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## A NEW OTIORHYNCHUS GERMAR, 1822 FROM MOUNT ETNA, SICILY (COLEOPTERA CURCULIONIDAE)

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Magrini P., Abbazzi P., Magnano L., Baviera C. – A new *Otiorhynchus* Germar, 1822 from Mount Etna (Sicily) (Coleoptera Curculionidae).

Is described *Otiorhynchus angelae* n. sp. from Mount Etna, Sicily, clearly differing from the closely related *O. meridionalis* Gyllenhal, 1834 by the slenderer body, less convex eyes, narrower intraocular space, smaller and more convex granules on the pronotum, paler colour with spots of thin serrate silver scales on elytra, and aedeagus with longer and narrower median lobe. *O. meridionalis* is distributed in southern France, eastern Pyrenees, northeastern Spain, North Africa, and Italy (Piedmont, Liguria, Abruzzo and Sicily).

KEY WORDS: Coleoptera, Curculionidae, Entiminae, *Otiorhynchus*, new species, Sicily, Italy.

### INTRODUCTION

During a short trip to Mount Etna, Sicily, one of us (P. M.) and his wife collected at high elevation a small series of a new species of *Otiorhynchus* Germar, 1822, the description of which is below.

Type depositories abbreviations are as follows: CM: P. Magrini collection (Firenze, Italy); CA: P. Abbazzi collection (Firenze, Italy); CMA: L. Magnano collection (Poggibonsi, Italy); CB: C. Baviera collection (Messina, Italy); CD: coll. L. Diotti collection (Cinisello Balsamo, Italy).

Abbreviations in Table 1 are the following: LT: total length from anterior margin of rostrum to the tip of elytra; LSR: body length excluding rostrum; LS: length of scape; LF: length of funiculus; LC: length of club; PL: pronotal length along median line; PMW: maximum pronotal width; EL: length of elytra along suture from base of scutellum to apex; EW: maximum elytral width; PMW/PL: maximum width/maximum length of pronotum ratio; EL/EW: elytral length/width ratio; EW/PMW: elytral/pronotal width ratio; AED: length of aedeagus; SPG: length of spiculum gastrale.

### *Otiorhynchus (Otiorhynchus) angelae* n. sp.

TYPE LOCALITY – Sicily, La Montagnola (Mount Etna, southern slope, Catania) 2500 m a.s.l.

TYPE SERIES – *Holotypus* ♂, «Sicilia, La Montagnola (Monte Etna, versante Sud, Catania) 2500 m s.l.m., 18.VIII.2005, leg. Angela Montemurro Magrini & Paolo Magrini» in CM. *Paratypi*: «Sicilia, La Montagnola (Monte Etna, versante Sud, Catania) 2500 m s.l.m., 18.VIII.2005, leg. Angela Montemurro Magrini & Paolo Magrini» 2 ♂♂ and 1 ♀ in CM, 1 ♂ and 1 ♀ in CA, 1 ♀ in CMA, 1 ♀ in CD. «Sicilia, La Montagnola (Monte Etna, versante

Sud, Catania) 2500 m s.l.m., 7.VII.1973, leg. Ricciardelli» 1 ♀ in CA. «Monte Nero 2000 m s.l.m. (Monte Etna, versante Nord), 1.XI.2005, leg. C. Baviera» 1 ♂ in CB.

DIAGNOSIS – An *Otiorhynchus (Otiorhynchus)* close to *O. (O.) meridionalis* Gyllenhal, 1834, from which differs by slenderer body shape, spots of silvery closely adpressed scales on elytra, less convex eyes, narrower interocular distance, pronotal granules smaller and more convex.

HOLOTYPE – Black, antennae, tibiae and tarsi ferruginous. Sparse elongate thin almost recumbent grey setae are generally distributed on integumental surface, and several silvery spots formed of small adpressed scales can be also seen (fig. II).

Rostrum as long as wide; epistoma subtriangular, smooth and glossy; epifrons with angulate sides converging toward eyes and with thin median keel; frons with not sharp margins. Pterigia widened outward, opened apically; antennal pits deep and reaching the anterior margin of eyes in repose.

Head convex, smooth. Eyes suboval, just a little convex, rather large, slanting in side view, interocular distance as wide as epifrons between antennal insertion.

