

# Notes on *Longitarsus aphthonoides* Weise 1887 and on the species groups of *L. lateripunctatus* (Rosenhauer 1856) and *L. curtus* (Allard 1860) (Coleoptera, Chrysomelidae)

Laura Farina

**Abstract** - The aim of this study is to deepen the knowledge of five poorly studied *Longitarsus* species in order to elucidate their taxonomic position within the genus. For each of them further diagnostic characters and many new collecting localities are supplied.

One new synonymy and one change of status are proposed: *L. callidus* Warchalowski 1967 = *L. aphthonoides* Weise 1887 *syn. nov.*, and *L. lateripunctatus personatus* Weise 1893 is raised to valid species. The morphologically similar *L. curtus* (Allard 1860) and *L. monticola* Kutschera 1863 are also examined, providing new male and female diagnostic characters for their identification, as well as several European and Italian new collecting localities.

**Key words:** Alticini, European fauna, Galerucinae, Italian fauna, Mediterranean fauna, taxonomy.

**Riassunto** - Note su *Longitarsus aphthonoides* Weise 1887 e sui gruppi di specie *L. lateripunctatus* (Rosenhauer 1856) e *L. curtus* (Allard 1860) (Coleoptera, Chrysomelidae).

Scopo di questo studio è approfondire la conoscenza di cinque specie di *Longitarsus* scarsamente studiate al fine di chiarire la loro posizione tassonomica all'interno del genere. Per ciascuna di esse vengono forniti ulteriori caratteri anatomici comparativi e numerosi nuovi dati geonemici.

Vengono proposti una nuova sinonimia: *L. callidus* Warchalowski 1967 = *L. aphthonoides* Weise 1887 *syn. nov.* e il cambio di stato di *L. lateripunctatus personatus* Weise 1893 che è elevato a rango di specie. Per *L. curtus* (Allard 1860) e *L. monticola* Kutschera 1863, specie assai simili, vengono forniti nuovi caratteri diagnostici, sia maschili che femminili, e numerose nuove località europee e italiane.

**Parole chiave:** Alticini, fauna europea, fauna italiana, fauna mediterranea, Galerucinae, tassonomia.

## INTRODUCTION

*Longitarsus* Latreille 1829 (2: 155) (*sensu* Löbl & Smetana, 2010) is the world's largest genus of Alticini, with about 500 species described. About 150 species are known for the Palaearctic Region, including 93 species

for Italy only: see Biondi *et al.* (1995), with the addition of *L. anacardius* (Allard 1866) *sensu* Leonardi & Sassi (1997).

The aim of this paper is to provide new diagnostic characters to clarify the related taxonomy of five species of *Longitarsus*, and to extend the knowledge of their ranges by listing new collecting localities. The following taxa are discussed:

*Longitarsus aphthonoides* Weise 1887  
*Longitarsus callidus* Warchalowski 1967  
*Longitarsus lateripunctatus* (Rosenhauer 1856)  
*Longitarsus personatus* Weise 1893  
*Longitarsus curtus* (Allard 1860)  
*Longitarsus monticola* Kutschera 1863

## MATERIALS AND METHODS

All observations were done using binocular microscopes. To set specimens and genitalia on the label, the author first gets the specimen wet, after boiling in pure water; then extracts genitalia with the aid of two pins. For the *spermatheca* extraction usually it is necessary to cut completely the abdomen of the wet specimen, separating it from the rest of the body, and extract gently the *spermatheca*. For the *aedeagus* extraction, instead, the author cuts slightly the abdomen in the middle and extracts carefully the *aedeagus*. The *aedeagi* and *spermathecae* were fixed with Arabic gum and set on the same label of the specimen or on another label below. The *spermathecae* were included in DMHF (Dimethyl-hydantoin formaldehyde) or in entomological glue. The biometric measurements were taken using an ocular micrometer. Drawings were taken using an eyepiece equipped with a 20x20 reticule and manually transferring the observed image on graph paper. The length of elytra and prothorax were measured keeping the specimens tilted in order to have the base and the apex of the elytra (or the fore and the rear edge of pronotum) on the same plane (Farina & Leonardi, 2018). The macrophotos were taken using a full-frame digital camera with a 25 mm lens.

Collection localities were recorded as written on the specimens' labels. Countries and Italian regions were arranged in a west to east and north to south order; the localities were listed grouping them according to the region of provenance and museum or private collections.

Via A. Stoppani 17/A, I - 23880 Casatenovo, Italia.  
 E-mail: laura.farina@chrysomelidae.it

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The specimens included in this study are kept in the following institutional and private collections:

BMNH: Natural History Museum, London (BMNH-War: A. Warchalowski collection);

CGCB: Christoph Germann collection, Basel, Switzerland;

DFCA: David Furth collection, Alexandria, VA, USA;

FFCJ: Frank Fritzlär collection, Jena, Germany;

FMCT: Fernando Montemurro collection, Taranto, Italy;

HNHM: Hungarian Natural History Museum, Budapest;

LFCC: Laura Farina collection, Casatenovo, Lecco, Italy;

MBCA: Maurizio Biondi collection, University of L'Aquila, Italy;

MHNB: Naturhistorisches Museum, Basel (MHNB-Heik: 1953 F. Heikertinger collection);

MSNG: Museo Civico di Storia Naturale "G. Doria", Genova (MSNG-Bin: G. Binaghi collection; MSNG-Dod: A. Dodero collection; MSNG-Man: C. Mancini collection);

MSNM: Museo di Storia Naturale di Milano (MSNM-Ber: M. Bergeal collection);

MSNVR: Museo Civico di Storia Naturale, Verona;

NHMW: Naturhistorisches Museum, Wien;

RPCR: Riccardo Papi collection, Ragusa, Italy;

SDEI: Senckenberg Deutsches Entomologisches Institut, Müncheberg;

SZCM: Stefano Zoia collection, Milano, Italy;

ZMB: Museum für Naturkunde, Berlin;

ZSM: Zoologische Staatssammlung München.

#### Further abbreviations

Al: median lobe of *aedeagus* length (taken in ventral view);

Aw: median lobe of *aedeagus* width (taken in ventral view);

El: elytral length;

Ew: elytral width (taken together);

Ig: lateral groove;

Lt: length of hind tibia in stretched position;

mg: median groove;

(...):m: mean value of ...;

n: number of specimens in the sample;

Pl: prothorax length;

Pw: prothorax width;

(!): specimens dissected for genitalia examination;

/: line break within the label; the line break is not applied in the species determination labels.

//: next label on the same pin.

#### SPECIES DISCUSSION

##### *Longitarsus aphthonoides* Weise 1887 (Figs. 1-3)

*Longitarsus aphthonoides* Weise, 1887: 206. Reported locality: Chabarofka.

Heikertinger, 1930: 1326; Csiki & Heikertinger, 1940: pars 166, 110; Lopatin, 1967: 166; Warchalowski, 1970: 106-107, 114 (Fig. 5) [designation of the Lectotype, typ. loc.: Ussuri Gebiet, Chabarofka]; Gruev, 1980: 32; Gruev, 1981: 149; Medvedev, 1982: 114-115 (Fig. 34: 2); Gruev, 1987: 56 (Fig. 3); Medvedev & Dubeshko, 1992: 153, 216

(Fig. 30: 10); Gruev, 1994: 81; Gruev & Döberl, 1997: 148-149; Gruev & Döberl, 2005: 75; Warchalowski, 2010: 830, 831 (Fig. 4020).

