian Archipelago: Vulcano Island, Gelso, 260m a.s.l., sifting in *Q. ilex*, 08.VII.2023, Baviera C.; from Fomes sp. Collected 27.XII.2023, adult V.2024, Baviera C.

**Notes.** This species was recorded on Vulcano: Piano (Lo Cascio, Altadonna, and Ponel 2022), in the Aeolian Archipelago also from Lipari and Salina (Lo Cascio *et al.* 2006).

*Bruchidius foveolatus* (Gyllenhal, 1833)

Chorotype – MED

Trophic category – PHY

New records – Aeolian Archipelago: Vulcano, Piani di Luccia, sifting *Ulmus*, 27.XII.2023, Leg. Baviera C.; Piano, belvedere, 300m a.s.l. sifting *Cistus*, 29.XII.2023, Leg. Baviera C.

**Notes.** This species was recorded on Vulcano: Piano (Lo Cascio 2004; Baviera 2024). Reported also from Lipari (Lo Cascio *et al.* 2006), Alicudi and Panarea (Lo Cascio, Altadonna, and Ponel 2022).

*Bruchidius lividimanus* (Gyllenhal, 1833)

Chorotype – WPA

Trophic category – PHY

**Notes.** This species was recorded on Vulcano: Vallonazzo. Also recorded on Lipari (Lo Cascio, Altadonna, and Ponel 2022).

*Bruchidius murinus* (Boheman, 1829)

Chorotype – CEM

Trophic category – PHY

**Notes.** A species recently recorded, for the first time in the Aeolian Archipelago, from Vulcano: Piano (Baviera 2024).

*Bruchidius nudus* (Allard, 1868)

Chorotype – MED

Trophic category – PHY

**Notes.** This species was recorded on Vulcano: Piano on *Cytisus aeolicus* (Lo Cascio 2004).

*Bruchidius pygmaeus* (Boheman, 1833)

Chorotype – CEM

Trophic category – PHY

New records – Aeolian Archipelago: Piani di Luccia, sifting *Ulmus*, 27.XII.2023, Leg. Baviera C.; Portella Gelso, 400m a.s.l., sifting *Ulmus*, *Cistus*, *Solanum*, 28.XII.2023, Leg. Baviera C.

**Notes.** This species was, only recently, recorded for the first time from Vulcano (Baviera 2024).

*Bruchidius seminarius* (Linnaeus, 1767)

Chorotype – PAL

Trophic category – PHY

**Notes.** This species was recorded on Vulcano: Gelso (Lo Cascio *et al.* 2006).

*Bruchidius villosus* (Fabricius, 1792)

Chorotype – COS

Trophic category – PHY

**Notes.** This species was recorded on Vulcano: surrounding of Gran Cratere (Lo Cascio, Altadonna, and Ponel 2022).

*Bruchidius brachialis* Fåhraeus, 1839

Chorotype – WPA

Trophic category – PHY

**Notes.** This species was recorded, in the Aeolian Archipelago as of now on Vulcano, Serro Felicicchie, Vallonazzo, near Gelso (Lo Cascio, Altadonna, and Ponel 2022).

*Bruchus rufipes* Herbst, 1783

Chorotype – CEM

Trophic category – PHY

**Notes.** This species was recorded, in the Aeolian Archipelago until now only from Lipari (Lo Cascio, Altadonna, and Ponel 2022). A new record from Vulcano only recently (Baviera 2024).

*Bruchus tristiculus* Fåhraeus, 1839

Chorotype – CEM

Trophic category – PHY

**Notes.** This species was recorded, in the Aeolian Archipelago until now on Vulcano, Serro Felicicchie (Lo Cascio *et al.* 2006).

*Paleoacanthoscelides gilvus* Gyllenhal, 1839

Chorotype – CEM (Imported in Oriental Region)

Trophic category – PHY

**Notes.** A species, and a genus, very recently recorded for the first time in the Aeolian Archipelago, from Vulcano, Salina, Stromboli, Filicudi and Alicudi (Baviera 2024).

*Palaeobruchidius plagiatus* (Reiche and Saulcy, 1857)

Chorotype – ASE

Trophic category – PHY

New records – Aeolian Archipelago: Vulcano Island, Piani di Luccia, beating *Mimosa* and *Cistus*, 28.XII.2023, Leg. Baviera C.

**Notes.** This species (and this genus) is recorded for the first time from Aeolian Archipelago. Recorded from Italy in the checklist of **Anton:2010**, but never in European nor in Italian checklist (Zampetti 1995, 2017). Vitale recorded this species for the first time in Sicily from Botanical Garden of Palermo (sub *Bruchus plagiatus*, as probably imported, (Vitale 1932, 1940). This data allow to confirm the presence of this species in Sicily (Baviera 2024).

*Serratobruchidius jocosus* (Gyllenhal, 1833)

Chorotype – MED

Trophic category – PHY

**Notes.** This species was recently recorded on Vulcano in Piano and Vulcanello (Lo Cascio, Altadonna, and Ponel 2022).

*Serratobruchidius meleagrinus* (Géné, 1839)

Chorotype – MED

Trophic category – PHY

New records – Aeolian Archipelago: Vulcano, Piani di Luccia, sifting *Ulmus*, 27.XII.2023, Leg. Baviera C.

**Notes.** This species was recently recorded on Vulcano: Piano (Lo Cascio, Altadonna, and Ponel 2022).

## Criocerinae

*Oulema duftschmidi* (Redtenbacher, 1874)

Chorotype – TEM

Trophic category – PHY

New records – Aeolian Archipelago: Vulcano, 9-10.V.2007, Leg. Baviera C. ; Piani di Luccia, sifting *Ulmus*, 27.XII.2023, Leg. Baviera C. ; same locality, 20.IX.2023, Leg. Baviera C.

**Notes.** This is the first species of this genus recorded from Aeolian Archipelago.

## Cassidinae

*Cassida (Cassida) deflorata* Suffrian, 1844

Chorotype – MED

Trophic category – PHY

**Notes.** This species was recently confirmed from Sicily (Baviera and Sassi 2020) and recorded for the first time from Vulcano: top of the crater (Lo Cascio, Altadonna, and Ponei 2022).

*Cassida (Cassida) rubiginosa* O.F. Müller, 1776

Chorotype – PAL

Trophic category – PHY

New records – Aeolian Archipelago, Vulcano Island, Piani di Luccia, sifting *Ulmus*, 20.IX.2023, Leg. Baviera C.

**Notes.** This is the first record of this species from Vulcano and Aeolian Archipelago.

## Galerucinae

*Xanthogaleruca luteola* (O.F. Müller, 1766)

Chorotype – CAE

Trophic category – PHY

**Notes.** This species was recently recorded on Vulcano: Piani di Luccia (Lo Cascio, Altadonna, and Ponei 2022).

## Chrysomelinae

*Chrysolina (Chrysolina) bankii* (Fabricius, 1775)

Chorotype – WME

Trophic category – PHY

**Notes.** A species recently recorded for the first time from Vulcano: Vallonazzo (Lo Cascio, Altadonna, and Ponei 2022).

*Chrysolina (Melasomoptera) grossa* (Fabricius, 1792)

Chorotype – WME

Trophic category – PHY

New records – Aeolian Archipelago: Vulcano, Piani di Luccia beating *Mimosa* and *Cistus*, 28.XII.2023, Leg. Baviera C.

**Notes.** This species was recorded on Vulcano: Piano (Lo Cascio *et al.* 2006).

*Chrysolina (Stichoptera) variolosa* (Petagna, 1819)

Chorotype – MED

Trophic category – PHY

**Notes.** This species is endemic from Sicily, Calabria and Malta, (Daccordi and Ruffo 2005). A species recorded on Vulcano: Capo Grillo and western slope of Gran Cratere (Lo Cascio, Altadonna, and Ponel 2022).

*Chrysolina (Synerga) herbacea* (Duftschmid, 1825)

Chorotype – ASE

Trophic category – PHY

New records – Aeolian Archipelago: Vulcano, Piano, 21.IX.2023, Leg. Baviera C.

**Notes.** This is the first record of this species from Vulcano and Aeolian Archipelago.

*Chrysolina (Synerga) viridana chloris* (Lucas, 1849)

Chorotype – WME

Trophic category – PHY

New records – Aeolian Archipelago: Vulcano, Piano belvedere, beating *Clinopodium nepeta*, 07.VII.2023, Leg. Baviera C.; Piano, 21.IX.2023, Leg. Baviera C.

**Notes.** This species was recorded on Vulcano: Piano on *Cytisus aeolicus* (Lo Cascio 2004).

*Chrysolina (Taeniochrysea) americana* (Linnaeus, 1758)

Chorotype – MED

Trophic category – PHY

**Notes.** This species was recorded on Vulcano: Piano (Lo Cascio, Altadonna, and Ponel 2022).

## **Cryptocephalinae**

*Cryptocephalus (Burlinius) connexus* Olivier, 1807

Chorotype – TUE

Trophic category – PHY

**Notes.** This species was recently recorded for the first time from Vulcano: Piano (Lo Cascio, Altadonna, and Ponel 2022).

*Cryptocephalus (Burlinius) fulvus* (Goeze, 1777)

Chorotype – WPA

Trophic category – PHY

New records – Aeolian Archipelago, Vulcano Island, Piani di Luccia, sifting *Ulmus*, 20.IX.2023, Leg. Baviera C.