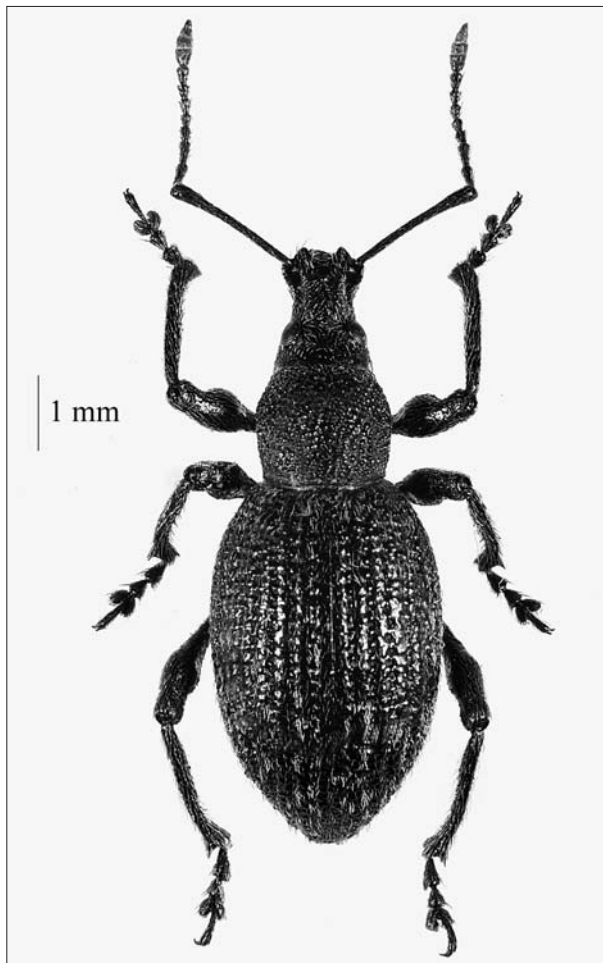
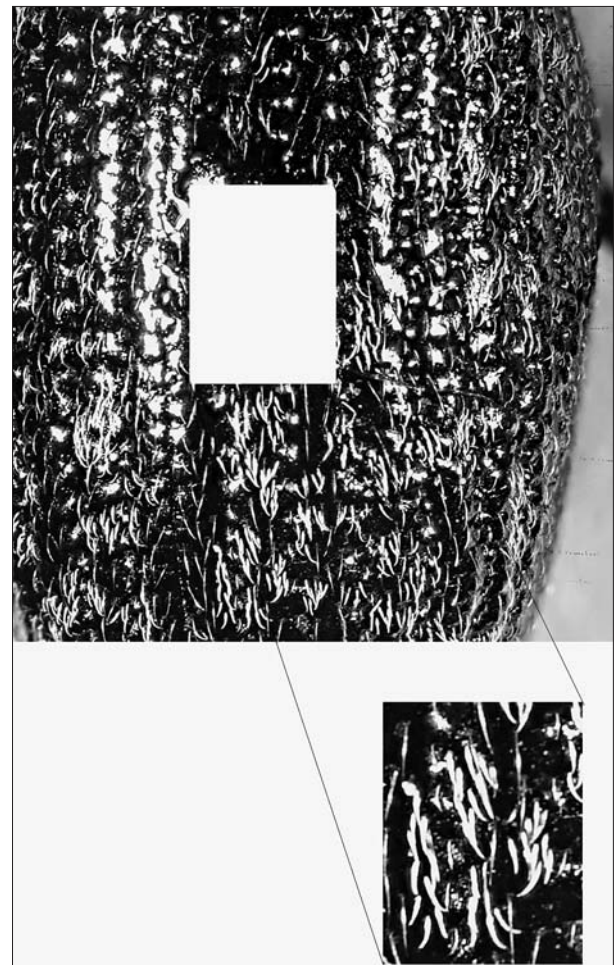
Antennae slender, finely setose; scape gradually tickening from base to apex, two first antennomera elongate, somewhat clubbed, first 3.5, second 3.0, third 1.5, fourth 1.2, fifth and sixth 1.3, seventh 1.5 volte as long as wide. Club fusiform as long as funicular joints 5-7 together.

Prothorax subglobular, 1.3 as long as wide, anterior margin a little narrower than basal one, sides weakly widened, maximum pronotal width a trifle anterior of middle. Disc with dense tubercles slightly flattened, whereas they are more convex on sides.