= *Longitarsus callidus* Warchalowski, 1967: 59-60. Loc. typ.: North Iran: Mt. Talysch (*syn. nov.*)

Leonardi, 1975: 207 (Figs. 27-28, 53), 212 (Fig. 57), 213-214; Fogato & Leonardi, 1980: 46, 53 (Fig. 14); Doguet, 1987: 4(2): 138; Biondi, 1990a: 138; Döberl, 1994: 103, 129 (Figs. 173-175); Doguet, 1994: 224 (Fig. 93f), 228-229, 297 (Fig. 122b); Lucht, 1994: 319; Doguet & Dufay, 1994: 306-307 (Figs. 5,7); Biondi *et al.*, 1995: 18; Döberl, 1995b: 53; Warchalowski, 1995a: 152 (Figs. 460-461), 155 (Fig. 478), 224; Warchalowski, 1996: 45 (Fig. 95-96), 48 (Fig. 113), 76-77; Rozner, 1996: 255 ["this species is distributed from Asia Minor through Southeast Europe to Austria. Its occurrence in Hungary is quite probably"]; Gruev & Döberl, 1997: 157-158; Geiser, 2001: 465; Brelieh *et al.*, 2003: 96; Warchalowski, 2003: 419; Geiser, 2004: 19; Biondi, 2005: data on CD-Rom; Gruev & Döberl, 2005: 80; Čížek, 2006: 24-25; Warchalowski, 2010: 841 (Figs. 4096-4097), 842 (Fig. 4098); Özdikmen *et al.*, 2020: 282.

#### Types

Lectotype (♂) and paralectotype (♀) of *L. aphthonoides* (Chabarofka, leg. Koltze, undated), selected and studied by Warchalowski (1970: 106-107) were not retrieved (see below under "Notes on types search and identification").

Two of the 5 paralectotypes (still labelled as syntypes) of the Koltze collection, housed at SDEI, were seen as a detailed photograph (kindly supplied by Lutz Behne) (Fig. 2):

2 exx., labelled "Chabarofka // Weise", undated. A second handwritten label (by Weise, Koltze or else): "12223, *aphthonoides* Ws, Chabarofka Weise determ. Type".

Three specimens previously thought to be syntypes of *L. aphthonoides* and now redefined as paralectotypes were found and examined:

1 ♀! labelled "Cotype" in MHNB: "Chabarowka / *aphthonoides* Weise det. / Reitter don. // 1953 Coll. Heikertinger // *Paralectotypus* / *Longitarsus aphthonoides* Weise / *vidit* Laura Farina".

1 ex. in HNHM labelled "Chabarowka / *Longitarsus aphthonoides* Weise coll. Reitter // *Paralectotypus* / *Longitarsus aphthonoides* Weise / *vidit* Laura Farina".

1 ex. in ZMB labelled "Chabarowka / coll. Koltze // *Typus* // *Longitarsus aphthonoides* Weise det. L. N. Medvedev, 1987 // *Paralectotypus* / *Longitarsus aphthonoides* Weise / *vidit* Laura Farina".

The holotype of *L. callidus*, kept at BMNH was kindly sent by Maxwell Barclay (Fig. 3: *Holotypus*; Fig. 4: *aedeagus*):

1 ♂! labelled "Talysch / Reitter // *Longitarsus* / *callidus mihi* / det. A. Warchalowski // *Holotypus* // BMNH / A. Warchalowski collection".

The study of this material (plus the many specimens listed below) did not leave any doubt about the synonymy proposed here:

*Longitarsus aphthonoides* Weise 1887 = *Longitarsus callidus* Warchalowski 1967 *syn. nov.*

## Distribution

*L. aphthonoides* is widely distributed in the Palaearctic region, west from Italy and Tunisia across Asia, east to the Siberian Far East.

Gruev & Döberl (1997: 148, 157-158; 2005: 75, 80) report the following regions:

**Europe:** Austria, Azerbaijan (Dashdatuk), Carpathian Basin, Czechia (Moravia), France, Germany (West), Hungary, Italy (North), Poland, Slovakia, Slovenia (Veržej-Gomilica), Switzerland.

**Asia:** China (Heilungkiang, Fukien: Kuatun), Evenkia, Iran (North), Kazakhstan (“Aulie Ata” = Dzhambul; Syr Daria Valley; “Werneyi” = Alma Ata), Korea, Kurils, Mongolia, Russia (Mid Siberia, Irkutsk District, East Siberia, Far East, Amurland, Maritime Province), Sakhalin, Turkey.

**North Africa:** Tunisia.

## Morphological remarks

*L. aphthonoides* belongs to the group of *L. membranaceus* (Foudras 1860) (Leonardi, 1975: 213-214; Doguet & Dufay, 1994: 306-307; Warchalowski, 1970: 106-107; 1995: 224); as for *habitus*, it is similar to *L. lycopi* (Foudras 1860) (Warchalowski, 1970: 106-107; Leonardi, 1975: 213-214).

After many years from the Weise paper dealing with *L. aphthonoides*, and taking into account that the Warchalowski description (1967: 59-60) of his *L. callidus* might be considered rather short, it is useful to provide a new description of this taxon.

Body length: ♂♂: 1.36-1.68 mm, ♀♀: 1.58-1.91 mm.

Shape elliptical, moderately narrow and on average elongate (Figs. 1-3). Upper side (in mature individuals) yellow to pale rusty-brownish; elytral suture lightly darkened; head usually brown, darker than pronotum; upper lip dark.

*Antennae* pale at least in part: in some specimens progressively darkened from 5°-6° antennomeres, at times the last 4-5 antennomeres blackish. Legs yellow, hind femora often dark but rarely completely pale (as yellow as body); in some specimens, also last tarsomere and claws dark.

*Frons* [‘*postfrons*’ *sensu* Heikertinger, 1913 (Fig. 5)] and vertex [*sensu* Doguet, 2004 (Fig. 5a)] entirely microgranulated. Frontal tubercles distinctly separate from *frons* by deep frontal furrows. Ocular furrows weak and incomplete in terminal part as in *L. lycopi*.

*Antennae* always shorter than body. Articles ratio: 16:9:8:9:11:9:11:12:10:14.

*Pronotum* transverse [(Pw /Pl)m= 1.57-1.61], convex, wider in middle; sides rounded, lateral calli (behind fore corners) often showing an angular or obtuse dentiform profile; surface clearly microgranulated and rather strongly punctate; posterior angle, in intact specimens, with an erect seta as long as last antennomere.

*Elytrae* bright, moderately elongated [(El/Ew)m = 1.56-1.57], slightly rounded on sides, jointly rounded apically; surface less microgranulated than *pronotum* and more strongly, irregularly punctate, sometimes with traces of alignment. Humeral calli usually absent or weak but rather developed on approximately 30% of the examined specimens.

*Pigidium* microgranulated, covered by seta punctuation, finely punctate in apical half and simply microgranulated basally.

