

# Rove beetles (Coleoptera, Staphylinidae) in the LTSER-research area in Mazia/Matsch (South Tyrol, Prov. Bolzano, Italy) – Investigations in the frame of the research week 2016

## Abstract

The rove beetle fauna of the Matscher Tal / Val di Mazia (municipality of Malles Venosta / Mals), Vinschgau Valley was investigated in the frame of the "Long-Term Socio-economic and Ecosystem Research". Several strata and microhabitats were sampled by different techniques in the following vegetation units: arid pastures (1000, 1500, 2000 m a.s.l.), hay meadows (1500 m), grazed, open larch forests (*Larix decidua*, 1500 m), and swiss pine forests (*Pinus cembra*, 2000 m), 3 replicate sites each. A total of 86 species were identified. *Lordithon bimaculatus* (SCHRANK, 1798) and *Plataraea dubiosa* (BENICK, 1935) are new records for South Tyrol. *Oxypoda islandica* KRAATZ, 1857 is the 3rd record for the region. Other remarkable species are discussed in detail. The highest diversity was encountered in the larch forests at 1500 m a.s.l. and in the pine forests at 2000 m, where several microhabitats were sampled, including ant nests. The extremely arid grassland at low altitude offers few niches for rove beetles except some species tolerant to xerothermous habitats as *Sepedophilus nigripennis* (STEPHENS, 1832) as well as species distributed in the southern Alps and mountain ranges of southern Europe, e.g. *Oxypoda ignorata* ZERCHE, 1996.

Keywords: Staphylinidae, Coleoptera, faunistics, Alps, South Tyrol, Italy

## Introduction

Rove beetles (Staphylinidae) represent the most diverse beetle family worldwide, with more than 63.000 described species (Newton, pers. com.). About 2000 spp. occur in Central Europe, more than half of which are known from South Tyrol (KAHLEN & HELLRIGL 1996, KAHLEN (in press), SCHATZ 2005, updated).

The Matscher Tal / Val di Mazia (municipality of Malles Venosta / Mals) is situated in the region of arid grasslands of the upper Vinschgau Valley, known for its climate with high temperatures and low precipitation. Numerous faunistic data of staphylinids are available from different collectors, summarized in PEEZ & KAHLEN (1977), and KAHLEN (1987), as well as in the database of the Natural Science Collections of the Tyrolean State Museum Ferdinandeum in Innsbruck. Some adjacent localities on the Reschenpass / Passo Resia and in the Münstertal / Val Mustair were selectively sampled during the "Days of Biodiversity" (SCHATZ 2009, 2012). A detailed ecological investigation on staphylinid beetles along an altitudinal transect was undertaken on the Schlern / Sciliar in the Dolomites (SCHATZ 2008).

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Measurements concerning influence of climatic change on micro-climate, plant diversity and hay yield of grassland in mountainous regions, as well as vegetation and landscape mappings at different altitudes of the Matsch Valley are in progress since 2008. Since 2014 This research is undertaken in the frame of LTER Italy. The "Long-Term Ecosystem Research Network" constitutes a worldwide network of investigation areas for longterm ecosystem monitoring in different biomes in order to advance understanding of global change. The human impact is incorporated in the "LTSER" project (Long Term Socio-Ecological Research).

A survey of the biodiversity of selected groups of organisms was undertaken during the "Science Week Matscher Tal 2016". The present study on staphylinid beetles aimed at a faunistic overview of the area and the different vegetation types.

## Investigation area, material and methods

A detailed description of the area and the vegetation of the sampling sites is given in RIEF et al. (2017). Four different vegetation types along an altitudinal transect, each represented by three replicates, ranging from 1000 to 2500 m a.s.l. were sampled in June/July 2016:

- Pastures (TW) at 1000, 1500, 2000 and 2500 m, arid grassland
- Hay meadows (MW) at 1500 m, fertilized
- Open larch forests (LW) at 1500 m, *Larix decidua*
- Swiss stone pine forests (ZW) at 2000 m, *Pinus cembra*

In order to capture as representative a fraction of the staphylinid fauna as possible, different strata and microhabitats were sampled by appropriate techniques.