Elytra elliptic, 1.5 as long as wide, base slightly concave, maximum width at the middle. Humeral calli wanting. Striae with a row of pit-like punctures separated one

Table 1 – Holotypus ♂ (fig. I).

	LT	LSR	LS	LF	LC	PMW	PL	$\frac{PMW}{PL}$	EL	EW	$\frac{EL}{EW}$	$\frac{EW}{PMW}$	AED	SPG
Holotypus	7.86	7.06	1.90	2.03	0.65	1.77	1.64	1.08	4.80	3.09	1.55	2.89	2.89	2.23
Paratypi														
min.	7.33	6.67	1.90	1.91	0.65	1.64	1.51	1.08	4.47	2.96	1.51	1.67		
max	9.73	8.80	2.30	2.50	0.86	2.17	1.84	1.22	5.92	3.95	1.67	1.83		
mean	8.66	7.80	2.10	2.17	0.73	1.94	1.69	1.15	5.28	3.38	1.56	1.74		

Fig. I – *Otiorhynchus (Otiorhynchus) angelae* n. sp. (Holotypus ♂), CM: habitus.Fig. II – *Otiorhynchus (Otiorhynchus) angelae* n. sp. (Holotypus), elytral scales.

another by a distance equal to half diameter of one of them, and deeper toward apex: between each puncture is a granulate tubercle at the posterior margin of which is inserted an oblique seta a little shorter than the puncture diameter. Intervals flat, 1.5 wider than striae, with uniseriate flat tubercles on disc which became more conex on lateral intrspaces and toward apex.

Legs elongate, rugosely punctured, particularly femora, and pubescent. Femora clubbed, edentate, middle femora shorter than others. Protibiae and metatibiae curved inwards toward apex, with internal mucro and apical com of setae honey-red. Mesotibiae straight, shorter than others

and slightly bent distally at apex. First metatarsal joint twice longer than wide, second and third as long as wide, third deeply bilobe. Onychium as long as 1 and 2 together.

Metasternum and visible urosternites with irregularly spaced pit-like shallow punctures bear long grey-yellowish almost recumbent setae 2-3 times as long as their diameter (fig. III).

Aedeagus and spiculum gastrale; see figs. IV, 1, 2, 3, 4.

Measurements of the specimen are in Table 1.

PARATYPES – Size of specimens is rather variable (see table), although colour, vestiture and morfological traits



Fig. III – *Otiorynchus (Otiorynchus) angelae* n. sp. (Paratype ♂), CM: underside.

are quite uniform. Females have elytra wider than males. Spermatheca, spiculum ventrale and styli: see fig. VII. Measurements of the specimens are in Table 1.

**ETYMOLOGY** – The species is named after Angela Montemurro Magrini, who collected most of the type specimens.

**REMARKS** – It is easy to differentiate the new species from the close *Otiorynchus (Otiorynchus) meridionalis* Gyllenhal, 1834 (figs. V, VI) by the slender body, less convex and larger eyes, interocular distance narrower, longer antennae, pronotal tubercles smaller and more convex, elytral striae deeper, lighter vestiture with small silvery spots on elytra, median lobe of aedeagus longer and narrower in dorsal view, styli of different shape and narrower (figs. VII, VIII). *Otiorynchus meridionalis* Gyllenhal, 1834 was described from «Southern Europe» and is distributed in southern France, eastern Pyrenees, northeastern Spain, North Africa and Italy (Piedmont, Liguria, Abruzzo and Sicily), (DI MARCO & OSELLA 2001, OSELLA *et al.* 2005). In addition, *O. meridionalis* has been

