

Second contribution to the knowledge of the rove beetles (Coleoptera: Staphylinidae) of Val di Non / Nonstal (Trentino / Südtirol, Italy)

Abstract

A list of 466 species of Staphylinidae collected mostly by the author in Val di Non / Nonstal (Trentino / South Tyrol, Italy) is given. Among them four are new to Italy: *Atheta alpigrada*, *A. reissi*, *Schistoglossa pseudogemina* and *Cypha carinthiaca*. They are discussed with further 19 species considered relevant for rarity and geographic distribution. The biogeographic analysis shows a prevalence of widely distributed species. Among those with restricted distribution some are characteristic for the Rhaetian Alps, others point out the importance of the Adige river valley as a biogeographic barrier. Some southern species occur in thermophilous forests and in wetlands. The presence of rare species in protected areas, mostly in “Sites of Community Importance”, is evidenced.

Keywords: Staphylinidae, faunistics, new records, Alps, Trentino, Italy

Introduction

The aim of this work is the publication of a large amount of data on rove beetles (Staphylinidae), the largest family of Coleoptera (more than 60,000 species described up to date), collected by the author in Val di Non since the sixties of the past century. Year after year, I tried to sample every kind of macro- and microhabitat occurring in that area, with the aim of representing the diversity in this particular valley, which connects the Rhaetian and Dolomitic areas from west to east, and the metamorphic Central Alps and the carbonatic Prealps from north to south. A first contribution to the knowledge of Staphylinid beetles within a limited area in the Central Val di Non was published many years ago (ZANETTI 1978). The publication of these new records seems advisable due to the scarcity of faunistic data of staphylinids for most of the Southern Alps. Only South Tyrol provides a good list of Staphylinidae (VON PEEZ & KAHLER 1977, HELLRIGL 1996, additional data in SCHATZ 2005, 2007, 2008, 2012). No complete and recent list is available for the remaining part of the Italian Alps.

Materials and methods

Most records are the results of my research, only a few data are from materials deposited in other private collections and in Museums. In many cases material collected by me have already been published in taxonomic and faunistic contributions and all these publications are cited.

Research on rove beetles was carried out almost every year using all methods that are productive in collecting these insects: hand sampling under stones, on the soil surface after trampling it (on muddy surfaces), on river and stream banks, in moss of springs and waterfalls, in dung and carrion, on flowers; sifting of litter, soil, bark and decaying wood, fungi, mammal nests; pitfall trapping, car netting and beating vegetation. Identification is based on ASSING & SCHÜLKE (2012), and BENICK et al. (1974), with the support of more recent papers cited in the references.

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Fig. 1 Thermophilic mixed forest (Coredo).



Fig. 2 Firmetum (Gruppo del Brenta near Malga Flavona) – habitat of *Eusphalerum pulcherrimum*.



Fig. 3 Montane-subalpine open forest (Malga di Coredo) – habitat of *Dropephylla linearis*.



Fig. 4 Subalpine meadows and Alnetum viridis (Monte Peller) – habitat of *Atheta alpigrada* and *A. reissi* in *Marmota* nests.



Fig. 5 Bottom of narrow valley with *Cirsium montanum* (Valle di Verdès) – habitat of *Atheta pfaundleri*.



Fig. 6 Summit of Monte Roen with *Pinus mugo* – habitat of *Liogluta micans*.



Fig. 7 Subalpine meadows with *Rhododendron ferrugineum* (Malga Bordolona) – habitat of *Leptusa fauciumberninae*.



Fig. 8 Peat bog near Palù Longia (Brez) – habitat of *Cypha carinthiaca*.



Fig. 9 Lago di Santa Maria / Felixer Weiher with wetland – habitat of *Cephalocousya nivicola*.



Fig. 10 Ridge of the Catena della Mendola with Corno di Tres – habitat of *Maurachelia pilosicollis*.



Fig. 11 Peaty plain near Malga Preghena – habitat of *Atheta fallaciosa*, *Gnypeta coerulea* and *Oxyptoda ignorata*.



Fig. 12 Riparian forest with *Salix alba* (La Rocchetta) – habitat of *Carpelimus opacus*.

At least some representative specimens of each species were mounted. Habitats described below were visited in about 90 localities. Some of them, mostly those in the vicinity of the village Smarano, were investigated many times and in different seasons with several methods, others only once with a single method. For this reason the list of species is probably rather incomplete, mostly considering the absence of several rare entities found in adjacent areas.

Investigation area

Val di Non is a north-south oriented, wide valley (59,673 ha) in the Eastern Alps (sensu SOIUSA, (MARRAZZI 2005) at latitudes between 46°11'N and 46°32'N and longitudes between 10°53'E and 11°13'E. It is part of the Southern Rhaetian Alps (section 28 of SOIUSA), divided between 28.II Alpi della Val di Non / Nonsberger Alpen and 28.IV Dolomiti di Brenta. Its features are unusual within the Alps: the main part of the valley is shaped as a wide highland gently rising toward east where the long ridge of the Catena della Mendola (maximum altitude at Monte Roen, 2116 m) separates it abruptly from Val d'Adige. This highland is incised by the Novella stream and by the Noce river emerging from the Val di Sole. Both form deep gorges. The western side of the valley is much steeper and more complex. The Gruppo del Brenta, a part of the protected area "Parco Naturale dell'Adamello-Brenta" rises south of the Noce river. It is a spectacular dolomitic area with several peaks close to 3000 m, incised by the wild Val di Tovel, SSW – NNE oriented. North of the insertion of the Noce river, west of the proper Val di Non of the Novella stream and separated from it by the Monte Ozol (1566 m), some streams, primarily Barnès, Lavazzè and Pescara, incise a system of small deep and steep valleys. These rise to the western limit of Val di Non formed by the chain of the Maddalene and by Monte Luco (2434 m), which separate Val di Non from Val d'Ultimo / Ultental.

This morphological diversity is underlaid by a corresponding geological variety. In the wide highland that occupies most of the area, the outcropping rocks are mesozoic limestones and marls. The Gruppo del Brenta is mostly dolomitic, except the northern part (Monte Peller) that is calcareous and marl. The western area of the Maddalene is characterized by micaschists and paragneisses. Monte Luco in the extreme north and its surroundings are formed by Permian effusive rocks (rhyolite).

The climate differs in various sections related to altitude. The medium annual temperature varies between 10-11° at 800-1000 m with 800-1000 mm of rain, and 8-9° with 1000-1500 mm of rain above 1000 m. Many areas, mostly in the eastern calcareous side, are rather dry.

The natural vegetation is affected by the factors mentioned above, but anthropogenic activity was also decisive in setting the landscape to its present condition. A large presence of prehistoric Rhaetian sites confirms an ancient and intensive use of the territory, and today the primary condition is almost totally effaced. The bottom of the valley was used for agricultural purposes that changed from a simple subsistence farming (the presence of vineyards, mulberries, apple and pear trees, walnuts, mais, potato, buckwheat and other vegetables is documented in the 19th century, PILATI et al. 1995), often difficult for the lack of superficial water, to the modern industrial and intensive cultivation of apples. At middle altitude, in large forest clearings, meadows were used for the production of hay, at higher altitude in the alpine pastures cows were pastured during summer. Montane meadows and, partially, subalpine pastures are today often abandoned, and the area covered by forests and subalpine shrub is increasing. Forests still occupy about 50% of the territory, they are often secondary. In southern sides of the valley submediterranean conditions allow the presence of thermophilic mixed forests with *Quercus pubescens* (Fig. 1). Beech forests are of limited extension (for instance on the eastern side of Monte Peller) while conifers are largely predominant everywhere. *Pinus sylvestris* with *Erica carnea* covers sunny, mostly south-exposed areas, *Picea excelsa* and *Larix decidua* form the largest part of montane and subalpine forests. Noteworthy is the total absence of *Pinus cembra*, common in the subalpine areas of the adjacent valleys.

The subalpine bushy areas are prevalently formed by *Pinus mugo* in the calcareous eastern range and in the dolomitic Gruppo del Brenta, while *Alnus viridis* is prevalent on the siliceous Maddalene. Above a belt dominated by Ericaceae (*Rhododendron*, *Vaccinium*, *Arctostaphylos*), subalpine and alpine meadows exhibit a large vegetational diversity, for instance with *Seslerietum* on calcareous (ZORER 2011), and *Festucetum halleri* and *Curvuletum* on siliceous soils (BEZZI 2006). *Firmetum* characterizes the dolomitic screes (Fig. 2).

Riparian forests along streams and rivers are generally narrow and dominated by *Alnus incana*, *Salix* spp., *Fraxinus excelsior*, *Acer* spp., sometimes with *Tilia*. A belt with *Cirsium montanum* is often present near streams, for instance in the “Site of Community Importance Valle del Verdes” in the vicinity of Coredo and Smarano. The forest near the exit of the valley at low altitude in the protected biotope “La Rocchetta”, Site of Community Importance, is composed mostly by *Salix alba*.

Wetlands are represented by peat bogs and marshes. Large acid peat bogs with a wide *Sphagnetum* are located in the northwest of the valley. Various biotopes, mostly “Gran Palù” and “Palù di Tremole” in the vicinity of Brez, are protected areas as Sites of Community Importance. Marshes with *Phragmites* and *Carex* are reduced in surface and strongly modified by man today. The “Palù di Tuenno”, in the vicinity of Cles, is a Site of Community Importance. A complete list of the Natura 2000 sites in Val di Non is given in http://www.reeprotette.provincia.tn.it/rete_ecologica_europea_Natura_2000/natura_2000/pagina391.html

Records

The records are summarized in table 1. In the first column species are listed in taxonomic order, following SMETANA (2004). Subfamilies Pselaphinae, Scydmaeninae, and Scaphidiinae, recently included in Staphylinidae, are not reported.

In column 2 all localities for each species are listed and the coordinates of these localities are in table 2. These coordinates refer to a point in the collecting area. Since sampling was often performed before the availability of GPS, the coordinate were found a posteriori by Google Earth. Collecting localities are situated both in Trentino and in South Tyrol, the latter are recognizable because they are listed with both the Italian and the German name.

Columns 3 and 4 include all the macro- and microhabitats in which the species were found by the author in Val di Non. Since old captures are not provided with the sampled habitats, these data are lacking in some cases.

In column 5 the altitudinal range for the species documented in Val di Non is reported. In column 6 the following acronyms for the collections are used: cAss: private collection Assing (Hannover); cSch: private collection Schülke (Berlin); cTag: private collection Tagliapietra (Verona); cTam: collection Tamanini (now in Rovereto Museum, Trentino); cZan: private collection Zanetti (Verona); MMI: Museo Civico di Storia Naturale, Milano; MTN: Museo Tridentino di Scienze Naturali (now Muse), Trento; MVR: Museo Civico di Storia Naturale, Verona.

The literature records are also included here. The authors of the 19th century reported only few species from Val di Non, and their identification is very uncertain. GREDLER (1863) and BERTOLINI (1899) list 13 species: *Aleochara bipustulata* or *A. intricata* (as *A. biguttata*, *bipunctata*) (Cles); *Gyrophana boleti* (Mendola); *Quedius mesomelinus* (“Naunia”); *Platydracus flavopunctatus* (as *Staphylinus lutarius*) (Denno); *Philonthus nitidus* (San Romedio, Mendola, “Ruen”); *Philonthus atratus* (Cles); *Bisnius fimetarius* (as *Philonthus*) (Cles); *Xantholinus linearis* (Montagna di Cles); *Rugilus angustatus* (as *Stilicus fragilis*) (Senale); *Oxytelus sculptus* (Cles); *Eusphalerum minutum* (Mendola, Senale); *Eusphalerum sorbi* (“Naunia”); *E. torquatum* (Senale). These data are not included in the table.

Tab. 1. List of species. Corotypes as in Vigna Taglianti et al, 1993, modified. COS= cosmopolitan, WDI = wide distributed in the Palae/holoarctic Region; EUR = European; EUM = Euro-mediterranean; SIE= Sibero-European; CEU=Centro-European; ALP=Alpine; SEU=South-European; BOM=Boreomontane; ALAP=“Italian”. Abbreviations of source see text.

SPECIES	LOCALITY: SITE	MACROHABITAT	MICROHABITAT	ALTITUDINAL RANGE	SOURCE (collection and/or references)
<i>Acidota crenata</i> (FABRICIUS, 1793)	WDI Castelfondo: Laghetto delle Regole; Sfruz: Passo Predaia	bank of bog; altomontane/subalpine coniferous wood	litter	1200-1700	CZan; ZANETTI 2005
<i>Acidota cruentata</i> (MANNERHEIM, 1830)	WDI Coredo: Malga di Coredo	altomontane/subalpine coniferous wood	litter	1700	CZan
<i>Amphichroum canaliculatum</i> (ERICHSON, 1840)	CEU Coredo: Val di Toc	coniferous wood	on <i>Sorbus aucuparia</i>	1400	CZan
<i>Amphichroum hirtellum</i> (HEER, 1839)	ALP Bresimo: Malga Bordolona	subalpine bushy slope	on vegetation	2100	CZan; ZANETTI 2005
<i>Anthobium melanocephalum</i> (ILLIGER, 1794)	EUR Coredo: Malga di Coredo	altomontane/subalpine coniferous wood	rotten mushrooms	1600	CZan
<i>Anthophagus alpestris alpestris</i> HEER, 1839	CEU Amblar; Bresimo: Malga Bordolona; Bresimo: Malga Pregonna; Gruppo del Brenta: Val di Massodi; Monte Macaion = Gantkofel; Monte Peller; Monte Penegal; Pietra Grande: Malga Pozzol; Monte Roen; Smarano: Verdes; Lago di Tovel; Tres: Rifugio Sores; Corno di Tres; San Felice = St. Felix; Lago di Santa Maria = Felixer Weiher	coniferous montane wood; subalpine bushy slope; subalpine pasture; altomontane/subalpine coniferous wood; subalpine bushy slope; bottom of narrow wooded valley; coniferous montane wood; marsh	on vegetation	1000-2300	CZan; cTam; CMV; ZANETTI 1978; ZANETTI 2005
<i>Anthophagus alpinus alpinus</i> (PAYKULL, 1790)	EUR Bresimo: Malga Bordolona; Bresimo: Malga Pregonna; Gruppo del Brenta: Val di Massodi; Monte Peller	subalpine bushy slope; subalpine pasture	on vegetation	2000-2300	CZan; cTam; ZANETTI 2005
<i>Anthophagus bicornis</i> (BLOCK, 1799)	CEU Bresimo: Malga Bordolona; Bresimo: Malga Pregonna; Pietra Grande: Malga Pozzol; Proves = Proveis; Monte Roen: Coste Belle; Smarano; Lago di Tovel	subalpine bushy slope; subalpine pasture; coniferous montane wood;	on vegetation	1000-2300	CZan; CTN; ZANETTI 1978; ZANETTI 2005
<i>Anthophagus caraboides</i> (LINNAEUS, 1758)	SIE Santuario di San Romedio	bottom of narrow wooded valley	on vegetation	700	CZan; ZANETTI 2005

SPECIES		LOCALITY: SITE	MACROHABITAT	MICROHABITAT	ALTITUDINAL RANGE	SOURCE (collection and/or references)
<i>Anthophagus fallax</i> KIESENWETTER, 1848	ALP	Monte Peller; Monte Roen; Rumo; Lago di Tovel	subalpine bushy slope; subalpine pasture; coniferous montane wood	on vegetation; debris under <i>Alnus viridis</i>	1200- 2000	CZan; ZANETTI 2005
<i>Anthophagus omalinus arrowi</i> KÖCH, 1933	SIE	Monte Roen; Castelfondo: Laghetto delle Regole; Pietra Grande: Malga Pozzol; Rumo; Smarano: Lago di Tovel; Tres: Rifugio Sores; Corno di Tres	subalpine bushy slope; bank of bog; subalpine pasture; coniferous montane wood	on vegetation; litter under <i>Alnus viridis</i>	1200-2050	CZan; CTN; ZANETTI 1978 (<i>A. omalinus</i>); ZANETTI 2005
<i>Anthophagus spectabilis</i> HEER, 1839	ALP	Pietra Grande: Malga Flavona			2100	CTN; ZANETTI 2005
<i>Arpedium quadrum</i> (GRAVENHORST, 1806)	SIE	Cressino: la Rocchetta; Lago di Tovel	riparian wood; source	litter; musk	270-1200	CZan; ZANETTI 2005
<i>Deliphrosoma macrocephalum</i> (EPPELSHEIM, 1873)	EUR	Cima Grostè			2300	cTag; ZANETTI 2005
<i>Deliphrum tectum</i> (PAYKULL, 1789)	SIE	Monte Peller	subalpine pasture	dung	2000	CZan; ZANETTI 2005
<i>Geodromicus nigrita</i> (P. MÜLLER, 1821)	EUR	Pietra Grande: Malga Pozzol; Santuario di San Romedio; Smarano: Verdes; Lago di Tovel	bank of stream	gravel; moss	700-1600	CZan; ZANETTI 1978; ZANETTI 2005
<i>Hygrogeus aemulus</i> (ROSENHAUER, 1847)	ALP	Gruppo del Brenta: Val di Massodi				cTam; ZANETTI 2005
<i>Lesteva bavarica</i> LOHSE, 1956	ALP	Gruppo del Brenta; Pietra Grande: Malga Pozzol; Lago di Tovel;	bank of stream	gravel; moss	1600	cTam; CZan; ZANETTI 2005
<i>Lesteva benicki</i> LOHSE, 1958	ALP	Pietra Grande: Malga Pozzol; Smarano: Verdes; Lago di Tovel; Tret: Cascata di Tret	bank of stream; waterfall	gravel; moss	1000-1650	CZan; ZANETTI 1978; ZANETTI 2005
<i>Lesteva longoelytrata longoelytrata</i> (GOEZE, 1777)	EUM	Pietra Grande: Malga Pozzol; Lago di Tovel	bank of stream	gravel; moss	1200-1600	CZan; ZANETTI 2005
<i>Lesteva luctuosa</i> FAUVEL, 1871	CEU	Smarano: Verdes	bank of stream	gravel; moss	1000	CZan; ZANETTI 1978; ZANETTI 2005
<i>Lesteva monticola</i> KIESENWETTER, 1847	EUR	Bresimo: Malga Bordolona; Proves = Proveis; Smarano: Verdes; Lago di Tovel	bank of stream	gravel; moss	1000-2300	CZan; CTN; ZANETTI 2005
<i>Lesteva omissa</i> MULSANT & REY, 1880	SEU	Smarano: Verdes	bank of stream	gravel; moss	1000	CZan; ZANETTI 2005
<i>Lesteva pubescens</i> MANNERHEIM, 1830	EUR	Pietra Grande: Malga Pozzol; Proves = Proveis; Smarano: Verdes; Lago di Tovel	bank of stream	gravel; moss	1000-1800	CZan; ZANETTI 1978; ZANETTI 2005
<i>Lesteva punctata</i> ERICHSON, 1839	EUR	Smarano: Verdes; Coredo: Sette Larici;	bank of stream; bottom of narrow wooded valley; coniferous montane wood	gravel; moss	1000-1200	CZan; ZANETTI 1978; ZANETTI 2005
<i>Olophrum consimile</i> GYLLENHAL, 1810	WDI	Bresimo: Malga Bordolona; Bresimo: Malga Preghena; Brez: Palù di Tremole	bank of bog	debris	1700-2100	CZan; ZANETTI 2005
<i>Boreaphilus melichari</i> JURE...EK, 1910	ALP	Lago di Tovel	source		1200	MVR; BRASAVOLA DE MASSA 1934; ZANETTI 2005
<i>Eusphalerum alpinum alpinum</i> (HEER, 1839)	EUR	Bresimo: Malga Bordolona; Rifugi Pedrotti e Tosa; Lago di Tovel	subalpine bushy slope; subalpine pasture; coniferous montane wood	flowers (including <i>Dryas octopetale</i>)	1200-2400	CZan; ZANETTI 2005
<i>Eusphalerum anale</i> (ERICHSON, 1840)	CEU	Bresimo: Malga Bordolona; rifugi Pedrotti e Tosa; Monte Peller; Pietra Grande: Malga Flavona	subalpine bushy slope; Firmetum; subalpine pasture	flowers (including <i>Dryas octopetale</i>)	1600-2400	CZan; ZANETTI 2005
<i>Eusphalerum atrum</i> (HEER, 1839)	CEU	Smarano: Dosso di Pozzalunga	Picea wood	flowers (<i>Primula</i>)	1100	Czan
<i>Eusphalerum limbatum diolii</i> ZANETTI, 1982	EUR	Smarano; Smarano: Verdes	coniferous montane wood; bottom of narrow wooded valley	flowers (including <i>Petasites</i>)	1000	CZan; ZANETTI 1978 (<i>E. limbatum</i>); ZANETTI 2005
<i>Eusphalerum luteum luteum</i> (MARSHAM, 1802)	EUR	Ambiar; Cavareno; Cima Grostè; Monte Macaion = Gantkofel; Monte Penegal; Monte Roen; Smarano; Smarano: Verdes; Lago di Tovel	coniferous montane wood; altomontane/subalpine coniferous wood; subalpine pasture; bottom of narrow wooded valley	flowers	1000-2100	CZan; MMI; CMV; ZANETTI 1978 (<i>E. ophthalmicum</i>); ZANETTI 2005
<i>Eusphalerum marshami</i> (FAUVEL, 1869)	CEU	Cles: Monte di Cles; Coredo: Val di Toc; Tres: Rifugio Sores; Corno di Tres	margin of meadow; coniferous wood; clering; subalpine pasture	flowers (including <i>Sorbus aucuparia</i> , <i>Gentiana lutea</i>)	1300-1700	CZan; MMI; ZANETTI 1978; ZANETTI 2005
<i>Eusphalerum minutum</i> (FABRICIUS, 1792)	SIE	Brez: Gran Palù; Tuenno: Palude di Tuenno	peat bog; bank of marsh	flowers (including <i>Menyanthes trifoliata</i>)	600-1550	CZan; ZANETTI 2005
<i>Eusphalerum nitidicolle</i> (BAUDI DI SELVE, 1857)	ALP	rifugi Pedrotti e Tosa	Firmetum	flowers	2400	CZan; ZANETTI 2005
<i>Eusphalerum pallens</i> (HEER, 1841)	ALP	Monte Macaion = Gantkofel; Monte Peller; Monte Penegal; Smarano; Lago di Tovel	altomontane/subalpine coniferous wood; subalpine bushy slope; coniferous montane wood	flowers	1000-2000	CZan; MVR; ZANETTI 1978; ZANETTI 2005
<i>Eusphalerum primulae</i> (STEPHENS, 1834)	EUR	Coredo: Sette Larici; Coredo: Val di Toc; Smarano; Smarano: Verdes;	coniferous montane wood; bottom of narrow wooded valley	flowers (<i>Primula</i>)	1000-1400	CZan; ZANETTI 1978; ZANETTI 2005
<i>Eusphalerum pseudaucupariae</i> (E. STRAND, 1917)	CEU	Coredo: Val di Toc	clering	flowers of <i>Gentiana lutea</i>	1400	Czan
<i>Eusphalerum pulcherrimum</i> (BERNHAEUER, 1901)	ALP	rifugi Pedrotti e Tosa; Pietra Grande: Malga Flavona	Firmetum	flowers (<i>Dryas</i>)	2000-2400	CZan; ZANETTI 2005
<i>Eusphalerum rectangulum</i> (BAUDI DI SELVE, 1870)	CEU	Smarano; Lago di Tovel	coniferous montane wood	flowers	1200	CZan; ZANETTI 1978; ZANETTI 2005
<i>Eusphalerum rhododendri</i> (BAUDI DI SELVE, 1848)	SEU	Coredo: Val di Toc; Smarano; Smarano: Verdes; Lago di Tovel	coniferous wood; coniferous montane wood; bottom of narrow wooded valley;	flowers (including <i>Sorbus aucuparia</i>)	1000-1400	CZan; ZANETTI 1978; ZANETTI 2005