- Pitfall trapping (16.-27.06.2016 in most sites, 27.06.-05.07.2016 in MW 1500\_1 and WE 1500\_2 only, leg. Steinwandter and Seeber) for the species with high locomotory activity on the soil surface.
  - Hand sampling (26.06 -29.06.2016):
  - Extraction of upper soil strata and litter samples for the capture of small species with less locomotory activity. Sifting of leaf litter and detritus. The material was sorted on a white cloth on the spot or taken to the laboratory and extracted in a MacFadyen high-gradient-extractor (leg. Schatz and Zanetti).
  - Vegetation: Netting on Rhododendron and Apiaceae in the larch- and pine forests for the capture of flower-visiting rove beetles (leg. Zanetti).
  - Sifting of ant nests (*Formica*) in forest sites for myrmecophilous species (leg. Zanetti).
- Hand sampling in special microhabitats, e.g. bark of larch and fungi (*Agaricus*) (leg. Zanetti).

The material was sorted, stored in alcohol and determined to species level based on ASSING & SCHÜLKE (2012) and FREUDE et al. Vol. V (1974). The taxonomic nomenclature is based on SMETANA (2004) and ASSING & SCHÜLKE (2007, 2012).

## Results and discussion

Results from all sampling methods in the different vegetation types are summarized in table 1.

A total of 912 staphylinid specimens belonging to 86 species are recorded. The high diversity is characteristic for the family of Staphylinidae. The species list comprises only part of the rove beetle fauna expected in the area, due to the selective sampling program within a narrow time frame.

The emphasis was laid on the capture of as many species as possible from many different microhabitats. Thus, although the material is relatively small, the resulting list contains several faunistically remarkable species, including two new records for South Tyrol and some findings of very rare or supposedly vanished species (marked with an asterisk \* in the table).

The sum in the table is given as 85 since the species of the subgenus *Mocyta* were not separated in the samples. Both *Atheta fungi* (GRAVENHORST, 1806) as well as *A. amplicollis* (MULSANT & REY, 1874) were identified, both species are widely distributed and common in the litter layer.

## Remarkable species

### Subfamily Omaliinae:

#### *Mannerheimia brevipennis* (MOTSCHULSKY, 1860) (= *M. doderoi* GRIDELLI, 1924)

Matscher Tal / Val di Mazia:

Pasture (WE 2000\_3), sifted at base of *Picea*, 2 specimens, leg. Zanetti (28.06.2016).

South Tyrol:

Brixen - Gabler, 2000 m, single record from 1961, leg. Peez, no further records in spite of subsequent searchings! (PEEZ & KAHLLEN 1977, KAHLLEN 1987, KAHLLEN & HELLRIGL 1996).

Reschen / Resia, Innerer Kalchwald, 1830 m, larch-spruce-forest, sifted from decaying larch wood, 2008, leg. Schatz (SCHATZ 2009).

General distribution and habitat:

Northern Europe, Alps, Western Alps: Piedmont and Valle d'Aosta (Italy), Engadin (Switzerland), Lombardy (unpublished), South Tyrol and Province of Trent (Italy), Eastern Tyrol (Austria). Turkey, Central Asia, Himalayas. Rarity (ZANETTI 1987, 2005, 2008, 2012). In coniferous forests at timberline, in conifer leaf litter. The species seems much more abundant in the eastern part of its distribution area (Central Asia) (Zanetti i.l.).

### Subfamily Tachyporinae:

#### *Lordithon bimaculatus* (SCHRANK, 1798)

Matscher Tal / Val di Mazia: Open larch forest (LW 1500\_3), sifted at base of *Larix*, 1 specimen, leg. Zanetti (28.06.2016).