**Notes.** This species was recently recorded for the first time from Vulcano (Baviera and Sassi, 2020).

*Cryptocephalus (Burlinius) macellus* Suffrian, 1860

Chorotype – TEM

Trophic category – PHY

New records – Aeolian Archipelago, Vulcano Island, Lentia, beating on *Nerium oleander*, 07.VII.2023, Leg. Baviera C.

**Notes.** This species was recently recorded for the first time from Vulcano (Baviera and Sassi 2020).

*Cryptocephalus (Burlinius) politus* Suffrian, 1853

Chorotype – WME

Trophic category – PHY

New records – Aeolian Archipelago, Vulcano Island, Lentia crossroad, sifting, 20.IX.2023, Leg. Baviera C.; same locality, Piano, 20.IX.2023, Leg. Baviera C.

**Notes.** This species was recently recorded for the first time from Vulcano: Piano (Lo Cascio, Altadonna, and Ponel 2022).

*Pachybrachis siculus* Weise, 1891

Chorotype – SICI (and Malta)

Trophic category – PHY

New records – Aeolian Archipelago, Vulcano Island, Vulcanello, Valle dei Mostri, VI.2024, from sifted soil coll. 27.XII.2023, Leg. Baviera C.

**Notes.** This genus wasn't recorded before from Vulcano and Aeolian Archipelago.

**Alticinae***Longitarsus australis* (Mulsant and Rey, 1874)

Chorotype – EUM

Trophic category – PHY

**Notes.** A species recorded on Vulcano: Vallonazzo (Lo Cascio, Altadonna, and Ponel 2022).

*Longitarsus ballotae* (Marsham, 1802)

Chorotype – CAM

Trophic category – PHY

**Notes.** A species recorded on Vulcano: near Gelso, (Lo Cascio, Altadonna, and Ponel 2022).

*Longitarsus codinai* Madar and Madar, 1965

Chorotype – WME

Trophic category – PHY

**Notes.** A species recorded on Vulcano: Piano (Baviera and Biondi 2015).

*Longitarsus succineus* (Foudras, 1860)

Chorotype – PAL

Trophic category – PHY

**Notes.** A species recorded on Vulcano: Piano (Baviera and Biondi 2015).

*Psylliodes caneparii* Leonardi, 2007

Chorotype – APPE

Trophic category – PHY

**Notes.** This species, endemic from Calabria, Northeastern Sicily and Aeolian Islands, was recorded from Vulcano as well (Baviera and Biondi 2015).

*Psylliodes chalcomera* (Illiger, 1807)

Chorotype – PAL

Trophic category – PHY

**Notes.** This species was recently recorded on Vulcano by (Baviera and Biondi 2015).

*Psylliodes hospes* Wollaston, 1854

Chorotype – MED

Trophic category – PHY

**Notes.** This species was recently recorded from Vulcano (Baviera and Biondi 2015).

*Psylliodes instabilis* Foudras, 1860

Chorotype – EUR

Trophic category – PHY

**Notes.** This species was recorded on Vulcano: near Gelso (Lo Cascio, Altadonna, and Ponel 2022).

*Psylliodes marcida* (Illiger, 1807)

Chorotype – EUM

Trophic category – PHY

New records – Aeolian Archipelago: Vulcano Island, Gran Cratere, 01.V.2024 Capillo G. and Albano M.

**Notes.** A new record from Vulcano. This species was recorded for the first time from Aeolian Archipelago in Stromboli (Baviera and Biondi 2015).

*Psylliodes pyritosa* Kutschera, 1864

Chorotype – MED

Trophic category – PHY

New records – Aeolian Archipelago: Vulcano Island, Gran Cratere, 01.V.2024 Capillo G. and Albano M.

**Notes.** A species recorded on Vulcano (Baviera and Biondi 2015).

*Sphaeroderma rubidum* (Graëlls, 1858)

Chorotype – EUM

Trophic category – PHY

New records – Aeolian Archipelago: Vulcano Island, Gran Cratere, 01.V.2024 Capillo G. and Albano M.

**Notes.** A species recorded on Vulcano (Baviera and Biondi 2015).

## CURCULIONOIDEA

### ANTHRIBIDAE

*Noxius curtirostris* (Mulsant, 1861)

Chorotype – MED

Trophic category – PHY

New records – Aeolian Archipelago: Vulcano, Gelso, 260m a.s.l., 38°22'39.31"N 14°59'41.57"E, sifting in *Q. ilex*, 08.VII.2023, Leg. Baviera C.; Piano belvedere, beating *Ulmus*, 07.VII.2023, Leg.

Baviera C.; Valle Rio Grande beating *Ulmus*, 07.VII.2023, Leg. Baviera C.

**Notes.** A very commonly collected species on Vulcano, recorded for the first time by Abbazzi, Bartolozzi, and Calamandrei (2000). This species was recorded also from Stromboli and Lipari (Abbazzi, Bartolozzi, and Calamandrei 2000).

## BRENTIDAE

### Apioninae

46 species recorded from Aeolian Archipelago: 34 species on Vulcano (23 shared with Lipari; 16 with Salina; 3 with Stromboli and Panarea; 2 with Filicudi and 5 with Alicudi)

*Apion cruentatum* Walton, 1844

Chorotype – WEU

Trophic category – PHY

**Notes.** This species was recently recorded for the first time from Vulcano: La Fossa and Lipari (Lo Cascio, Altadonna, and Ponel 2022).

*Apion frumentarium* (Linnaeus, 1758)

Chorotype – ASE

Trophic category – PHY

**Notes.** A species recorded on Vulcano by Magnano and Osella (1973).

*Apion haematodes* Kirby, 1808

Chorotype – PAL

Trophic category – PHY

New records – Aeolian Archipelago: Vulcano, Piani di Luccia beating *Q. ilex* and *Pinus*, 20.IX.2023, Leg. Baviera C.

**Notes.** A species recorded on Vulcano: western slope of Gran Cratere, (Lo Cascio, Altadonna, and Ponel 2022).

*Perapion curtirostre* (Germar, 1817)

Chorotype – OLA

Trophic category – PHY

**Notes.** A species recorded (sub *Apion*) on Vulcano (Magnano and Osella 1973).

*Perapion ilvense* (Wagner, 1905)

Chorotype – SEU

Trophic category – PHY

**Notes.** A species recorded on Vulcano: Valle Rio Grande, Vallonazzo, western slopes of Gran Cratere (Lo Cascio, Altadonna, and Ponel 2022).

*Phrissotrichum tubiferum* (Gyllenhal, 1833)

Chorotype – MED

Trophic category – PHY

**Notes.** A species recorded (sub *Apion*) on Vulcano (Magnano and Osella 1973) .

*Phrissotrichum sicanum* Ehret, 1997

Chorotype – MED

Trophic category – PHY

New records – Aeolian Archipelago: Vulcano, Piani di Luccia beating *Mimosa* and *Cistus*, 28.XII.2023, Leg. Baviera C.

**Notes.** This species was never recorded before from Aeolian Archipelago.

*Aspidapion radiolus* (Marsham, 1802)

Chorotype – EUR

Trophic category – PHY

**Notes.** A species recorded (sub *Apion*) on Vulcano (Magnano and Osella 1973).

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

Chorotype – APPE

Trophic category – PHY

**Notes.** A species recorded (sub *Apion*) on Vulcano (Magnano and Osella 1973).

*Catapion corsicum* (Desbrochers des Loges, 1888)

Chorotype – WME

Trophic category – PHY

New records – Aeolian Archipelago: Vulcano, Gelso, 260m a.s.l., 38°22'39.31"N 14°59'41.57"E, sifting in *Q. ilex*, 08.VII.2023, Leg. Baviera C.; Piano, beating *Q. ilex*, 20.IX.2023, Leg. Baviera C.; same locality, on flowers, 08.VII. 2023, Leg. Baviera C.; Crossroads for Lentia, sifting *Ulmus*, 20.IX.2023, Leg. Baviera C.; Piani di Luccia beating *Mimosa* and *Cistus*, 28.XII.2023, Leg. Baviera C.; same locality on *Q. ilex* and *Pinus*, 20.IX.2023, Leg. Baviera C.

**Notes.** A species recorded until now only (sub *Apion*) from Vulcano (Magnano and Osella 1973).

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

Chorotype – CEM

Trophic category – PHY

**Notes.** This species was recorded until now only (sub *Apion*) from Vulcano (Magnano and Osella 1973).

*Ceratapion (Ceratapion) gibbirostre* (Gyllenhal, 1813)

Chorotype – CEM

Trophic category – PHY

New records – Aeolian Archipelago: Vulcano, Gelso, 260m a.s.l., sifting in *Q. ilex*, 08.VII.2023, Leg. Baviera C.; Piano, on flowers, 08.VII. 2023, Leg. Baviera C.; Piani di Luccia beating *Mimosa* and *Cistus*, 28.XII.2023, Leg. Baviera C.; same locality on *Q. ilex* and *Pinus*, 20.IX.2023, Leg. Baviera C.

**Notes.** This species was never recorded before from Vulcano and Aeolian Archipelago.

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

Chorotype – CEM

Trophic category – PHY

New records – Aeolian Archipelago: Vulcano, Piani di Luccia, on *Quercus ilex* and *Pinus*, 20.IX.2023, Leg. Baviera C.; Piani di Luccia, sifting *Ulmus*, 27.XII.2023, Leg. Baviera C.; Piano, on flowers, 08.VII. 2023, Leg. Baviera C.