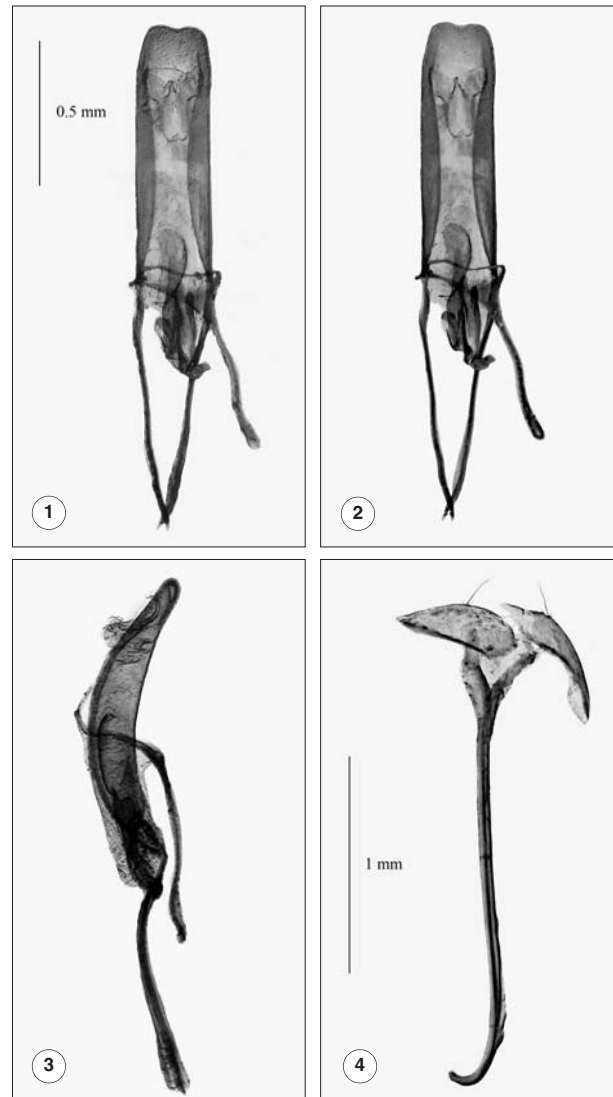


Fig. IV – *Otiorynchus (Otiorynchus) angelae* n. sp. (Holotype): -1. Aedeagus in dorsal view mounted on acetate label. -2. Aedeagus in dorsal view mounted on perspex label. -3. Aedeagus in side view mounted on acetate label; -4. Spiculum gastrale.

imported in several of the United States where it damages particularly ornamental plants (WARNER & NEGLEY 1976). Perhaps *Otiorynchus meridionalis* is a complex of some very close species, since obvious differences are shown by the populations from Sicily and those from southern France (Aude), for which see photographs. However, we are currently unable to propose a different taxonomic arrangement for lack of more abundant material.

**DISTRIBUTION AND ECOLOGICAL NOTES** – The new species appears to be limited to the high mountain level of Etna volcano, between 1800 and 2500 m, and has been found either in wooden areas and in stony places. Most specimens were collected near the roots of the small plants growing among lava stones just before the upper limit of vegetation. The example from Monte Nero has been sifted out beech litter.

Of course with such a scarce material we cannot exclude that *O. angelae* may be present at lower elevation, although at the moment the new species seems to be an endemic of high mountain level of Mount Etna. In spite of the constant volcanic eruptions, several insects are thus



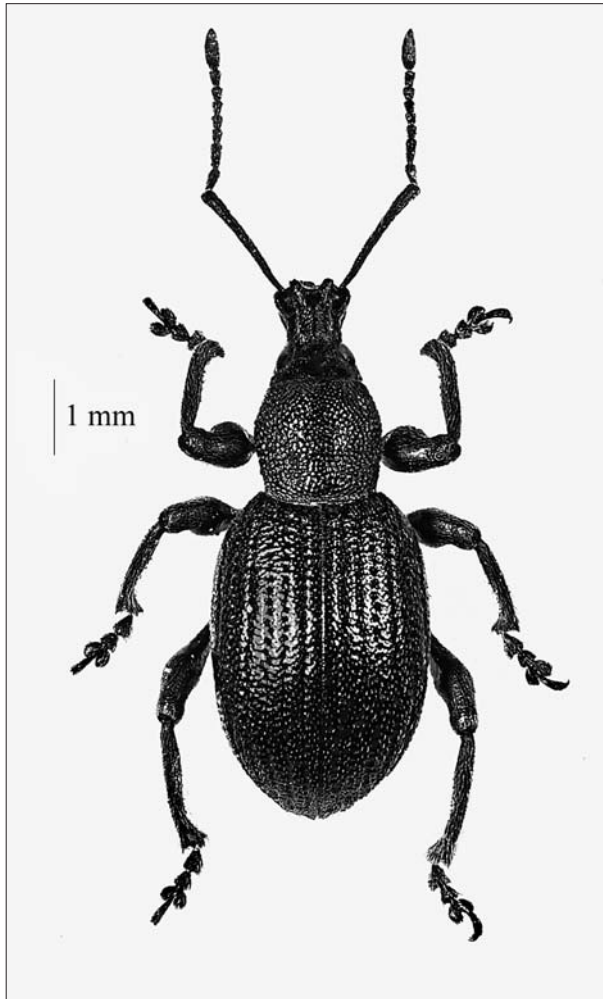


Fig. V – *Otiobryncus (Otiobryncus) meridionalis* Gyllenhal from Tourouzele near Lésigan, Aude, France, CMA: habitus.