#### **New record for South Tyrol!**

General distribution:

Central Asia to Central Europe and northern Spain. Incomplete data due to mistaken identity (ambiguity errors) (SCHÜLKE 2012). The species is very common in the Alps and often replaces the closely related *Lordithon trinotatus* (Erichson, 1839) that usually lives at lower altitude (Zanetti, 2015).

### ***Mycetoporus inaris* LUZE, 1901**

Matscher Tal / Val di Mazia:

*Pinus cembra* forest (ZW 2000\_2), pitfall trap, 1 specimen, leg. Steinwandter & Seeber (27.06.2016).

South Tyrol:

Only historical records from Schlüsseljoch on the frontier to Austria (1906, 1950) (KAHLEN & HELLRIGL 1996, Kahlen in litt.).

General distribution and habitats:

Arcto-alpine species: Scandinavia, Alps, high mountains of Balkan. Rarity! Few reliable, scattered records from Austria (SCHÜLKE 2012), and Switzerland (LUKA et al. 2009, GERMAN et al. 2014). In the Italian Alps known from some localities of Lombardia (SCHÜLKE, 2008) and Trentino (ZANETTI, 2015). In alpine habitats: glacier forefields, Curvuletum, Alnetum.

### ***Sepedophilus nigripennis* (STEPHENS, 1832)**

Matscher Tal / Val di Mazia:

Arid pastures (WE 1000\_2, 3), sifted from leaf litter under shrubs, 14 specimens, leg. Schatz & Zanetti (27.06.2016). (WE 1500\_1), sifted from leaf litter under shrubs, 4 specimens, leg. Schatz (29.06.2016). Open larch forest (LW 1500\_3), sifted from larch detritus and decaying wood, 3 specimens, leg. Schatz & Zanetti (27.06.2016).

South Tyrol:

Scattered records from the Vinschgau Valley (Sonnenberg) and the surroundings of Bozen / Bolzano, on arid slopes (Kahlen, in litt.).

General distribution and habitat:

Atlanto-mediterranean species, occurring in all Central Europe, but rare (SCHÜLKE 2012). In arid grassland.

### **Subfamily Aleocharinae:**

#### ***Oxypoda formiceticola* MÄRKEL, 1841**

Matscher Tal / Val di Mazia:

*Pinus cembra* forest (ZW 2000\_1), sifted from ant nest (*Formica*), 1 specimen, leg. Zanetti (28.06.2016).

South Tyrol:

Brixen, Brenner, Pragser Wildsee, Trafoi, Jochgrimm, very rare (PEEZ & KAHLEN 1977, KAHLEN 1987, KAHLEN & HELLRIGL 1996).

General distribution:

Widely distributed in Europe (SMETANA 2004).

#### ***Oxypoda ignorata* ZERCHE, 1996**

Matscher Tal / Val di Mazia:

Pasture (WE 2000\_3), sifted from base of *Picea*, 1 specimen, leg. Zanetti (28.06.2016).

*Pinus cembra* forest (ZW 2000\_2), sifted from base of *Pinus cembra*, 1 specimen, leg. Zanetti (28.06.2016), (ZW 2000\_3), pitfall trap, 1 specimen, leg. Steinwandter & Seeber (27.06.2016).

South Tyrol:

Few records from Ritten near Bozen / Bolzano, and Obergrünwald (Kahlen in litt.).

General distribution:

Southern Alps and mountain ranges of southern Europe, from the Pyrenees to the Crimea (ZERCHE 2014).

### ***Oxypoda islandica* KRAATZ, 1857**

Matscher Tal / Val di Mazia:

Arid pasture (WE 1500\_1), extraction of litter sample and sifting from base of *Pinus*, *Larix*, *Berberis*, 22 specimens, leg. Schatz (29.06.2016), (WE 2000\_3), sifted at base of *Picea*, 2 specimens, leg. Zanetti (28.06.2016). Open larch forest (LW 1500\_1), sifted at base of *Larix*, 1 specimen, leg. Zanetti (28.06.2016).