**Notes.** A species recently recorded for the first time from Vulcano: Vallonazzo, (Lo Cascio, Altadonna, and Ponel 2022).

*Kalcapion semivittatum* (Gyllenhal, 1833)

Chorotype – EUM

Trophic category – PHY

New records – Aeolian Archipelago: Vulcano Island, Piano, sifting *Q. ilex*, 08.VII.2023, Leg. Baviera C.; same locality, 20.IX.2023, Leg. Baviera C.; Piani di Luccia on *Quercus ilex*, 08.VII.2023, Leg. Baviera C.

**Notes.** This species was recently recorded for the first time from Vulcano: near Gelso (Lo Cascio, Altadonna, and Ponel 2022).

*Taeniapion rufescens* (Gyllenhal, 1833)

Chorotype – MED

Trophic category – PHY

**Notes.** A species recently recorded on Vulcano: Piano (Lo Cascio, Altadonna, and Ponel 2022).

*Taeniapion rufulum* (Wencker, 1864)

Chorotype – EUR

Trophic category – PHY

**Notes.** A species recently recorded on Vulcano: Vallonazzo, near Gelso, (Lo Cascio, Altadonna, and Ponel 2022).

*Malvapion malvae* (Fabricius, 1775)

Chorotype – PAL

Trophic category – PHY

**Notes.** This species was recently recorded on Vulcano: near Pantano, (Lo Cascio, Altadonna, and Ponel 2022).

*Eutrichapion (Cnemapion) vorax* (Herbst, 1797)

Chorotype – PAL

Trophic category – PHY

New records – Aeolian Archipelago: Vulcano, 09-10.V.2007, Leg. Baviera C.

**Notes.** This species was recently recorded on Vulcano: near Gelso, (Lo Cascio, Altadonna, and Ponel 2022).

*Eutrichapion (Eutrichapion) viciae* (Paykull, 1800)

Chorotype – PAL

Trophic category – PHY

New records – Aeolian Archipelago: Vulcano, 01.IV.1994, Leg. Baviera C.

**Notes.** This is the first record of this species from Aeolian Archipelago.

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

Chorotype – MED

Trophic category – PHY

New records – Aeolian Archipelago: Vulcano, 09-10.V.2007, Leg. Baviera C.

**Notes.** This species is recorded for the first time from Aeolian Archipelago.

*Holotrichapion (Legaricapion) gracilicolle* (Gyllenhal, 1839)

Chorotype – SEU

Trophic category – PHY

**Notes.** A species that has long been recorded (sub *Apion*) from Vulcano (Magnano and Osella 1973).

*Ischnopterapion modestum* (Germar, 1817)

Chorotype – EUM

Trophic category – PHY

New records – Aeolian Archipelago: Vulcano, 09-10.V.2007, Leg. Baviera C.; Piani di Luccia, sifting *Ulmus*, 27.XII.2023, Leg. Baviera C.

**Notes.** This species is recorded for the first time from Vulcano and Aeolian Archipelago.

*Ischnopterapion plumbeomicans* (Rosenhauer, 1856)

Chorotype – EUM

Trophic category – PHY

**Notes.** A species recorded since a long time (sub *Apion sicardi*) from Vulcano (Dieckmann 1973).

*Oryxolaemus flavifemoratus* (Herbst, 1797)

Chorotype – SEU

Trophic category – PHY

**Notes.** A species recently recorded on Vulcano, Vallonazzo, (Lo Cascio, Altadonna, and Ponel 2022).

*Oryxolaemus scabiosus* (Weise, 1889)

Chorotype – EUM

Trophic category – PHY

New records – Aeolian Archipelago: Vulcano, Piani di Luccia on *Quercus ilex*, 08.VII.2023, Leg. Baviera C.

**Notes.** Until now recorded only from Lipari, Salina (Lo Cascio, Altadonna, and Ponel 2022) and Stromboli (Lo Cascio *et al.* 2006) (sub *O. flavifemoratus*).

*Oxystoma dimidiatum* Desbrochers des Loges, 1897

Chorotype – EUR

Trophic category – PHY

New records – Aeolian Archipelago: Vulcano, Piani di Luccia beating *Mimosa* and *Cistus*, 28.XII.2023, Leg. Baviera C.; same locality beating *Q. ilex*, 08.VII.2023, Leg. Baviera C.; same locality, sifting *Ulmus*, 20.IX.2023, Leg. Baviera C.

**Notes.** A species recorded (sub *Apion pseudocerdo*) on Vulcano (Magnano and Osella 1973).

*Oxystoma pomonae* (Fabricius, 1798)

Chorotype – WPA

Trophic category – PHY

New records – Aeolian Archipelago: Vulcano, Piani di Luccia beating *Mimosa* and *Cistus*, 28.XII.2023, Leg. Baviera C.**Notes.** A species recorded on Vulcano: near Gelso (Lo Cascio, Altadonna, and Ponel 2022).*Protapion assimile* (Kirby, 1808)

Chorotype – WPA

Trophic category – PHY

New records – Aeolian Archipelago: Vulcano Island, Portella Gelso, 400m a.s.l., sifting *Ulmus*, *Cistus*, *Solanum*, 28.XII.2023, Leg. Baviera C.; Vulcano - IV.1971 – Zunino (OGCO).**Notes.** This species wasn't recorded until now from Vulcano and Aeolian Archipelago.*Protapion interjectum* (Desbrochers des Loges, 1895)

Chorotype – EUM

Trophic category – PHY

New records – Aeolian Archipelago: Vulcano Island, Piani di Luccia, on *Q. ilex* and *Pinus*, 20.IX.2023, Leg. Baviera C.**Notes.** A species recorded (sub *Apion*) on Vulcano (Magnano and Osella 1973).*Protapion laevicolle* (Kirby, 1811)

Chorotype – EUM

Trophic category – PHY

New records – Aeolian Archipelago: Vulcano Island, Piano, belvedere, sifting *Cistus* sp., 28.XII.2023, Leg. Baviera C.**Notes.** A species recorded (sub *Apion*) on Vulcano (Magnano and Osella 1973).*Protapion nigrirtarse* (Kirby, 1808)

Chorotype – PAL

Trophic category – PHY

New records – Aeolian Archipelago: Vulcano, Gelso, 260m a.s.l., 38°22'39.31"N 14°59'41.57"E, sifting in *Q. ilex*, 08.VII.2023, Leg. Baviera C.; Piano, on flowers, 20.IX.2023, Leg. Baviera C.; same locality, 08.VII.2023, Leg. Baviera C.; belvedere, on *Ulmus*, 08.VII. 2023, Leg. Baviera C.; Crossroad for Lentia, sifting *Ulmus*, 20.IX.2023, Leg. Baviera C.; Piani di Luccia beating *Mimosa* and *Cistus*, 28.XII.2023, Leg. Baviera C.; Portella Gelso, on *Solanum*, *Cistus* and *Ulmus*, 29.XII.2023, Leg. Baviera C.

**Notes.** Another species recorded (sub *Apion*) on Vulcano since a long time (Magnano and Osella 1973).

### **Nanophyinae**

*Corimalia tamarisci* (Gyllenhal, 1838)

Chorotype – TUM

Trophic category – PHY

**Notes.** A species recorded on Vulcano (Magnano and Osella 1973).

*Corimalia tetrastigma* (Aubé, 1863)

Chorotype – WME

Trophic category – PHY

New records – Aeolian Archipelago - Is. Vulcano - 17-19.VII.1968 - Leg. Magnano (OGCO).

**Notes.** A new recorded species from Aeolian Archipelago.

## **CURCULIONIDAE**

There are 140 species recorded from Aeolian Archipelago: 67 species on Vulcano (42 shared with Lipari; 17 with Salina; 11 with Stromboli; 8 with Panarea; 9 with Filicudi and 15 with Alicudi). A species, *Otiorhynchus (Arammichnus) ocellifer* needs to be excluded from Vulcano fauna.

### **Conoderinae**

*Aulacobaris caerulescens* (Scopoli, 1763)

Chorotype – EUM

Trophic category – PHY

**Notes.** A species recorded on Vulcano: Piano (Lo Cascio, Altadonna, and Ponel 2022).

*Ceutorhynchus assimilis* (Paykull, 1792)

Chorotype – WPA

Trophic category – PHY

**Notes.** This species was already recorded on Vulcano: western slopes of Gran Cratere (Lo Cascio, Altadonna, and Ponel 2022).

*Ceutorhynchus chalybaeus* Germar, 1824

Chorotype – ASE

Trophic category – PHY

**Notes.** A species recorded on Vulcano (Magnano and Osella 1973).*Ceutorhynchus hirtulus* Germar, 1824

Chorotype – EUM

Trophic category – PHY

New records – Aeolian Archipelago: Vulcano, 01.IV.1994, Leg. Baviera C.