SPECIES	LOCALITY: SITE	MACROHABITAT	MICROHABITAT	ALTITUDINAL RANGE	SOURCE (collection and/or references)
<i>Eusphalerum robustum</i> (HEER, 1839)	ALP Bresimo: Malga Bordolona; Cles: Monte di Cles; Coredo: Val di Toc; Sfruz: Predaia; Smarano; Smarano: Dosso di Pozzalunga	subalpine bushy slope; margin of meadow; coniferous wood; montane meadow; coniferous montane wood; Picea wood	flowers (Primula)	1000-2100	CZan; ZANETTI 1978; ZANETTI 2005
<i>Eusphalerum signatum signatum</i> (MÄRKEL, 1857)	CEU Brez: Gran Palù; Lago di Tovel	margin of meadow; coniferous montane wood	flowers of Sorbus aucuparia	1200-1550	CZan; ZANETTI 2005
<i>Eusphalerum stramineum</i> (KRAATZ, 1857)	ALP Bresimo: Malga Bordolona; Coredo: Val di Toc; Pietra Grande; Sfruz: Predaia; Smarano	subalpine bushy slope; coniferous wood; subalpine pasture; margin of meadow; coniferous montane wood	flowers (including Sorbus aucuparia, Amelanchier ovalis)	1300-2100	CZan; ZANETTI 1978; ZANETTI 2005
<i>Dropephylla linearis</i> (ZETTERSTEDT, 1828)	BOM Monte Roen: Malga di Romeno; Coredo: Malga di Coredo	altomontane/subalpine coniferous wood	under baks (Picea)	1600-1900	CZan
<i>Omalius caesum</i> GRAVENHORST, 1806	EUM Cavareno: Pradei; Cima Grostè; Bresimo: Malga Preghena	bank of marsh; subalpine bushy slope	debris (Phragmites, Carex, Spiraea; Cirsium spinosissimum)	2400-900	CZan; ZANETTI 2005
<i>Omalius excavatum</i> STEPHENS, 1834	WDI Bresimo: Malga Bordolona; Monte Luc = Laugenspitze: Laugen Alm; Monte Peller; Pietra Grande: Malga Pozzol; Monte Roen; Smarano; Lago di Tovel; San Felice = St. Felix; Lago di Santa Maria = Felixer Weiher; Bresimo: Malga Preghena	subalpine bushy slope; marsh	debris (including Cirsium spinosissimum)	1000-2100	CZan; ZANETTI 1978; ZANETTI 2005
<i>Omalius rivulare</i> PAYKULL, 1789	EUM Castelfondo: Laghetto delle Regole; Senale = Unserer Liebe Frau im Walde; Sfruz: Predaia; Smarano; Castel Thun	bank of bog; bank of marsh; montane meadow; thermophilic submontane wood	fungi; debris	600-1300	CZan; ZANETTI 1978; ZANETTI 2005
<i>Omalius rugatum</i> MULSANT & REY, 1880	EUM Coredo: Val di Toc; Monte Roen; Smarano: Verdes; Lago di Tovel; Bresimo: Malga Preghena	Picea wood; subalpine bushy slope; bottom of narrow wooded valley; coniferous montane wood	pitfall; debris	1000-2100	CZan; ZANETTI 1978; ZANETTI 2005
<i>Omalius validum</i> KRAATZ, 1857	EUR Monte Peller; Brez: Gran Palù	subalpine pasture; peat bog	dung of Marmota	1500-2000	CZan; ZANETTI 2005
<i>Phloeonomus punctipennis</i> THOMSON, 1867	EUM Coredo: Pozza Lunga;	dry mixed wood	barks of Quercus	700	CZan; ZANETTI 2005
<i>Phloeonomus pusillus</i> (GRAVENHORST, 1806)	WDI Coredo: Pozza Lunga; Monte Roen: Malga di Romeno; Sfruz: Predaia; Smarano; Lago di Tovel	dry mixed wood; altomontane/subalpine coniferous wood; coniferous montane wood;	barks (Quercus, Picea, Conifers)	700-1900	CZan; ZANETTI 1978; ZANETTI 2005
<i>Phloeostiba plana</i> (PAYKULL, 1792)	WDI Santuario di San Romedio	bottom of narrow wooded valley	barks	800	CZan; ZANETTI 2005
<i>Xylodromus concinnus</i> (MARSHAM, 1802)	EUM Monte Luc = Laugenspitze: Laugen Alm	anthropic environment	hen-house	1800	CZan; ZANETTI 2005
<i>Megarthus denticollis</i> (BECK, 1817)	WDI Smarano: Verdes; Smarano	various environments	car net	1000	Czan
<i>Megarthus depressus</i> (PAYKULL, 1789)	SIE Val di Bresimo; Smarano: Verdes; Smarano; Proves = Proveis: Kesselalm	various environments; montane coniferous wood; subalpine bushy slope	fungi (Russula); car net; debris (Pinus mugo, Cirsium spinosissimum)	1000-2100	CZan; ZANETTI 1978 (M. sinuatocollis)
<i>Megarthus stercorarius</i> (MULSANT & REY, 1878)	SEU Bresimo: Malga Preghena; Monte Peller	subalpine pasture	dung (horse, Marmota)	2000	Czan
<i>Proteinus atomarius</i> (ERICHSON, 1840)	WDI Coredo: Malga di Coredo; Coredo: Sette Larici; Monte Roen; Rumo: Malga Lavazzè; Smarano; Lago di Tovel; Monte Roen	altomontane/subalpine coniferous wood; coniferous montane wood; subalpine bushy slope;	fungi (including Lactarius, Russula); debris of Pinus mugo	1000-1600	CZan; ZANETTI 1978
<i>Proteinus brachypterus</i> (FABRICIUS, 1792)	EUM Coredo: Malga di Coredo; Lauregno = Laurein; Monte Ozol; Monte Roen; Sfruz: Passo Predaia; Smarano: Verdes; Smarano; Vervò: Passo Favogna; Bresimo: Malga Preghena	altomontane/subalpine coniferous wood; coniferous montane wood; subalpine coniferous open wood; bottom of narrow wooded valley;	fungi (including Russula, Boletus); debris (Cirsium spinosissimum)	1000-1600	CZan; ZANETTI 1978
<i>Proteinus crenulatus</i> PANDELLÉ, 1867	EUR Smarano: Verdes	bottom of narrow wooded valley	car net	1000	CZan; ASSING 2007
<i>Proteinus laevigatus</i> HOCHHUTH, 1872	SIE Coredo: Sette Larici; Smarano	various environments	car net	1000-1200	CZan; ZANETTI 1978 (P. macropterus)
<i>Dasycerus sulcatus</i> BRONGNIART, 1800	EUR Smarano; Coredo: Val di Toc;	mixed coniferous wood; Picea wood	fungi	1000-1200	Czan
<i>Phloeocharis subtilissima</i> MANNERHEIM, 1830	EUR Cressino: la Rocchetta; Smarano	riparian wood; coniferous montane wood	debris; barks	250-1000	CZan; ZANETTI 1978
<i>Bolitobius castaneus</i> (STEPHENS, 1832)	SIE Smarano: Verdes; Smarano: Malga di Coredo	bottom of narrow wooded valley; montane meadow	debris	1000-1700	CZan; ZANETTI 1978 (Bryocharis analis)
<i>Bryophacis rufus</i> (ERICHSON, 1839)	EUR Proves = Proveis: Malga Manzara = Stierbergalm	subalpine bushy slope	debris	1800	Czan
<i>Ischnosoma longicorne</i> (MÄKLIN, 1847)	WDI Sfruz; Smarano: Pozzalunga	coniferous montane wood	debris	1000	Czan
<i>Ischnosoma splendidum</i> (GRAVENHORST, 1806)	COS Coredo: Laghi Palù; Cressino: la Rocchetta; Monte Peller; Sfruz;	bank of marsh; riparian wood; subalpine bushy slope;	debris (including Alnus viridis)	250-2000	Czan
<i>Lordithon bimaculatus</i> (SCHRANK, 1798)	WDI Coredo: Malga di Coredo; Coredo: Sette Larici; Monte Roen	altomontane/subalpine coniferous wood; coniferous montane wood	fungi	1200-1700	CZan; ZANETTI 1978 (Bolitobius trinotatus)
<i>Lordithon exoletus</i> (ERICHSON, 1839)	EUM Coredo: Laghi Palù; Coredo: Malga di Coredo; Coredo: Sette Larici; Monte Roen; Tregiolo; Val di Tovel	coniferous montane wood; altomontane/subalpine coniferous wood;	fungi; tree fungi; car net	900-1600	Czan

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<i>Lordithon lunulatus</i> (LINNAEUS, 1760)	EUR	Coredo: Val di Toc; Monte Peller; Monte Roen	bottom of narrow wooded valley; coniferous montane wood	fungi	1200-2000	CZan; ZANETTI 1978 (<i>Bolitobius</i>)
<i>Lordithon thoracicus</i> (FABRICIUS, 1777)	WDI	Coredo: Laghi Palù; Sfruz: Predaia; Smarano; Brez: Palù di Tremole	coniferous montane wood; margin of bog	fungi; debris	900-1700	CZan; ZANETTI 1978 (<i>Bolitobius</i>)
<i>Lordithon trinitatus</i> (ERICHSON, 1839)	WDI	Cressino: La Rocchetta; Coredo: Castel Bragher	riparian wood; mixed wood	fungi; barks of Salix	250-650	CZan
<i>Mycetoporus brucki</i> (PANDELLE, 1869)	EUR	Monte Peller	subalpine bushy slope	debris of <i>Alnus viridis</i>	2000	CZan
<i>Mycetoporus forticornis</i> FAUVEL, 1875	EUR	Smarano	montane meadow	debris	1000	CZan; ZANETTI 1978
<i>Mycetoporus glaber glaber</i> (SPERK, 1835)	EUM	Smarano	montane meadow	debris	1000	CZan; ZANETTI 1978 (<i>M. splendens</i>); SCHÜLKE & KOČIAN 2000
<i>Mycetoporus inaris</i> LUZE, 1901	BOM	Sfruz: Passo Predaia; Coredo: Malga di Coredo	subalpine coniferous open wood	debris	1600-1700	CZan; MARISA et al., in press
<i>Mycetoporus longulus</i> MANNERHEIM, 1830	EUR	Smarano	montane meadow	debris	1000	CZan; ZANETTI 1978
<i>Mycetoporus maerkelii</i> KRAATZ, 1857	EUR	Lago di Tovel	bank of stream	debris	1400	CZan
<i>Mycetoporus niger</i> FAIRMAIRE & LABOULBÈNE, 1856	EUR	Coredo: Val di Toc; Monte Peller; Sfruz: Predaia; Smarano: Verdes	bottom of narrow wooded valley; subalpine bushy slope; coniferous montane wood;	debris; stump	1000-2000	CZan; ZANETTI 1978
<i>Mycetoporus nigrans</i> MÄKLIN, 1853	BOM	Bresimo: Malga Bordolona Valle del Vento	subalpine bushy slope	debris of <i>Rhododendron</i>	2000	CZan
<i>Mycetoporus punctus</i> (GRAVENHORST, 1806)	SIE	Lago di Tovel	bank of stream; waterfall		1200-1400	CZan
<i>Sepedophilus immaculatus</i> (STEPHENS, 1832)	EUR	Brez: Gran Palù	bank of bog	peat bog	1600	CZan
<i>Sepedophilus marshami</i> (STEPHENS, 1832)	WDI	Cressino: la Rocchetta; Smarano; Sfruz	riparian wood; montane meadow	debris (including <i>Salix</i>)	270-900	CZan; ZANETTI 1978 (<i>Conosoma</i>)
<i>Sepedophilus pedicularius</i> (GRAVENHORST, 1802)	SIE	Smarano	montane meadow	debris	900	CZan; ZANETTI 1978 (<i>Conosoma prope doderoi</i>)
<i>Sepedophilus testaceus</i> (FABRICIUS, 1793)	WDI	Cressino: la Rocchetta	riparian wood	debris of <i>Salix</i>	270	CZan
<i>Tachinus corticinus</i> GRAVENHORST, 1802	SIE	Smarano; Proves = Proveis: Kesselalm	montane meadow; subalpine bushy slope	debris (including <i>Pinus mugo</i>)	1000	CZan
<i>Tachinus elongatus</i> GYLLENHAL, 1810	WDI	Monte Roen; Smarano: Verdes	subalpine bushy slope; bottom of narrow wooded valley	debris (including <i>Pinus mugo</i>)	1000-2000	CZan
<i>Tachinus laticollis</i> GRAVENHORST, 1802	WDI	Coredo: Malga di Coredo; Coredo: Sette Larici; Monte Peller; Proves = Proveis: Rio Pescara = Fischbach; Smarano: Verdes; San Felice = St. Felix: Lago di Santa Maria = Felixer Weiher; Proves = Proveis: Kesselalm	altomontane/subalpine coniferous wood; coniferous montane wood; subalpine pasture; riparian wood; bottom of narrow wooded valley	debris (including <i>Alnus incana</i> , <i>Pinus mugo</i>)	1000-2000	CZan; ZANETTI 1978
<i>Tachinus pallipes pallipes</i> (GRAVENHORST, 1806)	SIE	Coredo: Malga di Coredo; Coredo: Val di Toc; Monte Peller; Monte Roen; Smarano: Verdes; Smarano	altomontane/subalpine coniferous wood; <i>Picea</i> wood; subalpine pasture; subalpine bushy slope; bottom of narrow wooded valley; coniferous montane wood	fungi (including <i>Russula</i>)	1000-2000	CZan; ZANETTI 1978
<i>Tachinus proximus</i> KRAATZ, 1855	SIE	Coredo: Malga di Coredo; Monte Peller; Pietra Grande: Malga Pozzol; Smarano	altomontane/subalpine coniferous wood; subalpine pasture; coniferous montane wood	dung of <i>Marmota</i> ; fungi (<i>Russula</i>)	1000-2000	CZan; ZANETTI 1978
<i>Tachinus rufipes</i> (LINNAEUS, 1758)	WDI	Cavareno: Pradei; Coredo: Laghi Palù; Coredo: Tavon; Coredo: Val di Toc; Sfruz; Smarano: Verdes; Tret: Cascata di Tret	bank of marsh; cultivated areas; bottom of narrow wooded valley; <i>Picea</i> wood; montane meadow; bottom of narrow wooded valley; bottom of narrow wooded valley; waterfall	debris (including <i>Phragmites</i> , <i>Carex</i> , <i>Spiraea</i>)	900-1200	CZan; ZANETTI 1978
<i>Tachyporus abdominalis</i> (FABRICIUS, 1781)	SIE	Cressino: La Rocchetta; Proves = Proveis: Rio Pescara = Fischbach	riparian wood	debris (including <i>Alnus incana</i>)	250	CZan
<i>Tachyporus atriceps</i> STEPHENS, 1832	WDI	Bresimo: Malga Bordolona; Sfruz; Smarano; Brez: Gran Palù	subalpine pasture; montane meadow; peat bog	debris	1000-2200	CZan; ZANETTI 1978
<i>Tachyporus chrysomelinus</i> (LINNAEUS, 1758)	WDI	Castelfondo: Laghetto delle Regole; Monte Peller; Smarano; Tret: Cascata di Tret	bank of bog; subalpine pasture; montane meadow; waterfall	debris	1000-2000	CZan; ZANETTI 1978
<i>Tachyporus dispar</i> (PAYKULL, 1789)	WDI	Malosco: Le Regole; Monte Peller; Sfruz; Smarano	subalpine pasture; montane meadow	debris	1000-2000	CZan
<i>Tachyporus hypnorum</i> (FABRICIUS, 1775)	WDI	Coredo: Laghi Palù; Coredo: Tavon; Sfruz; Smarano	bank of marsh; montane meadow	debris	900-1000	CZan; ZANETTI 1978
<i>Tachyporus nitidulus</i> (FABRICIUS, 1781)	COS	Mechel; Smarano; Denno	cultivated areas; montane meadow; apple orchard	debris	500-1000	CZan; ZANETTI 1978
<i>Tachyporus obtusus</i> (LINNAEUS, 1767)	SIE	Cressino: La Rocchetta; Coredo: Castel Bragher	riparian wood; submontane mixed wood	debris	250-650	CZan
<i>Tachyporus scitulus</i> ERICHSON, 1839	WDI	Cavareno: Pradei; Cressino: La Rocchetta; Smarano	bank of marsh; riparian wood; montane meadow	debris of <i>Phragmites</i> , <i>Carex</i> , <i>Spiraea</i>	250-1000	CZan; ZANETTI 1978 (<i>T. macropterus</i>)
<i>Tachyporus transpadanus</i> SCHÜLKE, 2007	ALP	Monte Peller; Smarano; Denno	subalpine pasture; apple orchard	debris; car net	500-2000	CZan; cTag; SCHÜLKE 2007
<i>Habrocerus capillaricornis</i> (GRAVENHORST, 1806)	WDI	Cressino: la Rocchetta; Coredo: Castel Bragher	riparian wood; submontane mixed wood	debris	250-650	CZan