Male last sternite with a deep, oval pit (Warchalowski, 1967: 59 Fig. 3B; Leonardi, 1973: 212 Fig. 57).

First tarsomere of fore legs clearly widened in male (Warchalowski, 1967: 59 Fig. 3A; Leonardi, 1973: 207 Fig. 43).

Median lobe of *aedeagus* (Figs. 4, 9-10), in lateral view, almost straight in distal part but, sometimes, distal 2/3s weakly curved with apex shortly sinuate and apical tip always facing upwards [a character which does not appear in the Warchalowski drawings: both *L. aphthonoides* (Warchalowski, 1970: 114 Fig. 5) and *L. callidus* (Warchalowski, 1967: 59 Fig. 3C), but appears in the Medvedev drawing of *L. aphthonoides* (Medvedev, 1982: 114-115 Fig. 34: 2)]; in ventral-dorsal view its distal 1/3 tapered and rather expanded at apex with apical tip rather short and prominent. Ventral groove moderately deep, widened, its bottom with slight transverse wrinkles.

Basal part of *spermatheca* (Figs. 11-12) more or less kidney-shaped, basal and distal part well differentiated from each other, tip of distal part usually absent; *ductus spermathecae* forming one, more or less widened, loop; *ductus* insertion about in the middle of *spermatheca* basal part.

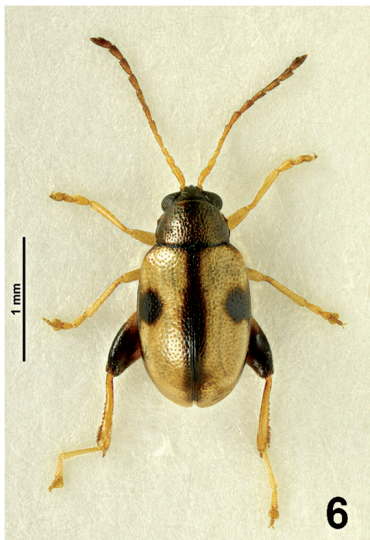
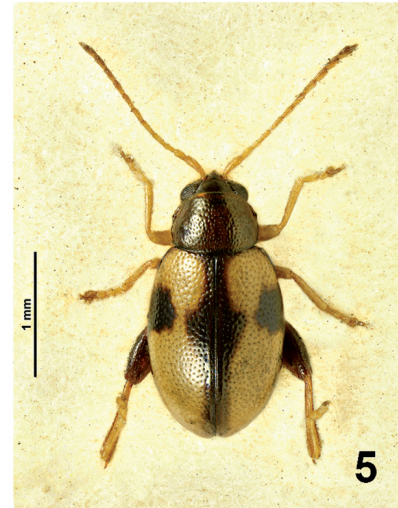
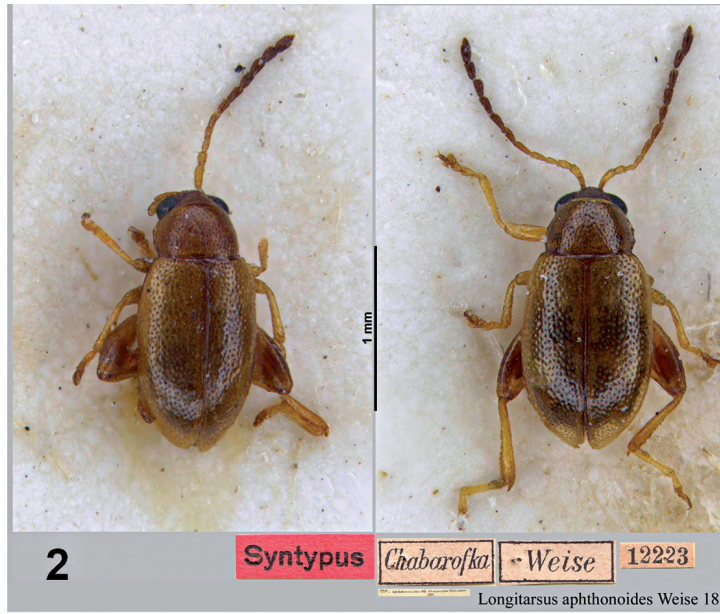
Morphological data. – ♂ (n=8): El = 1.05-1.26 mm; (El)m = 1.17 mm; Ew = 0.70-0.79 mm; (Ew)m = 0.75 mm; Pl = 0.29-0.35 mm; (Pl)m = 0.31 mm; Pw = 0.47-0.54 mm; (Pw)m = 0.50 mm; Lt = 0.44-0.54 mm; (Lt)m = 0.50 mm; El/Ew = 1.48-1.61; (El/Ew)m = 1.56; El/Pl = 3.40-4.20; (El/Pl)m = 3.77; Pw/Pl = 1.40-1.70; (Pw/Pl)m = 1.61; Lt/El = 0.41-0.46; (Lt/El)m = 0.43.

♀ (n=11): El = 1.21-1.37 mm; (El)m = 1.29 mm; Ew = 0.77-0.91 mm; (Ew)m = 0.82 mm; Pl = 0.28-0.40 mm; (Pl)m = 0.35 mm; Pw = 0.51-0.58 mm; (Pw)m = 0.55 mm; Lt = 0.47-0.58 mm; (Lt)m = 0.52 mm; El/Ew = 1.48-1.66; (El/Ew)m = 1.57; El/Pl = 3.38-4.03; (El/Pl)m = 3.69; Pw/Pl = 1.40-1.86; (Pw/Pl)m = 1.57; Lt/El = 0.35-0.43; (Lt/El)m = 0.40.

As mentioned above, the study of the *L. callidus* holotype has not shown any meaningful difference from the paralectotypes of *L. aphthonoides* and other specimens including topotypes. It's worth noting that the author could not corroborate the ♂♂ differences (between specimens determined *L. callidus* and *L. aphthonoides*) in the *aedeagus* shape, antennal length (which are shorter than the body in the specimens studied), male width first tarsomere of fore tarsi (which is medium to strong) and the last sternite character (with a deep, oval pit), previously reported by Warchalowski (1967: 59, 60; 1970: 106-107, 114 Fig. 5) and Leonardi (1975: 213-214).

In conclusion, the synonymy between the two names is here proposed.

It should be added that also Leonardi (1975: 213-214) already reported the similarity between *L. callidus* Warchalowski and *L. aphthonoides* Weise, as based on the study of only a few ♀♀ specimens (including one syntype) of *L. aphthonoides* from the Frey collection (housed at MHNB). The same author indeed noted the closeness between the two in both external characters and the *sper-*



Figs. 1-8 – 1) *L. aphthonoides*. Wrocław Wojnów. 2) *L. aphthonoides*. Chaborofka: paralectotypes. 3) *L. callidus*. Talysch Mountains: holotype. 4) *L. callidus*, holotype: aedeagus. 5) *L. personatus*. Budapest. 6) *L. lateripunctatus*. Promontorio del Gargano. 7) *L. monticola*. Monte Grigna Settentrionale. 8) *L. curtus*. Bisamberg. (Photos / Foto: 1, 3-8: S. Zoia; 2: L. Behne).

*matheca* shape, not advancing the synonymy because of the Warchalowski (1967: 59, 60; 1970: 106-107, 114 Fig. 5) claim of the several differences in the ♂♂ between these two species.