**Notes.** This species is a new record from Vulcano and Aeolian Archipelago.*Ceutorhynchus leprieuri* Brisout de Barneville, 1881

Chorotype – WEU

Trophic category – PHY

New records – Aeolian Archipelago: Vulcano, Piano, sifting *Q. ilex*, 09.VII.2023, Leg. Baviera C.**Notes.** A species recently recorded for the first time from Vulcano: western slopes of Gran Cratere (Lo Cascio, Altadonna, and Ponel 2022).*Ceutorhynchus pallidactylus* (Marsham, 1802)

Chorotype – COS

Trophic category – PHY

New records – Aeolian Archipelago: Vulcano, Gelso, on *Q. ilex*, 09.V.2007, Leg. Baviera C.**Notes.** A species already recorded (sub *C. quadridens*) on Vulcano (Magnano and Osella 1973).*Ceutorhynchus viridipennis* Brisout de Barneville, 1869

Chorotype – MED

Trophic category – PHY

New records – Aeolian Archipelago: Vulcano, Gelso, on *Q. ilex*, 09.V.2007, Leg. Baviera C.**Notes.** This species is a new record from Vulcano and Aeolian Archipelago.*Hadroplontus trimaculatus* Fabricius, 1775

Chorotype – WPA

Trophic category – PHY

New records – Aeolian Archipelago: Vulcano, Portella Gelso, sweeping net at night, 29.XII.2023, Leg. Baviera C.

**Notes.** A species recently recorded for Vulcano: Vallonazzo, (Lo Cascio, Altadonna, and Ponel 2022).

*Mogulones beckeri* (Schultze, 1900)

Chorotype – MED

Trophic category – PHY

New records – Aeolian Archipelago: Vulcano, Gelso, on *Q. ilex*, 09.V.2007, Leg. Baviera C.

**Notes.** This species is a new record from Vulcano, never recorded before from Aeolian Archipelago.

*Mogulones geographicus* (Goeze, 1777)

Chorotype – EUM

Trophic category – PHY

New records – Aeolian Archipelago: Vulcano, Gelso, on *Q. ilex*, 09.V.2007, Leg. Baviera C.

**Notes.** This species was recorded on Vulcano: Piano (Lo Cascio *et al.* 2006).

*Microplontus rugulosus* (Herbst, 1795)

Chorotype – WPA

Trophic category – PHY

New records – Aeolian Archipelago: Vulcano, Gelso, on *Q. ilex*, 09.V.2007, Leg. Baviera C.

**Notes.** This species was recorded (sub *Ceutorhynchus chrysanthemi*) on Vulcano (Magnano and Osella 1973).

## **Cossoninae**

*Mesites pallidipennis* Boheman, 1838

Chorotype – TUM

Trophic category – PHY

**Notes.** This species was recorded on Vulcano: Istmo (Lo Cascio *et al.* 2006).

*Brachytemnus porcatus* (Germar, 1824)

Chorotype – EUM

Trophic category – PHY

**Notes.** A species recorded on Vulcano: near Gelso (Lo Cascio, Altadonna, and Ponel 2022).

## Curculioninae

*Curculio glandium* Marsham, 1802

Chorotype – PAL

Trophic category – PHY

New records – Aeolian Archipelago: Vulcano, Gelso, 260m a.s.l., fragments sifting in *Q. ilex*, 28.XII.2023, Baviera C.

**Notes.** A genus never recorded before from Aeolian Archipelago.

*Rhinusa bipustulata* (Rossi, 1794)

Chorotype – CEU

Trophic category – PHY

**Notes.** A species recorded on Vulcano (Magnano and Osella 1973).

*Pachytychius hordei grandicollis* (Waltl, 1835)

Chorotype – WME

Trophic category – PHY

New records – Aeolian Archipelago: Vulcano, IV.1971, Zunino (OGCO)

**Notes.** A new record from Vulcano. Until now this species was recorded only (sub *P. squamosus*) from Lipari (Magnano and Osella 1973) and Alicudi (Lo Cascio *et al.* 2006).

*Sibinia attalica* Gyllenhal, 1835

Chorotype – SEU

Trophic category – PHY

**Notes.** A species recorded on Vulcano by (Magnano and Osella 1973).

*Tychius bicolor* C.N.F. Brisout de Barneville, 1862

Chorotype – TUM

Trophic category – PHY

New records – Aeolian Archipelago: Vulcano Island, Gelso, 260m a.s.l., sifting in *Q. ilex*, 28.XII.2023, Baviera C.

**Notes.** This species was recently recorded on Vulcano: Vulcanello, Piano (Lo Cascio, Altadonna, and Ponel 2022).

*Tychius curtirostris* Desbrochers des Loges, 1873

Chorotype – SEU

Trophic category – PHY

New records – Aeolian Archipelago: Vulcano Island, Piani di Luccia, sifting *Ulmus*, 20.IX.2023,

Leg. Baviera C.; same locality, 27.XII.2023, Leg. Baviera C.; Crossroads for Lentia, sifting *Ulmus*, 20.IX.2023, Leg. Baviera C.; Piano, belvedere, sifting *Cistus* sp., 28.XII.2023, Leg. Baviera C.; Gelso, 260m a.s.l., 38°22'39.31"N 14°59'41.57"E, sifting in *Q. ilex*, 28.XII.2023, Baviera C.; Vulcano, 01.IV.1994, Leg. Baviera C.; same locality, 09-10.V.2007, Leg. Baviera C.

**Notes.** A species recorded on Vulcano (Magnano and Osella 1973) sub *T. neapolitanus*). This species was by far the commonest beetles collected during the research.

*Tychius pusillus* Germar, 1842

Chorotype – SEU

Trophic category – PHY

New records – Aeolian Archipelago: Vulcano Island, Piani di Luccia, sifting *Ulmus*, 20.IX.2023, Leg. Baviera C.; same locality, 27.XII.2023, Leg. Baviera C.; Piano, belvedere, sifting *Cistus* sp., 28.XII.2023, Leg. Baviera C.

**Notes.** A species never recorded before from Aeolian Archipelago.

*Tychius naxiae* Faust, 1889

Chorotype – EEU

Trophic category – PHY

**Notes.** A species recorded on Vulcano (Lo Cascio *et al.* 2006).

## Entiminae

*Naupactus cervinus* Boheman, 1840

Chorotype – COS

Trophic category – PHY

New records – Aeolian Archipelago: Vulcano Island, Piani di Luccia, beating *Mimosa* and *Cistus*, 28.XII.2023, Leg. Baviera C.; Piano, beating *Polypodium*, 20.IX.2023, Leg. Baviera C.; Piano, Belvedere, on *Ulmus*, 20.IX.2023, Leg. Baviera C.; same locality, 08.VII.2023, Leg. Baviera C.; Porto di Ponente on *Mimosa*, 08.VII.2023, Leg. Baviera C.

**Notes.** This species, newly recorded from Vulcano, was previously known (sub *Pantomorus*) in Aeolian only from Lipari and Salina (Lo Cascio *et al.* 2006). A Neotropical species, (originates from Brazil, Paraguay and Argentina) recorded from Italy for the first time in 1908 (Liguria). Amphigonic and parthenogenetic populations are known, the amphigonic populations were attributed to *Naupactus cervinus* (based on the type specimen from Brazil), whereas the asexually reproducing ones were attributable to the name *Naupactus godmani* (Crotch, 1867) described from the Azores Islands (Germann 2016).

*Caulostrophus zancleanus* Pesarini et Baviera, 2006

Chorotype – SICI

Trophic category – PHY

New records – Aeolian Archipelago: Vulcano Island, Piani di Luccia, beating *Quercus ilex* and *Eucalyptus* sp., 20.IX.2023, Leg. Baviera C.; same locality, 08.VII.2023, Leg. Baviera C.

**Notes.** This North-eastern Sicilian endemic species (Pesarini and Baviera 2006) was recently recorded for the first time from Aeolian Archipelago from Stromboli Island (Lo Cascio, Altadonna, and Ponel 2022).

*Gonipterus* sp.

Trophic category – PHY

**Notes.** A species belonging to a genus only recently recorded for Sicily (Mazza *et al.* 2015). Vulcano: Piano (Lo Cascio, Altadonna, and Ponel 2022).

*Otiorhynchus (Arammichnus) cribricollis* Gyllenhal, 1834

Chorotype – SEU

Trophic category – PHY

New records – Aeolian Archipelago: Vulcano Island, Piani di Luccia, sifting *Ulmus*, 20.IX.2023, Leg. Baviera C.

**Notes.** A very common and widespread species recorded on Vulcano: Vallonazzo (Lo Cascio, Altadonna, and Ponel 2022).

*Otiorhynchus (Arammichnus) meligunensis* Magnano, 1992

Chorotype – SICI

Trophic category – PHY

New records – Aeolian Archipelago: Vulcano Island, Lentia Mount, at light, 08.VII.2023, Leg. Baviera C.; same locality, near Gelso, beating *Q. ilex*, 08.VII.2023, Leg. Baviera C.; Portella Gelso, 400m a.s.l., sifting *Ulmus*, *Cistus*, *Solanum*, 28.XII.2023, Leg. Baviera C.

**Notes.** A narrow endemic species of the Aeolian Islands, described from Lipari and recorded from Vulcano in the original description (Magnano 1992).

[*Otiorhynchus (Arammichnus) ocellifer* Reitter, 1912]

**Notes.** This species needs to be excluded from Aeolian Archipelago fauna as it was erroneously recorded on Vulcano, Panarea and Lipari (Magnano and Osella 1973). This is a Sicilian endemic species that wasn't recollected after the description based on a single female labeled "Sizilien" (Magnano, 1999; Baviera and Magnano, 2010).