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<i>Tricophya pilicornis</i> (GYLLENHAL, 1810)	WDI	Val di Bresimo; Coredo: Laghi Palù; Coredo; Monte Peller; Santuario di San Romedio; Senale = Unsera Liebe Frau im Walde; Smarano: Verdes; Smarano; Val di Tovel	various environments; bank of marsh; bottom of narrow wooded valley;	car net	900-1500	CZan; ZANETTI 1978
<i>Aleochara bilineata</i> GYLLENHAL, 1810	COS	Monte Peller; Sfruz: Passo Predaia	subalpine pasture	dung (Marmota, cow)	1700-2000	CZan
<i>Aleochara bipustulata</i> LINNAEUS, 1760	WDI	Smarano; Smarano: Verdes	montane meadows; bottom of narrow wooded valley		1000	CZan; ZANETTI 1978
<i>Aleochara brevipennis</i> GRAVENHORST, 1806	SIE	Cressino: La Rocchetta	riparian wood		260	CZan
<i>Aleochara curtula</i> (GOEZE, 1777)	COS	Coredo: Laghi Palù	coniferous wood	corpse of Talpa	900	CZan
<i>Aleochara fumata</i> GRAVENHORST, 1802	WDI	Brez: Palù di Tremole	altomontane/subalpine coniferous wood		1700	CZan
<i>Aleochara ganglbaueri</i> BERNHAUER, 1901	ALP	Smarano: Verdès	bottom of narrow wooded valley		1000	CZan
<i>Aleochara haematoptera</i> KRAATZ, 1858	EUM	Coredo: Laghi Palù; Santuario di San Romedio; Smarano; Smarano: Verdes	bank of marsh; bank of stream	gravel; moss	900-1000	CZan; ZANETTI 1978 (A. ripicola)
<i>Aleochara moerens</i> GYLLENHAL, 1827	SIE	Coredo: Malga di Coredo	altomontane/subalpine coniferous wood		1700	CZan
<i>Aleochara spadicea</i> (ERICHSON, 1837)	EUR	Cressino: La Rocchetta	meadow in valley bottom	Talpa nest	260	CZan
<i>Aleochara sparsa</i> HEER, 1839	EUR	Smarano; Castel Thun	thermophilic wood; montane meadow	bait on tree	450-1000	CZan; ZANETTI 1978
<i>Aleochara stichai</i> LIKOVSKÝ, 1965	EUR	Coredo: Val di Toc; Monte Roen: vetta	Picea wood; subalpine bushy slope	pitfall	1200-2100	CZan
<i>Aleochara verna</i> SAY, 1833	COS	Smarano; Sfruz: Passo Predaia; Brez: Palù di Tremole	subalpine pasture; peat bog	cow dung; debris	1000-1700	CZan
<i>Tinotus morion</i> (GRAVENHORST, 1802)	WDI	Smarano			1000	CZan
<i>Acrotona aterima</i> (GRAVENHORST, 1802)	SIE	Val di Bresimo; Smarano	montane meadow	bait on tree; car net	1000-1500	CZan; ZANETTI 1978
<i>Acrotona muscorum</i> (BRISOUT DE BARNEVILLE, 1860)	WDI	Santuario di San Romedio; Smarano: Verdes; Smarano	bottom of narrow wooded valley; coniferous montane wood	car net; fungi (Russula)	700-1000	CZan; ZANETTI 1978
<i>Acrotona parens</i> (MULSANT & REY, 1852)	WDI	Santuario di San Romedio; Denno	apple orchard	car net	500-700	CZan
<i>Acrotona parvula</i> (MANNERHEIM, 1830)	WDI	Monte Peller; Smarano: Verdes	subalpine pasture; bottom of narrow wooded valley	debris; Marmota dung	1000-2000	CZan; ZANETTI 1978
<i>Acrotona pygmaea</i> (GRAVENHORST, 1802)	WDI	Tuenno: Palude di Tuenno	bank of marsh		670	CZan
<i>Acrotona sylvicola</i> (KRAATZ, 1856)	SIE	Proves = Proveis: Rio Pescara = Fischbach; Rumo: confluenza Lavazè-Pescara	riparian wood	plant debris	650-1100	CZan
<i>Alianta incana</i> (ERICHSON, 1837)	EUM	Tavon: Biotopo Senda	wetland	on Typha latifolia	850	CZan
<i>Aloconota cambrica</i> (WOLLASTON, 1855)	WDI	Coredo; Rumo: Maso Stasal; Smarano: Verdes; Lago di Tovel: Pozzol di Tuenno	bank of stream	gravel; silt; car net	1000-1300	CZan; ZANETTI 1978
<i>Aloconota currax</i> (KRAATZ, 1856)	EUR	Pietra Grande: Malga Pozzol; Rumo: Maso Stasal; Santuario di San Romedio; Smarano: Verdes; Ton: Sabino; Lago di Tovel: Rifugio Capriolo	bank of stream	moss; silt; gravel; sand	700-1600	CZan; ZANETTI 1978
<i>Aloconota debilicornis</i> (ERICHSON, 1839)	EUR	Smarano: Verdes	bank of stream	sand	1000	CZan
<i>Aloconota ernestinae</i> (BERNHAEUER, 1898)	ALP	Pietra Grande: Malga Pozzol	bank of stream	moss	1600	CZan
<i>Aloconota gregaria</i> (ERICHSON, 1839)	WDI	Smarano		car net	1000	CZan
<i>Aloconota philonthoides</i> (WOLLASTON, 1854)	EUM	Coredo		car net	900	CZan
<i>Aloconota sulcifrons</i> (STEPHENS, 1832) s.l.	EUR	Cavareno: Pradei; Coredo: Laghi Palù; Pietra Grande: Malga Pozzol; Santuario di San Romedio; Smarano: Verdes; Ton: Sabino; Lago di Tovel: Rislà	bank of marsh, bank of stream	gravel, silt, moss	300-1650	CZan; ZANETTI 1978
<i>Amidobia talpa</i> (HEER, 1841)	SIE	Proves = Proveis: Rio della Chiesa = Kirchbach	subalpine pasture	nest of Formica sp.	1600	CZan
<i>Amischa analis</i> (GRAVENHORST, 1802)	WDI	Smarano: Verdes	bottom of narrow wooded valley	debris	900	CZan; ZANETTI 1978
<i>Amischa forcipata</i> (MULSANT & REY, 1873)	EUR	Coredo		car net	800	CZan
<i>Atheta aeneipennis</i> (THOMSON, 1856)	WDI	Coredo: Malga di Coredo; Smarano; Brez: Palù di Tremole	altomontane/subalpine coniferous wood; margin of peat bog	fungi (including Russula)	1000-1700	CZan; ZANETTI 1978 (A. picipennis)
<i>Atheta alpigrada</i> FAUVEL, 1900	ALP	Monte Peller	subalpine pasture	Marmota dung	2000	CZan
<i>Atheta amicola</i> (STEPHENS, 1832)	WDI	Monte Luc = Laugenspitze: Laugen Alm	anthropic environment	hen-house	1800	CZan

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<i>Atheta atramentaria</i> (GYLLENHAL, 1810)	COS	Bresimo: Malga Bordolona; Bresimo: Malga Preghena; Monte Peller; Proves = Proveis; Rio della Chiesa = Kirchbach; Sfruz: Passo Predaia; Smarano	subalpine pasture; coniferous montane wood	dung (Marmota, cow, horse)	1000-2000	CZan
<i>Atheta benickiella</i> BRUNDIN, 1948	EUR	Sfruz: Predaia	montane meadow	fungi	1400	CZan
<i>Atheta boreella</i> BRUNDIN, 1948	EUM	Smarano		car net		CZan
<i>Atheta britanniae</i> BERNHAUER & SCHEERPELTZ, 1926	EUR	Coredo: Sette Larici; Smarano: Merlonga; Smarano: Verdes; Vervò: Passo Favogna	coniferous montane wood; altomontane/subalpine coniferous wood	fungi; tree fungi; car net	1000-1600	CZan
<i>Atheta brunneipennis</i> (THOMSON, 1852)	EUR	Coredo: Val di Toc	Picea wood	pitfall	1200	CZan
<i>Atheta castanoptera</i> (MANNERHEIM, 1830)	EUR	Coredo: Laghi Palù; Coredo: Sette Larici; Coredo: Val di Toc; Monte Roen; Sfruz: Credai; Sfruz: Predaia; Smarano: Merlonga; Smarano: Verdes; Smarano; Castel Thun	coniferous montane wood; bottom of narrow wooded valley; thermophilic submontane wood	fungi (including <i>Russula</i>); debris of <i>Cirsium montanum</i>	500-2000	CZan; ZANETTI 1978
<i>Atheta cinnamoptera</i> (THOMSON, 1856)	SIE	Senale = Unsere Liebe Frau im Walde; Smarano: Verdes; Smarano	bottom of narrow wooded valley	car net	1000-1300	CZan
<i>Atheta contristata</i> (KRAATZ, 1856)	EUR	Pietra Grande: Malga Pozzol; Smarano	bottom of narrow wooded valley	debris	1000-1700	CZan; ZANETTI 1978
<i>Atheta coriaria</i> (KRAATZ, 1856)	COS	Coredo; Smarano		car net	800-1000	CZan
<i>Atheta corvina</i> (THOMSON, 1856)	SIE	Val di Bresimo; Brez: Gran Palù; Coredo: Sette Larici	altomontane/subalpine coniferous wood; coniferous montane wood	fungi; car net	1200-1600	CZan
<i>Atheta crassicornis</i> (FABRICIUS, 1793)	EUM	Coredo: Laghi Palù; Coredo; Monte Roen	coniferous montane wood	fungi (including <i>Russula</i>); car net	900-1000	CZan; ZANETTI 1978
<i>Atheta dadopora</i> THOMSON, 1867	WDI	Coredo: Sette Larici; Smarano: Merlonga; Smarano: Verdes; Castel Thun	coniferous montane wood; bottom of narrow wooded valley; thermophilic submontane wood	fungi (including <i>Russula</i>); car net	500-1200	CZan; ZANETTI 1978
<i>Atheta deformis</i> (KRAATZ, 1856)	SIE	Santuario di San Romedio	bottom of narrow wooded valley	car net	700	CZan
<i>Atheta depressicollis</i> (FAUVEL, 1875)	EUR	Monte Luc = Laugenspitze; Laugen Alm; Monte Roen; Malga di Romeno	altomontane/subalpine coniferous wood	hen-house; fungi	1750-1850	CZan
<i>Atheta divisa</i> (MÄRKEL, 1845)	EUR	Santuario di San Romedio	various environments	car net	700	CZan
<i>Atheta ebenina</i> (MULSANT & REY, 1873)	EUR	Pietra Grande: Malga Pozzol; Coredo: Val di Toc	bottom of narrow wooded valley	debris	1300-1600	CZan; ZANETTI 1978
<i>Atheta elongatula elongatula</i> (GRAVENHORST, 1802)	WDI	Coredo: Laghi Palù; Senale = Unsere Liebe Frau im Walde; Sfruz: Predaia	bank of marsh	debris	900-1450	CZan
<i>Atheta excellens</i> (KRAATZ, 1856)	SIE	Monte Peller	subalpine pasture		2000	CZan
<i>Atheta excelsa</i> BERNHAUER, 1911	SIE	Bresimo: Malga Preghena; Monte Peller	subalpine pasture	dung (cow, Marmota)	2000	CZan
<i>Atheta fallaciosa</i> (SHARP, 1869)	SIE	Bresimo: Malga Preghena	bank of bog		2000	CZan; TAGLIAPIETRA & ZANETTI 2012
<i>Atheta fungi</i> (GRAVENHORST, 1806) (gr.)	WDI	Cles: Mechel; Coredo: Laghi Palù; Coredo; Cressino: La Rocchetta; Malosco: Le Regole; Monte Peller; Proves = Proveis; Rio Pescara = Fischbach; Sfruz: Passo Predaia; Sfruz: Predaia; Sfruz; Smarano: Verdes; Smarano; Coredo: Castel Bragher; Denno; Pietra Grande: Malga Pozzol	cultivated areas; bank of marsh; riparian wood; coniferous montane wood; subalpine pasture; bottom of narrow wooded valley; montane meadow; submontane mixed wood; apple orchard; waterfall	debris (including <i>Alnus incana</i>); car net; moss	270-2000	CZan; ZANETTI 1978
<i>Atheta fungicola</i> (THOMSON, 1852)	EUR	Coredo: Val di Toc; Monte Roen; Sfruz; Smarano: Merlonga; Vervò: Passo Favogna	bottom of narrow wooded valley; coniferous montane wood; altomontane/subalpine coniferous wood	fungi; tree fungi	1000-1700	CZan
<i>Atheta fungivora</i> (THOMSON, 1867)	EUM	San Felice = St. Felix; Lago di Santa Maria = Felixer Weiher	subalpine meadow	rotting hay	1600	CZan
<i>Atheta gagatina</i> (BAUDI DI SELVE, 1848)	EUR	Monte Roen; Sfruz: Credai; Smarano; Smarano: Merlonga; Lago di Tovel;	coniferous montane wood	fungi (including <i>Russula</i>)	1000-1400	CZan; ZANETTI 1978
<i>Atheta hansseni</i> A. STRAND, 1943	EUR	Coredo: Malga di Coredo; Coredo: Sette Larici; Coredo: Val di Toc; Smarano: Merlonga; Smarano: Verdes; Smarano	altomontane/subalpine coniferous wood; coniferous montane wood; coniferous montane wood;	fungi (including <i>Russula</i>); debris of <i>Cirsium montanum</i>	1000-1700	CZan; ZANETTI 1978 (<i>A. cadaverina</i>); MARISA et al., in press
<i>Atheta harwoodi</i> B. S. WILLIAMS, 1930	CEU	Monte Luc = Laugenspitze; Laugen Alm; Smarano;	montane meadow	hen-house; car net; bait on tree	1000-1800	CZan; ZANETTI 1978
<i>Atheta hybrida</i> SHARP, 1869	EUR	Lago di Tovel	coniferous montane wood		1200	CZan
<i>Atheta hygrobia vindobonensis</i> BRUNDIN, 1944	SIE	Andalo: Lago di Andalo	bank of marsh	silt	1000	CZan; ZANETTI (2009)
<i>Atheta hygrotopora</i> (KRAATZ, 1856)	EUR	Pietra Grande: Malga Pozzol; Proves = Proveis; Santuario di San Romedio; Smarano: Verdes; Lago di Tovel	bank of stream; bank of stream	car net; silt	700-1600	CZan; ZANETTI 1978

SPECIES		LOCALITY: SITE	MACROHABITAT	MICROHABITAT	ALTITUDINAL RANGE	SOURCE (collection and/or references)
<i>Atheta incognita</i> (SHARP, 1869)	EUR	Smarano: Verdes; Lago di Tovel	bottom of narrow wooded valley; coniferous montane wood		1000-1200	CZan
<i>Atheta indubia</i> (SHARP, 1869)	EUR	Vervò: Passo Favogna	altomontane/subalpine coniferous wood		1600	CZan
<i>Atheta inquinula</i> (GRAVENHORST, 1802)	WDI	Santuario di San Romedio	bottom of narrow wooded valley		700	CZan
<i>Atheta intermedia</i> (THOMSON, 1852)	SIE	Coredo: Malga di Coredo	altomontane/subalpine coniferous wood; subalpine pasture	fungi (Lactarius); cow dung	1600	CZan
<i>Atheta knabli</i> G. BENICK, 1938	ALP	Sfruz: Passo Predaia	subalpine pasture	cow dung	1700	CZan
<i>Atheta laevana</i> (MULSANT & REY, 1852)	SIE	Val di Bresimo; Coredo: Val di Toc; Smarano: Verdes; Smarano	Picea wood; bottom of narrow wooded valley	car net	1000-1400	CZan
<i>Atheta laevicauda</i> J. SAHLBERG, 1876	EUR	Monte Roen	subalpine bushy slope	debris of <i>Alnus viridis</i>	2040	CZan
<i>Atheta laticollis</i> (STEPHENS, 1832)	WDI	Val di Bresimo: Coredo; Monte Peller; Smarano: Verdes; Smarano	various environments; bottom of narrow wooded valley	debris of <i>Cirsium montanum</i> ; car net	1000-1500	CZan; ZANETTI 1978
<i>Atheta leonhardi</i> BERNHAUER, 1911	EUR	Monte Roen	base rocce		2040	CZan
<i>Atheta longicornis</i> (GRAVENHORST, 1802)	COS	Val di Bresimo; Coredo: Tavon; Monte Peller; Proves = Proveis: Rio della Chiesa = Kirchbach; Senale = Unsere Liebe Frau im Walde; Sfruz: Passo Predaia; Smarano; San Felice = St. Felix: Lago di Santa Maria = Felixer Weiher	coniferous montane wood; subalpine pasture;	car net; dung (horse, cow, Marmota); rotting hay	800-2000	CZan
<i>Atheta luridipennis</i> MANNERHEIM, 1830	EUM	Santuario di San Romedio; Smarano	bank of stream	moss; car net	700-1000	CZan
<i>Atheta luteipes</i> (ERICHSON, 1837)	WDI	Ton: Sabino	river bank	silt	300	CZan
<i>Atheta macrocera</i> (THOMSON, 1856)	WDI	Coredo: Malga di Coredo; Monte Peller; Sfruz: Passo Predaia	subalpine pasture	dung (cow, Marmota)	1600-2000	CZan
<i>Atheta marcida</i> (ERICHSON, 1837)	EUM	Coredo: Castel Bragher	mixed wood	fungi	630	CZan
<i>Atheta monacha</i> BERNHAUER, 1899	CEU	Pietra Grande: Malga Pozzoli; Val di Tovel: Rifugio Capriolo	bank of stream	gravel	800-1600	CZan
<i>Atheta monticola</i> (THOMSON, 1852)	EUR	Val di Bresimo; Coredo: Malga di Coredo; Vervò: Passo Favogna	altomontane/subalpine coniferous wood	fungi; car net	1600-1700	CZan; ZANETTI 1978 (<i>L. nivicola</i>)
<i>Atheta myrmecobia</i> (KRAATZ, 1856)	CEU	Brez: Palù di Tremole; Malosco: Le Regole; Proves = Proveis; Sfruz: Predaia; Smarano: Verdes; Lago di Tovel; San Felice = St. Felix: Lago di Santa Maria = Felixer Weiher	peat bog; coniferous montane wood; bottom of narrow wooded valley; marsh	debris; Formica sp. nest; car net; stump; debris (including <i>Cirsium montanum</i>)	1000-1700	CZan
<i>Atheta nigra</i> (KRAATZ, 1856)	WDI	Val di Bresimo; Coredo; Monte Luc = Laugenspitze; Laugen Alm; Santuario di San Romedio;	various environments; hen-house	car net; chicken droppings	700-1800	CZan
<i>Atheta nigripes</i> (THOMSON, 1856)	SIE	Coredo: Malga di Coredo; Proves = Proveis: Rio della Chiesa = Kirchbach; Sfruz: Passo Predaia	subalpine pasture	cow dung	1600-1700	CZan
<i>Atheta nigriflora</i> (GRAVENHORST, 1802)	WDI	Coredo: Laghi Palù; Monte Roen; Sfruz; Smarano	coniferous montane wood	fungi (including <i>Russula</i>)	900-1500	CZan; ZANETTI 1978
<i>Atheta oblita</i> (ERICHSON, 1839)	EUM	Coredo; Monte Peller; Senale = Unsere Liebe Frau im Walde; Sfruz; Smarano	various environments; montane meadow	bait on tree; car net	800-1500	CZan
<i>Atheta orbata</i> (ERICHSON, 1837)	EUM	Coredo	various environments	car net	800	CZan
<i>Atheta orphana</i> (ERICHSON, 1837)	SIE	Malosco: Le Regole; Lago di Tovel	coniferous montane wood		1200-1300	CZan
<i>Atheta pallidicornis</i> (THOMSON, 1856)	EUR	Smarano: Verdes	bottom of narrow wooded valley	barks of <i>Picea</i>	1000	CZan
<i>Atheta palustris</i> (KIESENWETTER, 1844)	WDI	Coredo; Smarano: Verdes; Smarano; Lago di Tovel; Coredo: Castel Bragher; Val di Tovel	various environments; bottom of narrow wooded valley; submontane mixed wood; montane coniferous wood	fungi (<i>Russula</i>); car net	600-1200	CZan; ZANETTI 1978
<i>Atheta paracrossicornis</i> BRUNDIN, 1954	EUR	Brez: Gran Palù; Coredo: Malga di Coredo; Coredo: Sette Larici: Coredo: Val di Toc; Monte Roen	altomontane/subalpine coniferous wood; coniferous montane wood; bottom of narrow wooded valley	fungi	1200-1600	CZan
<i>Atheta parapicipennis</i> BRUNDIN, 1954	BOM	Pietra Grande: Malga Pozzoli; Proves = Proveis: Kesselalm	waterfall; subalpine bushy slope	moss; debris (<i>Pinus mugo</i>)	1650	CZan
<i>Atheta parca</i> (MULSANT & REY, 1873)	CEU	Coredo: Laghi Palù	bank of marsh		900	CZan
<i>Atheta pfaundleri</i> G. BENICK, 1940	CEU	Smarano: Verdes	bottom of narrow wooded valley	debris of <i>Cirsium montanum</i>	1000	CZan; FELDMAN (2006)
<i>Atheta picipes</i> (THOMSON, 1856)	CEU	Coredo; Lauregno = Laurein	coniferous montane wood	fungi	800-1200	CZan; ZANETTI 1978
<i>Atheta pilicornis</i> (THOMSON, 1852)	SIE	Coredo: Malga di Coredo; Monte Roen	altomontane/subalpine coniferous wood; coniferous montane wood	fungi	1000-1700	CZan