South Tyrol:

Reschen / Resia, Reschener Alm, 2060 m (SCHATZ 2009) and fen bordering lake Haider See bei St. Valentin auf der Haide (Zanetti in litt.). **Third record for South Tyrol!**

General distribution:

Atlanto-Mediterranean species (ASSING 2008): Iceland, Scandinavia, British Isles, north-western Russia to France, Spain, South Italy, Tunisia and Algeria. Alps: French Alps, Piedmont (Italy), Switzerland (LUKA et al. 2009), Province of Trent (Italy) (PORTA 1926 in HORION 1967), North Tyrol, Salzburg, Carinthia (Austria). **Rarity!** Only historical records from Central Europe in need of revision!

### ***Plataraea dubiosa* (BENICK, 1935)**

Matscher Tal / Val di Mazia:

Open larch forest (LW 1500\_3), pitfall trap, 1 specimen, leg. Steinwandter & Seeber (27.06.2016).

**New record for South Tyrol!**

General distribution:

Northeastern and Central Europe. Widely distributed, but rare.

### **Subfamily Staphylininae:**

#### ***Ocypus rhaeticus* EPPELSHEIM, 1873**

Matscher Tal / Val di Mazia:

Open larch forest (LW 1500\_3), pitfall trap, 1 specimen, leg. Steinwandter & Seeber (27.06.2016).

South Tyrol:

Ultental (2400 m), St. Martin am Kofel, Morter, Meran, Passeier, Stilfser Joch, Eppan, Taufers im Münstertal, Franzenshöhe, on River Etsch / Adige near Lana (PEEZ & KAHLLEN 1977, KAHLLEN 1987, SCHATZ 2005).

General distribution:

Central Alps: Austria, Italy Switzerland (SMETANA 2004). Distribution restricted to the Central Alps, characteristic for montane and subalpine forests (ZANETTI 2015).

## **Staphylinid species assemblages**

Due to the limited sampling program, only a rough overview of the species assemblages in the investigated sites can be given (Table 1).

### **Pastures at 1000 m a.s.l. (WE 1000\_1, 2, 3)**

The arid pastures at about 1000 m provide very few niches for the predominantly mesophilous rove beetles. All three replicates are characterized by an extremely dry and warm microclimate and thin vegetation cover. Moreover, they are "controlled" by the ubiquitous ants. Thus according to expectation, a scant material of 57 specimens belonging to only 7 species was collected. These could only be gathered by sifting

leaf and conifer litter and debris under isolated shrubs and trees. This shaded microhabitat serves as a refuge for small, mostly nocturnal species during daytime. The xerotolerant species found here mostly belong to the subfamilies of Aleocharinae (e.g. *Atheta fungi*, *A. amplicollis*, both common, and *Oxypoda togata*, occurring in dry meadows and on sandy soil) and Tachyporinae (e.g. *Sepedophilus nigripennis*, a remarkable finding, see above). Except one coprophilous species (*Philonthus parvicornis*) caught by hand sampling, no large-sized, active predatory species were captured in the pitfall traps.

#### **Pastures at 1500 m a.s.l. (WE 1500\_1, 2, 3)**

The pastures situated at a much higher altitude are still characterized as dry due to the local climatic conditions, but are less arid than the lower sites. Accordingly, the staphylinid fauna is much more diverse, with 16 recorded species. The material of 149 specimens is dominated by four species: *Philonthus cognatus*, an active predator, common in grassland and widely distributed, captured by pitfall trapping, *Atheta fungi*/*A. amplicollis* (see above), and *Oxypoda islandica*. Aggregations of this small species inhabiting plant debris could be sifted from litter samples and represents a faunistically remarkable record (see above). The rest of the species assemblage comprises additional small leaf litter dwellers and one large-sized, coprophilous predatory staphylinine (*Ontholestes haroldi*).