### Notes on typical locality

The exact placement of the *L. aphthonoides* type locality deserves a clarification.

Weise (1887: 206), in his original description, simply reported “Chabarofka”. Warchalowski (1970: 106-107) identified a specimen from this locality as lectotype and correctly placed “Chabarowka” in the “Ussuri-Gebiet” (= Ussuri region).

Today, the place can be identified with Khabarovsk (also spelled Chabarovsk or Khabarovka; Chabarofka in German), a town and an administrative territory of the Russian Far East located at the confluence of Amur and Ussuri rivers.

### Notes on ecology

In Italy *L. aphthonoides* was observed in May-June 1973, close to Rovasenda (Vercelli, Piedmont), on *Lysimachia vulgaris* L. (Primulaceae), but probably this was only a refuge plant (Leonardi, 1975: 213-214, reported as *L. callidus*). The host plant could be *Stachys* L. spp. or *Teucrium* L. spp. (Lamiaceae), similarly to other species related to *L. membranaceus*.

*L. aphthonoides* was also observed on *Sanguisorba officinalis* L. (Rosaceae) (Warchalowski, 1996: 76-77) and on *Onobrychis viciifolia* Scopoli (= *Onobrychis sativa* Lamarck) (Fabaceae) (Özdikmen *et al.*, 2020: 282).

In the Rovasenda area, *Lysimachia vulgaris* as well as the (supposed) host plants (*Stachys* spp., *Teucrium* spp., *Sanguisorba officinalis*) are rather common and widespread but, unfortunately, this species could not be observed any more in the several surveys carried out by the author in the years 2018, 2019 and 2020.

### Notes on types search and identification

Warchalowski (1970: 106-107) established, as lectotype (♂) and paralectotype (♀) of *L. aphthonoides*, two specimens of “DEI” collection in Eberswalde (now SDEI in Müncheberg), from Chabarofka, leg. Koltze, undated.

Unfortunately, it was impossible to examine these specimens. Indeed, they are missing from the type series still present in SDEI, they are missing in the collection Warchalowski housed at the BMNH and they were not found also in the Reitter collection (housed both at MH-NB and HNHM).

At ZMB, two specimens were found, bearing a red label “*Typus*”, written by a curator (Bernd Jaeger *in verbis*); one of these specimens (♀) not dissected and labelled “Chabarowka / Koltze // det. Medvedev 1987”, is probably a syntype of Weise, now a paralectotype. The other specimen, a male, not dissected, is labelled Irkutsk and collected by Koltze (but it cannot be considered among the type material).

Some topotypical specimens were also found in the MSNM-Ber, permitting to illustrate the median lobe of the *aedeagus* of one of them (Fig. 9).

### Materials studied

As mentioned, many specimens were studied, from several Western and Eastern Palaearctic localities (as detailed below), which were determined with either one or the other name but all certainly belonging to this same species.

**Italy:** Piemonte: **2 exx.** (1♂! 1♀!) Rovasenda / 13.V.1973 / leg. Leonardi // *Longitarsus callidus* det. C. Leonardi (LFCC); **3 exx.** Rovasenda / 17.VI.1973 / leg. Leonardi // *Longitarsus callidus* det. C. Leonardi (LFCC); **1 ex.** (1♂!) Rovasenda / 17.VI.1973 / leg. Leonardi // *Longitarsus callidus* Warchalowski det. C. Leonardi, 1975 (BMNH); **2 exx.** (1♂! 1♀!) Rovasenda / Novara VI.1959 / brughiera / Leonardi (MSNM); **1 ex.** Piemonte (VC) / Rovasenda / 13.V.1973 // *Longitarsus callidus* det. C. Leonardi (MSNM); **66 exx.** (12♂♂! 6♀♀!) Rovasenda / 17.VI.1973 / leg. Leonardi // *Longitarsus callidus* det. C. Leonardi (MSNM); **1 ex.** (1♀!) Rovasenda / 18.VI.1976 / leg. Leonardi // *Longitarsus callidus* det. C. Leonardi (MSNM); **1 ex.** (1♀!) Rovasenda / 5.VI.1977 / leg. Pesarini // *Longitarsus callidus* det. C. Leonardi (MSNM); **2 exx.** (1♀!) Rovasenda / 5.VI.1977 / leg. Fogato // *Longitarsus callidus* det. Leonardi (MSNM); **1 ex.** (1♂!) Rovasenda / 17.VI.1973 / leg. C. Leonardi // *Longitarsus callidus* Warchalowski det. Leonardi, 1975 (ZSM);

Friuli Venezia Giulia: **1 ex.** (1♂!) Doberdò / 15.X.1933 / Springer (MSNM); **1 ex.** Friuli V.G. (Trieste) / dint. Gropada / 15.IV.1996 / leg. S. Zoia // *Longitarsus callidus* det. L. Farina (SZCM);

**Poland:** **1 ex.** Poland / Wroclaw Wojnów / 17°06'E-51°05'N / 18.VIII.1995 / leg. M. Döberl // *Longitarsus callidus* det. M. Döberl, 1995a (BMNH); **1 ex.** (1♂!) Polonia sept. / Puszcza Piska Szeroki Bór / 17.XI.1958 / leg. A. Szujewski // *Longitarsus callidus mihi* / det. A. Warchalowski (BMNH-War); **1 ex.** Silesia minor / Wojnów ad Wroclaw / 130 m 15.X.1992 / leg. A. Warchalowski // *Longitarsus callidus mihi* / det. A. Warchalowski (BMNH-War); **1 ex.** Silesia minor / Wojnów ad Wroclaw / 13.IX.2008 / leg. A. Warchalowski // *Longitarsus callidus mihi* / det. A. Warchalowski (BMNH-War); **1 ex.** (1♂!) Poland, Silesia / Wroclaw-Wojnów / 24.X.1975 / L. Borowiec // *Longitarsus callidus* det. L. Borowiec (MSNM); **1 ex.** Poland, Silesia / Wroclaw-Wojnów / 1.V.1977 / L. Borowiec // *Longitarsus callidus* det. L. Borowiec (MSNM); **2 exx.** (1♂! 1♀!) Poland, Silesia / Wroclaw-Wojnów / 24.IX.1982 / L. Borowiec // *Longitarsus callidus* det. L. Borowiec (MSNM); **2 exx.** (1♂!) Poland, Silesia / Wroclaw-Wojnów / 3.IX.1994 / L. Borowiec // *Longitarsus callidus* det. L. Borowiec (MSNM); **16 exx.** (1♂!) Wroclaw Wojnów / 5.X.1982 / Warchalowski (MSNM-Ber); **6 exx.** (3♂♂! 3♀♀!) Polen Silesia minor / Umg. Wroclaw Oderwiesen / 24.VII.1994 / leg. U. Heinig // an Wiesenkopf (*Sanguisorba* sp.) // *Longitarsus callidus* det. M. Döberl, 1995a (MSNM-Ber) (Fig. 10); **1 ex.** (1♂!) Poland / Wroclaw Wojnów / 17°06'E-51°05'N / 18.VIII.1995 / leg. M. Döberl // *Longitarsus callidus* det. M. Döberl, 1995a (MSNM-Ber) (Fig. 1);

**Austria:** **1 ex.** (1♂!) Nussdorf / (S. Peter) 10.V.1936 / Springer // *Longitarsus callidus* Warch. det. C. Leonardi (MSNM); **1 ex.** (1♂!) Moor von Gois / bei Salzburg / H.

