

Arnaldo BORDONI

***Lathrobium pivai* sp. n. from the Altopiano di Asiago (Veneto, Vicenza)
and new records for *L. freyi* Koch, 1938 and *L. pacei* Piva, 1995
(Coleoptera, Staphylinidae, Paederinae)**

313° contribution to the knowledge of the Staphylinidae

Riassunto: *Lathrobium pivai* sp. n. dell'Altopiano di Asiago (Veneto, Vicenza) e nuovi dati per *L. freyi* Koch, 1938 e *L. pacei* Piva, 1995 (Coleoptera, Staphylinidae, Paederinae).

Lathrobium pivai sp. n., specie anoftalma, attera e depigmentata del Veneto (Altopiano di Asiago), viene descritta ed illustrata. Nuovi dati geonemici sono elencati per *Lathrobium freyi* Koch, 1938 e *Lathrobium pacei* Piva, 1995.

Abstract: *Lathrobium pivai* sp. n., anophthalmous, apterous and depigmented species from Veneto (Altopiano di Asiago), is described and illustrated. Some new records are listed for *Lathrobium freyi* Koch, 1938 and *Lathrobium pacei* Piva, 1995.

Key words: Coleoptera, Staphylinidae, Paederinae, *Lathrobium*, new species, new records, Italy.

INTRODUCTION

As a preamble to the following discussion, I think it is useful to present my opinion on the genus *Lathrobium* Gravenhorts, 1802 and the subgenus *Glyptomerus* Müller, 1856. Based on Schülke & Smetana's Catalog of Palaearctic Coleoptera (2015), the species described in these pages should be included in the subgenus *Glyptomerus* which contains depigmented, apterous, anophthalmous or sub-anophthalmous *Lathrobium*. In the past however (Bordoni, 1984) and still recently (Bordoni, 2018) I had considered it appropriate to refute this interpretation, reaffirming the synonymy between *Lathrobium* and *Glyptomerus*. Coiffait, after writing that this subgenus had no reason to exist (1972), later (1982) repropose it based on some characters (ventral lamina and dorsal lamina of aedeagus always without denticulations, except from sometimes at the apex; ventral lamina always divided in two at the apex; surface of the sixth sternite visible with setae combs) which are not constant in the species in question, nor exclusive of them, since they are also observed in *Lathrobium* s. str. Ventral and dorsal laminae with denticulation are present also, for example, in *L. elongatum* (Linnaeus, 1767)

and *L. dilutum* Erichson, 1839; ventral lamina divided in two at the apex occur for example in *L. brunripes* (Fabricius, 1792); sixth apparent sternite provided with setae combs occur also in *L. furcatum* Czwalina, 1888 or in *L. elongatum*.

In my opinion, therefore, the presence or absence of the above characters does not constitute sufficient reason to create or maintain a subgenus. What remains to distinguish the species in question whose aedeagus has the same structure as the other *Lathrobium*. Depigmentation, eyes reduced to a whitish cicatric or a few presumably non-functional ommatidia, wingless, characters that are common to other *Lathrobium*. In essence, a characteristic aspect for which as early as 1984 (l. c.) I have indicated these species with the word gliptomeroides.

In support of this opinion, I propose a couple of examples. Years ago (Bordoni, 1987) I described *Atrechus casalei* (sub *Baptolinus*), anophthalmous, subapterous and depigmented species that has not been included in a separate subgenus compared to congeners that have large eyes and dark livery. On another occasion (Bordoni, 1973) I described *Lesteva sbordonii*, also depigmented, sub-anophthalmous and with very small

*Arnaldo Bordoni, Museo di Storia Naturale dell'Università di Firenze, Sezione di Zoologia "La Specola", Via Romana 17, 50125 Firenze, Italy. E-mail: arnaldo.bordoni@fastwebnet.it

wings, very different from the dark brown congeners with large protruding eyes. In this case I have also described a new subgenus (*Lestevina*) due to the constant presence in *L. sbordonii* and in some species of real diagnostic characters: fully carinate pronotum margin, pronotum with a deep lateral fossa, constantly more marked punctuation. In conclusion, since the important characters are present / absent in both *Lathrobium* and *Glyptomerus*, I believe that the name subgenus can and should be used only in the presence of very significant and peculiar characters.