#### **Pastures at 2000 m a.s.l. (WE 2000\_1, 2, 3)**

The sites representing the pastures near the timberline shows a remarkable diversity with high equitability (14 species in 45 specimens). The staphylinid fauna encompasses species characteristic for grassland as well as forests, captured not only in the litter samples taken predominantly at the base of isolated trees, but also in the pitfall traps in the center of the pastures.

Faunistic highlights are represented by one very rare omaliine, *Mannerheimia brevipennis*, and the aleocharines *Oxypoda ignorata*, and *O. islandica* (see above).

#### **Pastures at 2500 m a.s.l. (WE 2500\_2)**

Only scant material from pitfall traps is available from one replicate of the high-alpine pastures. Thus, no comparison with other sites is feasible, although a decrease of species number and abundance of the rove beetle fauna is to be expected. Three of the four captured species belong to the subfamily Staphylininae. Beside one eurytopic species, widely distributed at montane to subalpine altitudes (*Quedius paradisianus*), two are closely bound to subalpine and alpine grassland (*Philonthus frigidus* and *Ph. nimbicola*). Additionally, the semiparasitic, coprophilous aleocharine species (*Aleochara maculata*) was trapped.

### **Forest sites**

As expected, the most diverse species assemblages were encountered in the highly structured forest sites. Several microhabitats were sampled, mainly the coniferous leaf litter, decaying wood as well as bark, but also flowering dwarf shrubs and especially ant nests (*Formica*).

The open larch forest sites at about 1500 m a.s.l. yielded 209 specimens belonging to 35 species. In the much higher *Pinus cembra* forests at 2000 m the similar amount of 196 specimens contained 30 species.

### **Open larch forests (LW 1500\_1, 2, 3)**

Large-sized, epigeic predators belonging to the subfamily Staphylininae dominate in the pitfall traps, especially from the replicates 2 and 3: *Dinothenarus fossor*, *Philonthus decorus*. Beside these, the notable species *Ocypus rhaeticus* was recorded. Small plant litter dwellers abundant in all three replicates are *Atheta amplicollis* / *A. fungi* and *Oxypoda annularis*. The numerous remaining species are represented by few or single specimens.

Faunistic highlights are *Lordithon bimaculatus*, *Ocypus rhaeticus*, and *Oxypoda islandica* (see above).

### **Pinus cembra forests (ZW 2000\_1, 2, 3)**

Although situated near the timberline, the pine forests contain a staphylinid fauna as rich in species numbers as the larch forests at lower altitude, but lacking the large predators.

In contrast, the search for myrmecophilous species in nests of *Formica*-ants was quite successful, yielding the aleocharines *Amidobia talpa*, *Lyprocorrhe anceps*, *Notothecta flavipes*, *Oxypoda formiceticola*, *O. haemorrhoea*, and *Thiasophila angulata*.

Remarkable records are *Mycetoporus inaris*, *Oxypoda formiceticola*, and *O. ignorata* (see above).

### **Fertilized hay meadows (MW 1500\_2, 3)**

Only material from pitfall trapping was evaluated. Hand sampling and litter samples were not feasible due to the extremely high and dense grass and herb layer prior to mowing. The species number lies in the order of the dry pastures. The species list comprises mainly large-sized epigeic predators, as expected. They belong to common grassland species, without any faunistic specialities.

Tab. 1: Species list of rove beetles (Coleoptera, Staphylinidae) in the Matscher Tal / Val di Mazia (South Tyrol, Italy) collected in June 2016. Remarkable species records are marked with an asterisk (\*, see text, new records, rarities), abbreviations of vegetation types see text.