*Otiorhynchus (Zustalestus) rugosostratus* (Goeze, 1777)

Chorotype – EUM

Trophic category – PHY

New records – Aeolian Archipelago: Vulcano Island, Portella Gelso, 400m a.s.l., sifting *Ulmus*, *Cistus*, *Solanum*, 28.XII.2023, Leg. Baviera C.

**Notes.** A new record from Aeolian Archipelago.

*Pseudomeira aeolica* Bellò, Pesarini et Pierotti, 1997

Chorotype – SICI

Trophic category – PHY

**Notes.** A narrow endemic species of the Aeolian Islands (Bellò and Baviera, 2011), recently recorded for the first time from Vulcano (Lo Cascio, Altadonna, and Ponel 2022).

*Pseudomeira obscura* (A. Solari and F. Solari, 1907)

Chorotype – APPE

Trophic category – PHY

New records – Aeolian Archipelago: Vulcano Island, Piani di Luccia, sifting *Ulmus*, 20.IX.2023, Leg. Baviera C.; same locality sifting *Q. ilex*, Leg. Baviera C.; Portella Gelso, 400m a.s.l., sifting *Ulmus*, *Cistus*, *Solanum*, 28.XII.2023, Leg. Baviera C.; Gelso street, 28.XII.2023, sifting *Q. ilex*, Leg. Baviera C.

**Notes.** A species never recorded before from Vulcano and the Aeolian Archipelago (Bellò and Baviera 2011). All the collected specimens are females with the morphological characters of *Pseudomeira obscurella* Pierotti and Bellò, 1994, a partenogenetic species recently synonymized with *P. obscura* (Pierotti 2017).

*Charagmus gressorius* (Fabricius, 1792)

Chorotype – CEM

Trophic category – PHY

New records – Aeolian Archipelago: Vulcano Island, Vulcanello, Valle dei Mostri, 29.XII.2023, Leg. Baviera C.; Vulcano, 09-10.V.2007, Leg. Baviera C.; Is. Eolie - Vulcano - IV.1971 – Zunino; Is. Eolie - Vulcano - 14.VI.85 - leg. A. Carapezza.

**Notes.** A species recorded (sub *Sitona*) in the Aeolian Archipelago, from Vulcano and Alicudi (Lo Cascio *et al.* 2006) and from Lipari, Stromboli and Filicudi (Magnano and Osella 1973).

*Charagmus intermedius* (Küster, 1847)

Chorotype – EUM

Trophic category – PHY

New records – Aeolian Archipelago: Vulcano Island, Piano, on flowers, 08.VII.2023, Leg. Baviera C.; same locality, crossroads for Lentia, sifting *Ulmus*, 20.IX.2023, Leg. Baviera C.; same locality, swipping net at night, 29.XII.2023, Leg. Baviera C.; Is. Eolie - 16.V.92 - Vulcano (ME) leg. A. Carapezza.

**Notes.** This species was recorded on Vulcano: Piano (Lo Cascio, Altadonna, and Ponel 2022).

*Coelositona limosus* (Rossi, 1792)

Chorotype – EUR

Trophic category – PHY

New records – Aeolian Archipelago: Vulcano Island, crossroads for Lentia, swipping net at night, 28.XII.2023, Leg. Baviera C.

**Notes.** This species was recorded (sub *Sitona*) on Vulcano by (Magnano and Osella 1973).

*Sitona discoideus* (Gyllenhal, 1834)

Chorotype – WME

Trophic category – PHY

New records – Aeolian Archipelago: Vulcano Island, Piano, beating *Polypodium* sp., 08.VII.2023, Leg. Baviera C.; Vulcano, 09-10.V.2007, Leg. Baviera C.; same locality, 02.IV.1994 . Leg. Baviera C.

**Notes.** This species was recently recorded from Vulcano (Lo Cascio, Altadonna, and Ponel 2022).

*Sitona lineatus* (Linnaeus, 1758)

Chorotype – PAL

Trophic category – PHY

**Notes.** This species was recorded from Vulcano (Magnano and Osella 1973).

*Sitona ophthalmicus* Desbrochers des Loges, 1869

Chorotype – SEU

Trophic category – PHY

New records – Aeolian Archipelago: Vulcano Island, Piani di Luccia, sifting *Ulmus*, 20.IX.2023, Leg. Baviera C.; Vulcano, 09-10.V.2007, Leg. Baviera C.; Is. Eolie - 16.X.92 - Vulcano (ME) leg. A. Carapezza.

**Notes.** This was the most common species of the tribe Sitonini collected. It was recorded from Vulcano since a long time (Magnano and Osella 1973).

*Sitona puncticollis* Stephens, 1831

Chorotype – EUR

Trophic category – PHY

New records – Aeolian Archipelago: Vulcano Island, Piani di Luccia, sifting *Ulmus*, 20.IX.2023, Leg. Baviera C.

**Notes.** This species was recently recorded on Vulcano: near Gelso (Lo Cascio, Altadonna, and Ponel 2022).

*Cycloderes canescens* (Rossi, 1792)

Chorotype – EUM

Trophic category – PHY

**Notes.** This species was recently recorded on Vulcano: Piano, Piani di Luccia (Lo Cascio, Altadonna, and Ponel 2022).

*Trachyphloeus laticollis* Boheman, 1842

Chorotype – EUR

Trophic category – PHY

New records – Aeolian Archipelago: Vulcano Island, Piani di Luccia, sifting *Ulmus*, 20.IX.2023, Leg. Baviera C.; same locality, 27.XII.2023, Leg. Baviera C.; Crossroads for Lentia, sifting *Ulmus*, 20.IX.2023, Leg. Baviera C.; street to Gelso, sifting *Q. ilex*, 28.XII.2023, Leg. Baviera C.

**Notes.** The most common species of this genus in Southern Italy and Sicily, recorded on Vulcano by Osella *et al.* (2005).

## Hyperinae

*Brachypera (Antidonus) lunata* (Wollaston, 1854)

Chorotype – TUM

Trophic category – PHY

**Notes.** This species was recently recorded on Vulcano: western slopes of Gran Cratere (Lo Cascio, Altadonna, and Ponel 2022).

*Brachypera (Antidonus) zoilus* (Scopoli, 1763)

Chorotype – PAL

Trophic category – PHY

New records – Aeolian Archipelago: Vulcano Island, Piani di Luccia, sifting *Ulmus*, 20.IX.2023, Leg. Baviera C.; same locality, 29.XII.2023, Leg. Baviera C.

**Notes.** This species was recorded (sub *Hypera punctata*) from Vulcano (Magnano and Osella 1973).

*Brachypera (Brachypera) crinita* (Boheman, 1834)

Chorotype – WME

Trophic category – PHY

New records – Aeolian Archipelago: Vulcano Island, Piani di Luccia, sifting *Ulmus*, 20.IX.2023, Leg. Baviera C.; same locality, 29.XII.2023, Leg. Baviera C.

**Notes.** This species was recently recorded on Vulcano: Piano (Lo Cascio, Altadonna, and Ponel 2022).

*Coniatus tamarisci* (Fabricius, 1787)

Chorotype – MED

Trophic category – PHY

New records – Aeolian Archipelago: Vulcano Island, Piani di Luccia, sifting *Ulmus*, 20.IX.2023, Leg. Baviera C.; same locality, 29.XII.2023, Leg. Baviera C.

**Notes.** This species was recorded from Vulcano (Magnano and Osella 1973).

*Donus philanthus* (Olivier, 1807)

Chorotype – WME

Trophic category – PHY

New records – Aeolian Archipelago: Vulcano Island, Piani di Luccia, sifting *Ulmus*, 20.IX.2023, Leg. Baviera C.; Piano, sifting *Q. ilex.*, 08.VII.2023, Leg. Baviera C.

**Notes.** This species was recently recorded on Vulcano: Piano, Piani di Luccia, Valle Rio Grande, Capo Grillo, (Lo Cascio, Altadonna, and Ponel 2022).

*Hypera melancholica* (Fabricius, 1792)

Chorotype – CEM

Trophic category – PHY

New records – Aeolian Archipelago: Vulcano Island, Piani di Luccia, sifting *Ulmus*, 20.IX.2023, Leg. Baviera C.; Vulcano, 09-10.V.2007, Leg. Baviera C.

**Notes.** A species never recorded before from Vulcano. This species was, until now, recorded (sub *H. murina*) from Aeolian Archipelago on Lipari (Magnano and Osella 1973) and Alicudi (Lo Cascio, Altadonna, and Ponel 2022).

*Hypera nigrirostris* (Fabricius, 1775)

Chorotype – EUM

Trophic category – PHY

New records – Aeolian Archipelago: Vulcano Island, Piani di Luccia, sifting *Ulmus*, 20.IX.2023, Leg. Baviera C.

**Notes.** This species was reported from Vulcano since a long time (Magnano and Osella 1973).

*Hypera ononidis* (Chevrolat, 1863)

Chorotype – EUM

Trophic category – PHY

New records – Aeolian Archipelago: Vulcano Island, Piani di Luccia, sifting *Ulmus*, 20.IX.2023, Leg. Baviera C.; same locality, 27.XII.2023, Leg. Baviera C.; Piano, belvedere, 300m a.s.l. sifting *Cistus*, 29.XII.2023, Leg. Baviera C.