The anophthalmous or sub-anophthalmous, depigmented and apterous *Lathrobium* from the Italian oriental Alps are the following: *L. alzonai* Capra & Binaghi, 1938 (Colli Berici); *L. baldense* Pace, 1975 (Mt Baldo; Lessini Mts); *L. cavicola* Müller, 1856 (Istria, Venezia Giulia; the only species not endemic of Italy, because occurs also in Austria, Croatia and Slovenia); *L. freyi* Koch, 1938 (Cansiglio, Venetian Alps); *L. pacei* Piva, 1995 (Lessini Mts), *L. pinkeri* Ganglbauer, 1901 (Mts Lessini, Massiccio del Pasubio) and *L. settei* Pace & Zanetti, 1983 (Parco della Musella-Verona).

The collection of a new species of *Lathrobium* on the Asiago plateau (Altopiano dei Sette Comuni) in the province of Vicenza, where no other species belonging to this group has ever been collected, is of particular interest. My colleague Erminio Piva generously gave me the opportunity to describe this taxon and provided me with a large amount of data that I tried to summarize in these pages, related to some *Lathrobium* species of Northern Italy.

I also derived a great deal of information from his excellent contribution (Piva, 1995) in which he described *L. pacei* and provided morphological and geonomic data of other anophthalmous or sub-anophthalmous, apterous and depigmented *Lathrobium*.

***Lathrobium pivai* sp. n.**

EXAMINED MATERIAL. Holotype ♂: Veneto, Altopiano di Asiago (Altopiano dei Sette Comuni, Vicenza), Mount Barco, 1100 m, Mondin leg. 6.VI.1996 (coll. Piva); paratype: same data, Cogollo del Cengio (Vicenza), Mount Barco, 1250 m, sud-ovest slopes, E. Piva leg. 13.VII.2018, 1 ♂ (coll. Bordoni).

DESCRIPTION. Length of body about 8.8 mm; from anterior margin of head to posterior margin of elytra: 4.36 mm. Body (Fig. 1) uniformly yellow red. Head

length 1.22 mm from the antennal tubercles to the posterior margin of the head, width 1.18 mm, at the point of its maximum width behind the middle of it, with rounded sides and widely rounded posterior angles. Eyes depigmented, reduced to a very small sub-circular area with an axis of 0.074 mm. Antennae 2.4 mm long, thickly pubescent.

Surface of head with polygonal, very fine micro-reticulation, and transverse micro-striation on the lateral margins. Punctuation fine, circular and dense, often with thin yellow setae, except from a narrow, median stripe, without punctures. The distance between the punctures more or less similar to their diameter. Pronotum length 1.48 mm, width 1.03 mm at the point of its