SITE (TYPE OF VEGETATION) / ALTITUDE	WE 1000	WE 1500	WE 2000	WE 2500	MW 1500	LW 1500	ZW 2000	TOTAL	FAUNISTIC REMARKS
Number of specimens	57	149	45	7	249	209	196	912	
Number of species	7	16	14	4	14	35	30	85	
<i>Aleochara maculata</i> BRISOUT DE BARNEVILLE, 1863				1				1	
<i>Amidobia talpa</i> (HEER, 1841)							4	4	
<i>Anaulacaspis nigra</i> (GRAVENHORST, 1802)		2						2	
<i>Anotylus rugosus</i> (FABRICIUS, 1775)					1			1	
<i>Anthophagus fallax</i> KIESENWETTER, 1848							1	1	
<i>Atheta amplicollis / fungi</i> (GRAV., 1806)	16	33	4			61	26	140	
<i>Atheta indubia</i> (SHARP, 1869)						1		1	
<i>Atheta myrmecobia</i> (KRAATZ, 1856)			7					7	
<i>Atheta sodalis</i> (ERICHSON, 1837)						4		4	
<i>Atheta</i> sp.							1	1	
<i>Bisnius</i> sp.					1			1	
<i>Bryophacis rufus</i> (ERICHSON, 1839)							1	1	
<i>Cypha</i> sp.						1		1	
<i>Dinothenarus fossor</i> (SCOPOLI, 1771)						23		23	
<i>Eusphalerum stramineum</i> (KRAATZ, 1857)						1	65	66	
<i>Eusphalerum tenenbaumi</i> (BERNHAEUER, 1932)							1	1	
<i>Gabrius appendiculatus</i> SHARP, 1910					4			4	
<i>Heterothops dissimilis</i> (GRAVENHORST, 1802)	1		1			3		5	
<i>Ischnosoma splendidum</i> (GRAVENHORST, 1806)							2	2	
<i>Leptusa pulchella</i> MANNERHEIM, 1830						1		1	
<i>Liogluta alpestris</i> (HEER, 1839)		4				4		8	
<i>Liogluta longiuscula</i> (GRAVENHORST, 1802)		1					1	2	
<i>Liogluta micans</i> (MULSANT & REY, 1852)			6				18	24	
<i>Liogluta wuesthoffi</i> (BENICK, 1938)						2	3	5	
<i>Lordithon bimaculatus</i> (SCHRANK, 1798) *						1		1	New record!
<i>Lordithon thoracicus</i> (FABRICIUS, 1777)			4			1		5	
<i>Lyprocorrhe anceps</i> (ERICHSON, 1837)							10	10	
<i>Mannerheimia brevipennis</i> (MOTSCHULSKY, 1860) *			2					2	Rarity!
<i>Mycetoporus baudueri</i> MULSANT & REY, 1875		2						2	
<i>Mycetoporus caliginosus</i> SCHÜLKE, 2009						1		1	
<i>Mycetoporus inaris</i> LUZE, 1901 *							1	1	Rarity!
<i>Mycetoporus nigrans</i> MÄKLIN, 1853			1					1	
<i>Notothecta flavipes</i> (GRAVENHORST, 1806)							2	2	
<i>Ocypus ophthalmicus</i> (SCOPOLI, 1763)						1		1	
<i>Ocypus picipennis fallaciosus</i> (MÜLLER, 1926)			4					4	
<i>Ocypus rhaeticus</i> EPPELSHEIM, 1873 *						2		2	Restricted distribution!
<i>Omalius excavatum</i> STEPHENS, 1834							5	5	
<i>Ontholestes haroldi</i> (EPPELSHEIM, 1884)		6				1		7	
<i>Othius angustus angustus</i> STEPHENS, 1833			2				3	5	
<i>Othius lapidicola</i> MÄRKEL & KIESENWETTER, 1848							5	5	
<i>Othius punctulatus</i> (GOEZE, 1777)						2		2	