**Notes.** This species was a new record from Vulcano. Until now recorded in Aeolian only from Lipari (Magnano and Osella 1973).

*Hypera postica* (Gyllenhal, 1813)

Chorotype – PAL

Trophic category – PHY

New records – Aeolian Archipelago: Vulcano Island, Piani di Luccia, sifting *Ulmus*, 20.IX.2023, Leg. Baviera C.; Piano, beating Polypodium, 08.VII.2023, Leg. Baviera C.; Vulcano, 09-10.V.2007, Leg. Baviera C.

**Notes.** A species recorded on Vulcano: Piano (Lo Cascio, Altadonna, and Ponel 2022).

*Hypera venusta* (Fabricius, 1781)

Chorotype – EUM

Trophic category – PHY

New records – Aeolian Archipelago: Vulcano Island, Piani di Luccia, sifting *Ulmus*, 20.IX.2023, Leg. Baviera C.; same locality, 27.IX.2023, Leg. Baviera C.; Vulcano, 09-10.V.2007, Leg. Baviera C.

**Notes.** A species recorded (sub *H. trilineata*) on Vulcano (Magnano and Osella 1973).

*Limobius borealis* (Paykull, 1792)

Chorotype – EUM

Trophic category – PHY

New records – Aeolian Archipelago: Vulcano Island, Piani di Luccia, sifting *Ulmus*, 20.IX.2023, Leg. Baviera C.

**Notes.** A species, and a genus, never recorded before from Aeolian Archipelago.

**Lixinae***Lachnaeus crinitus* Schoenherr, 1826

Chorotype – SEU

Trophic category – PHY

New records – Aeolian Archipelago: Vulcano Island, Piani di Luccia, sifting *Ulmus*, 20.IX.2023, Leg. Baviera C.

**Notes.** This species was recorded from Vulcano (Magnano and Osella 1973).

*Larinus (Larinomesius) scolymi* (Olivier, 1808)

Chorotype – WME

Trophic category – PHY

New records – Vulcano (Is.Aeolian Archipelago) 14.VI.1967 - Bruno leg. (OGCO)

**Notes.** A new species from Vulcano, recorded, until now (sub *L. flavescens*) in the Aeolian Archipelago, only from Lipari and Panarea (Magnano and Osella 1973) .

*Larinus (Larinus) ursus* (Fabricius, 1792)

Chorotype – MED

Trophic category – PHY

**Notes.** This species has long been recorded (sub *L. vittatus*) from Vulcano (Magnano and Osella 1973).

*Lixus (Epimeces) filiformis* (Fabricius, 1781)

Chorotype – CEM

Trophic category – PHY

**Notes.** This species has long been recorded (sub *L. elongatus*) from Vulcano (Magnano and Osella 1973) .

*Rhinocyllus conicus* (Froelich, 1792)

Chorotype – CEM

Trophic category – PHY

**Notes.** A species recently recorded on Vulcano: Piano, Capo Grillo, Passo Piano, Vallonazzo, Vulcanello, near Gelso (Lo Cascio, Altadonna, and Ponel 2022).

## **Molytinae**

*Dichromacalles dromedarius* (Boheman, 1844)

Chorotype – WME

Trophic category – PHY

**Notes.** A species recorded on Vulcano (Lo Cascio *et al.* 2006).

## Scolytinae

*Crypturgus numidicus* Ferrari, 1867

Chorotype – SEU

Trophic category – PHY

New records – Aeolian Archipelago: Vulcano Island, Piani di Luccia, sifting *Rubus*, 20.IX.2023, Leg. Baviera C.

**Notes.** A new species from Vulcano, recently recorded for the first time from Aeolian Archipelago in Lipari (Lo Cascio, Altadonna, and Ponel 2022).

*Hylurgus ligniperda* (Fabricius, 1787)

Chorotype – CEM

Trophic category – PHY

**Notes.** A species recently recorded on Vulcano: Capo Grillo (Lo Cascio, Altadonna, and Ponel 2022).

*Tomicus destruens* (Wollastron, 1865)

Chorotype – TUM

Trophic category – PHY

**Notes.** A species recently recorded on Vulcano: top of Gran Cratere (Lo Cascio, Altadonna, and Ponel 2022).

*Hypoborus ficus* Erichson, 1836

Chorotype – CEM

Trophic category – PHY

**Notes.** A species recently recorded on Vulcano: Piano, reared from *Cytisus aeolicus* (Lo Cascio, Altadonna, and Ponel 2022).

*Phloeotribus cristatus* (Fauvel, 1889)

Chorotype – MED

Trophic category – PHY

**Notes.** A species recently recorded on Vulcano: Valle Rio Grande and western slope of Gran Cratere (Lo Cascio, Altadonna, and Ponel 2022).

*Phloeotribus rhododactylus* (Marsham, 1802)

Chorotype – EUM

Trophic category – PHY

New records – Aeolian Archipelago, Vulcano Island, Lentia crossroad, at light, 20.IX.2023, Baviera C.

**Notes.** A species recently recorded on Vulcano: Valle Rio Grande and western slope of Gran Cratere (Lo Cascio, Altadonna, and Ponel 2022).

*Scolytus multistriatus* (Marsham, 1802)

Chorotype – EUM

Trophic category – PHY

New records – Aeolian Archipelago, Vulcano Island, Piano, belvedere, on *Ulmus*, 20.IX.2023, Leg. Baviera C.; Valle Rio Grande, on *Rubus*, 07.VII.2023, Leg. Baviera C.

**Notes.** A species never recorded before from Aeolian Archipelago.

*Scolytus rugulosus* (Müller, 1818)

Chorotype – CEM

Trophic category – PHY

New records – Aeolian Archipelago, Vulcano Island, Piano, 20.IX.2023, Leg. Baviera C.

**Notes.** A species never recorded before from Aeolian Archipelago.

*Xyleborinus saxesenii* (Ratzeburg, 1837)

Chorotype – COS

Trophic category – PHY

New records – Aeolian Archipelago, Vulcano Island, Piano, 20.IX.2023, Leg. Baviera C.

**Notes.** A species recently recorded on Vulcano: Valle Rio Grande (Lo Cascio, Altadonna, and Ponel 2022).

## DRYOPHTHORIDAE

### Dryophthorinae

*Sitophilus granarius* (Linnaeus, 1758)

Chorotype – COS

Trophic category – PHY

**Notes.** This species has long been recorded from Vulcano (Magnano and Osella 1973).

*Sitophilus oryzae* (Linnaeus, 1763)

Chorotype – COS

Trophic category – PHY

**Notes.** This species has long been recorded from Vulcano (Magnano and Osella 1973).

*Sitophilus zeamais* Motschulsky, 1855

Chorotype – COS

Trophic category – PHY

New records – Aeolian Archipelago: Vulcano Island, Gelso, 260m a.s.l., 38°22'39.31"N 14°59'41.57"E, sifting in *Q. ilex*, 28.XII.2023, Baviera C.; same locality, 07.V.2007, Baviera C.

**Notes.** This species was recently recorded on Vulcano: near Gelso (Lo Cascio, Altadonna, and Ponel 2022). As observed by Lo Cascio, Altadonna, and Ponel (2022) many specimens were found by sifting the leaf litter with acorns of *Quercus ilex*.

*Rhynchophorus ferrugineus* (Olivier, 1790)

Chorotype – SCO

Trophic category – PHY

**Notes.** The red palm weevil was first recorded in Sicily in 2005 (Longo and Tamburino 2005) recently recorded also on Vulcano: Porto, Portella della Trovatina (Lo Cascio, Altadonna, and Ponel 2022).

#### 4. Discussion

During the 2023–2024 survey, 267 species were recorded. Of these, 119 were recorded for the first time on Vulcano Island, along with 13 unpublished records preserved in the Osella and Baviera collections. In addition, 6 species were cited in the recently published Chrysomelidae Bruchinae Sicilian checklist (Baviera 2024). These records increase the number of species newly documented on Vulcano to 135. The newly recorded species, observed for the first time in the Aeolian Archipelago during this study, include both very common and rare species, localized ones, such as the Italian subendemic Cleridae *Enoplium doderoi* and the northeastern Sicilian endemic weevil *Caulostrophus zancleanus*. Among the 53 families of beetles recorded in the Aeolian Archipelago, 48 were recorded on Vulcano Island (Table 2). A total of 188 species have been recorded exclusively on Vulcano within the Aeolian Archipelago (20% of all recorded species). Eighteen genera are reported here for the first time in the Aeolian Archipelago (Table 3), including species of the Ciidae family, Bostrichidae of Lyctinae subfamily, and Tenebrionidae of Ulomini tribe, taxonomic groups recorded for the first time in the Aeolian Archipelago. Five families are new to Vulcano: Ciidae, Scaptiidae, Leiodidae, Eucinetidae, and Dytiscidae. Additionally, Pselaphinae, Thorictinae, Nitidulinae and Attageninae subfamilies are recorded here for the first time on Vulcano. The families with the highest number of species in beetle fauna of Vulcano are: Carabidae, Staphylinidae, Scarabaeidae, Tenebrionidae, Chrysomelidae, Brentidae, and

TABLE 2. Species of beetles for families in the Aeolian Archipelago, number of species shared with Vulcano in brackets. Data from Lo Cascio, Altadonna, and Ponel (2022), and Baviera (2024, 2025).

