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## A new species of glyptomeroid *Lathrobium* from Campania, Italy (Coleoptera, Staphylinidae)

**Riassunto:** Una nuova specie di *Lathrobium gliptomeroide* della Campania, Italia (Coleoptera, Staphylinidae).

*Lathrobium petruzzelloi* sp. n. dalla Grotta degli Angeli (Monti Picentini, Monte Cervialto, Acerno, Campania, Italia), la specie ritrovata più a sud della penisola italiana di questo gruppo, è qui descritta e raffrontata con *L. angelae* Bordoni & Magrini, 1996 della Grotta dei Diavoli (Monti del Matese, Letino, Caserta, Campania, Italia). Viene presentata una mappa di distribuzione del gliptomeroide *Lathrobium* Gravehorst, 1802 negli Appennini italiani. La seguente sinonimia è convalidata: *Lathrobium* Gravenhorst, 1802 = *Glyptomerus* H. Müller, 1856.

**Abstract:** *Lathrobium petruzzelloi* sp. n. from Grotta degli Angeli (Picentini Mounts, Cervialto Mount, Acerno, Campania, Italy), the most southern species in the Italian peninsula of this group, is described and compared with *L. angelae* Bordoni & Magrini, 1996 from Grotta dei Diavoli (Matese Monts, Letino, Caserta, Campania, Italy). A map of the distribution of the glyptomeroid *Lathrobium* Gravehorst, 1802 in the Italian Apennines is presented. The following synonymy is validated: *Lathrobium* Gravenhorst, 1802 = *Glyptomerus* H. Müller, 1856.

**Key words:** Coleoptera, Staphylinidae, *Lathrobium petruzzelloi*, Campania, new species.

### INTRODUCTION

Luigi Petruzzello, an enthusiastic speleologist and entomologist, sent me for study a glyptomeroid *Lathrobium* collected in a cave of Campania (Southern Italy) representing the southernmost locality of these depigmented, anophthalmous or microphthalmous and apterous Staphylinids. In describing this new species of great interest, I take the opportunity to summarize the distribution of the group in the Apennines. I present this distribution in a map (Fig. 1): *L. doderoi* Abeille, 1900 (medium filled square), *L. zoiai* Briganti, 1980 (large triangle), *L. straneo*i Schatzmayr & Koch, 1934 (empty small square), *L. andreinii* Schatzmayr & Koch, 1934 (small arrow), *L. rosai* Bordoni, 1985 (empty triangle), *L. garioi* Bordoni, 1984 (halo); *L. magrinianum* Bordoni, 1986 (small filled inverted triangle), *L. degiovannii* Bordoni, 2005 (empty star), *L. apenninum* Baudi, 1870 (small filled square), *L. magrinii* Bordoni, 2012a (empty circle), *L. colacurcioi* Bordoni & Magrini, 2016 (square within square), *L. bastianinii* Bordoni & Magrini, 2011a, (empty large inverted triangle), *L. bramantii* Bordoni, 2012 (filled triangle pointing right), *L. assingi* Bordoni, 1997 (large arrow), *L. etruscum* Piccioli, 1871 (large filled star), *L. castellini* Bordoni, 1979 (square within cir-

cle), *L. lottii* Holdhaus, 1923 (small filled circle), *L. cirocchii* Bordoni, 1987 (large filled circle), *L. vignai* Bordoni, 1998 (large filled inverted triangle), *L. ganum* Bordoni, 1972 (small arrow), *L. volscum* Bordoni, 2010 (open inverted rhombus), *L. lacustre* Bordoni, 1972 (triangle within circle), *L. livatense* Bordoni, 1985 (large open square), *L. oblitum* Pace, 1977 (small open inverted triangle), *L. franzinii* Bordoni, 1985 (small filled star), *L. maginii* Bordoni, 1972 (filled rhombus), *L. auruncum* Bordoni & Magrini 2011 (filled triangle pointing left), *L. angelae* Bordoni & Magrini, 1996 (large empty triangle), *L. petruzzelloi* sp. n. (large filled square). Nine other species of this group occur in northern Italy, so 38 glyptomeroid *Lathrobium* are now known from Italy.. Most of these Staphylinids are restricted to single localities, and even more widespread species such as *L. maginii* in Mugello and *L. etruscum* in the Vallombrosano-Pratomagno area are limited to small areas.