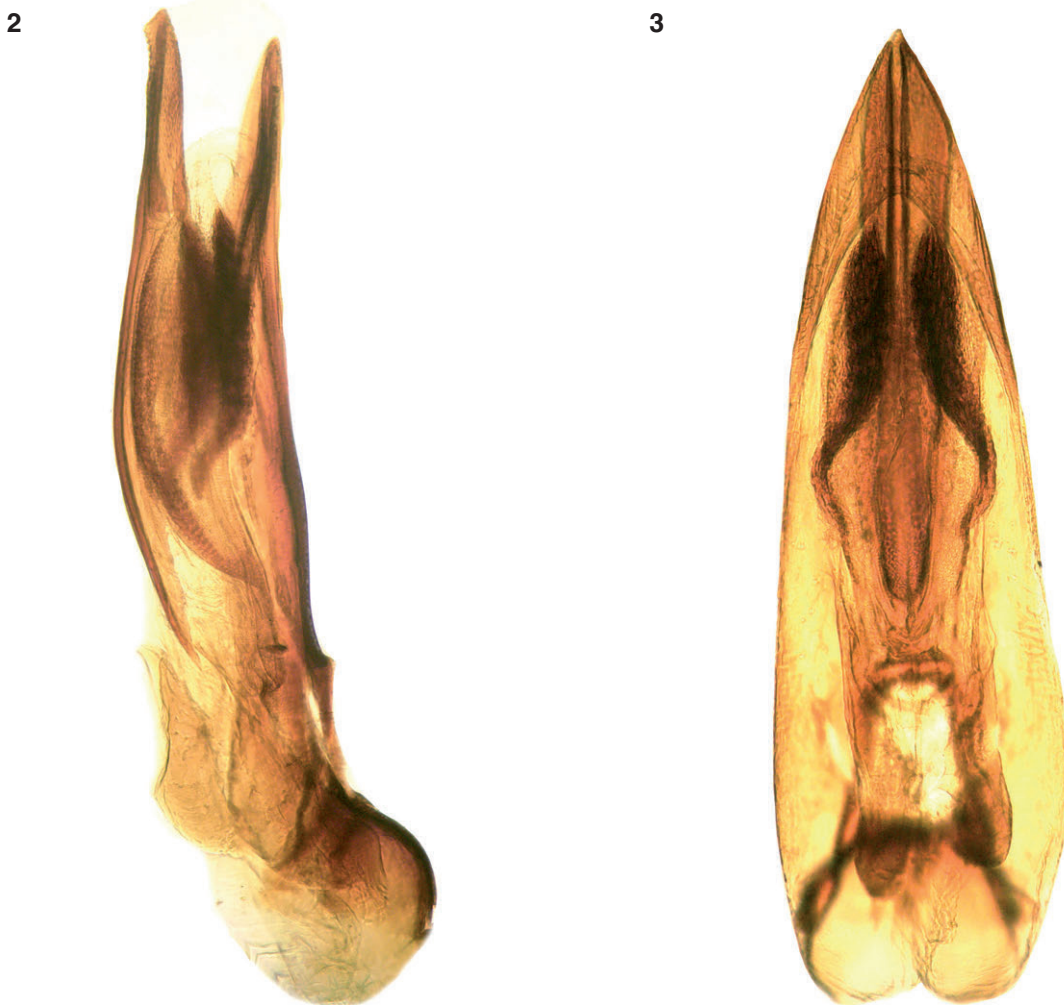


Fig. 1. *Lathrobium pivai* sp. n.: body (total length 8.8 mm) (photo S. Cuoco).

maximum width near the anterior angles, sub-rectangular, with barely oblique anterior margins and sub-rectilinear sides, longer and narrower than head. Surface shiny, without micro-sculpture, with numerous punctures, except from a median stripe, similar to those of the head, often with yellow setae, arranged in some irregular series, absent on the lateral margins. Elytra short, shorter and narrower than pronotum, slightly dilated posteriad, with almost obsolete humeral angles. Surface wrinkled, without micro-sculpture, with rounded, irregular and superficial punctures with yellow setae, sparser on the lateral margins. Abdomen with transverse micro-striation and very fine

punctuation, arranged in numerous closed series on each segment. In ventral view the setae on the fourth and fifth sternite visible converge towards the median axis. These sternites have a weak median depression. Sixth sternite visible with three superimposed series on each half, composed of short blackish setae.

Aedeagus (Figs 2-6) 1.85 mm long; dorsal lamina in lateral view (Fig. 3) thick and wider in the distal portion than in the proximal portion; ventral lamina, in lateral view gradually narrower towards the acute apex (Fig. 4); in ventral view the ventral lamina has an elongated ovoid shape (Fig. 5) with pointed apex and for a long proximal section divided in two; the dorsal lam-



Figs 2-3: *Lathrobium pivai* sp. n.: 2, 3 - aedeagus in lateral and ventral view (total length 1.85 mm) (photo S. Cuoco).

ina (Fig. 6) also has a narrow ovoid shape and the distal apex more acute than the proximal one. The proximal apex posteriorly presents, in lateral view, a short series of minute denticulations, the first of which is more evident than the others.