SPECIES		LOCALITY: SITE	MACROHABITAT	MICROHABITAT	ALTITUDINAL RANGE	SOURCE (collection and/or references)
<i>Atheta puncticollis</i> G. BENICK, 1938	EUR	Proves = Proveis: Rio della Chiesa = Kirchbach	subalpine pasture	cow dung	1500	CZan
<i>Atheta ravilla</i> (ERICHSON, 1839)	CEU	Coredo: Sette Larici; Sfruz: Predaia; Smarano	coniferous montane wood	fungi	1000-1400	CZan; ZANETTI 1978
<i>Atheta reissi</i> G. BENICK, 1936	ALP	Monte Peller	subalpine pasture	Marmota dung	2000	CZan
<i>Atheta ripicola</i> HANSEN, 1932	SIE	Coredo: Sette Larici; Smarano	bank of marsh	marsh; car net	800-1000	CZan
<i>Atheta rugulosa</i> (HEER, 1839)	EUR	Pietra Grande: Malga Pozzol	bank of stream		1600	CZan
<i>Atheta setigera</i> (SHARP, 1869)	EUR	Bresimo: Malga Bordolona	subalpine pasture	horse dung	2000	CZan
<i>Atheta sodalis</i> (ERICHSON, 1837)	SIE	Brez: Gran Palù; Cavareno: Pradei; Coredo: Malga di Coredo; Coredo: Sette Larici; Coredo: Val di Toc; Lauregno = Laurein; Proves = Proveis: Rio Pescara = Fischbach; Monte Roen; Sfruz: Credai; Sfruz: Predaia; Smarano: Merlonga; Smarano: Verdes; Smarano; Vervò: Passo Favogna; San Felice = St. Felix: Lago di Santa Maria = Felixer Weiher	altomontane/subalpine coniferous wood; bank of marsh; subalpine pasture; coniferous montane wood; bottom of narrow wooded valley; Picea wood; riparian wood; subalpine bushy slope;	debris (of Phragmites, Carex, Spiraea, Alnus incana; Pinus mugo); barks; fungi (including Russula); cow dung; stump	1000-1700	CZan; ZANETTI 1978
<i>Atheta subglabra</i> (SHARP, 1869)	EUR	Val di Bresimo		car net	1000	CZan
<i>Atheta subrugosa</i> (MÄRKEL & KIESENWETTER, 1848)	CEU	Bresimo: Malga Preghena	subalpine pasture	horse dung	2000	CZan
<i>Atheta subtilis</i> (W. SCRIBA, 1866)	WDI	Val di Bresimo; Coredo: Malga di Coredo; Monte Roen; Sfruz: Predaia; Smarano; Vervò: Passo Favogna	altomontane/subalpine coniferous wood; subalpine pasture; coniferous montane wood; subalpine bushy slope	car net; fungi (including Russula); cow dung; debris under Pinus mugo	1000-1600	CZan; ZANETTI 1978
<i>Atheta testaceipes</i> (HEER, 1839)	EUR	Passo della Mendola = Mendelpass		car net	1200	CZan
<i>Atheta tibialis</i> (HEER, 1839)	CEU	Bresimo: Malga Preghena; Bresimo: Malga Bordolona Valle del Vento; Coredo: Val di Toc; Gruppo del Brenta: Passo del Grosté; Monte Roen: Malga di Romeno; Monte Peller; Pietra Grande: Malga Pozzol; Monte Roen: Malga di Smarano; Monte Roen: vetta; Sfruz: Passo Predaia	subalpine pasture; bottom of narrow wooded valley; altomontane/subalpine coniferous wood; Firmetum; subalpine bushy slope	debris (Dryas, Pinus mugo, Cirsium spinosissimum); base of rocks; Marmota dung	1400-2400	CZan
<i>Atheta trinotata</i> (KRAATZ, 1856)	EUM	Senale = Unsere Liebe Frau im Walde; Sfruz: Passo Predaia; Smarano: Verdes;	subalpine pasture; bottom of narrow wooded valley	car net	1000-1700	CZan
<i>Atheta vaga</i> (HEER, 1839)	EUR	Sfruz	montane meadow	bait on tree	1000	CZan
<i>Atheta volans</i> (W. SCRIBA, 1859)	EUR	Coredo: Sette Larici; Coredo: Val di Toc; Santuario di San Romedio; Smarano: Verdes; Ton: Sabino	coniferous montane wood; bottom of narrow wooded valley; river bank		300-1300	CZan; ZANETTI 1978
<i>Dadobia immersa</i> (ERICHSON, 1837)	WDI	Coredo: Sette Larici; Sfruz: Credai	coniferous montane wood	barks (Abies, Pinus)	1200	CZan
<i>Dinaraea aequata</i> (ERICHSON, 1837)	SIE	Cressino: la Rocchetta; Smarano: Verdes	riparian wood; bottom of narrow wooded valley	debris of Salix	270-1000	CZan
<i>Dinaraea angustula</i> (GYLLENHAL, 1810)	SIE	Denno	apple orchard		500	cTam
<i>Dinaraea arcana</i> (ERICHSON, 1839)	SIE	Monte Luc = Laugenspitze: Laugen Alm; Monte Roen: Malga di Romeno; Rumo: Malga Lavazzé	altomontane/subalpine coniferous wood;	barks (Larix, Picea)	1800-1900	CZan
<i>Dinaraea linearis</i> (GRAVENHORST, 1802)	SIE	Coredo: Malga di Coredo; Cressino: la Rocchetta	altomontane/subalpine wood; riparian wood	fungi; debris	250-1600	CZan
<i>Geostiba circellaris</i> (GRAVENHORST, 1806)	SIE	Brez: Gran Palù; Castelfondo: Laghetto delle Regole; Cavareno: Pradei; Coredo: Val di Toc; Proveis = Proveis: Rio Pescara = Fischbach; Sfruz: Predaia; Smarano: Verdes; Smarano	bank of bog; bank of marsh; bottom of narrow wooded valley; Picea wood; riparian wood; coniferous montane wood; bottom of narrow wooded valley; bank of stream	debris of Phragmites, Carex, Spiraea, Alnus incana, Betula, Cirsium montanum; fungi (Russula)	1000-1600	CZan; ZANETTI 1978
<i>Hydrosmeeta fragilis</i> (Kraatz, 1854)	EUM	Smarano: Verdes; Ton: Rio Pongaiola; Lago di Tovel: Pozzol di Tuenno; Lago di Tovel	bottom of narrow wooded valley; bank of stream	car net	300-1300	CZan
<i>Hydrosmeeta longula</i> (HEER, 1839)	WDI	Andalo: Lago di Andalo	bank of marsh	silt with Scyrcpus	1000	CZan
<i>Liogluta granigera</i> (KIESENWETTER, 1850)	SIE	Monte Peller; Vervò: Passo di Favogna	subalpine bushy slope; altomontane/subalpine coniferous wood	debris (including Alnus viridis)	1600-1700	CZan; ZANETTI (2011)
<i>Liogluta longiuscula</i> (GRAVENHORST, 1802)	EUM	Smarano: Verdes	bottom of narrow wooded valley	debris	1000	CZan; ZANETTI 1978; ZANETTI (2011)
<i>Liogluta micans</i> (MULSANT & REY, 1852)	BOM	Monte Roen; San Felice = St. Felix: Lago di Santa Maria = Felixer Weiher	subalpine bushy slope; marsh	debris (Loiseleuria); base of trees (including Salix)	1600-2000	CZan

SPECIES		LOCALITY: SITE	MACROHABITAT	MICROHABITAT	ALTITUDINAL RANGE	SOURCE (collection and/or references)
<i>Liogluta wuesthoffi</i> (G. BENICK, 1938)	CEU	Coredo: Val di Toc; Proves = Proveis: Rio Pescara = Fischbach = Fischbach; Santuario di San Romedio; Sfruz: Passo Predaia; Smarano: Verdes; Smarano; Lago di Tovel; Vervò: Passo Favogna; Brez: Palù di Tremole; Proves = Provais: Kesseralm; Bresimo: Malga Pregonna; Pietra Grande: Malga Pozzol	Picea wood; riparian wood; bottom of narrow wooded valley; altomontane/subalpine coniferous wood; coniferous montane wood; waterfall	debris (including <i>Alnus incana</i> , <i>Pinus mugo</i>); mosses	700-1600	CZan; ZANETTI 1978; ZANETTI (2011)
<i>Lyprocorrhe anceps</i> (ERICHSON, 1837)	SIE	Coredo: Malga di Coredo; Monte Roen: Malga di Smarano;	altomontane/subalpine coniferous wood	nest of <i>Formica</i> sp.	1600-1900	CZan
<i>Nehemitropia lividipennis</i> (MANNERHEIM, 1830)	COS	Smarano	various environments	car net	1000	CZan
<i>Neohilara subterranea</i> (MULSANT & REY, 1853)	EUR	Coredo; Smarano; Val di Tovel	various environments	car net	900-1000	CZan
<i>Nothotecta flavipes</i> (GRAVENHORST, 1806)	SIE	Proves = Proveis: Rio della Chiesa = Kirchbach; Monte Roen; Lago di Tovel	subalpine pasture; subalpine bushy slope; coniferous montane wood	nest of <i>Formica</i> sp.	1200-1800	CZan
<i>Schistoglossa gemina</i> (ERICHSON, 1837)	SIE	Tavon: Biotopo Senda	wetland	debris on banks	850	CZan
<i>Schistoglossa pseudogemina</i> G. BENICK, 1981	CEU	Castelfondo: Laghetto delle Regole	Molinietum with <i>Carex</i>	tuft of <i>Carex</i>	1250	CZan
<i>Trichiusa immigrata</i> LOHSE, 1984	EUR	Monte Luc = Laugenspitze: Laugen Alm	anthropic environment	hen-house	1800	CZan
<i>Taxicera deplanata</i> (GRAVENHORST, 1802)	EUR	Castelfondo: Laghetto delle Regole; Proves = Proveis; Smarano: Verdes; Smarano	altomontane/subalpine coniferous wood; bottom of narrow wooded valley	corpse of <i>Bufo</i> ; car net	1000-1200	CZan
<i>Taxicera dolomitana</i> (BERNHAEUER, 1901)	ALP	Santuario di San Romedio: Smarano: Verdes	bank of stream		700-1000	CZan
<i>Taxicera sericophila</i> (BAUDI DI SELVE, 1870)	CEU	Santuario di San Romedio; Senale = Unsere Liebe Frau im Walde; Smarano	various environments	car net	700-1300	CZan
<i>Autalia impressa</i> (OLIVIER, 1795)	EUM	Monte Roen; Smarano	coniferous montane wood	fungi (including <i>Russula</i>)	1000-1500	CZan; ZANETTI 1978
<i>Autalia longicornis</i> SCHEERPELTZ, 1947	EUR	Monte Roen; Smarano: Verdes	coniferous montane wood; bottom of narrow wooded valley	fungi; debris of <i>Cirsium montanum</i>	1000-1500	CZan
<i>Autalia puncticolis</i> SHARP, 1864	WDI	Bresimo: Malga Pregonna, Coredo: Malga di Coredo; Monte Peller; Sfruz: Passo Predaia; San Felice = St. Felix: Lago di Santa Maria = Felixer Weiher	subalpine bushy slope; altomontane/subalpine coniferous wood; subalpine pasture	dung (horse, <i>Marmota</i>); rotting hay	1600-2100	CZan
<i>Autalia rivularis</i> GRAVENHORST, 1802	WDI	Coredo; Fondo: Smarano; Smarano: Verdes; Vervò	various environments; bottom of narrow wooded valley	car net	900-1000	CZan
<i>Anaulacaspis nigra</i> (GRAVENHORST, 1802)	SIE	Castelfondo: Laghetto delle Regole	bank of bog		1250	CZan
<i>Falagrioma thoracica</i> (STEPHENS, 1832)	WDI	Smarano; Sfruz	montane meadow; montane meadow with trees	debris	1000	CZan; ZANETTI 1978 (<i>Falaglia</i>)
<i>Bolitochara mulsanti</i> SHARP, 1875	EUR	Coredo; Monte Roen: Malga di Romeno	altomontane/subalpine coniferous wood	fungi (<i>Lactarius</i> , <i>Amanita</i>)	1650	CZan
<i>Bolitochara obliqua</i> ERICHSON, 1837	EUR	Sfruz: Predaia; Smarano: Verdes	coniferous montane wood; bottom of narrow wooded valley	stump; barks of <i>Picea</i>	1000-1400	CZan
<i>Bolitochara pulchra</i> (GRAVENHORST, 1806)	SIE	Amblar; Coredo: Malga di Coredo; Lauregno = Laurein; Monte Roen; Smarano; Brez: Palù di Tremole; Lago di Tovel	coniferous montane wood; altomontane/subalpine coniferous wood; margin of peat bog	stump (<i>Picea</i>); fungi (<i>Russula</i> , <i>Lactarius</i>)	1000-1700	CZan; ZANETTI 1978 (<i>B. lunulata</i>)
<i>Leptusa fauciumberinae</i> SCHEERPELTZ, 1973	ALP	Bresimo: Malga Bordolona Valle del Vento	subalpine bushy slope	debris of <i>Rhododendron ferrugineum</i>	2350	CZan
<i>Leptusa fumida</i> (ERICHSON, 1839)	WDI	Brez: Gran Palù; Coredo: Sette Larici; Smarano: Verdes; Vervò: Passo Favogna	altomontane/subalpine coniferous wood; coniferous montane wood; bottom of narrow wooded valley;	barks (<i>Picea</i> , <i>Abies</i>)	1000-1500	CZan
<i>Leptusa pseudoalpestris</i> pseudoalpestris SCHEERPELTZ, 1935	ALP	Coredo: Malga di Coredo; Monte Roen: Malga di Romeno; Monte Peller; Monte Roen: vetta; Monte Roen: Malga di Smarano; Rumo: Malga Lavazzè; Smarano: Verdes; Lago di Tovel: Malga di Tuenno; Corno di Tres	altomontane/subalpine coniferous wood; subalpine bushy slope; riparian wood; bottom of narrow wooded valley; coniferous montane wood	nest of <i>Formica</i> sp.; debris of <i>Rhododendron</i> , <i>Salix</i> , <i>Pinus mugo</i> ; barks of <i>Picea</i>	1000-2100	CZan; CAS; MML; ZANETTI & PACE 2005
<i>Leptusa pulchella</i> MANNERHEIM, 1830	EUR	Brez: Gran Palù; Coredo: Malga di Coredo; Smarano: Pozza Lunga; Coredo: Sette Larici; Monte Roen: Malga di Romeno; Proves = Proveis: Malga Manzara = Stierbergalm; Rumo: Malga Lavazzè; Sfruz: Predaia; Sfruz; Smarano; Smarano: Verdes; Vervò: Passo Favogna	altomontane/subalpine coniferous wood; dry mixed wood; coniferous montane wood; subalpine bushy slope; bottom of narrow wooded valley;	barks (<i>Picea</i> , <i>Pinus sylvestris</i> , <i>Abies</i> , <i>Alnus</i>)	700-1900	CZan; ZANETTI 1978; ZANETTI & PACE 2005
<i>Rhopalocerina clavigera</i> (W. SCRIBA, 1859)	EUR	Smarano: sentiero "Acquedotto"	<i>Picea</i> wood with <i>Fagus</i>	debris	1000	CZan
<i>Thecturota marchii</i> (DODERO, 1922)	EUR	Coredo	various environments	car net	900	CZan
<i>Encephalus complicans</i> STEPHENS, 1832	CEU	San Felice = St. Felix: Lago di Santa Maria = Felixer Weiher	wetland	heads of <i>Carex</i>	1600	CZan

SPECIES		LOCALITY: SITE	MACROHABITAT	MICROHABITAT	ALTITUDINAL RANGE	SOURCE (collection and/or references)
<i>Agaricochara latissima</i> (STEPHENS, 1832)	EUR	Smarano: Pozzalunga	coniferous montane wood		1000	CZan
<i>Gyrophaena affinis</i> MANNERHEIM, 1830	WDI	Coredo: Malga di Coredo; Coredo: Sette Larici; Monte Roen: Tregiolo; Santuario di San Romedio; Smarano; Smarano: Verdes	altomontane/subalpine coniferous wood; coniferous montane wood; bottom of narrow wooded valley;	fungi (Lactarius, Amanita; Polyporus, Collybia); tree fungi; car net	1000-1200	CZan
<i>Gyrophaena manca</i> (ERICHSON, 1839)	SIE	Coredo; Smarano;	various environments	car net	900-1000	CZan
<i>Gyrophaena bihamata</i> THOMSON, 1867	WDI	Coredo	various environments	car net	900	CZan
<i>Gyrophaena boleti</i> (LINNAEUS, 1758)	SIE	Coredo: Val di Toc; Santuario di San Romedio; Sfruz: Passo Predaia; Sfruz: Predaia	bottom of narrow wooded valley; subalpine coniferous open wood; coniferous montane wood	car net; fungi (including Polyporus)	600-1600	CZan; ZANETTI 1978
<i>Gyrophaena fasciata</i> (MARSHAM, 1802)	SIE	Coredo	various environments	car net	900	CZan
<i>Gyrophaena gentilis</i> ERICHSON, 1839	SIE	Monte Roen: Tregiolo	coniferous montane wood	tree fungi	1250	CZan
<i>Gyrophaena joyi</i> WENDELER, 1924	SIE	Coredo; Coredo: Laghi Palù	various environments; bank of marsh	car net	900	CZan
<i>Gyrophaena joyioides</i> WÜSTHOFF, 1937	EUR	Monte Roen: Tregiolo; Smarano: Verdes	coniferous montane wood; bottom of narrow wooded valley	tree fungi; car net	1000-1250	CZan
<i>Gyrophaena strictula</i> ERICHSON, 1839	SIE	Fondo	various environments	car net	1200	CZan
<i>Gyrophaena williamsi</i> A. STRAND, 1935	EUR	Coredo: Sette Larici; Smarano; Smarano: Verdes; Sfruz: Predaia	coniferous montane wood; bottom of narrow wooded valley	car net; fungi (Tricholomopsis)	1000-1300	CZan; ZANETTI 1978
<i>Homalota plana</i> (GYLLENHAL, 1810)	WDI	Coredo: Pozza	dry wood	baks of Pinus sylvestris	700	CZan
<i>Cypha carinthiaca</i> (SCHEERPELTZ, 1958)	ALP	Brez: Gran Palù	bank of bog		1600	CZan
<i>Hygronoma dimidiata</i> (GRAVENHORST, 1806)	SIE	Cavareno: Pradei; Tavon: Biotopo Senda; Castelfondo: Laghetto delle Regole	bank of marsh; Moliniatum with Carex	debris of Phragmites, Carex, Spiraea; on Typha latifolia; in tufts of Carex	850-950	CZan
<i>Holobus flavicornis</i> (LACORDAIRE, 1835)	EUM	Revò	various environments	car net	1000	CZan
<i>Lomechusoides strumosus</i> (FABRICIUS, 1775)	SIE	Smarano	montane wood (Pinus sylvestris)	ant nest	1000	CZan; ZANETTI 1978 (Lomechusa)
<i>Drusilla canaliculata</i> (FABRICIUS, 1787)	SIE	Cles: Mechel; Coredo: Laghi Palù; Cressino: La Rocchetta; Proves = Proveis: Rio Pescara = Fischbach; Sfruz: Predaia; Smarano; Ton: Sabino; Sfruz	cultivated areas; bank of marsh; riparian wood; montane meadow; river bank	debris(including Alnus incana)	250-1200	CZan; ZANETTI 1978
<i>Pella cognata</i> (MÄRKEL, 1842)	SIE	Coredo: Pozza Lunga; Smarano; Castel Thun	dry mixed wood; montane meadow; thermophilic submontane wood	nest of Lasius	650-1000	CZan
<i>Pella humeralis</i> (GRAVENHORST, 1802)	SIE	Coredo: Pozza Lunga; Coredo: Val di Toc; Monte Roen	dry mixed wood; Picea wood;	nest of Lasius, Formica	650-2000	CZan
<i>Pella laticollis</i> (MÄRKEL, 1845)	EUR	Coredo: Pozza Lunga	dry mixed wood	nest of Lasius	800	CZan
<i>Pella lugens</i> (GRAVENHORST, 1802)	WDI	Smarano			900	ZANETTI 1978
<i>Zyras collaris</i> (PAYKULL, 1800)	EUM	Smarano			1000	CZan; ZANETTI 1978
<i>Myllaena brevicornis</i> (A. MATTHEWS, 1838)	EUM	Pietra Grande: Malga Flavona; Rumo: Maso Stasal; Smarano: Verdes; Tret: Cascata di Tret; Proves = Proveis: Kesselalm	bank of stream; bottom of narrow wooded valley; waterfall	debris (including Cirsium montanum and Pinus mugo); moss with drip	900-1900	CZan; ZANETTI 1978
<i>Myllaena minuta</i> (A. MATTHEWS, 1838)	WDI	Coredo: Laghi Palù; Cressino: la Rocchetta; Tuenno: Palude di Tuenno	bank of marsh; riparian wood; bank of marsh	debris; debris Carex	250-900	CZan
<i>Meotica sp.</i>		Cressino: la Rocchetta	riparian wood	debris	270	CZan
<i>Calodera ligula</i> ASSING, 1996	SEU	Coredo: Laghi Palù	bank of marsh		900	CZan
<i>Cephalocousya nivicola</i> (THOMSON, 1871)	BOM	San Felice = St. Felix: Lago di Santa Maria = Felixer Weiher	bog with trees	debris	1600	CZan
<i>Crataraea suturalis</i> (MANNERHEIM, 1830)	EUM	Smarano	montane meadow	bait on tree	1000	CZan; ZANETTI 1978
<i>Ilyobates mech</i> (BAUDI DI SELVE, 1848)	SEU	Coredo: Val di Toc; Smarano: Verdes	Picea wood; bottom of narrow wooded valley	debris	1000-1200	CZan; ZANETTI 1978
<i>Ischnoglossa elegantula</i> (MANNERHEIM, 1830)	BOM	Pietra Grande: Malga Pozzol; Vervò: Passo Favogna	altomontane/subalpine coniferous wood	stump; barks	1600-1700	CZan
<i>Maurachelia pilosicollis</i> (BERNHAEUER, 1902)	CEU	Sfruz: Passo Predaia; Vervò: Passo Favogna	subalpine coniferous open wood; altomontane/subalpine coniferous wood	barks of Picea	1600	CZan
<i>Ocalea badia</i> ERICHSON, 1837	SIE	Sfruz: Passo Predaia; Lago di Tovel	subalpine coniferous open wood; coniferous montane wood	debris	1200-1600	CZan
<i>Ocalea concolor</i> KIESENWETTER, 1847	CEU	Ton: Sabino	waterfall	moss	350	CZan
<i>Ocalea picata</i> STEPHENS, 1832	EUM	Smarano: Verdes	bank of stream	moss	1000	CZan