Family	Species in Eolie	New records Vulcano	Vulcano	Lipari	Salina	Panarea	Stromboli	Alicudi	Filicudi
CARABIDAE	92	4	39	48(19)	30(14)	7(5)	12(7)	20(10)	15(8)
DYTISCIDAE	5	4	4	1(1)	1	-	-	-	-
HYDROPHILIDAE	14	2	8	4(1)	6(3)	-	-	-	-
HYDRAENIDAE	1	-	-	-	-	-	1	-	-
HISTERIDAE	19	-	14	5(3)	3(2)	2(1)	5(1)	2(1)	-
SILPHIDAE	4	-	1	2(1)	1	-	1	-	-
STAPHYLINIDAE	91	12	47	44(19)	19(7)	4(1)	5(4)	15(9)	6(4)
PTILIIDAE	4	3	3	-	1	-	-	-	-
GEOTRUPIDAE	3	-	2	2(2)	2(2)	1(1)	1(1)	1(1)	2(1)
TROGIDAE	2	-	2	2(2)	2(2)	-	-	1(1)	-
SCARABAEIDAE	59	1	48	34(25)	12(8)	6(4)	15(12)	13(12)	15(10)
EUCINETIDAE	1	1	1	1(1)	-	-	-	-	-
BUPRESTIDAE	17	1	5	13(5)	6(4)	4(1)	7(4)	2(1)	2(2)
HETEROCERIDAE	1	-	-	1	-	-	-	-	-
THROSCIDAE	1	-	-	1	-	-	-	-	-
LAMPYRIDAE	1	-	-	-	1	-	-	-	-
CANTHARIDAE	6	-	-	4	4	-	2	2	1
DERMESTIDAE	15	6	13	8(7)	5(4)	2(1)	4(3)	7(6)	2(1)
BOSTRICHIDAE	6	1	3	3(1)	4(2)	-	1(1)	-	-
PTINIDAE	25	9	15	13(7)	4(3)	2(1)	5(5)	3(1)	2(2)
TROGOSSITIDAE	1	-	1	-	-	-	-	-	-
CLERIDAE	9	1	7	5(4)	2(1)	-	2(2)	-	1(1)
MELYRIDAE	22	2	8	9(3)	13(5)	5(2)	4(2)	6(3)	7(3)
EROTYLIDAE	3	2	3	3(3)	-	-	1(1)	1(1)	-
MONOTOMIDAE	1	-	1	-	-	-	1	-	-
CRYPTOPHAGIDAE	10	6	9	2(2)	1	1(1)	2(2)	1(1)	1(1)
SILVANIDAE	3	1	2	1(1)	-	-	-	-	-
LAEMOPHLOEIDAE	4	2	4	1(1)	-	1(1)	1(1)	-	-
PHALACRIDAE	10	5	9	7(5)	1	-	1(1)	-	-
KATERETIDAE	1	0	1	-	-	-	-	-	-
NITIDULIDAE	21	8	14	10(4)	3(2)	2(1)	2(2)	2(2)	-
CYBOCEPHALIDAE	1	1	1	1	-	-	-	-	-
ENDOMYCHIDAE	4	-	-	3	-	-	-	1	1
COCCINELLIDAE	29	10	24	20(16)	12(11)	6(5)	10(9)	6(5)	3(3)
CORYLOPHIDAE	8	5	8	1	-	-	1	1	-
LATRIDIIDAE	10	5	8	7(6)	-	-	2(2)	3(2)	-
LEIODIDAE	3	1	1	1	-	-	-	-	-
MYCETOPHAGIDAE	5	2	4	3(2)	2(2)	2(2)	1(1)	2(2)	1
MORDELLIDAE	4	1	2	1	1	1	1	2	1
TENEBRIONIDAE	58	3	34	41(25)	27(16)	25(17)	27(19)	20(16)	17(12)
CIIDAE	2	2	2	-	-	-	-	-	-
OEDEMERIDAE	7	-	5	7(5)	3(2)	1(1)	1(1)	3(2)	2(2)
MELOIDAE	9	-	5	8(5)	2(1)	-	-	2(2)	1(1)
SALPINGIDAE	2	0	1	2(1)	1(1)	1	-	-	-
ANTHICIDAE	21	1	11	10(4)	5(5)	2(1)	3(2)	3(2)	5(3)
ADERIDAE	2	0	1	2(1)	-	-	-	-	-
SCRAPTIIDAE	3	1	2	-	-	-	-	-	-
CERAMBYCIDAE	38	2	29	23(16)	14(12)	5(4)	7(6)	6(6)	7(7)
CHRYSOMELIDAE	89	6	42	57(24)	20(8)	11(5)	10(5)	12(7)	8(4)
ANTHRIBIDAE	1	-	1	-	-	-	1	-	-
BRENTIDAE	46	8	33	34(23)	17(15)	3(3)	4(3)	4(4)	1(1)
CURCULIONIDAE	141	15	68	95(42)	34(17)	13(8)	22(11)	19(15)	16(9)
<b>TOTAL</b>	<b>943</b>	<b>135</b>	<b>551</b>	<b>551(291)</b>	<b>264(156)</b>	<b>111(67)</b>	<b>166(114)</b>	<b>163(118)</b>	<b>117(78)</b>

Curculionidae, which, together, constitute more than half (54%) of all the listed species. The Scarabaeidae species (including Melolonthinae, Rutelinae, Dynastinae, Cetoniinae, and Aphodiinae) on Vulcano account for 81.35% of the total species listed in the Aeolian Archipelago, mainly composed of coprophagous taxa, Apioninae (Brentidae) are next with 71%, followed by Tenebrionidae with 58.62%, and Staphylinidae (51.64%). Considering the Sicilian species of the aforementioned families, Vulcano hosts 28% of Sicilian Scarabaeidae and 25% of the Sicilian Brentidae Apioninae. As emphasized by Lo Cascio, Altadonna,

TABLE 3. Species of new genera for Aeolian Archipelago. The Family Ciidae was collected for the first time.

FAMILY	SPECIES
<b>Chrysomelidae</b>	<i>Pachybrachis hieroglyphicus</i> (Laicharting, 1781)
<b>Ciidae</b>	<i>Cis villosulus</i> Marsham, 1802
<b>Ciidae</b>	<i>Cis (Orthocis) pygmaeus</i> (Marsham, 1802)
<b>Corylophidae</b>	<i>Orthoperus anxius</i> Mulsant, 1861
<b>Curculionidae</b>	<i>Curculio glandium</i> Marsham, 1802
<b>Curculionidae</b>	<i>Limobius borealis</i> (Paykull, 1792)
<b>Bostrichidae</b>	<i>Lyctus brunneus</i> (Stephens, 1830)
<b>Dytiscidae</b>	<i>Hydaticus leander</i> (Rossi, 1790)
<b>Dytiscidae</b>	<i>Hydrovatus cuspidatus</i> (Kunze, 1818)
<b>Dytiscidae</b>	<i>Rhantus suturalis</i> (MacLeay, 1825)
<b>Laemophloeidae</b>	<i>Cryptolestes (Cryptolestes) ferrugineus</i> (Stephens, 1831)
<b>Laemophloeidae</b>	<i>Cryptolestes (Cryptolestes) fractipennis</i> (Motschulsky, 1845)
<b>Latridiidae</b>	<i>Metophthalmus ragusae</i> Reitter, 1875
<b>Leiodidae</b>	<i>Leiodes (Leiodes) obscura</i> (Fairmaire, 1858)
<b>Mycetophagidae</b>	<i>Litargus coloratus</i> Rosenhauer, 1856
<b>Mycetophagidae</b>	<i>Litargus connexus</i> (Geoffroy, 1785)
<b>Nitidulidae</b>	<i>Phenolia picta</i> (MacLeay, 1825)
<b>Ptiliidae</b>	<i>Acrotrichis grandicollis</i> (Mannerheim, 1844)
<b>Ptiliidae</b>	<i>Actidium kraatzi</i> Flach, 1889
<b>Tenebrionidae</b>	<i>Uloma culinaris</i> (Linnaeus, 1758)

and Ponel (2022), the biases in the data sources explain many erroneous conclusions about colonization dynamics, biodiversity, and distribution of Coleoptera on Oceanic islands such as the islands of the Aeolian Archipelago. The lack of sufficiently in-depth and specialist research prevents meaningful comparison between the data on all the other islands and that on Vulcano (see Table 2). Of all the islands, only the beetle fauna of Lipari is sufficiently well known to allow comparison with that of Vulcano. Among the seven main islands of the Archipelago, Lipari is the one that shares the highest number of species with Vulcano (Table 2), and of the species recorded on Lipari by Lo Cascio, Altadonna, and Ponel (2022), only 291 (53%) are also reported from Vulcano. Considering the small distances (less than 1km) between these two islands, this limited species overlap constitute a significant biogeographic finding. Dispersal in beetle species has eco-evolutionary effects, suggesting that taxa may become more species-rich when dispersal is neither too low nor too high (Ashby, Shaw, and Kokko 2020). Therefore, differences in dispersal abilities among beetle families should partly explain patterns of distribution and speciation. As expected, most species on Vulcano were found in the oldest areas in the southern part of the island (see Table 1 and Fig. 3). Neither the SIC ITA03002 “Isola di Vulcano” nor the ZPS ITA 03044 “Arcipelago delle Eolie Area Terrestre” covers the Piano and Gelso areas, where the highest beetle species diversity and many endemic plant species were found (Lo Cascio and Sparacio 2004). The recorded number of beetle species recorded in the Aeolian Archipelago increased from 861 (Lo Cascio, Altadonna, and Ponel 2022) to 940.