ETYMOLOGY. The species is dedicated with pleasure to the colleague and friend Erminio Piva who collected the interesting taxon here described, generously giving to me the paratype, and who gave me a lot of information on the depigmented *Lathrobium* of north-eastern Italy.

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

REMARKS. The paratype is similar to the holotype in external and aedeagic characters.

The ventral lamina of the new species is similar to that of *Lathrobium baldense* Pace, 1975 from Mt Baldo and Lessini Mts (Veneto), from which it differs in the following characters of aedeagus: dorsal lamina narrow, ovoid elongate and spindle-shaped in dorsal view; ventral lamina with narrowly rounded apex in lateral view and with non-acute apex in ventral view. The aedeagus of the new species also differs from that of *L. pinkeri* Ganglbauer, 1901 of the Lessini Mts and Massiccio del Pasubio-Novegno. In fact, in *L. pinkeri* the aedeagus is very similar to that of *L. baldense* but it has the apex of the dorsal lamina more dilated in lateral view and wider in the middle-proximal portion in dorsal view and therefore the aedeagus has a different structure also from *L. pivai* sp. n.

In 1975 Pace also described a subspecies of *L. pinkeri* (*pinkeri veronense*) of the Lessini Mts that was considered synonymous with *L. pinkeri* since the indicated characters are considered of little account (Bordoni, 1984).

Lathrobium pivai sp. n. is similar in the appearance to *L. freyi* from which differs by the following characters: body very stronger, broader and a little shorter; head wider, with more rounded sides and sparser punctation; pronotum massive, wider and a little longer, with more marked anterior angles and deeper punctation; elytra wider, with almost obsolete humeral angles and very sparser punctation. From *L. freyi* the new species differs also by the structure of the aedeagus (Figs. 7-8).

***Lathrobium freyi* Koch, 1938**

EXAMINED MATERIAL. Veneto, Mt Cesen (Treviso), 900-1000 m, sud slopes, D. Zanon 25.V.1988, 1 ♂, 1 ♀ (coll. Magrini), 1 ♂ (coll. Bordoni); Veneto, Trichi-

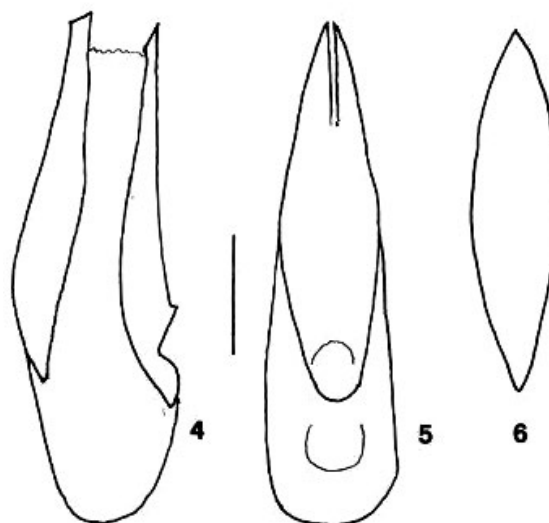
ana, Val Brenta (Belluno), 900 m, D. Zanon 18.VI.1987, 2 ♀♀ (coll. Magrini); Trentino, Susà (Pergine Valsugana, Trento), Rio Merdar, D. Zanon 2.VII.1992, 1 ♂ (coll. Bordoni), 1 ♂ (coll. Magrini).

DISTRIBUTION. This species is known from the hydrographic left of the Piave river, in the pre-Alpine belt, from the Bosco del Cansiglio to Mt Cesen and from the hydrographic right of the Piave river in the Feltrine Prealps (Mt Avena) and on massif of Mt Grappa (Piva, 1995). The record of Susà is the first to the right of the Brenta river and is therefore of particular interest.