SPECIES		LOCALITY: SITE	MACROHABITAT	MICROHABITAT	ALTITUDINAL RANGE	SOURCE (collection and/or references)
<i>Ocalea rivularis</i> MILLER, 1852	EUM	Smarano: Verdes	bank of stream	debris of <i>Cirsium montanum</i>	1000	CZan
<i>Oxypoda alternans</i> (GRAVENHORST, 1802)	WDI	Coredo: Malga di Coredo; Coredo: Sette Larici; Monte Roen; Sfruz: Predaia; Smarano: Merlonga; Coredo: Castel Bragher; Lago di Tovel; Vervò: Passo Favogna	altomontane/subalpine coniferous wood; coniferous montane wood; mixed wood	fungi	650-1700	CZan; ZANETTI 1978
<i>Oxypoda annularis</i> (MANNERHEIM, 1830)	WDI	Brez: Gran Palù; Coredo: Malga di Coredo; Coredo: Val di Toc; Lauregno = Laurein; Monte Roen; Sfruz: Passo Predaia; Smarano: Verdes; Brez: Palù di Tremole	bank of bog; altomontane/subalpine coniferous wood; Picea wood; bank of bog; subalpine bushy slope; subalpine coniferous open wood; bottom of narrow wooded valley	debris (including <i>Alnus viridis</i> , <i>Pinus mugo</i> , <i>Abies alba</i>); fungi (including <i>Russula</i>)	1200-2000	CZan; ZANETTI 1978
<i>Oxypoda brevicornis</i> (STEPHENS, 1832)	WDI	Coredo: Val di Toc	Picea wood	debris	1200	CZan; ZANETTI 1978 (<i>O. umbrata</i>)
<i>Oxypoda flavicornis</i> KRAATZ, 1856	WDI	Coredo: Malga di Coredo	altomontane/subalpine coniferous wood	fungi	1700	CZan
<i>Oxypoda formosa</i> KRAATZ, 1856	EUM	Coredo: Malga di Coredo; Coredo: Castel Bragher; Castel Thun	altomontane/subalpine coniferous wood; mixed wood; thermophilic submontane wood	fungi	650-1700	CZan
<i>Oxypoda haemorhoa</i> (MANNERHEIM, 1830)	WDI	Coredo: Malga di Coredo; Lauregno = Laurein; Malosco; Le Regole; Monte Peller; Proves = Proveis: Rio della Chiesa = Kirchbach; Monte Roen: Malga di Smarano; Rumo: Malga Lavazzé; Lago di Tovel;	altomontane/subalpine coniferous wood; coniferous montane wood; subalpine pasture;	nest of <i>Formica</i> sp.	1200-2000	CZan
<i>Oxypoda ignorata</i> ZERCHE, 1996	SEU	Bresimo: Malga Preghena	subalpine slope with bushes	debris of <i>Cirsium spinosissimum</i>	2100	CZan
<i>Oxypoda longipes</i> MULSANT & REY, 1861	SIE	Cressino: La Rocchetta	meadow in valley bottom	Talpa nest	250	CZan
<i>Oxypoda lugubris</i> KRAATZ, 1856	SIE	Pietra Grande: Malga Pozzol; Lago di Tovel	waterfall	moss	1200-1600	CZan
<i>Oxypoda opaca</i> (GRAVENHORST, 1802)	WDI	Cavareno: Pradei; Castel Thun	bank of marsh; thermophilic submontane wood	debris; debris of <i>Phragmites</i> , <i>Carex</i> , <i>Spiraea</i>	650-1000	CZan
<i>Oxypoda rufa</i> KRAATZ, 1856	EUR	Cavareno: Pradei	bank of marsh	debris of <i>Phragmites</i> , <i>Carex</i> , <i>Spiraea</i>	950	CZan
<i>Oxypoda skalitzkyi</i> BERNHAUER, 1902	EUR	Bresimo: Malga Preghena	subalpine bushy slope	debris of <i>Rhododendron</i>	2000	CZan
<i>Oxypoda spectabilis</i> MÄRKEL, 1845	EUR	Monte Peller; Bresimo: Malga Preghena	subalpine bushy slope	debris (<i>Alnus viridis</i> , <i>Cirsium spinosissimum</i>)	1700-2100	CZan
<i>Oxypoda tirolensis</i> GREDLER, 1863	BOM	Monte Peller; Pietra Grande: Malga Pozzol	Firmetum; waterfall	debris, moss	1600-2300	CZan
<i>Oxypoda togata</i> ERICHSON, 1837	EUM	Coredo: Malga di Coredo; Smarano	subalpine pasture; montane meadow	debris	1000-1600	CZan; ZANETTI 1978
<i>Tetralaucopora longitarsis</i> (ERICHSON, 1839)	WDI	Coredo: Sette Larici; Pietra Grande: Malga Pozzol; Smarano: Verdes	bank of stream; bottom of narrow wooded valley	gravel, silt	1000-1600	CZan
<i>Tetralaucopora rubicunda</i> (ERICHSON, 1837)	WDI	Smarano: Verdes	bank of stream	gravel, silt	1000	CZan
<i>Phloeopora testacea</i> (MANNERHEIM, 1830)	EUR	Coredo: Sette Larici; Coredo; Sfruz; Smarano	coniferous montane wood; montane wood (<i>Pinus sylvestris</i>);	barks (<i>Conifers</i> ; <i>Pinus</i>)	900-1200	CZan; ZANETTI 1978
<i>Gnypeta caerulea</i> (C. R. SAHLBERG, 1830)	SIE	Bresimo: Malga Preghena; Bresimo: Malga Bordinola Valle del Vento	bank of bog	tufts of grass; moss	2100-2300	CZan
<i>Gnypeta ripicola</i> (KIESENWETTER, 1844)	EUR	Coredo: Laghi Palù; Lago di Tovel; Lago di Tovel: Rifugio Capriolo	bank of marsh; bank of stream;	silt	700-1000	CZan
<i>Tachyusa balteata</i> ERICHSON, 1839	EUM	Cressino: La Rocchetta	riparian wood	debris	250	CZan
<i>Tachyusa constricta</i> ERICHSON, 1837	EUR	Cressino: La Rocchetta; Santuario di San Romedio	riparian wood; bank of stream	debris	250-700	CZan
<i>Tachyusa umbratica</i> ERICHSON, 1837	WDI	Cressino: La Rocchetta; Revò	riparian wood	debris; car net	250-1000	CZan
<i>Placusa atrata</i> (MANNERHEIM, 1830)	WDI	Smarano		barks (<i>Pinus</i> , <i>Fagus</i>)	1000	CZan; ZANETTI 1978
<i>Placusa complanata</i> ERICHSON, 1839	WDI	Smarano: Dosso di Pozzalunga	montane wood (<i>Pinus sylvestris</i>)	baks of <i>Pinus sylvestris</i>	1000	CZan
<i>Placusa depressa</i> MÄKLIN, 1845	WDI	Smarano; Smarano: Verdes	coniferous montane wood	baks (<i>Pinus sylvestris</i> , <i>Picea</i>)	1000	CZan; ZANETTI 1978
<i>Deleaster dichrous</i> (GRAVENHORST, 1802)	EUM	Santuario di San Romedio; Smarano: Verdes; Lago di Tovel	bank of stream	gravel	700-1200	CZan; ZANETTI 1978
<i>Syntomium aeneum</i> (P. MÜLLER, 1821)	EUR	Proves = Proveis: Malga Manzara = Stierbergalm; Smarano	subalpine bushy slope; coniferous montane wood	debris of ferns	1000-1500	CZan; ZANETTI 1978
<i>Anotylus clypeonitens</i> (PANDELLÉ, 1867)	EUR	Cressino: La Rocchetta; Monte Peller; Santuario di San Romedio; Smarano: Verdes; Denno	riparian wood; apple orchard	plant debris; car net	270-1500	CZan
<i>Anotylus complanatus</i> (ERICHSON, 1839)	COS	Coredo; Monte Peller; Sfruz	subalpine pasture	Marmota dung; car net	800-2000	CZan; ZANETTI 1978
<i>Anotylus nitidulus</i> (GRAVENHORST, 1802)	WDI	Coredo; Santuario di San Romedio; Senale = Unsere Liebe Frau im Walde		car net	700-1350	CZan

SPECIES	LOCALITY: SITE	MACROHABITAT	MICROHABITAT	ALTITUDINAL RANGE	SOURCE (collection and/or references)
<i>Anotylus rugosus</i> (FABRICIUS, 1775)	COS Cavareno: Pradei; Coredò: Laghi Palù; Cressino: La Rocchetta; Santuario di San Romedio; Smarano; Denno	bank of marsh; riparian wood; apple orchard	debris; marsh debris; car net	270-1000	CZan
<i>Anotylus tetracarinatus</i> (BLOCK, 1799)	WDI Coredò: Laghi Palù; Sfruz; Smarano; Smarano: Verdes;	montane meadow; bottom of narrow wooded valley; coniferous montane wood;	cow dung; bait on tree; fungi (Russula)	900	CZan; ZANETTI 1978
<i>Oxytelus laqueatus</i> (MARSHAM, 1802)	COS Bresimo: Malga Preghena; Val di Bresimo; Monte Peller; Proves = Proveis; Rio della Chiesa = Kirchbach; Sfruz: Passo Predaia	subalpine pasture	car net; dung (horse, Marmota)	1500-2000	CZan
<i>Oxytelus sculptus</i> GRAVENHORST, 1806	COS Monte Roen: Malga di Smarano	anthropic environment	debris of hen-house	1800	CZan
<i>Platystethus alutaceus</i> THOMSON, 1861	WDI Smarano	anthropic environment	silt	1000	CZan; ZANETTI 1978
<i>Platystethus arenarius</i> (GEOFFROY, 1785)	WDI Monte Peller; Proves = Proveis; Rio della Chiesa = Kirchbach; Sfruz: Passo Predaia; Smarano	subalpine pasture; coniferous montane wood	cow dung	1000-2000	CZan; ZANETTI 1978
<i>Platystethus cornutus</i> (GRAVENHORST, 1802)	COS Andalo: Lago di Andalo	bank of marsh	silt	1000	CZan
<i>Platystethus spinosus</i> ERICHSON, 1840	WDI Cressino: la Rocchetta	riparian wood	debris	270	CZan
<i>Aploderus caelatus</i> (GRAVENHORST, 1802)	WDI Val di Bresimo; Monte Luc = Laugenspitze; Laugen Alm; Monte Peller; Tres: Malga di Tres; San Felice = St. Felix; Lago di Santa Maria = Felixer Weiher	car net; subalpine pasture	hen-house; dung (Marmota, cow); debris (rotting hay)	1600-2000	CZan
<i>Bledius baudii</i> FAUVEL, 1872	EUM Smarano: Verdes	bottom of narrow wooded valley	sand	1000	CZan
<i>Bledius opacus</i> (BLOCK, 1799)	WDI Andalo: Lago di Andalo; Smarano: Verdes	bank of marsh; bank of stream	sand; silt	1000	CZan
<i>Carpelimus bilineatus</i> (STEPHENS, 1834)	COS Ton: Sabino; Smarano	bank of stream	silt; car net	700	CZan; ZANETTI 1978
<i>Carpelimus corticinus</i> (GRAVENHORST, 1806)	WDI Andalo: Lago di Andalo; Castelfondo: Laghetto delle Regole; Cavareno: Pradei; Coredò: Laghi Palù; Cressino: la Rocchetta; Smarano: Verdes; Smarano;	bank of marsh; bank of bog; riparian wood; bank of stream; car net;	debris of Phragmites, Carex, Spiraea	250-1200	CZan
<i>Carpelimus elongatulus</i> (ERICHSON, 1839)	EUR Coredò: Laghi Palù; Cressino: la Rocchetta	bank of marsh; riparian wood	debris	250-900	CZan
<i>Carpelimus fuliginosus</i> (GRAVENHORST, 1802)	EUM Smarano	various environments	car net	1000	CZan
<i>Carpelimus gracilis</i> (MANNERHEIM, 1830)	WDI Cavareno: Pradei; Coredò: Laghi Palù; Santuario di San Romedio; Senale = Unsere Liebe Frau im Walde; Smarano: Verdes	bank of marsh; bottom of narrow wooded valley; bank of stream	debris of Phragmites, Carex, Spiraea	700-1350	CZan
<i>Carpelimus obesus</i> (KIESENWETTER, 1844)	WDI Andalo: Lago di Andalo; Smarano: Verdes	bank of marsh; bank of stream	silt	1000	CZan
<i>Carpelimus opacus</i> (BAUDI DI SELVE, 1848)	SEU Cressino: la Rocchetta	riparian wood	debris	270	CZan
<i>Carpelimus pusillus</i> (GRAVENHORST, 1802)	WDI Andalo: Lago di Andalo; Santuario di San Romedio; Senale = Unsere Liebe Frau im Walde; Smarano: Verdes; Smarano; Ton: Sabino	bank of marsh; bottom of narrow wooded valley; river bank	silt	350-1300	CZan
<i>Carpelimus rivularis</i> (MOTSCHULSKY, 1860)	WDI Andalo: Lago di Andalo; Cavareno: Pradei; Cressino: la Rocchetta	bank of marsh; riparian wood	debris of Phragmites, Carex, Spiraea	250-900	CZan
<i>Ochtheophilus praepositus</i> MULSANT & REY, 1878	EUR Pietra Grande: Malga Pozzol; Santuario di San Romedio; Smarano: Verdes; Val di Tovel	bank of stream	gravel, moss	700-1600	CZan; ZANETTI 1978 (<i>Ancyrophorus longipennis</i>); MAKRANCZY 2014
<i>Oxyporus rufus</i> (LINNAEUS, 1758)	SIE Smarano	coniferous montane wood	fungi (Boletus)	1000	CZan; ZANETTI 1978
<i>Dianous coeruleus</i> GYLLENHAL, 1810	EUR Proves = Proveis; Malga Manzara = Stierbergalm	bank of stream	moss	1500	CZan
<i>Stenus ater</i> LACORDAIRE, 1835	WDI Coredò: Val di Toc	bottom of narrow wooded valley	debris	1200	CZan; ZANETTI 1978
<i>Stenus bifoveolatus</i> GYLLENHAL, 1827	SIE Cavareno: Pradei; San Felice = St. Felix; Lago di Santa Maria = Felixer Weiher	bank of marsh	debris (including Phragmites, Carex, Spiraea)	1000	CZan
<i>Stenus binotatus</i> LUNGH, 1804	SIE Coredò: Sette Larici	coniferous montane wood		1200	CZan
<i>Stenus boops ludmilae</i> HRONÁDKA, 1979	WDI Coredò: Laghi Palù; Ton: Sabino	bank of marsh; river bank	silt	350-900	CZan
<i>Stenus brunripes</i> STEPHENS, 1833	WDI Lauregno = Laurein	bank of bog	peat bog	1300	CZan; TAGLIAPIETRA & ZANETTI 2012
<i>Stenus cicindeloides</i> (SCHALLER, 1783)	WDI Senale = Unsere Liebe Frau im Walde; Ton: Sabino	bank of marsh; river bank		350-1350	CZan
<i>Stenus clavicornis</i> (FABRICIUS, 1777)	WDI Smarano	montane meadow	debris	1000	CZan; ZANETTI 1978
<i>Stenus comma aeneiceps</i> REY, 1884	WDI Andalo: Lago di Andalo; Coredò: Laghi Palù; Smarano	bank of marsh	silt, gravel	900-1000	CZan