Frieb // *Longitarsus callidus* det. Bergeal (MSNM-Ber); **1 ex.** (1♂!) Achau NÖ / 28.VIII.1960 / Hausmayer // 1953 coll. Heikertinger // *Longitarsus callidus* det. C. Leonardi (ZSM);

**Slovenia:** **1 ex.** Slovenia / Verzej-Gomilica / 16°12' E- 46°34'N / 19.IV.1996 Döberl // *Longitarsus callidus* det. M. Döberl (MHNB); **1 ex.** Valvolciana / Stara Gora 17.V.1943 / Springer (MSNM); **3 exx.** (1♂! 2♀♀!) Slovenia Verzej-Gomilica / 16°12'E-46°34'N / 19.IV.1996 Döberl // *Longitarsus callidus* det. M. Döberl (MSNM-Ber) (Fig. 12);

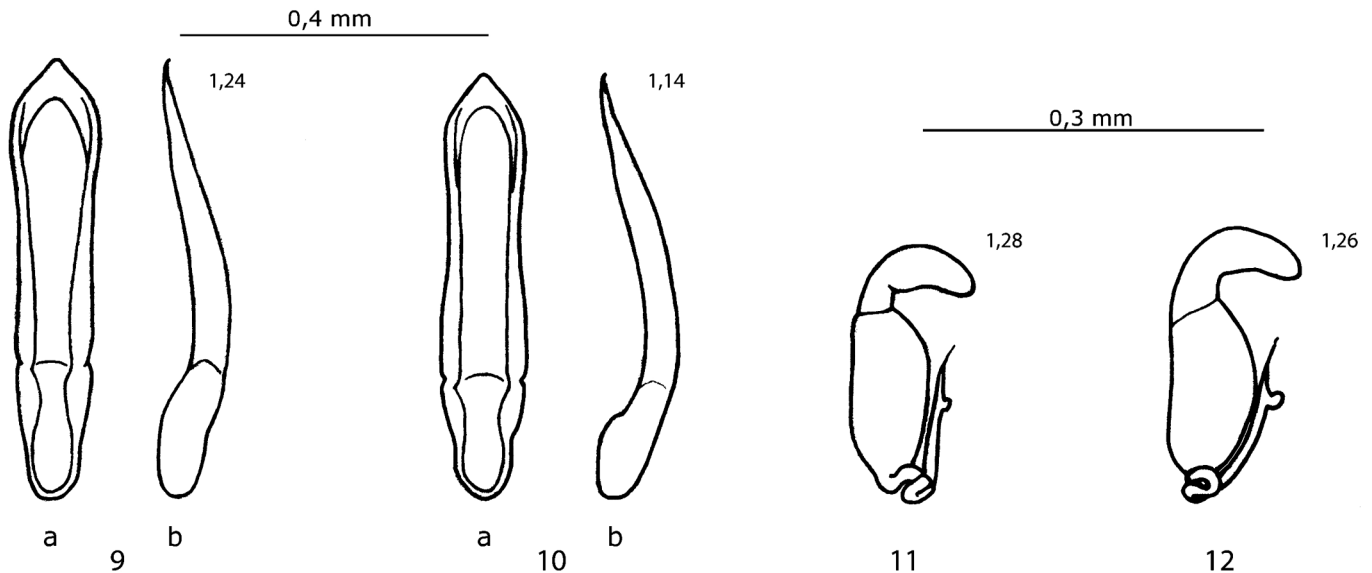
**Russia:** **1 ex.** (1♂!) Derbent // *cetera data nulla* // *Longitarsus callidus mihi* / det. A. Warchalowski (BMNH-War); **1 ex.** Ussuria / lacus Chanka / 12.VI.1908 / leg. Aleks. Czernski // coll. Warchalowski // *Longitarsus aphthonoides* Weise det. A. Warchalowski (BMNH-War); **1 ex.** Ins. Sachalin / Konuma / 30.V.1927 / leg. Tamanuki // coll. Warchalowski // *Longitarsus aphthonoides* Weise det. A. Warchalowski (BMNH-War); **1 ex.** Chabarowka / *Longitarsus aphthonoides* Weise coll. Reitter // *Paralectotypus* / *Longitarsus aphthonoides* Weise / *vidit* Laura Farina (HNHM); **1 ex.** (1♀!) Chabarowka / *aphthonoides* Weise det. Type / Reitter don. // Cotype // *Paralectotypus* / *Longitarsus aphthonoides* Weise / *vidit* Laura Farina (MHNB-Heik); **1 ex.** (1♀!) Baical / Obert. Transt. // *Longitarsus aphthonoides* Weise (MHNB-Heik); **2 exx.** (2♂♂!) Saghalien // *Longitarsus aphthonoides* det. B. Gruev (MSNM); **1 ex.** (1♂!) Vladivostok / 8.VII.1927 / B. Belov // *Longitarsus aphthonoides* det. B. Gruev (MSNM-Ber); **6 exx.** (2♂♂! 4♀♀!) Amur country / Chabarovsk / Primorskaja / 7.VIII.1990 // leg. D. Boukal (MSNM-Ber) (Figs. 9, 11); **2 exx.** Chabarofka // Weise // 12223 // *Longitarsus aphthonoides* Ws. det. J. Weise Type (SDEI) (Fig. 2); **1 ex.** Chabarowka / coll. Koltze // *Typus* // *Longitarsus aphthonoides* Weise det. L. N. Medvedev, 1987 // *Paralectotypus* / *Longitarsus aphtho-*

*noides* Weise / *vidit* Laura Farina (ZMB); **1 ex.** Irkutsk / coll. Koltze // *Typus* (ZMB); **1 ex.** (1♂!) Krasnoyarsky region / Lensk transt. / 5, 6 Station / meadow near the forest / 15/1 / 18.VI.1975 / Guselnikov leg. (ZSM); **1 ex.** (1♂!) USSR / Evenkia / Tura / 28.VIII.1982 // leg. L.N. Medvedev // *Longitarsus aphthonoides* Weise / det. B. Gruev (ZSM);