SITE (TYPE OF VEGETATION) / ALTITUDE	WE 1000	WE 1500	WE 2000	WE 2500	MW 1500	LW 1500	ZW 2000	TOTAL	FAUNISTIC REMARKS
<i>Oxypoda annularis</i> (MANNERHEIM, 1830)						15	16	31	
<i>Oxypoda formiceticola</i> MÄRKEL, 1841 *							1	1	Rarity!
<i>Oxypoda haemorrhoea</i> (MANNERHEIM, 1830)							2	2	
<i>Oxypoda ignorata</i> ZERCHE, 1996 *			1				4	5	Rarity!
<i>Oxypoda islandica</i> KRAATZ, 1857 *		22	1			2		25	3rd record!
<i>Oxypoda mutata</i> SHARP, 1871						2		2	
<i>Oxypoda togata</i> ERICHSON, 1837	21		1					22	
<i>Oxypoda vittata</i> MÄRKEL, 1842						1		1	
<i>Pella humeralis</i> (GRAVENHORST, 1802)						8	8	16	
<i>Philonthus albipes</i> (GRAVENHORST, 1802)		1						1	
<i>Philonthus carbonarius</i> (GRAVENHORST, 1802)		5			7			12	
<i>Philonthus cognatus</i> STEPHENS, 1832		58	10		140			208	
<i>Philonthus decorus</i> (GRAVENHORST, 1802)					3	50		53	
<i>Philonthus frigidus</i> MÄRKEL & KIESENWETTER, 1848				2				2	
<i>Philonthus laminatus</i> (CREUTZER, 1799)					51			51	
<i>Philonthus lepidus</i> (GRAVENHORST, 1802)		4						4	
<i>Philonthus nimbicola</i> FAUVEL, 1874				1		1	4	6	
<i>Philonthus parvicornis</i> (GRAVENHORST, 1802)	1							1	
<i>Plataraea dubiosa</i> (BENICK, 1935) *						1		1	New record!
<i>Quedius fuliginosus</i> (GRAVENHORST, 1802)						4		4	
<i>Quedius nemoralis</i> BAUDI DI SELVE, 1848		1				1		2	
<i>Quedius ochropterus</i> ERICHSON, 1840							1	1	
<i>Quedius paradisiensis</i> (HEER, 1839)				3			4	7	
<i>Quedius plagiatus</i> MANNERHEIM, 1843							1	1	
<i>Quedius xanthopus</i> ERICHSON, 1839						1		1	
<i>Sepedophilus nigripennis</i> (STEPHENS, 1832) *	15	4				3		22	Rarity!
<i>Sepedophilus testaceus</i> (FABRICIUS, 1793)		2				1		3	
<i>Staphylinus caesareus</i> CEDERHJELM, 1798					1			1	
<i>Staphylinus dimidiaticornis</i> GEMMINGER, 1851					22			22	
<i>Stenus clavicornis</i> (SCOPOLI, 1763)					1			1	
<i>Stenus nanus</i> STEPHENS, 1833					3			3	
<i>Tachinus corticinus</i> GRAVENHORST, 1802							1	1	
<i>Tachinus laticollis</i> GRAVENHORST, 1802						3	1	4	
<i>Tachinus rufipes</i> (LINNÉ, 1758)		2			10			12	
<i>Tachyporus abdominalis</i> (FABRICIUS, 1781)					1			1	
<i>Tachyporus atriceps</i> STEPHENS, 1832	2	2	1					5	
<i>Tachyporus chrysomelinus</i> (LINNÉ, 1758)					4			4	
<i>Tachyporus dispar</i> (PAYKULL, 1789)						1		1	
<i>Tachyporus scitulus</i> ERICHSON, 1839	1							1	
<i>Thiasophila angulata</i> (ERICHSON, 1837)							3	3	
<i>Trichophya pilicornis</i> (GYLLENHAL, 1810)						1		1	
<i>Trimium brevicorne</i> (REICHENBACH, 1816)							1	1	
<i>Xantholinus laevigatus</i> JACOBSEN, 1849						3		3	
<i>Xantholinus tricolor</i> (FABRICIUS, 1787)						1		1	