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<i>Stenus crassus</i> STEPHENS, 1833	EUR	Brez: Gran Palù; Monte Roen; San Felice = St. Felix: Lago di Santa Maria = Felixer Weiher	bank of bog; subalpine bushy slope; bank of marsh	debris (including Rhododendron)	1600-2000	CZan
<i>Stenus flavipalpis</i> THOMSON, 1860	EUR	Cavareno: Pradei; Smarano: Verdes; Castelfondo: Laghetto delle regole	bank of marsh; bottom of narrow wooded valley; Molinietum with Carex	debris of Phragmites, Carex, Spiraea, Cirsium montanum	1000-1200	CZan
<i>Stenus fossulatus</i> ERICHSON, 1840	EUR	Rumo: Malga Lavazzé; Smarano: Verdes; Lago di Tovel;	bank of stream	gravel	1000-1500	CZan; ZANETTI 1978
<i>Stenus fulvicornis fulvicornis</i> STEPHENS, 1833	EUR	San Felice = St. Felix: Lago di Santa Maria = Felixer Weiher; Castelfondo: Laghetto delle Regole	bank of marsh; Molinietum with Carex	debris; tufts of Carex	1200-1600	CZan; TAGLIAPIETRA & ZANETTI 2012
<i>Stenus guttula</i> P. MÜLLER, 1821	EUM	Smarano: Verdes	bank of stream	gravel	1000	CZan; ZANETTI 1978
<i>Stenus guynemeri</i> JACQUELIN DU VAL, 1850	EUM	Tret: Cascata di Tret	waterfall	moss	1000	CZan
<i>Stenus impressus</i> GERMAR, 1824	EUR	Brez: Gran Palù; Smarano: Verdes; Proves = Proveis: Kesselalm; San Felice = St. Felix: Lago di Santa Maria = Felixer Weiher	bank of bog; bottom of narrow wooded valley; subalpine bushy slope	debris (including Pinus mugo)	1000-1600	CZan
<i>Stenus junò</i> PAYKULL, 1789	WDI	Cavareno: Pradei; Senale = Unsere Liebe Frau im Walde; Ton: Sabino	bank of marsh; river bank	debris of Phragmites, Carex, Spiraea	350-1300	CZan
<i>Stenus ludyi</i> FAUVEL, 1886	EUR	Monte Roen	subalpine bushy slope	debris of Alnus viridis	2000	CZan
<i>Stenus ochropus</i> KIESENWETTER, 1858	WDI	Coredo; Monte Roen: Tregiolo; Sfruz	montane wood (Pinus sylvestris); coniferous montane wood; montane meadow with trees	debris	1000-1300	CZan
<i>Stenus parciòr</i> BERNHAUER, 1929	EUR	Coredo: Malga di Coredo; Monte Roen; Sfruz: Passo Predaia; Vervò: Passo Favogna	altomontane/subalpine coniferous wood; subalpine bushy slope; subalpine coniferous open wood; altomontane/subalpine coniferous wood	debris (including Rhododendron)	1600-2000	CZan; ZANETTI 1978 (<i>S. parciòr limonensis</i>)
<i>Stenus phyllobates miscellus</i> L. BENICK, 1925	EUR	Cavareno: Pradei	bank of marsh	debris of Phragmites, Carex, Spiraea	1000	CZan; TAGLIAPIETRA & ZANETTI 2012
<i>Stenus pusillus</i> STEPHENS, 1833	EUM	Cavareno: Pradei; San Felice = St. Felix: Lago di Santa Maria = Felixer Weiher	bank of marsh; subalpine meadow	debris of Phragmites, Carex, Spiraea; rotting hay	1000-1700	CZan
<i>Stenus solutus</i> ERICHSON, 1840	EUR	Cavareno: Pradei	bank of marsh	debris of Phragmites, Carex, Spiraea	1000	CZan
<i>Stenus tarsalis</i> LJUNGH, 1810	SIE	Castelfondo: Laghetto delle Regole; Coredo: Laghi Palù; Coredo: Sette Larici	bank of bog; bank of marsh		1200-1700	CZan
<i>Stenus trivialis</i> KRAATZ, 1857	SEU	Coredo: Laghi Palù	bank of marsh	silt	900	CZan; TAGLIAPIETRA & ZANETTI 2012
<i>Euaestethus ruficapillus</i> (LACORDAIRE, 1835)	SIE	Coredo: Tavon	bank of marsh	debris	900	CZan; TAGLIAPIETRA & ZANETTI 2005
<i>Ochtheophilum fracticorne</i> (PAYKULL, 1800)	WDI	Brez: Palù di Tremole	bank of bog	debris	1700	CZan; TAGLIAPIETRA & ZANETTI 2005
<i>Lathrobium impressum</i> HEER, 1841	SIE	Coredo: Laghi Palù; Tuenno: Palude di Tuenno	bank of marsh	debris	670	CZan; TAGLIAPIETRA & ZANETTI 2005
<i>Tetartopeus paeneinsularum</i> A. BORDONI, 1982	ALAP	Coredo: Laghi Palù	bank of marsh	debris	900	CZan; TAGLIAPIETRA & ZANETTI 2005
<i>Medon brunneus</i> (ERICHSON, 1839)	EUR	Smarano: Pozzalunga	coniferous montane wood	debris	1000	CZan; ZANETTI 1978
<i>Medon ripicola</i> (KRAATZ, 1854)	EUM	Cressino: la Rocchetta	riparian wood	debris	270	CZan
<i>Sunius melanocephalus</i> (FABRICIUS, 1793)	EUR	Cressino: la Rocchetta; Sfruz; Smarano	riparian wood; montane meadow	debris	270-1000	CZan; ZANETTI 1978 (<i>Hypomedon</i>)
<i>Paederidus rubrothoracicus</i> (GOEZE, 1777)	EUR	Tassullo; Ton: Sabino	river bank	gravel	350-500	CZan
<i>Paederus littoralis</i> GRAVENHORST, 1802	WDI	Coredo: Laghi Palù; Sfruz; Smarano: Raon	bank of marsh; montane meadow		900-1000	CZan
<i>Scopaeus gracilis</i> (SPERK, 1835)	WDI	Ton: Sabino	river bank	gravel, silt	350	CZan
<i>Scopaeus laevigatus</i> (GYLLENHAL, 1827)	WDI	Coredo: Laghi Palù; Smarano: Verdes	bank of marsh; bank of stream	debris	900-1000	CZan
<i>Scopaeus debilis</i> HOCHHUTH, 1851	WDI	Coredo	various environments	car net	900	CZan
<i>Scopaeus sulcicollis</i> (STEPHENS, 1833)	EUR	Coredo: Pozza Lunga; Cressino: la Rocchetta; Castelfondo: Laghetto delle Regole	dry mixed wood; riparian wood; margin of paet bog	debris	250-1250	CZan
<i>Rugilus orbiculatus</i> (PAYKULL, 1789)	COS	Coredo: Laghi Palù; Smarano	bank of marsh; various environments	car net	900-1000	CZan
<i>Rugilus rufipes</i> GERMAR, 1836	SIE	Cavareno: Pradei; Coredo: Laghi Palù	bank of marsh	debris of Phragmites, Carex, Spiraea	900-1000	CZan
<i>Atrecus affinis</i> (PAYKULL, 1789)	SIE	Brez: Gran Palù; Rumo: Malga Lavazzé; Smarano: Verdes; Lago di Tovel; Vervò: Passo Favogna;	altomontane/subalpine coniferous wood; bottom of narrow wooded valley; coniferous montane wood;	decaying barks	1000-1700	CZan
<i>Atrecus longiceps</i> (FAUVEL, 1873)	EUR	Rumo: Malga Lavazzé; Smarano: Verdes; Vervò: Passo Favogna	altomontane/subalpine coniferous wood; bottom of narrow wooded valley;	decaying barks	1000-1700	CZan

SPECIES		LOCALITY: SITE	MACROHABITAT	MICROHABITAT	ALTITUDINAL RANGE	SOURCE (collection and/or references)
<i>Othius angustus</i> STEPHENS, 1833	EUR	Monte Roen	subalpine bushy slope	debris of <i>Alnus viridis</i>	2000	CZan
<i>Othius lapidicola</i> MÄRKEL & KIESENWETTER, 1848	EUR	Bresimo: Malga Preghena; Coredo: Malga di Coredo; Monte Peller; Monte Roen; Sfruz: Passo Predaia; Smarano: Verdes; Lago di Tovel	subalpine bushy slope; altomontane/subalpine coniferous wood; bottom of narrow wooded valley; coniferous montane wood	debris (<i>Rhododendron</i> , <i>Alnus viridis</i>)	1000-2000	CZan; ZANETTI 1978
<i>Othius punctulatus</i> (GOEZE, 1777)	EUM	Proves = Proveis: Rio Pescara = Fischbach = Fischbach; Sfruz: Predaia; Sfruz; Smarano: Verdes; Smarano	riparian wood; coniferous montane wood; bottom of narrow wooded valley; bank of stream; montane meadow	debris (including <i>Alnus incana</i> , <i>Cirsium montanum</i>)	700-1300	CZan; ZANETTI 1978
<i>Bisnius fimetarius</i> (GRAVENHORST, 1802)	WDI	Coredo: Laghi Palù; Coredo: Sette Larici; Coredo: Tavon; Coredo: Val di Dermulo; Senale = Unsere Liebe Frau im Walde; Smarano: Verdes; Smarano; Tret: Cascata di Tret; San Felice = St. Felix: Lago di Santa Maria = Felixer Weiher	bank of marsh; coniferous montane wood; montane meadow; coniferous montane wood; bottom of narrow wooded valley; bank of stream; waterfall	marsh debris; silt; car net; rotting hay	900-1350	CZan; ZANETTI 1978 (<i>Philonthus rigidicornis</i>)
<i>Erichsonius cinerascens</i> (GRAVENHORST, 1802)	EUM	Coredo: Laghi Palù; Cressino: la Rocchetta; Lauregno = Laurein; Tuenno: Palude di Tuenno	bank of marsh; riparian wood; bank of bog; bank of marsh	debris	300-1200	CZan; TAGLIAPIETRA & ZANETTI 2005
<i>Gabrius astutoides</i> A. STRAND, 1946	EUR	Smarano: Verdes; Smarano;	bank of stream; river bank	debris, car net	300-1000	CZan; ZANETTI 1978
<i>Gabrius nigrulus</i> (GRAVENHORST, 1802)	COS	Coredo	various environments	car net	900	CZan
<i>Gabrius sexualis</i> SMETANA, 1954	EUM	Cavareno: Pradei; Coredo: Laghi Palù; Smarano: Verdes; Smarano	bank of marsh; bank of stream	debris of <i>Phragmites</i> , <i>Carex</i> , <i>Spiraea</i> ; car net	900-1000	CZan
<i>Gabrius splendidulus</i> (GRAVENHORST, 1802)	SIE	Coredo: Malga di Coredo; Cressino: la Rocchetta; Smarano	altomontane/subalpine coniferous wood; riparian wood; coniferous montane wood	stump; barks (<i>Salix</i> , <i>Conifers</i>)	250-1600	CZan; ZANETTI 1978
<i>Neobisnius lathrobioides</i> (BAUDI DI SELVE, 1848)	EUM	Smarano	various environments	car net	1000	CZan
<i>Neobisnius villosulus</i> (STEPHENS, 1833)	EUR	Santuario di San Romedio; Smarano	various environments	car net	700-1000	CZan
<i>Philonthus albipes</i> (GRAVENHORST, 1802)	WDI	Coredo: Tavon; Senale = Unsere Liebe Frau im Walde; Smarano;	montane meadow	car net	900-1350	CZan
<i>Philonthus alpinus</i> EPPELSHEIM, 1875	EUR	Coredo: Malga di Coredo; Monte Peller; Proves = Proveis: Rio della Chiesa = Kirchbach; Lago di Tovel: Malga Termoncello	subalpine pasture	cow dung	1600-2000	CZan
<i>Philonthus atratus</i> (GRAVENHORST, 1802)	WDI	Andalo: Lago di Andalo; Cavareno: Pradei	bank of marsh	debris of <i>Phragmites</i> , <i>Carex</i> , <i>Spiraea</i>	950-1000	CZan
<i>Philonthus carbonarius</i> (GRAVENHORST, 1802)	SIE	Sfruz: Predaia; Sfruz; Smarano	montane meadow	debris	900.1200	CZan; ZANETTI 1978
<i>Philonthus cognatus</i> STEPHENS, 1832	WDI	Cavareno: Pradei; Sfruz; Smarano;	bank of marsh; montane meadow	debris of <i>Phragmites</i> , <i>Carex</i> , <i>Spiraea</i>	1000	CZan; ZANETTI 1978
<i>Philonthus concinnus</i> (GRAVENHORST, 1802)	WDI	Coredo: Tavon	montane meadow	debris	900	CZan
<i>Philonthus debilis</i> (GRAVENHORST, 1802)	WDI	Coredo: Laghi Palù	bank of marsh	debris	900	CZan
<i>Philonthus decorus</i> (GRAVENHORST, 1802)	EUR	Coredo: Sette Larici; Coredo: Val di Toc; Smarano; Lago di Tovel	coniferous montane wood; bottom of narrow wooded valley	debris	900-1200	CZan; ZANETTI 1978
<i>Philonthus intermedius</i> (LACORDAIRE, 1835)	WDI	Smarano	coniferous montane wood (<i>Pinus</i>)	cow dung	1000	ZANETTI 1978
<i>Philonthus marginatus</i> (O. MÜLLER, 1764)	SIE	Bresimo: Malga Preghena; Monte Peller; Sfruz: Passo Predaia; Lago di Tovel: Malga Termoncello; Lago di Tovel; Tres: Malga di Tres	subalpine pasture	dung (cow, Marmota)	1300-2000	CZan
<i>Philonthus montivagus</i> HEER, 1839	EUR	Coredo: Malga di Coredo; Pietra Grande: Malga Pozzol; Monte Roen	subalpine pasture; subalpine bushy slope	under stones; under <i>Pinus mugo</i>	1600-2000	CZan
<i>Philonthus nimbicola</i> FAUVEL, 1874	ALP	Bresimo: Malga Bordolona	subalpine pasture	under stones	2200	CZan; PILON & ZANETTI 1991
<i>Philonthus nitidus</i> (FABRICIUS, 1787)	SIE	Coredo: Malga di Coredo; Monte Peller; Sfruz: Passo Predaia; Smarano; Lago di Tovel: Malga Termoncello	subalpine pasture	dung (cow, Marmota)	1000-2000	CZan; ZANETTI 1978
<i>Philonthus parvicornis</i> (GRAVENHORST, 1802)	COS	Lago di Tovel: Malga Termoncello	subalpine pasture	cow dung	1800	CZan; ZANETTI 1978
<i>Philonthus politus</i> (LINNAEUS, 1758)	COS	Monte Roen: Malga di Smarano; Smarano	anthropic environment; montane meadow	debris of hen-house; bait on tree	900-1800	CZan; ZANETTI 1978
<i>Philonthus pseudovarians</i> A. STRAND, 1941	EUR	Bresimo: Malga Preghena; Monte Peller; Proves = Proveis: Rio della Chiesa = Kirchbach; Sfruz: Passo Predaia; Lago di Tovel: Malga Termoncello	subalpine pasture	cow dung	1600-2000	CZan
<i>Philonthus quisquiliarius</i> (GYLLENHAL, 1810)	WDI	Cavareno: Pradei; Coredo: Laghi Palù	bank of marsh	debris of <i>Phragmites</i> , <i>Carex</i> , <i>Spiraea</i> ; silt	900	CZan
<i>Philonthus rectangulus</i> SHARP, 1874	COS	Smarano: Verdes; Smarano	bank of stream; anthropic environment	silt	1000	CZan

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<i>Philonthus rubripennis</i> STEPHENS, 1832	WDI	Smarano: Verdes	bank of stream	gravel	1000	CZan; ZANETTI 1978 (<i>P. fulvipes</i>)
<i>Philonthus splendens</i> (FABRICIUS, 1793)	WDI	Bresimo: Malga Preghena; Monte Peller; Rumo: Malga Lavazzè; Lago di Tovel: Malga Termoncello	subalpine pasture	cow dung	1800-2000	CZan
<i>Philonthus temporalis</i> MULSANT & REY, 1853	CEU	Pietra Grande: Malga Pozzol; Monte Roen; Lago di Tovel: Malga Termoncello	subalpine pasture	cow dung	1600-2000	CZan
<i>Philonthus tenuicornis</i> MULSANT & REY, 1853	SIE	Coredo: Tavon; Senale = Unsere Liebe Frau im Walde; Tret: Cascata di Tret	cultivated areas; waterfall; wetland		900-1300	CZan
<i>Philonthus umbratilis</i> (GRAVENHORST, 1802)	WDI	Cavareno: Pradei; Santuario di San Romedio; San Felice = St. Felix: Lago di Santa Maria = Felixer Weiher	bank of marsh; bottom of narrow wooded valley	debris of Phragmites, Carex, Spiraea; rotting hay	700-900	CZan
<i>Philonthus varians</i> (PAYKULL, 1789)	WDI	Coredo: Tavon; Sfruz: Passo Predaia	montane meadow; subalpine pasture	cow dung	900-1600	CZan
<i>Euryporus picipes</i> (PAYKULL, 1800)	EUR	Monte Roen; Sfruz: Passo Predaia; Lago di Tovel	subalpine bushy slope; subalpine coniferous open wood; coniferous montane wood	plant debris (including <i>Alnus viridis</i>)	1200-2000	CZan
<i>Heterotops niger</i> KRAATZ, 1868	EUR	Cressino: La Rocchetta	meadow in valley bottom	Talpa nest	250	CZan
<i>Quedius alpestris</i> HEER, 1839	CEU	Bresimo: Malga Preghena; Bresimo: Malga Bordolona Valle del Vento; Monte Peller; Pietra Grande: Malga Pozzol	subalpine bushy slope; subalpine pasture;	debris, stones	1800-2300	CZan
<i>Quedius boops</i> (GRAVENHORST, 1802)	WDI	Sfruz; Smarano	montane meadow	debris	1000	CZan; ZANETTI 1978
<i>Quedius cinctus</i> (PAYKULL, 1790)	EUM	Coredo: Val di Toc; Smarano: Verdes; Smarano	bottom of narrow wooded valley; coniferous montane wood	dung, debris	1000-1200	CZan; ZANETTI 1978
<i>Quedius collaris italicus</i> GRIDELLI, 1925	EUR	Castelfondo: Laghetto delle Regole; Proves = Proveis: Malga Manzara = Stierbergalm; Lago di Tovel; Brez: Palù di Tremole; Proves = Proveis: Kesselalm	bank of bog; subalpine bushy slope; coniferous montane wood;	debris	1200-1700	CZan
<i>Quedius dubius dubius</i> (HEER, 1839)	EUR	Bresimo: Malga Bordolona Valle del Vento; Bresimo: Malga Bordolona: Coredo: Val di Toc; Monte Peller; Pietra Grande: Malga Pozzol; Proveis = Proveis: Malga Manzara = Stierbergalm; Monte Roen; Santuario di San Romedio; Smarano: Verdes; Smarano; Lago di Tovel; Tres: Malga di Tres; Vervò: Passo Favogna	bank of bog; subalpine pasture; bottom of narrow wooded valley; subalpine bushy slope; coniferous montane wood; altomontane/subalpine coniferous wood	debris (including <i>Alnus viridis</i> , <i>Rhododendron</i> ; <i>Pinus mugo</i>); on wings	700-2200	CZan; ZANETTI 1978
<i>Quedius fuliginosus</i> (GRAVENHORST, 1802)	EUM	Coredo: Laghi Palù; Coredo: Sette Larici; Senale = Unsere Liebe Frau im Walde; Smarano: Verdes	bank of marsh; coniferous montane wood; bottom of narrow wooded valley; montane meadow	debris; debris <i>Cirsium montanum</i>	900-1300	CZan; ZANETTI 1978
<i>Quedius fulvicollis</i> (STEPHENS, 1833)	WDI	Smarano: Verdes	bottom of narrow wooded valley	debris	1000	CZan; ZANETTI 1978
<i>Quedius latinus</i> GRIDELLI, 1938	SEU	Castel Thun	thermophilic submontane wood	mixed wood with <i>Fagus</i>	450	CZan; ZANETTI & TAGLIAPIETRA 2005
<i>Quedius lucidulus</i> ERICHSON, 1839	EUR	Coredo: Malga di Coredo; Lago di Tovel	altomontane/subalpine coniferous wood	debris (<i>Abies alba</i>)	1450-1600	CZan
<i>Quedius mesomelinus mesomelinus</i> (MARSHAM, 1802)	COS	Brez: Gran Palù; Monte Luc = Laugenspitze; Laugen Alm; Monte Peller; Smarano; Lago di Tovel	altomontane/subalpine coniferous wood; anthropic environment; subalpine pasture;	debris; Marmota dung; tree-hole (<i>Fagus</i>)	1000-2000	CZan; ZANETTI 1978
<i>Quedius nemoralis</i> BAUDI DI SELVE, 1848	EUR	Smarano; Sfruz	montane meadow; margin of montane meadows with trees	debris	1000	CZan; ZANETTI 1978
<i>Quedius nitipennis</i> STEPHENS, 1833	EUR	Smarano	montane meadow	debris	1000	CZan
<i>Quedius ochripennis</i> (MÉNÉTRIÉS, 1832)	WDI	Sfruz; Smarano	montane meadow	debris	1000	CZan; ZANETTI 1978
<i>Quedius ochropterus</i> ERICHSON, 1840	EUR	Amblar; Coredo: Sette Larici; Coredo: Val di Toc; Pietra Grande: Malga Pozzol; Monte Roen; Sfruz: Passo Predaia; Sfruz: Predaia; Smarano: Verdes; Lago di Tovel; Vervò: Passo Favogna	coniferous montane wood; bottom of narrow wooded valley; <i>Picea</i> wood; subalpine bushy slope; subalpine coniferous open wood; altomontane/subalpine coniferous wood	debris (including <i>Alnus viridis</i> , <i>Pinus mugo</i>)	1000-2000	CZan; ZANETTI 1978
<i>Quedius paradisianus</i> (HEER, 1839)	EUR	Coredo: Val di Toc; Monte Roen; Rumo: Maso Stasal; Santuario di San Romedio; Sfruz: Predaia; Smarano; Lago di Tovel	bottom of narrow wooded valley; subalpine bushy slope; coniferous montane wood; bottom of narrow wooded valley	debris (including <i>Alnus viridis</i>)	700-2000	CZan; ZANETTI 1978
<i>Quedius plagiatus</i> MANNERHEIM, 1843	WDI	Monte Roen: Malga di Romeno; Sfruz: Predaia; Lago di Tovel: Malga di Tuonno; Vervò: Passo Favogna	altomontane/subalpine coniferous wood; coniferous montane wood	stump; barks of <i>Picea</i>	1200-1900	CZan
<i>Quedius punctatellus</i> (HEER, 1839)	EUR	Bresimo: Malga Preghena; Monte Roen;	subalpine bushy slope	debris (including <i>Rhododendron</i> , <i>Alnus viridis</i>)	2000	CZan
<i>Quedius suturalis</i> KIESENWETTER, 1845	EUR	Rumo: Maso Stasal; Smarano: Verdes; Tres: Rio Sette Fontane; Tret: Cascata di Tret	bank of stream; bottom of narrow wooded valley; waterfall	debris; debris <i>Cirsium montanum</i> ;	750-1200	CZan; ZANETTI 1978 (<i>Q. humeralis</i>)