Since there are no external characters or relating to the edeagus to justify the existence of the subgenus *Glyptomerus* H. Müller, 1856 and because in some catalogs (e.g. Smetana, 2004; Schulke & Smetana, 2015) the species of this group but not all (for example *L. vignai* missing and *L. assingi* related

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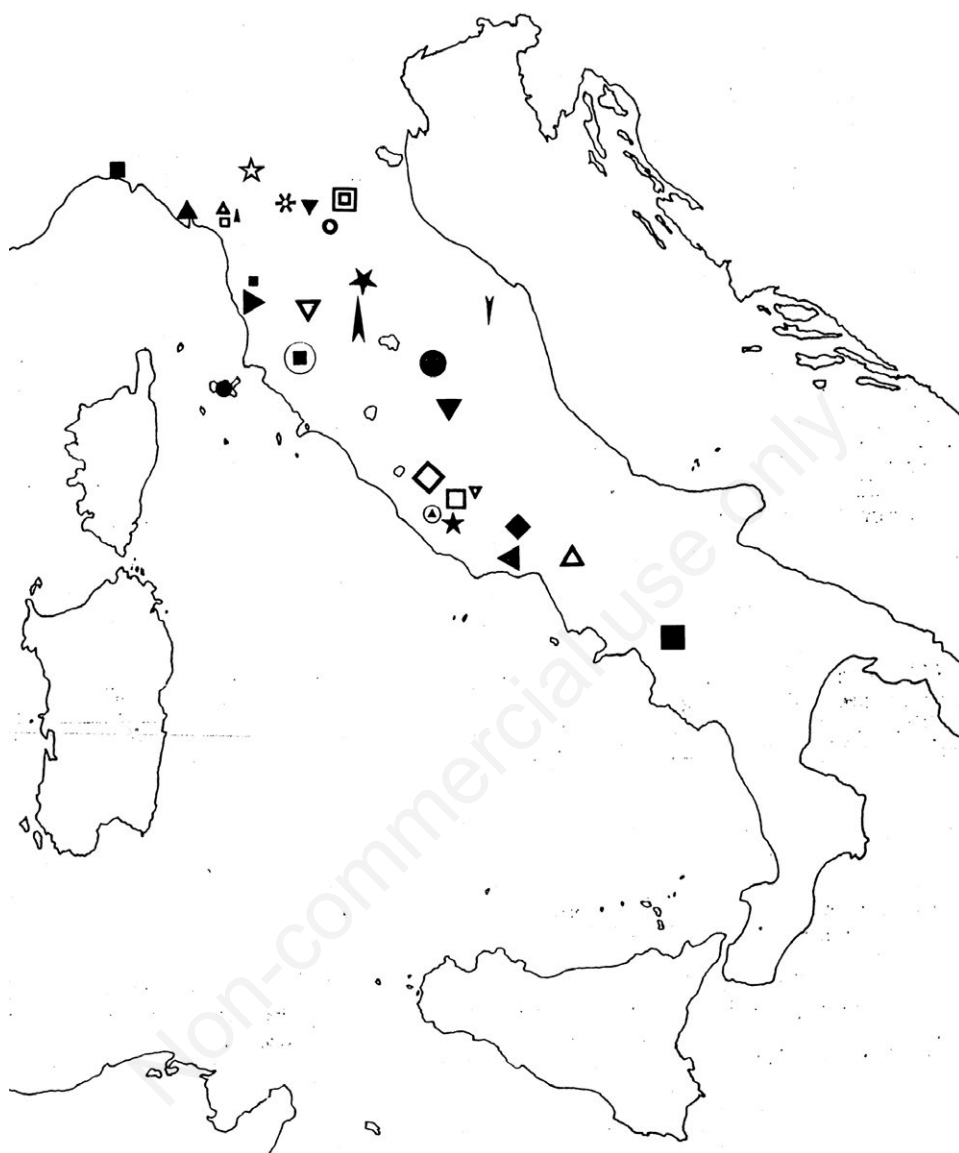