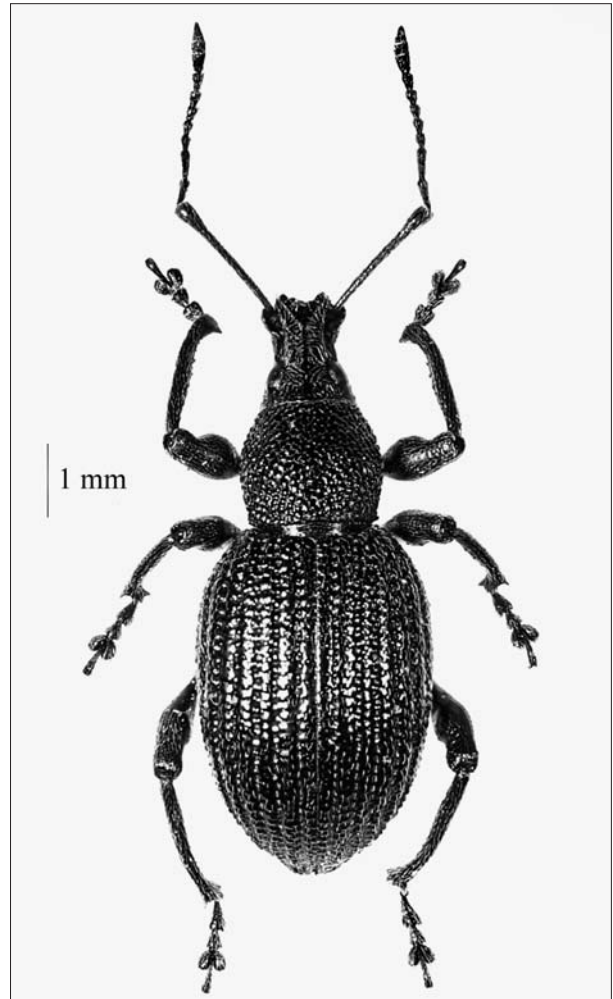


Fig. VI – *Otiobryncus (Otiobryncus) meridionalis* Gyllenhal from Portella Polizzi, Madonie, Sicily, Italy, CB: habitus.