SPECIES	LOCALITY: SITE	MACROHABITAT	MICROHABITAT	ALTITUDINAL RANGE	SOURCE (collection and/or references)
<i>Quedius umbrinus</i> ERICHSON, 1839	EUR Cavareno: Pradei; Smarano: Verdes; Ton: Sabino; Brez: Palù di Tremole; Castelfondo: Laghetto delle Regole	bank of marsh; bottom of narrow wooded valley; bank of bog	debris (including Phragmites, Carex, Spiraea)	350-1700	CZan
<i>Quedius unicolor</i> KIESENWETTER, 1847	CEU Bresimo: Malga Preghena; Bresimo: Malga Bordolona Valle del Vento	bank of bog	moss	2000-2300	CZan
<i>Quedius xanthopus</i> ERICHSON, 1839	EUR Monte Roen: Malga di Romeno; Vervò: Passi di Favogna	altomontane/subalpine coniferous wood	barks (Picea, Larix)	1900	CZan
<i>Creophilus maxillosus</i> LINNAEUS, 1758	WDI Smarano	anthropic environment		1000	CZan; ZANETTI 1978
<i>Dinothenarus fossor</i> FABRICIUS, 1793	CEU Cavareno; Ruffrè; Smarano	coniferous montane wood		1000-1200	CMM; ; ZANETTI 1978 (<i>Parabemus</i>)
<i>Dinothenarus pubescens</i> (DEGEER, 1774)	EUR Gampen Joch = Passo delle Palade; Monte Roen			1500	VON PEEZ & KAHLEN 1977; PILON 1998
<i>Ocypus alpicola</i> ERICHSON, 1840	ALP Tuenno				PILON 1998
<i>Ocypus chevrolatii</i> BAUDI DI SELVE, 1848	ALP Coredo: Val di Toc; Lago di Tovel; Smarano: Verdes	bottom of narrow wooded valley; coniferous montane wood; Picea wood;	debris	1000-1200	CZan; ZANETTI 1978 (<i>O. chevrolatii</i>); Pilon 1998
<i>Ocypus fulvipennis</i> ERICHSON, 1840	SIE Sfruz; Smarano	montane meadow	debris	900-1000	Pilon 1998; ZANETTI 1978 (<i>O. fulvipennis confusus</i>); CZan
<i>Ocypus ophthalmicus</i> (SCOPOLI, 1763)	WDI Cagnò: Maso Bolego; Cavareno; Rumo: Malga Lavazzè	cultivated areas		700-1500	CMM; PILON 1998; CZan
<i>Ocypus picipennis fallaciosus</i> (J. MÜLLER, 1926)	WDI Cavareno; Passo della Mendola = Mendelpass; Monte Penegal; Sfruz: Predaia; Smarano;	montane meadow	debris	1000-1500	CMM; PILON 1998; CZan
<i>Ocypus rhaeticus</i> (EPPELSHEIM, 1873)	ALP Cavareno; Coredo: Val di Toc; Smarano: Pozzalunga; Smarano; Lago di Tovel; Proves = Provais: Rio della Chiesa	bottom of narrow wooded valley; coniferous montane wood	debris	1000-1400	Pilon 1998; ZANETTI 1978; CZan
<i>Ocypus tenebrosus</i> (GRAVENHORST, 1846)	EUR Ruffrè; Tavon: Biotopo Senda	margin of meadow	base of Populus sp.	850	MMI; CZan; PILON 2005
<i>Ontholestes tessellatus</i> (GEOFFROY, 1785)	SIE Proves = Proveis: Rio della Chiesa = Kirchbach; Smarano	subalpine pasture; coniferous montane wood	fungi	1000-1500	CZan; PILON 1998
<i>Platydracus fulvipes</i> (SCOPOLI, 1763)	SIE Lago di Tovel	coniferous montane wood		1200	CZan
<i>Platydracus stercorarius</i> (OLIVIER, 1795)	WDI Cavareno; Ruffrè; San Felice = St. Felix: Lago di Santa Maria = Felixer Weiher			1000-1600	PILON 1998; CZan
<i>Staphylinus caesareus</i> CEDERHJELM, 1798	EUR Cavareno; Sfruz; Smarano;	montane meadow	debris	900-1000	PILON 1998; ZANETTI 1978; CZan
<i>Staphylinus dimidiaticornis</i> GEMMINGER, 1851	EUR Smarano: Raon	montane meadow	debris	900	CZan
<i>Tasgius morsitans</i> (ROSSI, 1790)	EUR Sfruz; Smarano; Castel Thun	coniferous montane wood; submontane thermophilic Quercus wood	debris	450-1000	PILON 1998; CZan; ZANETTI 1978 (<i>Ocypus compressus cerdo</i>)
<i>Tasgius winkleri</i> (BERNHAEUER, 1906)	EUM Ton: Sabino	river bank	riparian wood	350	CZan
<i>Gyrophypnus angustatus</i> STEPHENS, 1833	WDI Cressino: La Rocchetta; Smarano: Verdes; Smarano	riparian wood; bottom of narrow wooded valley; montane meadow;		250-1000	CZan; ZANETTI 1978 (<i>G. angustatus scoticus</i>)
<i>Gyrophypnus fracticornis</i> (O. MÜLLER, 1776)	WDI Smarano	coniferous montane wood; anthropic environment		1000	CZan
<i>Gyrophypnus punctulatus</i> (PAYKULL, 1789)	EUM Coredo; Coredo: Tavon; Smarano	coniferous montane wood; montane meadow		900-1000	CZan; ZANETTI 1978
<i>Leptacinus formicetorum</i> MÄRKEL, 1841	WDI Proves = Proveis: Malga Manzara = Stierbergalm	subalpine bushy slope	nest of Formica sp.	1700	CZan; CICERONI 1994
<i>Leptacinus pusillus</i> (STEPHENS, 1833)	WDI Santuario di San Romedio; Smarano	various environments; inhouse	car net	700-1000	CZan
<i>Leptacinus sp.</i>		Santuario di San Romedio	various environments	700	CZan
<i>Nudobius lentus</i> (GRAVENHORST, 1806)	WDI Coredo: Sette Larici; Sfruz: Predaia; Smarano: Verdes; Smarano	coniferous montane wood; bottom of narrow wooded valley	stump; barks (Picea, Pinus)	1000-1300	CZan; ZANETTI 1978
<i>Xantholinus audrasi</i> COIFFAIT, 1956	EUR Smarano	montane meadow	debris	900	CZan; ZANETTI 1978
<i>Xantholinus coiffaiti</i> FRANZ, 1966	SEU Denno	apple orchard	debris	500	cTag
<i>Xantholinus elegans</i> (OLIVIER, 1795)	EUR Smarano	montane meadow	debris	900	CZan; ZANETTI 1978 (<i>X. jarrigei</i>)
<i>Xantholinus laevigatus</i> JACOBSEN, 1849	EUR Coredo: Val di Toc; Smarano: Verdes; Lago di Tovel; San Felice = St. Felix; Lago di Santa Maria = Felixer Weiher	bottom of narrow wooded valley; coniferous montane wood; marsh	debris	1000-1600	CZan; ZANETTI 1978
<i>Xantholinus linearis</i> (OLIVIER, 1795)	WDI Smarano; Denno	montane meadow; apple orchard	debris	500-1000	CZan; ZANETTI 1978
<i>Xantholinus tricolor</i> (FABRICIUS, 1787)	SIE Coredo: Val di Toc; Proves = Proveis: Rio della Chiesa = Kirchbach; Proves = Proveis; Monte Roen: Tregiolo; Rumo: Maso Stasai; Sfruz; Smarano; Vervò: Passo Favogna; Brez: Palù di Tremole	bottom of narrow wooded valley; subalpine pasture; riparian wood; coniferous montane wood; bank of stream; montane meadow; altomontane/subalpine coniferous wood; margin of peat bog	debris; debris of Alnus incana	1000-1700	CZan; ZANETTI 1978

Tab 2. Coordinates of the sampled localities

LOCALITY	SITE	LATITUDE	LONGITUDE
Amblar		46°23'44.00"N	11° 8'50.13"E
Andalo	Lago di Andalo	46°10'22.95"N	11° 0'19.68"E
Brenta, Gruppo di-	Val di Massodi	46° 8'41.70"N	10°54'43.63"E
Bresimo, val di-		46°24'57.34"N	10°57'1.27"E
Bresimo: Malga Bordolona		46°25'49.09"N	10°52'3.22"E
Bresimo: Malga Bordolona	Valle del Vento	46°26'33.99"N	10°52'41.03"E
Bresimo: Malga Preghena		46°24'53.25"N	10°53'31.82"E
Brez	Gran Palù	46°28'18.87"N	11° 4'53.81"E
Brez	Palù di Tremole	46°28'44.67"N	11° 4'29.70"E
Castelfondo	Laghetto della Regola	46°28'30.05"N	11° 6'37.19"E
Cavareno	Prasdei	46°24'49.53"N	11° 8'2.96"E
Cles	Mechel	46°20'58.26"N	11°1'44.16"E
Cles	Monte di Cles	46°21'43.73"N	10°59'23.47"E
Coredo		46°21'0.14"N	11° 5'46.07"E
Coredo	Laghi Palù	46°21'28.95"N	11° 6'26.35"E
Coredo	Malga di Coredo	46°19'18.27"N	11°11'0.00"E
Coredo	Pozza Lunga	46°21'10.80"N	11° 4'30.61"E
Coredo	Sette Larici	46°20'36.93"N	11° 8'3.54"E
Coredo	Tavon, biotopo Senda	46°21'42.54"N	11° 6'11.40"E
Coredo	Val di Dermulo	46°21'59.89"N	11° 7'49.48"E
Coredo	Val di Toc	46°20'2.34"N	11° 9'23.55"E
Coredo	Castel Bragher	46°19'43.22"N	11° 4'51.12"E
Cressino	la Rocchetta	46°14'36.53"N	11° 3'33.74"E
Denno		46°16'48.21"N	11° 2'44.09"E
Fondo		46°26'18.44"N	11° 8'26.61"E
Gampen Joch / Passo delle Palade		46°31'50.69"N	11° 6'42.80"E
Gruppo del Brenta	Passo del Grosté	46°11'1.07"N	10°54'49.44"E
Lauregno / Laurein		46°27'26.63"N	11° 4'4.76"E
Luco, Monte- / Laugenspitze	Laugen Alm	46°31'18.20"N	11° 5'34.97"E
Macaion, Monte- / Gantkofel		46°29'16.77"N	11°12'33.68"E
Malosco	Le Regole	46°26'29.81"N	11°10'39.47"E
Mendola, Passo della- / Mendelpass		46°25'3.00"N	11°12'12.95"E
Ozol, Monte-		46°25'23.12"N	11° 3'31.36"E
Pedrotti e Tosa, Rifugi-		46° 9'19.97"N	10°54'5.56"E
Peller, Monte	top	46°19'0.34"N	10°56'44.55"E
Peller, Monte		46°19'2.90"N	10°57'4.52"E
Penegal, Monte-		46°26'17.19"N	11°12'57.47"E
Pietra Grande	Malga Flavona	46°13'28.33"N	10°55'50.27"E
Pietra Grande	Malga Pozzol	46°14'8.35"N	10°55'20.37"E
Proves / Proveis		46°28'41.76"N	11°1'0.65"E
Proves / Proveis	Kesselalm	46°24'51.95"N	10°53'30.67"E

LOCALITY	SITE	LATITUDE	LONGITUDE
Proves / Proveis	Malga Manzara / Stierbergalm	46°29'0.32"N	11° 0'32.21"E
Proves / Proveis	Rio della Chiesa / Kirchbach	46°28'47.90"N	11°1'4.64"E
Proves / Proveis	Rio Pescara / Fischbach	46°27'44.31"N	11° 2'27.27"E
Revò		46°23'30.08"N	11° 3'31.36"E
Roen, Monte	Malga di Romeno	46°22'16.04"N	11°11'41.07"E
Roen, Monte-		46°21'43.14"N	11°11'13.20"E
Roen, Monte-	Malga di Smarano	46°21'15.74"N	11°10'47.31"E
Roen, Monte-	Tregiolo	46°21'52.16"N	11° 9'20.00"E
Ruffrè		46°24'54.03"N	11°10'43.60"E
Rumo		46°27'31.91"N	10°59'37.46"E
Rumo	Malga Lavazzé	46°27'22.90"N	10°57'47.99"E
Rumo	Maso Stasal	46°27'57.28"N	11° 0'51.92"E
San Felice / St. Felix	Lago di Santa Maria / Felixer Weiher	46°29'46.21"N	11° 9'45.64"E
San Romedio, Santuario di-		46°22'10.20"N	11° 6'23.75"E
Senale / Unsere Liebe Frau im Walde		46°30'43.77"N	11° 6'34.30"E
Sfruz		46°20'9.24"N	11° 7'9.78"E
Sfruz	Credai	46°20'23.59"N	11° 7'47.10"E
Sfruz	Passo Predaia	46°18'53.03"N	11°10'59.00"E
Sfruz	Predaia	46°19'5.17"N	11° 8'55.00"E
Smarano		46°20'55.57"N	11° 6'53.44"E
Smarano	Dosso di Pozzalunga	46°21'10.80"N	11° 7'19.22"E
Smarano	Merlonga	46°20'59.15"N	11° 6'42.75"E
Smarano	Raon	46°20'13.57"N	11° 6'6.29"E
Smarano	Verdes	46°20'45.87"N	11° 8'44.49"E
Tassullo		46°20'9.45"N	11° 3'32.26"E
Thun, Castello-		46°16'21.82"N	11° 5'29.86"E
Ton	Rio Pongaiola	46°16'17.97"N	11° 3'56.11"E
Ton	Sabino	46°16'5.77"N	11° 3'56.81"E
Tovel, Lago di-	Malga di Tuenno	46°16'15.49"N	10°55'55.11"E
Tovel, lago di-	Malga Termoncello	46°15'2.95"N	10°57'55.55"E
Tovel, lago di-	Pozzol di Tuenno	46°15'12.70"N	10°56'29.50"E
Tovel, lago di-	Rifugio Capriolo	46°17'46.53"N	10°58'28.98"E
Tovel, Lago di-	Rislà	46°15'30.58"N	10°56'59.17"E
Tres	Malga di Tres	46°18'36.56"N	11°10'26.93"E
Tres	Sores, Rifugio-	46°19'4.89"N	11° 8'8.99"E
Tres, Corno di-		46°17'42.78"N	11° 9'48.28"E
Tret	Cascata di Tret	46°28'46.00"N	11° 7'50.11"E
Tuenno		46°19'37.72"N	11°1'18.44"E
Tuenno	Palude di Tuenno	46°20'26.32"N	11°1'47.48"E
Vervò		46°18'32.10"N	11° 6'54.09"E
Vervò	Passo Favogna	46°17'20.42"N	11° 8'40.37"E

Remarkable species

Anthobium melanocephalum (ILLIGER, 1794)

Records. Coredò (Trento), env. Malga di Coredò, 1650 m, on fungi, 07.10.2007 3 spec. leg. A. & M. Zanetti (CZan).

Distributed in all Europe (SMETANA 2005), few records of this species are reported in the literature for Italian Alps (Piedmont, Valle d'Aosta, Trentino Alto-Adige, Veneto) (ZANETTI 2005). It is present in Lombardy as well (Colle di Varena, Brescia, CZan). VON PEEZ & KAHLEN (1977) report only one locality for Alto Adige – South Tyrol (“Weg nach Fennhals”).

Anthobium melanocephalum is found mostly in fungi in autumn.

Boreaphilus melichari JUREČEK, 1910

Records. Trentino, Lago di Tovel, spring on rocks, 30.09.1934 1 spec. (MVR)

A very rare species, described from Folgaria (Trento), and reported only from Lago di Tovel (Brasavola de Massa 1934), Passo Falzarego (Belluno), Monte Schiara (Belluno) and Defereggengebirge (Osttirol) (ZERCHE 1990).

Eusphalerum pseudaucupariae (E. STRAND, 1917)

Records. Coredò (Trento), Val di Toc, 1400 m, on *Gentiana lutea*, 27.06.2010 1 spec. leg. A. Zanetti (CZan).

A rare species distributed in Central Europe, in Italy known from some localities of Alto Adige, and one each of Piedmont and Liguria (VON PEEZ & KAHLEN 1977, ZANETTI 2005)

Dropephylla linearis (ZETTERSTEDT, 1828)

Records. Coredò (Trento), env. Malga di Coredò, Santa Barbara, m 1700, under bark on stump of *Picea*, 19.08.2006 1 spec. leg. A. & M. Zanetti (CZan) (Fig. 3); Monte Roen (Trento), env. Malga di Romeno, 1900 m under bark of *Picea*, 09.10.2013 1 spec. leg. Tagliapietra & Zanetti (CZan).

Distributed in North Europe and on mountains of South Europe (JÁSZAY & HLAVÁČ 2006). HORION (1963) considers it a boreomontane species.

Up to date five localities are reported for Italy in the Alps in Valle d'Aosta, Alto Adige and Friuli (ZANETTI 2005).

Xylodromus concinnus (MARSHAM, 1802)

Records. M. Luc / Laugenspitze (Bolzano / Bozen), Laugen Alm, 1850 m, debris in hen-house, 27.08.1997 6 spec. leg. A. Zanetti (CZan).

This species is considered anthropophilic as an inhabitant of “Strohbiotops”. It was reported as not rare or common (HORION 1963), but presently it is becoming rare (ZANETTI 2012). It is known from Europe and North Africa, and as introduced to North America (KLIMASZEWSKI et al. 2013). In Italy it occurs in Northern and Central regions (ZANETTI 2005).

Tachyporus transpadanus SCHÜLKE, 2007

Records. Smarano / Vervo Tres / Coredò (Trento), car net 05.08. 1990 leg. A. Zanetti 1 paratype (CZan); M. Peller (Trento) 2000 m 02.08.89 leg. A. Zanetti (CSc); Denno

(Trento) 19.06.2015, in apple orchard 2 spec. leg. Tagliapietra (CTa).
This adventive species was described as new from Val di Non and Val Venosta / Vinschgau. The very recent record from Denno confirms its presence and naturalisation in Val di Non.

***Amidobia talpa* (HEER, 1841)**

Records. Proves / Proveis (Bolzano / Bozen) Rio della Chiesa 1450 m, nest of *Formica* spec., 10.07.2004 1 spec. leg. A. Zanetti (CZan).

This myrmecophilic species is distributed in Europe and Siberia. In Italy it seems rare, it is reported only from North (CICERONI et al. 1995), in LUIGIONI (1929) and PORTA (1926) from Val Venosta – Vinschgau, in VON PEEZ & KAHLLEN (1977) from Plose, Lago di Braies / Pragser Wildsee, Monte Pana (Val Gardena) and Trafoi.

***Atheta alpigrada* FAUVEL, 1900**

Records. Monte Peller (Trento), 2000 m, *Marmota* dung, 08.08.1989 3 spec. leg. A. Zanetti (CZan) (Fig. 4).

An inhabitant of *Marmota* nests, endemic of the Alps (SMETANA 2005). Its distribution in Italy is almost unknown, no record for it in the classic literature, including VON PEEZ & KAHLLEN (1977). Besides the locality of Val di Non, I know it from Val Formazza (Piedmont) Passo San Giacomo (CZan) and Ormea (Cuneo, Piedmont) Monte Armetta.

***Atheta deformis* (KRAATZ, 1856)**

Records. Santuario di San Romedio (Trento), 600 m, car net, 02.08.1996 10 spec. leg. Zanetti (CZan).

Reported from Europe and Siberia, it is considered rare; possibly it lives in nests of small mammals (BENICK et al. 1974). It is reported for Italy as *A. complana* from Piedmont (Torino) (PORTA 1926, LUIGIONI 1929). No record for Alto Adige / South Tyrol in VON PEEZ & KAHLLEN (1977).

***Atheta pfaundleri* G. BENICK, 1940**

Records. Smarano (Trento), Val di Verdès, Longiaca, 1000 m, debris of *Cirsium montanum*, 15.06.1974 1 spec. leg. A. Zanetti (CZan); idem 22.08.1974 2 spec. (CZan); idem 09.08.1984 1 spec. (CZan); idem 30.08.2005 3 spec. (CZan); idem 27.06.2010 1 spec. (CZan) (Fig. 5).

A very sporadic Central European species, known up to date from 10 localities of South Sweden, Germany, Austria, Czech Republic, Slovakia and Italy (Trentino). The record from Trentino reported by FELDMANN (2006) refers to the specimens here listed from Val di Non. All captures are from wet places, the type was found in Carinthia in conditions similar to Val di Verdès. No other Italian locality is known.