Fig. 1. Distribution of the glyptomeroid *Lathrobium* in the Italian Apennines. *L. doderoi* Abeille, 1900 (medium filled square), *L. zoiai* Briganti, 1980 (large triangle), *L. straneoi* Schatzmayr & Koch, 1934 (empty small square), *L. andreinii* Schatzmayr & Koch, 1934 (small arrow), *L. rosai* Bordoni, 1985 (empty triangle), *L. garioi* Bordoni, 1984 (halo); *L. magrinianum* Bordoni, 1986 (small filled inverted triangle), *L. degiovannii* Bordoni, 2005 (empty star), *L. apenninum* Baudi, 1870 (small filled square), *L. magrinii* Bordoni, 2012a (empty circle), *L. colacurcioi* Bordoni & Magrini, 2016 (square within square), *L. bastianinii* Bordoni & Magrini, 2011a, (empty large inverted triangle), *L. bramantii* Bordoni, 2012 (filled triangle pointing right), *L. assingi* Bordoni, 1997 (large arrow), *L. etruscum* Piccioli, 1871 (large filled star), *L. castellinii* Bordoni, 1979 (square within circle), *L. lottii* Holdhaus, 1923 (small filled circle), *L. cirocchii* Bordoni, 1987 (large filled circle), *L. vignai* Bordoni, 1998 (large filled inverted triangle), *L. genganum* Bordoni, 1972 (small arrow), *L. volscum* Bordoni, 2010 (open inverted rhombus), *L. lacustre* Bordoni, 1972 (triangle within circle), *L. livatense* Bordoni, 1985 (large open square), *L. oblitum* Pace, 1977 (small open inverted triangle), *L. franzinii* Bordoni, 1985 (small filled star), *L. maginii* Bordoni, 1972 (filled rhombus), *L. auruncum* Bordoni & Magrini 2011 (filled triangle pointing left), *L. angelae* Bordoni & Magrini, 1996 (large empty triangle), *L. petruzzielloi* sp. n. (large filled square).

to the subgenus *Lathrobium* s. str.) are still attributed to the subgenus *Glyptomerus*, I consider finally appropriate to validate the synonymy *Lathrobium* Gravenhorst, 1802 = *Glyptomerus* H. Müller, 1856, proposed by Coiffait (1972).

For the sake of completeness I recall that Coiffait (1972) initially proposed the synonym between *Glyptomerus* and *Lathrobium* and subsequently, without explanations, collected some species under the subgenus *Glyptomerus* (Coiffait, 1982). Later Piva (1995) confirmed this latter proposal by suggesting characters I had shown to be insubstantial as present/absent both in glyptomeroid *Lathrobium* both in *Lathrobium* s. str. (Bordoni, 1997).

#### TAXONOMY

##### *Lathrobium petruzziielloi* sp. n.

MATERIAL EXAMINED. Holotype ♀: Italy, Campania, Cervialto Mount, Grotta degli Angeli n. 588 Cp/SA (Picentini Mounts, Acerno, Salerno), 1075 mt, L. Petruzziiello leg. 18.VII.2015 (with traps) (coll. Bordoni, Firenze).

DESCRIPTION. Body (Fig. 2) length about 11 mm; length from anterior margin of head to posterior margin of elytra about 5 mm. Body of the usual light brown coloration. Similar to *L. angelae* Bordoni & Magrini, 1996 from Grotta dei Diavoli (Matese Mountains, Campania) from which it differs in the following characters: body smaller (in *L. angelae* 12 mm long, 5.5 mm from anterior margin of head to posterior margin of elytra) and narrower; in particular head visibly narrower, not roundish as in *L. angelae*, with less rounded sides (in *L. angelae* head almost orbicular with very rounded sides); surface of head with more evident, very fine and dense, transverse micro-striation, with smaller and more dense punctation. Eyes totally obsolete, represented by a smaller macula without ommatidia (a few ommatidia in *L. angelae*). Pronotum a little shorter, slender, visibly narrower than in *L. angelae*, sub-rectangular and not dilated forward as in *L. angelae*, with more oblique anterior angles. Surface with more dense and smaller punctures. Elytra longer and narrower, not dilated posteriorly, with more obsolete humeral angles. Surface of elytra and abdomen with similar punctation.

Posterior margin of the sixth visible sternite with a small median emargination. In the other species of this group of *Lathrobium* the posterior margin of the sixth female visible sternite is rounded or with a more or less protruberent median lobule.



Fig. 2. Habitus of *Lathrobium petruzziielloi* sp. n. (photo S. Cuoco).

Male unknown.

ETYMOLOGY. Patronymic. The species is dedicated to our friend and colleague Luigi Petruzzello.

DISTRIBUTION. The species is known only from the type locality.