**Asia:** **1 ex.** (1♂!) Talysch / Reitter // *Longitarsus callidus mihi* / det. A. Warchalowski // *Holotypus* (BMNH-War) (Fig. 3); **1 ex.** (1♀!) Aulie Ata / Syr Daria (MSNM); **1 ex.** N. China / P.M. Hammond / B.M. 1967-215 // Heilungkiang / Erlungshan / 29.V.1966 / P.M. Hammond // *Longitarsus aphthonoides* Weise det. B. Gruev (BMNH); **1 ex.** (1♀!) N. China / P.M. Hammond / B.M. 1967-215 // Heilungkiang / Erlungshan / 29.V.1966 / P.M. Hammond // *Longitarsus aphthonoides* det. B. Gruev (ZSM); **1 ex.** (1♀!) N. China / P.M. Hammond / B.M. 1967-215 // *Longitarsus aphthonoides* Weise det. B. Gruev (ZSM); **1 ex.** (1♀!) Korea prov. / Hamgjong-namdo / leg. M. Mroczkowski et A. Riedel // ad lac. Čang-džin-ho / 9.VI.1965 // coll. Warchalowski // *Longitarsus aphthonoides* Weise det. A. Warchalowski (BMNH-War); **1 ex.** Korea Mt. Pektusan / 2-6 km N Samzi-yan hotel wood / 18.VII.1977 // No. 372 netting in grasses / Dely & Draskovits // *Longitarsus aphthonoides* Weise det. B. Gruev (HNHM); **1 ex.** Korea / Ryanggang Prov. / Samjlyon 1000 m / No. 976 / 3.VI.1985 / A. Vojnits & L. Zombori // *Longitarsus aphthonoides* Weise det. B. Gruev (HNHM); **1 ex.** Korea Mt. Pektusan / environs Sam-Zi-Yan / Hotel Lake-Shore 19.VII.1977 // No. 376 Netting in grasses / Dely & Draskovits // *Longitarsus aphthonoides* Weise det. B. Gruev (ZSM);

**North Africa:** **1 ex.** (1♂!) Tunis // 1953 Coll. Heikertinger // *Longitarsus callidus* det. C. Leonardi, 1975 (ZSM).

Dissected specimens: 40 ♂♂; 27 ♀♀.



Figs. 9-12 – *L. aphthonoides*. 9-10) Aedeagus: median lobe / lobo mediano; a) ventral view / vista ventrale; b) lateral view / vista laterale. 11-12) Spermatheca. Localities / Località: 9) Chabarovsk; 10) Wroclaw; 11) Chabarovsk; 12) Verzej-Gomilica. Here and in the ensuing groups of figures, the relative elytral lengths are shown to the top right of each drawing. / Qui e nei seguenti gruppi di figure, le lunghezze elitrali relative sono indicate accanto a ciascun disegno in alto a destra.

***Longitarsus personatus* Weise 1893 stat. nov.** (Fig. 5)

*Longitarsus lateripunctatus* var. *personatus* Weise, 1893: 964.

Kolbe, 1920: 402-403, 404 [mut. *personata*]; Heikertinger, 1930: 1328; Porta, 1934: 357; Normand, 1937: 133; Csiki & Heikertinger, 1940: *pars* 166, 134; Mohr, 1962: 62 (Figs. 32a, 32b), 63 (Fig. 32c), 98; Mohr, 1966: 228; Warchalowski, 1978: 49, 50 (Figs. 243-245); Furth, 1980: 101; Gruev & Tomov, 1986: 221-222 (Fig. 244); Gruev, 1987: 58 (Fig. 21) [the author, in the text, wrote about *lateripunctatus* but in Fig. 21 represented a *spermatheca* of *personatus*]; Warchalowski, 2003: 413 (*forma personatus*).

= *Longitarsus lateripunctatus* ssp. *personatus* Weise sensu Doguet, 1989: 172. Loc. typ.: Austria: Wien (as in Gruev & Döberl, 1997:182).

Heikertinger, 1912: 194 ["Unterart *personatus*. In Deutschland nicht gef. Die Normalform *lateripunctatus* (*biguttatus* Foudras) nur in Mittelmeergebiete"]; Müller, 1949-1953: 524, 536; Kaszab, 1962: 311 (Fig. 132 I-J), 314; Gruev, 1979: 131; Biondi, 1990a: 142-143; Biondi, 1990c: 346; Gruev *et al.*, 1993: 102; Döberl, 1994: 107, 135 (Figs. 266-268); Doguet, 1994: 220-221, 260 (Fig. 105bis b), 297 (Fig. 122g); Lucht, 1994: 319; Döberl, 1995b: 55-56; Warchalowski, 1995a: 144 (Fig. 384), 146 (Figs. 400-401), 254-256 (Figs. 954, 956); Warchalowski, 1996: 36 (Fig. 19, *L. lateripunctatus*), 38 (Figs. 35, 36, *L. lateripunctatus*), 137-138, 141 (Fig. 589), 142 (Fig. 591); Vig, 1996: 125; Rozner, 1996: 256; Strejcek, 1996: 572; Gruev & Tomov, 1998: 93; Gruev & Döberl, 1997:182; Herger & Kamke, 1998: 123 ["neu für Kanton Schaffhausen und NordSchweiz"]; Callot, 1999: 43; Gruev, 2002: 27; Vig, 2002: 122; Brelih *et al.*, 2003: 114; Geiser, 2004: 19; Gruev & Döberl, 2005: 90; Čížek, 2006: 32 (Fig. 102)-33; Warchalowski, 2010: 864 (Figs. 4289-4290), 865 (Fig. 4292); Baviera & Biondi, 2015: 19; Fritzlär, 2017: 80.

= *Longitarsus lateripunctatus* (Rosenhauer 1856) Furth, 1980: 101 [*partim?*]

The comparative study of a wide sample (MSNM, MSNG, MHNB, HNHM and private collections) permitted to come to the conclusion that *L. personatus* is neither just a wingless form of *L. lateripunctatus*, as Weise supposed (1893: 964) and as Warchalowski (1978: 49-50) and Gruev & Tomov (1986: 221-222) confirmed, nor a subspecies, as put forward by Heikertinger (1912: 194), Müller (1949-1953: 524, 536), Kaszab (1962: 311, 314), Doguet (1989: 172) and Warchalowski (1996: 137), but a valid species. This taxonomic proposal is based on the significant morphological differences between the two species and considers the partial overlap of their ranges (Fig. 31).

**Comparative description**

An accurate morphological description of both species can be found in Doguet (1989: 172; 1994: 220-221, 260 Figs. 105 bis a, b) and Warchalowski (1995: 254-256; 1996: 137-138, 142 Figs. 590-591), which also report colour differences, regrettably not always a stable character. In addition, Doguet (1989: 172; 1994: 220-221, 297 Figs. 122 f-g) observed differences in the shape of the *sper-*

*matheca* (*ductus spermathecae* forms 2 or 3 loops in *L. lateripunctatus* and shows no loops in *L. personatus*). The comparative analysis of the morphology on a wider sample permitted to add further discriminant characters between the two species (Table 1).

**Distribution**

*L. personatus* distribution is mainly eastern Euro-Mediterranean.

Gruev & Döberl (1997: 182; 2005: 90) report the following regions:

**Europe:** Austria, Bosnia-Herzegovina, Bulgaria, Carpathian Basin, Croatia, Czechia, France (Alsace), Germany, Greece (Crete), Hungary, Italy (North and East), Moldavia, Montenegro, Rumania, Serbia, Slovakia, Slovenia, Switzerland, Ukraine.

**Asia:** Caucasus, Cyprus, Greece (Rhodos), Israel, Caucasic Russia (Krasnodar District), Turkey.

In previous studies (Müller, 1949-1953: 524, 536; Doguet, 1989: 172; 1994: 220-221; Warchalowski, 1995a: 254-256; 1996: 137-138, 141; 2010: 865) where *L. lateripunctatus* and *L. personatus* were considered as geographical races of the same species, *L. lateripunctatus* was reported to include the western Mediterranean area, while *L. personatus* range would cover the northern and eastern part of it. However, as it appears from the materials studied (see below), the two species are clearly parapatric (Fig. 31), with overlapping ranges, which mainly include peninsular Italy and Sicily.