***Atheta reissi* G. BENICK, 1936**

Records. Monte Peller (Trento), S side, 2000 m, *Marmota* dung, 26.08.1995 2 spec. leg. A. Zanetti (CZan); idem 27.08.1998 1 spec. (CZan); idem 8.08.89 16 spec. (CZan).

This species lives in *Marmota* nests. It is known from the Alps (Austria, Germany and Switzerland) (SMETANA 2005), no record from Italy is reported up to date. Besides from Val di Non, I have seen specimens from Val Formazza (Piedmont) Passo San Giacomo, and Monte Altissimo di Nago (Trentino) (CZan).

***Liogluta micans* (MULSANT & REY, 1852)**

Records. Monte Roen (Trento), N side, 2050 m, debris under *Loiseleuria*, 09.10.2013 leg. Tagliapietra & Zanetti 1 spec. (CZan) (Fig. 6); San Felice / St. Felix (Bolzano / Bozen), Lago di Santa Maria / Felixer Weiher, 1620 m, wetland with trees, 05.08.2015 5 spec. leg. A. Zanetti (CZan).

Liogluta micans (MULSANT & REY, 1852) was described from Switzerland. It is reported from Czech Republic, Denmark, Estonia, Finland, Russia, Slovakia and Sweden in SMETANA (2004), but it is known also from Italy (CICERONI et al. 1995) and from Germany, Poland and Austria as *letzneri* (LUCHT 1987). In the Italian Alps it is very common in the Dolomites east of Adige river in subalpine woods, but west of Adige it becomes much more sporadic (ZANETTI 2011). These records are the first for Val di Non.

***Neohilara subterranea* (MULSANT & REY, 1853)**

Records. Smarano / Coredo / Tres (Trento), 800-1000 m, car net, 16.08.1989 2 spec. leg. A. Zanetti (CZan); idem 18.08.1989 1 spec. leg. A. Zanetti (CZan); Tuenno / Lago di Tovel (Trento), car net, 24.08.1989 3 spec. leg. A. Zanetti (CZan); Smarano / Predaia / Vervò (Trento), car net, 24.08.1996 1 spec. leg. A. Zanetti (CZan); Cunevo / Malga Arza (Trento), 600-1500 m, 21.08.2008 12 spec. leg. A. Zanetti (CZan); Coredo / Tres / Smarano (Trento), 700-900 m, car net, 13.08.2007 3 spec. leg. A. & M. Zanetti (CZan). A scarcely known species reported from North and Central Europe, for Italy from North, South and Sicily (ZANETTI 2007). It is considered a forest species of debris, usually in nests of small mammals, but in fact most captures are by car net.

***Schistoglossa pseudogemina* G. BENICK, 1981**

Records. Castelfondo (Trento), Laghetto delle Regole, 1250 m, in tuft of *Carex* in Moli-nietum, 26.08.2015 2 spec. leg. A. Zanetti (CZan).

This species was described from South Germany (Bayern), Maisinger See, in nest of gull. No other record is reported in SMETANA (2004). The record of Val di Non is the first for Italy. The specimens were collected in a marshy/boggy area. The species was found also in two close localities in the plain south of Verona (Veneto): Busolo near Vago di Lavagno and Rivalunga near Palù di Zevio, in wetlands near resurgences (MVR).

***Leptusa fauciuberninae* SCHEERPELTZ, 1973**

Records. Bresimo (Trento), Malga Bordolona Alta, Valle del Vento, 2300 m, debris under *Rhododendron ferrugineum* near snow field, 27.08.2009 9 spec. leg. A. & M. Zanetti (CZan) (Fig. 7).

Leptusa fauciuberninae was described from Passo del Bernina (Switzerland) and is known from some localities of the Alps in Switzerland (Grisons) and Lombardy (Monte Grigna, Pizzo Arera, Averara, Passo di San Marco, Pizzo Scalino) (PACE 1989, ZANETTI & PACE 2005). The record from Val di Non moves about 100 km east the known border of the distribution area.

***Rhopalocerina clavigera* (W. SCRIBA, 1859)**

Records. Smarano (Trento), path "Acquedotto", 1030 m, debris with mosses in coniferous wood with *Fagus*, 29.04.2012 2 spec. leg. A. Zanetti (CZan).

This species has a wide European distribution and is reported from Piedmont, the Apennines and Sicily (PORTA 1926, LUIGIONI 1929); VON PEEZ (in HORION 1967) refers its presence in *Fagus* wood near Trento, but not in South Tyrol.

***Encephalus complicans* Stephens, 1832**

Records. San Felice = St. Felix (Bolzano = Bozen), Lago di Santa Maria = Felixer Weiher, 1620 m, wetland, heads of *Carex*, 13.11.2015 1 spec. leg. A. Zanetti (CZan).

This species, not rare in Central Europe, is reported from few Italian localities: Valganna (Lombardia, Varese) Lago di Ganna in heads of *Carex* (Binaghi, 1972); Bressanone – Brixen (Alto Adige, South Tyrol) riparian woods of Isarco - Eisack, base of *Salix* (von Peez & Kahlen, 1977). I know it also from Passo di Lavazè (Trentino), *Piceetum subalpinum*, window trap (cZan), Val Soana (Piemonte, Torino), Campiglia Santuario S. Besso, meadows, 2000 m (cZan), Parco Naturale delle Prealpi Giulie, Resia, Sant’Anna di Carnizza (Friuli, Udine), meadows, 1000 m (cTag). It is found usually in wet meadows and margins of woods.

***Cypha carinthiaca* (SCHEERPELTZ, 1958)**

Records. Brez (Trento), env. E Gran Palù, 1600 m, base of *Betula* in peat bog, 28.08.1992 1 spec. leg. R. Moro & A. Zanetti (CZan) (Fig. 8).

Cypha carinthiaca was described based on a male from Zottachkopf (Carinthia) “aus “Azalea”-Rasen” (*Loiseleuria procumbens*); a second specimen was collected in Styria (DAUPHIN 2004). This rare species is new to Italy.

***Calodera ligula* ASSING, 1996**

Records. Coredò (Trento), Laghi Palù, 900 m, 21.04.1987 2 spec. leg. A. Zanetti (CZan).

Calodera ligula was described from Aspromonte (Calabria, Italy) and is distributed in Italy, Austria, Beskidy Zachodnie, Hungaria, Bosnia Herzegovina, Romania and Bulgaria (ASSING 1996). Probably it replaces in all Italy the closely related *Calodera aethiops* (GRAVENHORST, 1802). It lives in marshy places.

***Cephalocousya nivicola* (THOMSON, 1871)**

Records. San Felice / St. Felix (Bolzano / Bozen), Lago di Santa Maria / Felixer Weiher, 1620 m, wetland with trees, 05.08.2015 4 spec. leg. A. Zanetti (CZan) (Fig. 9).

A species with boreomontane distribution. SMETANA (2004) reports it from Finland, Norway, Sweden, Russia (North European Territory), East Siberia, Altai, Kashmir, Italy, Austria, Germany. For Italy von Peez & Kahlen report it from Mount Plose (South Tyrol) (under *Pinus cembra*, *Alnus viridis* and *Rhododendron*), SCHATZ (2008) from Plattkofel (Dolomites), I have seen specimens also from Passo Rolle (Dolomites) (CZan), base of *Pinus cembra*, October (CZan) and Lago Nambino (Gruppo della Presanella, Trento), sifting at base of *Picea* under snow, December (CTag).

***Maurachelia pilosicollis* (BERNHAEUER, 1902)**

Records. Sfruz (Trento), Passo Predaia, 1700 m, pitfall trap in open wood, 07/21.08.2000 1 spec. leg. A. Zanetti (CZan); Vervò (Trento), Corno di Tres env. Passo di Favogna, 1600 m, under rotting *Picea* bark, 1 spec. leg. A. Zanetti (CZan) (Fig. 10).

This species is reported from Austria, Czech Republic, France, Germany, Italy, Poland, Slovakia and Ukraine (SMETANA 2004). In Italy, besides the old records from “Italia settentrionale” (=Northern Italy) (PORTA 1926) and Piedmont (LUIGIONI 1929), it is known from Bolzano / Bozen, Kaiserau (VON PEEZ & KAHLEN 1977). It lives in decaying wood of old trees.

***Oxypoda ignorata* ZERCHE, 1996**

Records. Bresimo (Trento), Malga Preghena, 2100 m, debris of *Cirsium spinosissimum*, 21.08.2015 2 spec. leg. A. Zanetti (CZan) (Fig. 11).

This species, closely related to the common *O. opaca* (GRAVENHORST, 1802), was described from Bulgaria, and paratypes are also from Italy (Veneto: Campo Grosso; Trentino: Roncegno; “Valdidendro”). SMETANA (2004) reports it only from Austria, Bulgaria, Greece and Switzerland, but in the original description paratypes are also from Andorra, South French, Bosnia-Herzegovina, North-East Carpathians and Crimea.

It seems rather common in the Alps, I have seen specimens from several alpine localities and from Sicily (Madonie, Piano Battaglia) (CZan).

***Bledius baudii* FAUVEL, 1872**

Records. Smarano (Trento), Valle di Verdès, Longiaca, 1000 m, banks with silt and gravel, 28.08.2001 1 spec. leg. A. & M. Zanetti (CZan).

I found this species in Valle di Verdès only once on gravel and silt of a debris flow that invaded the bottom of this narrow valley from a lateral glen.

Bledius baudii is known from South and central Europe and North Africa (SCHÜLKE 2012), Italian records from Piedmont and Emilia (PORTA 1926, LUIGIONI 1929), and from South Tyrol (Novacella / Neustift, in a biotope destroyed in 1971, and banks of Isarco / Eisack) (VON PEEZ & KAHLEN 1977)

***Carpelimus opacus* (BAUDI DI SELVE, 1848)**

Records. Cressino (Trento), biotope “La Rocchetta”, 270 m, debris in riparian wood, 26.03.2014 23 spec. leg. A. Zanetti (CZan) (Fig. 12).

This species is known from South East Europe and South regions of Central Europe (very rare) (SCHÜLKE 2012), but it is common mostly in North Italy in the Po Plain, in all wetlands. For the Alps, besides the record of Val di Non, I have seen only one specimen from Dro, banks of Sarca River (Trentino) (CZan).

Biogeography



Map 1. Distribution of *Eusphalerum pulcherrimum* in Italy (from Zanetti, 2005)



Map 2. Distribution of *Leptusa fauciumberinae* in Italy (from Zanetti & Pace 2005, asterisk for the new record in Val di Non).



Map 3. Distribution of *Leptusa pseudoalpestris* (from Zanetti & Pace 2005)



Map 4. Distribution of *Ocybus rhaeticus* in Italy (from Pilon 2005)



Map 5. Distribution of *Ocybus tenebricosus* in Italy (from Pilon 2005)



Map 6. Distribution of *Ocybus chevrolatii* in Italy (from Pilon 2005)

The biogeographic analysis of the data is based on chorotypes proposed by VIGNA et al. (1992) with some adaptations to staphylinids, mostly to the Alpine fauna. The low level of chorological knowledge of many species, mostly regarding the Asiatic fauna, induces to avoid the split of very large distributions into many different chorotypes, which are here summarized with cosmopolitan and “widely distributed”, including holarctic, palearctic, asiatic-european and similar patterns. The chorotype BOM will be used for boreo-montane species. The distributions are obtained basically from SMETANA (2004), the main available compendium on distribution of palearctic Coleoptera, with the awareness of the limits of this compilation.

The results of the analysis is summarized in figure 13.

A prevalence of widely distributed species is pointed out. This is to be expected in an area deeply affected by human activity. It is also caused by the large use of collecting techniques that prevalently capture species with great capability of colonisation (e.g. car net). The 21 cosmopolitan species are mostly synanthropic. Widely distributed (palearctic and similar) are 121, european 124, euro-mediterranean 47 and sibero-european 77 species.

Species with restricted distribution are 74: 27 central european, 26 alpine, 11 south-european, 9 boreomontane, and 1 “italian” (alpine-apenninic in VIGNA et al. 1992).

Central european and alpine species represent the core fauna of the area, and include some very representative species like *Atheta pfaundleri*, *Schistoglossa pseudogemina*, *Maurachelia pilosicollis*, *Lesteva benicki*, *Encephalus complicans*, *Boreaphilus melichari*, *Eusphalerum pulcherrimum*, *Leptusa fauciumberninae*, *Leptusa pseudoalpestris* and *Ocypus rhaeticus*.

Some of these are particularly representative because their distribution is restricted to a part of the Alps, notably to the Central Alps and/or Prealps. *Eusphalerum pulcherrimum* is a mostly prealpine species occurring from Val d’Aosta (Gressoney) to Gruppo del Brenta (locus typicus) (map 1). It characterizes the communities of the calcareous and dolomitic screes at high altitude (*Firmetum*), living as adult on flowers of *Dryas octopetala*. Two closely related species, *E. albipile* and *E. annaerosae*, replace it in the Venetian Prealps and in the Dolomites (ZANETTI 2005). *Leptusa fauciumberninae* and *L. pseudoalpestris* are micropterous and microphthalmic inhabitants of the soil of subalpine shrub. The first is distributed in the Rhaetian Alps, the latter in a mostly prealpine area between Val Camonica (west) and Monte Cavallo (east) (map 2 and 3). *Ocypus rhaeticus* (map 4) is distributed mostly in the southern Alps between Biellese and the Venetian Prealps, montane forests representing its optimum habitat (ZANETTI & TAGLIAPIETRA 2005).

The Valley of the Adige, east of Val di Non, is an important biogeographic barrier. This is evident from the comparison of the maps of two species of *Ocypus*: *O. tenebricosus* is a central-european species which colonized the Alps from the east with very few

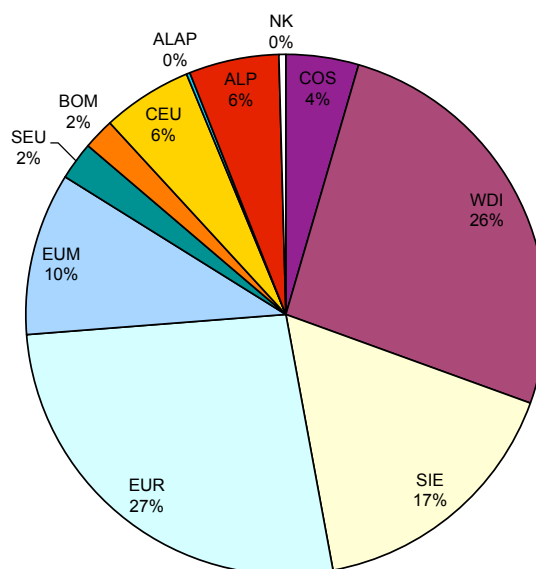


Figure 13. Percent of chorotypes of the species. COS= Cosmopolitan; WDI=wide distribution (see the text); SIE=Siberian-european; EUR=European; EUM=Euro-mediterranean; SEU=South European; BOM=Boreo-montane; CEU=Central-european; ALAP="Italian"; ALP=Alpine; NK=unknown.

localities east of Adige, including Val di Non. *O. chevrolatii* is distributed mostly in the Western Alps (populations also in Jura, Massif Central, Engelberg in Switzerland and southwest Germany) (COIFFAIT 1974, SCHILLHAMMER 2012), and for which Val di Non is the eastern limit of distribution (map 5 and 6).

Among the boreomontane species, *Dropephylla linearis* and *Cephalocousya nivicola* are remarkable for the rarity and fragmentation of their areal.

The southern and central parts of the valley, open towards the valley of Adige river, are populated also by species distributed mostly in peninsular Italy. *Quedius latinus* lives in broad-leaved forests of the Apennines and Sicily and in the thermophilic forests of the southern Alps, extending north to the vicinities of Bolzano / Bozen (Monticolo / Montiggli) and Val di Non (Castel Thun) (ZANETTI & TAGLIAPIETRA 2005). It is known also from France (Pyrenees) and the Iberian Peninsula (TRONQUET 2014). *Tetartopeus paeneinsularum* is an inhabitant of wetlands endemic of Italy, known from all peninsular Italy and Sicily. It is known from all the Adige Valley north to Bolzano / Bozen and from Laghi Palù near Coredo in Val di Non. This biotope was strongly modified in the recent years and the population is threatened.

Habitats and protected areas

Val di Non is a land of contrast between the very intensive cultivation of apple orchards in the valley bottom and the notable wilderness of the wooded and alpine sides. The presence of protected areas grants (or should grant) the conservation of relevant ecosystems in forests, wetlands, dry areas and other peculiar habitats. In these areas the presence of rare or threatened species, even if not included in the lists of Species of the “Habitats directive” of the European Commission (http://ec.europa.eu/environment/nature/conservation/species/habitats_dir_en.htm) that considers mostly large animals, supports their importance and validates the protection. The protected areas of Val di Non with their remarkable rove beetles are listed in table 3.

Table 3: Remarkable Staphylinid species present in protected areas of Val di Non/Nonsberg

PROTECTED AREA	SPECIES
Parco Naturale Provinciale dell'Adamello-Brenta	<i>Boreaphilus melichari</i>
S.C.I. Valle del Verdes IT3120144	<i>Atheta pfaundleri</i>
S.C.I. La Rocchetta IT3120061	<i>Carpelimus opacus</i>
S.C.I. Palù Longia IT3120056	<i>Cypha carinthiaca</i>
S.C.I. Laghetto delle Regole IT3120146	<i>Schistoglossa pseudogemina</i>

Discussion

Even if the goal of the research is mainly faunistic and no quantitative methods were used, some general observations are possible.

The amount of available data on Staphylinidae of Val di Non is adequate for a more than sufficient assessment of the diversity of these insects in the area. Almost 988 species of this enormous family are reported from Alto Adige / Südtirol in HELLRIGL (1996), a similar number of species is known from Provincia di Verona. For Monte Baldo, an important area with high environmental diversity in Provincia di Verona, 490 species are known (Zanetti, unpublished). The 466 species here listed for Val di Non represent a significant percentage.

A large part of the records were published in taxonomic and faunistic contributions. The captures are representative of all the macro- and micro habitats populated by Staphylinidae in this territory.

Four species, *Atheta alpigrada*, *Atheta reissi*, *Cypha carinthiaca* and *Schistoglossa pseudogemina*, are new to Italy, and a large number of species is relevant from a faunistic or biogeographic point of view.

Several species listed above (e.g. *Oxypoda togata*) are preferential inhabitants of dry montane cultivated areas. They may be considered threatened, at least locally, as are species of riparian habitats and wetlands, on which human activity often has a high impact.

Zusammenfassung

Zweiter Beitrag zur Kenntnis der Kurzflügelkäfer (Coleoptera: Staphylinidae) des Val di Non / Nonstal (Trentino / Südtirol, Italien)

Insgesamt 466 überwiegend vom Autor gesammelte Arten der Staphylinidae aus dem Nonstal / Val di Non (Trentino / Südtirol, Italien) werden aufgelistet. Darunter sind vier Neumeldungen für Italien: *Atheta alpigrada*, *A. reissi*, *Schistoglossa pseudogemina* and *Cypha carinthiaca*. Diese und weitere 19 Arten, die selten sind oder eine bemerkenswerte geographische Verbreitung zeigen, werden besprochen. Der überwiegende Anteil der Arten ist weit verbreitet. Unter den Arten mit eingeschränkten Verbreitungsarealen befinden sich Arten der Rätischen Alpen, andere zeigen die Bedeutung des Etsch-Flusstales als biogeographische Barriere auf. Einige Arten mit südlicher Verbreitung kommen in thermophilen Wäldern und in Feuchtgebieten vor. Das Vorkommen seltener Arten in Schutzgebieten, vor allem in „Sites of Community Importance“, wird nachgewiesen.

Riassunto

Secondo contributo alla conoscenza degli stafilinidi (Coleoptera: Staphylinidae) della Val di Non (Trentino / Alto Adige, Italia)

Viene fornita una lista di 466 specie raccolte soprattutto dall'autore in Val di Non (Trentino, Italia). Fra queste 4 sono nuove per l'Italia: *Atheta alpigrada*, *A. reissi*, *Schistoglossa pseudogemina* and *Cypha carinthiaca*. Esse vengono discusse assieme ad altre 19 considerate rilevanti per rarità e distribuzione geografica. L'analisi biogeografica mette in evidenza la prevalenza di specie ad ampia distribuzione, fra quelle ad areale ristretto alcune sono tipiche delle Alpi Retiche, altre dimostrano l'importanza della valle del fiume Adige come barriera biogeografica. Nei boschi termofili e nelle zone umide sono presenti alcune specie meridionali. Viene posta in evidenza la presenza di specie rare in aree protette, soprattutto in Siti di Importanza Comunitaria.

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I dedicate this work to the memory of my mother Carla Rotta Zanetti (26.11.1921 – 29.07.2014), who introduced me to the knowledge and to the love of this land.

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