REMARKS. The species (Figs 7-8) is one of the most widespread in the area both from a numerical and territorial point of view. This probably explains some variability in the structure of the ventral and dorsal laminae of the aedeagus.

***Lathrobium pacei* Piva, 1995**

The species is known from Veneto, Montagna Spaccata, Mts Lessini, Recoaro Terme (Vicenza), 560 m and from Valle del Boia, Valdagno (Vicenza), 465 m, all records located west of the Valle dell'Agno. My friend Piva tells me about stations east of that valley (Valdagno, loc. Grendene, 610 m and SE slopes Mt Scandolara, 745 m, leg. D. Bianco & E. Piva 2017-2018), numerous specimens ♂♂ and ♀♀ (all col-

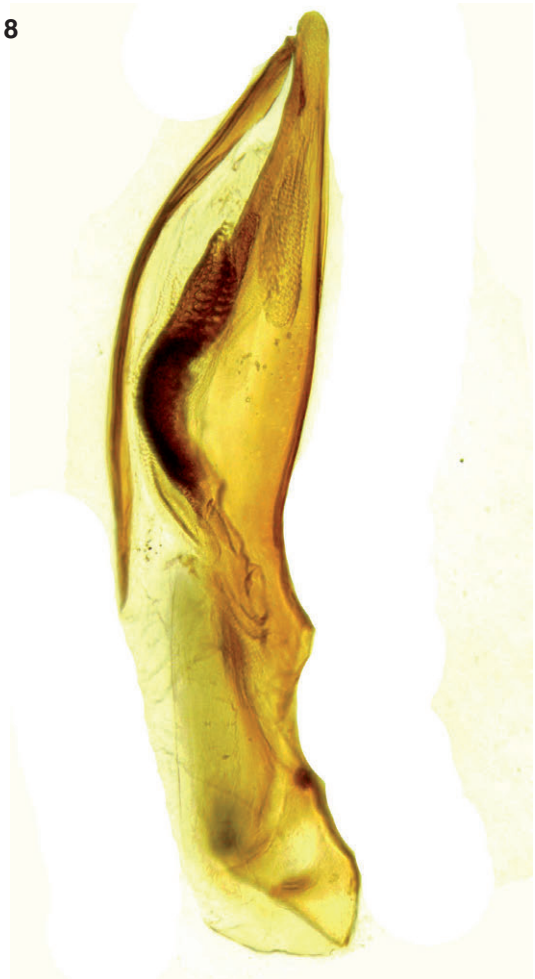


Figs 4-6: *Lathrobium pivai* sp. n.: 4, 5 - aedeagus in lateral and ventral view; 6 - dorsal lamina in dorsal view (scale bar: 0.5 mm).

7



8



Figs 7-8: *Lathrobium freyi* Koch, 1938: 7 - body (total length 9.25); 8 - aedeagus in lateral view (photo S. Cuoco).

lected by washing the soil) index of a thriving population in conjunction with an optimal MSS for their existence, which is a particularly interesting biogeographical datum. In these localities *L. pacei* does not live with *L. pinkeri* which instead is present in the typical locality and in the Valle del Boia (Piva, com. pers.)

ACKNOWLEDGEMENTS

I thank Erminio Piva (Vicenza, Italy), talented entomologist who collected the species described in these pages and who provided me with copious information on the *Lathrobium* of the eastern Italian Alps. Thanks also to Adriano Zanetti for critical re-reading of the text.

REFERENCES

- BORDONI A., 1973 - *Lesteva* (*Lestevina* nov.) *sbordonii* n. sp. della Campania (Col. Staphylinidae). *Redia*, 54: 229-234.
BORDONI A., 1984 - Appunti sulla morfologia di alcuni *Lathrobium* Mulsant & Rey gliptomeroidi e *Vulda* Jacquelin du Val dell'Appennino settentrionale (Col. Staphylinidae). *Redia*: 179-184.
BORDONI A., 1987 - *Baptolinus casalei* n. sp. ipogea della Grecia (Col. Staphylinidae). *Bollettino del Museo regionale di Scienze naturali*, Torino, 5: 567-571.