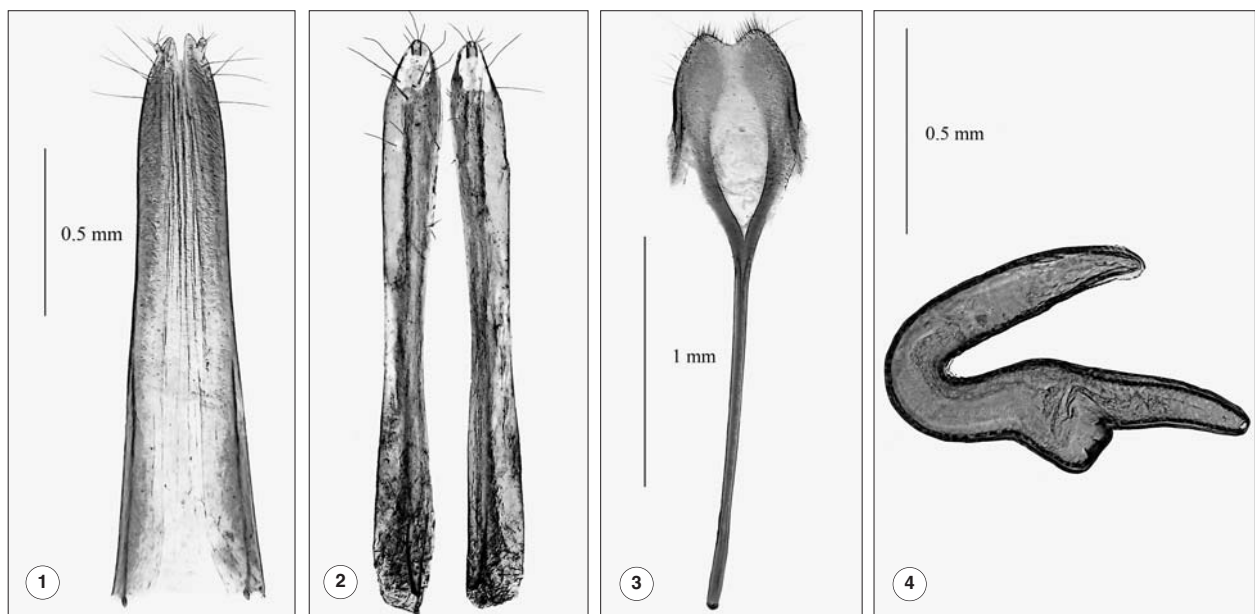


Fig. VII – *Otiobryncus (Otiobryncus) angelae* n. sp. (Paratype ♀), CM: -1. Styli; - 2. Separate styli. -3. Spiculum ventrale. - 4. Spermatheca.

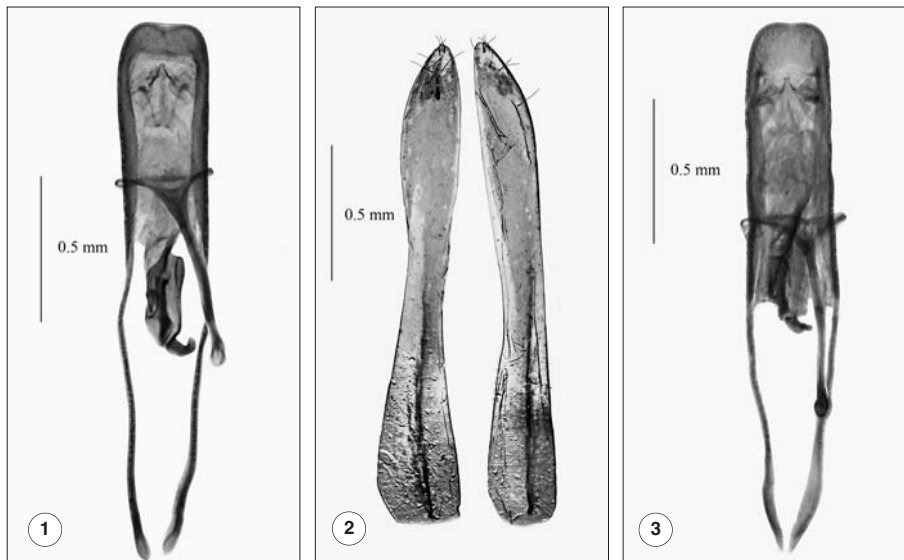


Fig. VIII – *Otorhynchus (Otorhynchus) meridionalis* Gyllenhal - 1. Aedeagus of a specimen from Tourouzelle in dorsal view. -2. Styli of a specimen from Tourouzelle -3 Aedeagus of a specimen from Portella Polizzi in dorsal view.

far reported only at high elevation: among Coleoptera we can mention *Duvalius hartigi* Magrini, Baviera & Vigna Taglianti, 2006 and *Lionychus fleischeri focarilei* Barajon, 1964 (Carabidae), *Buprestis aetnensis* Baviera & Sparacio, 2002 (Buprestidae), *Cardiophorus aetnensis* Platia & Baviera, 2005 (Elateridae).

#### ACKNOWLEDGEMENTS

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#### RIASSUNTO

##### UN NUOVO OTIORHYNCHUS GERMAR, 1822 DEL MONTE ETNA (SICILIA) (COLEOPTERA CURCULIONIDAE)

Nella presente nota viene descritto *Otorhynchus angelae* n. sp. del Monte Etna in Sicilia, il quale si distingue agevolmente dall'affine *O. meridionalis* Gyllenhal, 1834 per la forma più slanciata del corpo, per gli occhi meno convessi, per lo spazio interoculare più stretto, per i granuli del pronoto più piccoli e più convessi, per la vestitura più chiara e più allungata, per la presenza a livello elitrale di piccole macchie argentee costituite da squamule

serrate, per il lobo mediano dell'edeago più allungato e più stretto in visione dorsale. *O. meridionalis* Gyllenhal, è descritto dell'«Europa meridionale» ed è presente nella Francia meridionale, nei Pirenei orientali, nella Spagna nord-orientale, in Nord Africa e in Italia (Piemonte, Liguria, Abruzzo e Sicilia).

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