## Zusammenfassung

### Kurzflügelkäfer (Coleoptera: Staphylinidae) in den LTSER-Untersuchungsflächen in Matsch (Südtirol, Italien) – Erhebungen im Rahmen der Forschungswoche 2016

Die Staphylinidenfauna des Matscher Tals / Val di Mazia (Gemeinde Mals / Malles) im Vinschgau wurde im Rahmen des Projekts „Long-Term Socio-economic and Ecosystem Research“ untersucht. Mehrere Straten und Mikrohabitate wurden mittels verschiedener Methoden in den folgenden Vegetationseinheiten besammelt: Trockenweiden (1000, 1500, 2000 m), Mahdwiesen (1500 m), beweidete, offene Lärchenwälder (*Larix decidua*, 1500 m), und Zirbenwälder (*Pinus cembra*, 2000 m), jeweils mit 3 Vergleichsflächen. Insgesamt wurden 86 Arten determiniert. *Lordithon bimaculatus* (SCHRANK, 1798) und *Plataraea dubiosa* (BENICK, 1935) sind Neumeldungen für Südtirol. *Oxypoda islandica* KRAATZ, 1857 ist der dritte Nachweis für die Region. Weitere bemerkenswerte Funde werden im Detail besprochen. Die höchste Diversität weisen die Lärchenwälder in 1500 m sowie die Zirbenwälder in 2000 m auf. In beiden wurden jeweils mehrere Mikrohabitate, inklusive Ameisennester besammelt. Die extrem trockenen Weidewiesen in 1000 m bieten wenig Nischen für Kurzflügelkäfer, mit Ausnahme einiger Arten mit hoher Toleranz gegenüber xerothermen Habitaten wie *Sepedophilus nigripennis* (STEPHENS, 1832), sowie Arten mit Verbreitungsschwerpunkt in den Südalpen und Gebirgen Südeuropas, z.B. *Oxypoda ignorata* ZERCHE, 1996.

## Riassunto

### Stafilinidi (Coleoptera, Staphylinidae) dell' area di ricerca del LTSER in Val di Mazia (Prov. Bolzano, Italia) – Risultati ottenuti nell'ambito della settimana della scienza 2016

La fauna di Coleotteri Stafilinidi di Val di Mazia / Matscher Tal (comune di Malles Venosta /Mals), Val Venosta, è stata studiata nell'ambito della "Ricerca socio-economica ed ecosistemica a lungo termine". Parecchi orizzonti vegetazionali e microambienti sono stati censiti con differenti tecniche nelle seguenti unità: prati aridi (1000, 1500, 2000 m s.l.m.), prati da fieno (1500 m), foresta aperta pascolata di Larici (*Larix decidua*, 1500 m) e foresta di Cirmolo (*Pinus cembra*, 2000 m), ciascuno in tre siti replicati. E' stato individuato un totale di 86 specie. *Lordithon bimaculatus* (SCHRANK, 1798) e *Plataraea dubiosa* (BENICK, 1935) sono dati nuovi per l'Alto Adige. *Oxypoda islandica* KRAATZ, 1857 è il terzo dato per la regione. Altre specie notevoli sono discusse in dettaglio. La diversità più elevata è stata rilevata nella foresta di larici a 1500 m s.l.m. e nella foresta di cirmolo a 2000 m, dove è stato raccolto in parecchi microambienti, inclusi i nidi di formiche. I prati estremamente aridi a bassa quota offrono poche nicchie per i Coleotteri Stafilinidi, tranne per alcune specie tolleranti degli habitat xerotermici come *Sepedophilus nigripennis* (STEPHENS, 1832), e per specie distribuite nelle Alpi meridionali e nelle catene montuose dell'Europa meridionale, come ad esempio *Oxypoda ignorata* ZERCHE, 1996.

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