REMARKS. The Grotta degli Angeli (Fig. 3) is located on the southern slope of Mount Cervialto, just off the



Fig. 3. Grotta degli Angeli (photo L. Petruzzello).

Strazzatrippa cave, in “Piano Cupone” locality (Fig. 4) (typographic tablets F. 186 I NE Monte Cervialto). According to some (Giulivo *et al.*, 1988; Russo *et al.*, 2005) the Grotta Strazzatrippa and Grotta degli Angeli constitute a single karst channel along approximately 550 meters connected by a very narrow currently inaccessible siphon, so they may be considered to be two separate caves. Grotta degli Angeli is characterized by a different environment, with a planimetric development of 380 meters (compared to 95 meters in Strazzatrippa) and is a classic example of an endorheic basin that stands out among the rugged slopes of the surrounding mountains. The cave is located on a small limestone relief in a collapsed doline. The genesis of these cavities is very probably linked to the continuous-moulding activity of the drainage waters of Mount Cervialto, as evidenced by the counterslope profiles carved into idromorphic shapes resembling scallops (Giulivo *et al.*, l. c.). These data may explain why few endogenous beetles were collected in the cave (apart a species of *Bathysciola* and a new species of *Anemadus*: see later), but rather elements not strictly related to the caves. The glyptomeroid *Lathrobium* are not in fact properly endogean but hypogean and live under deeply sunken stones and in the ground of the woods, although certain species may be found in caves.

The southern slope of Mount Cervialto where the cave is located is covered by a vast beech forest (Fig. 5) mixed with sycamore maple (*Acer pseudoplatanus* L.), Neapolitan alder (*Alnus cordata* (Loisel.)) and holly bushes (*Ilex aquifolium* L.), typical plants of wetlands.



Fig. 4. Piano Cupone locality (photo L. Petruzzello).



Fig. 5. Beechwood of Cervialto Mount (photo L. Petruzziello).

*Lathrobium petruzzielloi* was collected in a trap in the Grotta degli Angeli. Despite repeated visits and trapping over the years no other specimen was collected, even under rocks around the entrance of the cave.

The following Coleoptera were collected in this place, inside the cave and at its entrance: *Carabus preslii neumeyeri* Schaum, 1856; *Cychrus italicus* Bonelli, 1810; *Pterostichus micans* Heer, 1841; *Laemostenus acutangulus* (Schauffus, 1862); *Trechus arthuri* Moravec & Lompe 2003, *T. obtusus lucanus* Focarile, 1949; *Ocys harpaloides* (Serville, 1821); *Nebria krateri* Dejean, 1831 (Carabidae); *Choleva sturmi* Brisout, 1863; *Catops subfuscus* Kellner, 1846 and a new species of *Anemadus* Reitter, 1885 that will be described by P. M. Giachino (Cholevidae); *Leptinus testaceus* Müller, 1817 (Platypyllinae) (for the references of these families see I. Löbl & A. Smetana, 2003 and Perreau M., 2004). All the cited species, apart the Cholevidae in my collection, are preserved in the Petruzziello collection.

A separate note deserves the collection (L. Petruzziello 27.XII.2014-28.XII.2015) of many specimens of the Cholevidae *Bathysciola partenii* Ruffo, 1947, until now known only from the type locality:

Grotta degli Sportiglioni, Avella, Avellino, in Campania (see also Capolongo *et al.*, 1974). This cave spreads over 120 meters at the base of the southern slope of Mt Spadafora, in a valley of the Clanio torrent and for its biospeleological features is one of the most interesting in Campania. *Bathysciola partenii* was also collected in the Grotta del Caprone, Montella, Avellino, 850 m, L. Petruzziello 22.XII.2014 and Grotta Strazzatrippa, L. Petruzziello 8.VII.2015-17.VIII.2015: unpublished data.

The comparison with *L. angelae* from Cave dei Diavoli (Matese mounts, Letino, Caserta, Campania) comes from the fact that this is the glyptomeroid *Lathrobium* closer geographically, located about 80 km as the crow flies. *L. petruzzielloi* is currently the southernmost species of the group in the Italian peninsula.

These considerations and the highlighted external characters lead me to describe the species albeit on the basis of a female.

NOTE. The name of the cave seems to be due to the fact that it was discovered by two speleologists from Campania, related to each other and both named Angelo, so the caves from which the two mentioned species come were given the fanciful names Devils' and Angels'.

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