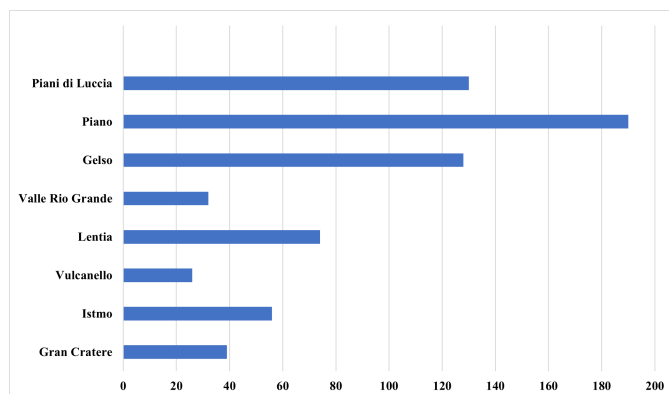


FIGURE 3. Species richness on Vulcano Island compared among different sites

If we consider the chorotypes of listed species, the most represented are the species with a wide distribution in the Palaearctic area (PAL s.l., see Fig. 5) with nearly half of species in 12 chorotypes among which stands out the European Mediterranean distribution (EUM) (Fig. 4).

The second group of species are the Mediterranean (MED s.l.) with more than a quarter of species represented by only four chorotypes dominated by Mediterranean (MED) with 78 species and West-Mediterranean (WME) with 51. The species with a European distribution (EUR s.l.) are 14% (Fig. 5) and 4% of the species are endemic or subendemic, 5 Appenninic and 13 Sicilian and Aeolian endemic (Table 4).

As biological invasions are the major threats to island biodiversity (Lenzner *et al.* 2020) especially for an island ecosystem the great problem for Vulcano biodiversity is that the cosmopolitan and sub-cosmopolitan species exceed double of the endemic or sub-endemic ones (Figs. 4 - 5). The trophic categories shows that almost a half of the species are phytophagous s.l. followed by predators, saprophagous and the more specialized mycetophagous (Fig. 6).

## 5. Conclusions

The equilibrium model of island biogeography (MacArthur and Wilson 1963, 1967) conceptualizes island biotas as dynamic systems shaped by ongoing colonization and extinction events, resulting in high species turnover (Heaney 2007). As island communities advance toward ecological maturity, in situ speciation increasingly contributes to species turnover, reinforcing the central role of speciation within the equilibrium framework e.g. (Emerson and Oromi 2005; Emerson and Gillespie 2008). The present data support the role of geographic isolation in driving speciation and further confirm a noteworthy biogeographic pattern: approximately 50% of beetle species recorded in the Aeolian Archipelago are restricted to a single island, indicating a high degree of inter-island differentiation (Lo Cascio, Altadonna, and Ponel 2022). This also true for two closely situated islands such as Vulcano and Lipari. This observation is also supported by molecular data recorded for the Aeolian Archipelago colonization by the apterous darkening beetle *Pimelia rugulosa rugulosa*.

TABLE 4. Sicilian (and Aeolian) endemic species recorded on Vulcano (*O. ocellifer*, *P. hypocrita* and *A. scutellaris sicula* are excluded). Numbers in the table are associated with the following references: 1 (Lo Cascio, Altadonna, and Ponei 2022); 2 (Sabatinelli 1976); 3 (Agoglietta *et al.* 2006); 4 (Aliquò, Leo, and Lo Cascio 2006); 5 (Bellò, Pesarini, and Pierotti 1997); 6 (Bellò and Baviera 2011); 7 (Magnano 1992); 8 (Pesarini 1970); 9 (Lo Cascio 2017); 10 (Lo Cascio *et al.* 2006); 11 (Baviera and Magnano 2010)

Species	Chorotype	Vulcano	Lipari	Salina	Panarea	Stromboli	Filicudi	Alicudi
<i>Astenus</i> cfr. <i>schatzmayri</i>	SICI	1						
<i>Anoxia moltonii</i>	SICI Aeolian	2						
<i>Palaeonthophagus massai</i>	SICI	3	3					
<i>Nalassus pastai</i>	SICI Aeolian	4		1			1	
<i>Pseudomeira aeolica</i>	SICI Aeolian	1	5	5		6	6	6
<i>Otiorhynchus meligenensis</i>	SICI Aeolian	7	7	8	9	10	11	10
<i>Caulostrophus zancleanus</i>	SICI	curr. res.				1		

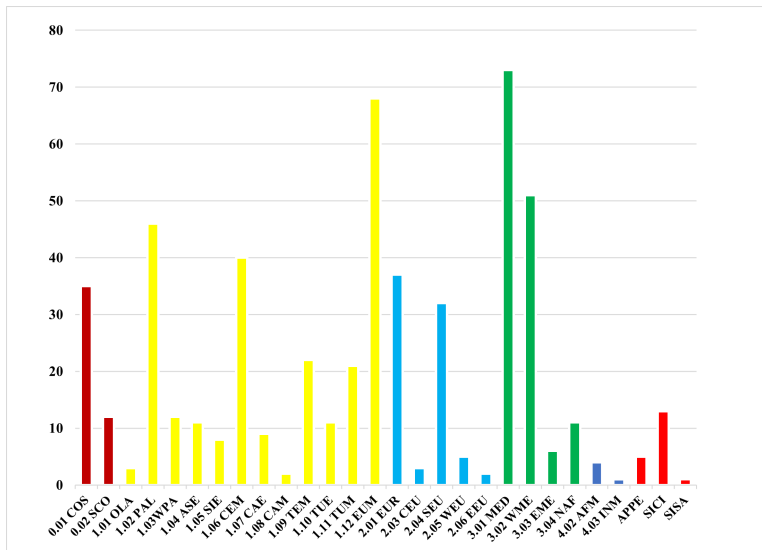


FIGURE 4. Chorotype – of the species listed

The Aeolian Archipelago populations of this species show a strong geographic structure, with each island being well characterized by a distinctive haplotype group. The north-east part of Sicily is suggested as the center of diversification of this species in the Archipelago. Gene flow between Vulcano and the nearby Islands was demonstrated by one haplotype from Vulcano shared with Salina and one with Lipari (Stroscio *et al.* 2011). These two islands, large and close to Vulcano, share the higher number of species of beetles with it. Other studies, conducted on several species, seem to provide evidence that volcanism may affect

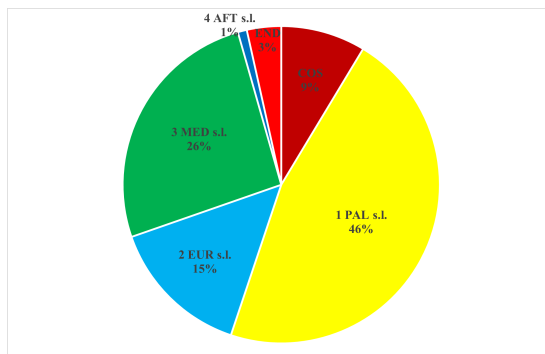


FIGURE 5. Percentage of species per Chorotype class (see Sec. 2 for abbreviations)

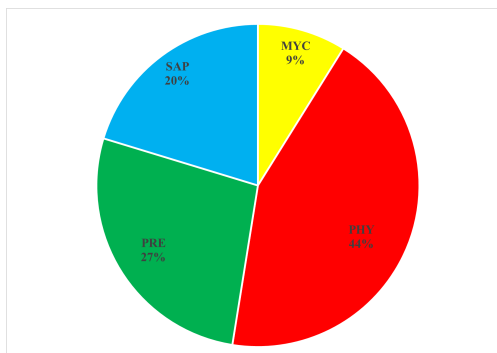


FIGURE 6. Percentage of species per trophic category (see Sec. 2 for abbreviations)

island cladogenesis and genetic diversity (e.g., Thorpe, Black, and Malhotra 1996; Brown, Woods, and Thorpe 1999) and that massive volcanic events may lead to a reduction in both genetic and biological diversity (Emerson and Oromi 2000; Contreras-Diaz *et al.* 2003; Emerson 2003). Based on bibliographic data and recently collected species, the southern sites such as Piano represent the most beetle-rich areas of Vulcano. Unfortunately, the perimeter of R.N.O. (Oriented Natural Reserve) does not include the localities of Piano and Cardo (elementary unit VC9488) despite the fact that the main sites of distribution on the island for *Cytisus aeolicus*, one of the species pursuant to Directive 43/92/EEC, cited among the reasons for establishing the protected area are there (Lo Cascio and Sparacio 2004). With the recent checklist (Lo Cascio, Altadonna, and Ponel 2022) and this contribution more than 300 species have been added to Vulcano beetles fauna. Considering that fewer than 250 species were known before 2022, the number has more than doubled. Extensive research will be required to achieve a comparable level of knowledge of beetles across all the Aeolian Islands, as is currently available for Lipari and Vulcano, in order to produce more accurate data and enable meaningful comparisons in the study of island biogeography.

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