It is worth reporting that, at least in two instances, the two species were found together in the same locality:

San Pier Niceto, Messina, Sicilia:

*L. lateripunctatus*: 1 ex. San Pier Niceto (Leonardi *in verbis*)

*L. personatus*: 1 ex. (1♀!) (MSNM) labelled "Sicilia Messina Peloritani / San Pier Niceto 2, 350 m / 19.VI.2011 / leg. C. Baviera"

Lazio, Riano:

*L. lateripunctatus*: 1 ex. (1♂!) (MBCA) labelled "Lazio Roma / Riano Flaminio / 1.IV.1979 M. Biondi"

*L. personatus*: 1 ex. (1♀!) (MSNM) labelled "Lazio Riano / VII.1937 Garavaglia"

In other countries too, specimens of the two species were occasionally found in the same locality. For example, in Greece (Corfu):

*L. lateripunctatus*: 1 ex. (1♀!) (MHNB-Heik) labelled "Corfù / Valle di Ropa", undated; 2 exx. (1♀!; 1♂!) (HNHM, the ♀ coll. Dr. J. Fodor) labelled "Corfù / Paganetti", undated;

*L. personatus*: 2 exx. (1♀!; 1♂!) (MHNB-Heik) labelled "Corfù / Paganetti", undated; 1 ex. (1♂!) (HNHM) labelled "Corfù / Paganetti", undated.

**Materials studied**

**France:** 1 ex. Gallia / Reitter (MSNM); 2 exx. Bois de Sermersheim / 9.IV.1999 M. Callot / *Pulmonaria* (MSNM-Ber);

**Italy:** Friuli Venezia Giulia: 1 ex. (1♂!) Trieste-Carso / Divaccia / 14.VI.2008 (MSNM) (Fig. 28); 1 ex. (1♀!) Trieste-Carso / Divaccia / 14.VI.2008 (MSNM);

Tab. 1 - Taxonomically discriminant characters of *L. lateripunctatus* and *L. personatus*. / Caratteri tassonomici discriminanti di *L. lateripunctatus* e *L. personatus*.

Character	<i>L. lateripunctatus</i> (Rosenhauer 1856)	<i>L. personatus</i> Weise 1893
<i>Elytrae</i>	Sutural stripe of <i>elytrae</i> almost parallel and usually narrow, in some specimens wider in middle (Fig. 6; also: Doguet, 1989: 172 Fig. 1; Warchalowski, 1996: 142 Fig. 590; Doguet, 1994: 260 Fig. 105bis a), never joining lateral black spots, except in one specimen from Morocco (prov. Taza in MBCA) which is considered belonging to <i>L. lateripunctatus</i> for the shape of the <i>aedeagus</i> .	Sutural stripe of <i>elytrae</i> widened before middle, sometimes joining lateral black spots (Fig. 5; also: Doguet, 1989: 172 Fig. 2; Warchalowski, 1996: 142 Fig. 591; Doguet, 1994: 260 Fig. 105bis b). Uncommonly pale specimens can be found, with sutural stripe narrower in material studied from Cyprus: 4 exx. (4♀♀!) “Larnaka, Tochni”, “Lemessos, Pachna”, “Lemessos, Gerovasa”, “Larnaka, Lefkara” (FFCJ) and 1 ex. (1♂!) “Akamas, Drouseia” (MSNM-Ber).
<i>Spermatheca</i>	<i>Ductus spermathecae</i> forms 2 or 3 loops (Figs. 13-17; also: Doguet, 1989: 172 Fig. 3; 1994: 297 Fig. 122f). Distal part of <i>spermatheca</i> usually wide and rounded at apex.	<i>Ductus spermathecae</i> more or less long and without loops (Figs. 18-22; also: Doguet, 1989: 172 Fig. 4; 1994: 297 Fig. 122g). In some specimens, <i>ductus</i> forms a slight ripple (Figs. 18 and 21). Distal part of <i>spermatheca</i> usually narrow and apically folded.
Median lobe of <i>aedeagus</i>	Median lobe of <i>aedeagus</i> (Figs. 23-26) on average less elongate than in <i>L. personatus</i> : (n=12) Al = 0.652-0.732 mm; (Al)m = 0.696 mm; Aw = 0.112-0.128 mm; (Aw)m = 0.122 mm; (Al/Aw) = 4.993-6.536; (Al/Aw)m = 5.732. In ventral view comparatively straight or basal 2/3s weakly tapered, not broadened at apex (only in a few specimens, weakly broadened); distal 2/3s usually bent in lateral view. Specimens from North Africa show a longer <i>aedeagus</i> in ventral view (Fig. 24a) basal 2/3s tapered and weakly wider at apex, but in lateral view bent as usual (Fig. 24b).	Median lobe of <i>aedeagus</i> (Figs. 27-30) more elongate than in <i>L. lateripunctatus</i> : (n=12) Al = 0.699-0.792 mm; (Al)m = 0.747 mm; Aw = 0.096-0.128 mm; (Aw)m = 0.115 mm; (Al/Aw) = 5.974-7.375; (Al/Aw)m = 6.539. In ventral view basal 2/3s weakly tapered and more or less broadened at apex. In lateral view distal 2/3s appear comparatively straight.
Wings	Usually hind wings well-developed, with humeral calli evident (75% of examined exx.). Almost all specimens with hind wings reduced come from islands (where winged specimens are also present): Corfù (1 ex.), Isola del Giglio (3 exx.), Sardegna (3 exx.), Isola di Capraia (1 ex.), Sicilia (4 exx.). Among the specimens studied, two, with reduced wings, come from continental localities (Portugal: “São Martinho” and “Serra de São Mamede”).	Usually hind wings reduced, with humeral calli absent (73% of examined exx.).

Liguria: **1 ex.** Fontanegli / Bavari Genova / A. Baliani (MBCA); **1 ex.** S. Ilario Ligure / 28.III.1915 / G. Mantero // *Longitarsus lateripunctatus* det. A. Doderò (MSNG); **2 exx.** (1♂! 1♀!) Fontanegli / Bavari Genova / IX.1925 / A. Baliani // *Longitarsus lateripunctatus* Rosenhauer teste M. Biondi (MSNG); **1 ex.** (1♀!) Genova / S. Ilario Ligure / 4.VII.1944 / leg. Binaghi (MSNG) (Fig. 22); **1 ex.** Liguria (GE) Genova / febbraio 1884 / A. Doderò (MSNG-Bin); **7 exx.** (1♂!) Genova / S. Mario 4.VII.1944 // su *Commelina communis* G. Binaghi (MSNG-Bin); **2 exx.** (1♀! 1♂!) Liguria (GE)

Genova Sturla 1.IV.1945 / Binaghi // su *Symphytum bulbosum* (MSNG-Bin); **3 exx.** (1♂!) Liguria (GE) Genova / Febbraio 1884 / A. Doderò (MSNG-Dod); **1 ex.** Liguria (GE) Genova / Aprile 1893 / A. Doderò (MSNG-Dod); **2 exx.** (2♂♂!) Liguria (SP) Ameglia / Liguria orientale / 14.IX.1913 / C. Mancini (MSNG-Man); **9 exx.** Liguria (GE) / Lavagna / 10.XII.1972 / S. Zoia (SZCM); **1 ex.** Finale Ligure (SV) loc. Perti / greto Torrente Pora / 10.IV.1994 / S. Zoia (SZCM);