- BORDONI A., 2018 - A new species of glyptomeroid *Lathrobium* from Campania, Italy (Coleoptera, Staphylinidae). Bollettino della Società entomologica italiana, 150: 41-46.
- CAPRA F., BINAGHI G., 1938 - Un nuovo *Glyptomerus* dei Monti Berici. Bollettino della Società Entomologica Italiana, 70: 130-135.
- COIFFAIT H., 1972 - Paederinae nouveaux ou mal connus de la Région paléarctique occidentale. Nouvelle Revue d'Entomologie, 2 (2): 131-150.
- COIFFAIT H., 1982 - Coléoptères Staphylinidae de la Région paléarctique occidentale. IV. Sous famille Paederinae, Tribu Paederini 1 (Paederi, Lathrobii). Nouvelle Revue d'Entomologie, 12 (4), 440 pp.
- CZWALINA G., 1888 - Die Forcipes der Staphyliniden-Gattung *Lathrobium* (s. str. Rey) Grav. Deutsche Entomologische Zeitschrift, 32: 337-354.
- ERICHSON W. F., 1839 - Die Käfer der Mark Brandenburg. Ester Band. Zweite Abtheilung. Morin, Berlin: 385-740.
- GANGLBAUER L., 1901 - Ein neues *Lathrobium* aus Südtirol. Verhandlungen der kaiserliche-königlichen Zoologisch-Botanischen Gesellschaft in Wien, 51: 390-392.
- GRAVENHORST J.L.C., 1802 - Coleoptera Microptera Brunsvicensis nec non exoticorum quotquot extant in collectionibus entomologorum Brunsvicensium in genera familias et species distribuit. Brunsvigae: Carolus Reichard, 206 pp.
- FABRICIUS J. C., 1792 - Entomologia systematica, emendata et aucta, secundum classes, ordines, genera, species adjectis synonymis, locis, observationibus descriptionibus. Tomus I, Pars 2. Hafniae: C. G. Proft, 538 pp.
- KOCH C., 1938 - Ueber neue und wenig bekannte paläarktische Paederinae (Col. Staph.). II. Mitteilungen der Münchner Entomologischen Gesellschaft, 28: 372-387.
- LINNAEUS C., 1767 - Systema naturae, per regna tria naturae, secundum classes, ordines, genera, species cum characteribus, differentiis, synonymis, locis. Editio Duodecima reformata. Tomus I. Pars II. Holmiae: Laurentii Salvii, pp. 533-1327.
- MÜLLER H., 1856 - Beschreibung eines Augenlosen Käfers aus der Familie der Staphyliniden. Entomologische Zeitung, Stettin, 17: 3308-312.
- PACE R., 1975 - Descrizione di *Lathrobium (Glyptomerus) baldense* n. sp. e di *L. (Glyptomerus) pinkeri veronense* n. ssp. del Veneto (Coleoptera, Staphylinidae). Nouvelle Revue d'Entomologie, 5: 241-245.
- PACE R., ZANETTI A., 1983 - *Lathrobium (Glyptomerus) settei* n. sp. del Parco della Musella (Verona) (Coleoptera, Staphylinidae). Bollettino del Museo civico di Storia naturale, Verona, 9: 417-422.
- PIVA E., 1995 - Descrizione di una nuova specie di *Lathrobium* Gravenhorst, 1802 del Vicentino e considerazioni sul valore del sottogenere *Glyptomerus* Müller, 1856. Bollettino della Società entomologica italiana, Genova, 126(3): 211-224.
- SCHÜLKE M., SMETANA A., 2015 - Staphylinidae. In: Löbl I. & Löbl D., Catalogue of Palaearctic Coleoptera. Revised and Updated Edition. Hydrophiloidea – Staphyloidea, vol. 1-2. Brill, Leiden-Boston: 304-1134.