Toscana: **1 ex.** (1♂!) Palude Peretola / Firenze 27.XI.1936 / A. Martelli (MSNM) (Fig. 27);



Marche: **1 ex.** Macerata / 1960 / leg. S. Battoni (MSNVR);

Lazio: **2 exx.** (1♂!) Lazio Roma / dintorni Maccarese / 25.II.1979 M. Biondi (MBCA); **1 ex.** Lazio / Fregene / 24.IV.1978 / leg. M. Biondi (MBCA); **1 ex.** (1♀!) Lazio Riano / VII.1937 Garavaglia (MSNM) (Fig. 21);

Campania: **1 ex.** Napoli / Italia // *lateripunctatus* det. F. Heikertinger (MHNH-Heik);

Puglia: **1 ex.** (1♀!) Puglia (TA) / Fiume Lato / 12.III.2011 / leg. F. Montemurro (LFCC) (Fig. 20);

Calabria: **4 exx.** (2♀♀! 1♂!) Calabria (RC) / Sta Eufemia / Paganetti // ex Orig. Samig. J. Breit Wien (MHNH); **1 ex.** (1♂!) Calabria (CZ) Sambiasi / Calabria / V.1920 / C. Minozzi (MSNG-Man);

Sicilia: **1 ex.** (1♀!) Sicilia Messina Peloritani / San Pier Niceto 2, 350 m / 19.VI.2011 / leg. C. Baviera // N 38°07'35.6 E 15°23'12.4 // *Longitarsus lateripunctatus personatus* W. det. C. Leonardi (MSNM) (Fig. 19); **1 ex.** (1♂!) Palermo / Oreto / VI.1961 // *Longitarsus lateripunctatus* (Rosh.) det. A. Warchalowski (MSNVR);

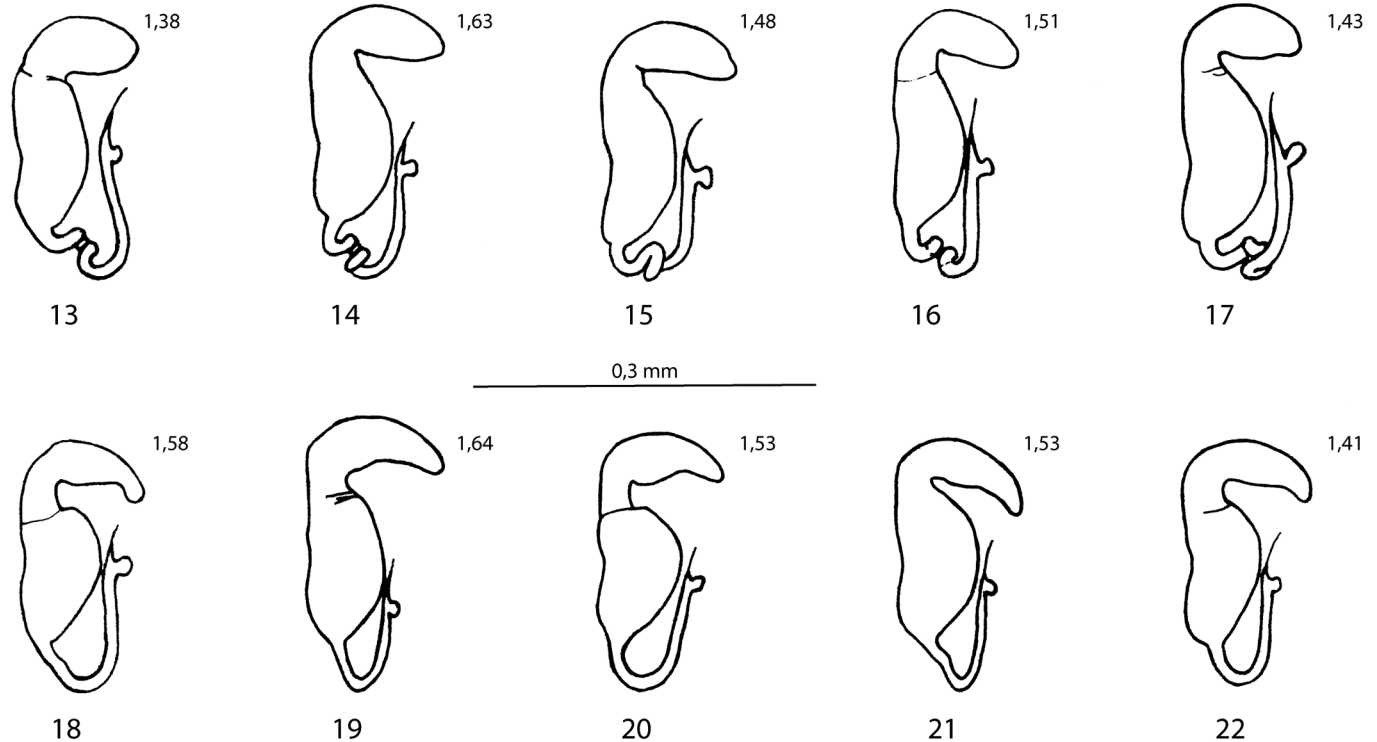
Czechia: **1 ex.** Moravia meridionale / Palava ras 169 / J. Macek 1992 (MSNM-Ber);

Austria: **3 exx.** (3♀♀!) Hainburg / A. i. Mader // *Longitarsus lateripunctatus* Rosh. det. A. Warchalowski, 1960-62 (HNHM); **2 exx.** (2♂♂!) Austria / Krems a. Don. / I. Bachinger (MHNH); **1 ex.** Bisamberg // ex Orig. Samig. J. Breit Wien (MHNH); **1 ex.** Mödling / Austr. Breit // ex Orig. Samig. J. Breit Wien (MHNH); **1 ex.** (1♀!) Baden-Wien / Helenental // Helen. Bad // *personatus* mit Schulterteule (MHNH-Heik); **1 ex.** (1♂!) Wien-Bisamberg / H. Schweiger (MHNH-Heik); **1 ex.** Bisamberg / 2.II.1907 //

Bisamberg A.i. / Heikertinger // *Longitarsus lateripunctatus* (MHNH-Heik); **1 ex.** (1♀!) Bisamberg / Heikertinger / 13.VI.1911/ Scheuch // *lateripunctatus* det. F. Heikertinger (MHNH-Heik); **1 ex.** Austria / Krems a. Don. / I. Bachinger // *Longitarsus lateripunctatus* det. F. Heikertinger // coll. A. Simonis dupleta coll. Winkler (MSNG); **5 exx.** Vienne / Autriche (MSNG-Dod); **4 exx.** (3♂♂!) Austria / Krems a. Don. / J. Bachinger (MSNM) (Figs. 29, 30); **1 ex.** Bisamberg / A. Otto (MSNM); **1 ex.** (1♀!) Austria inferiore / Bisamberg / Th. v. Wanka (MSNM); **2 exx.** Wien (MSNM); **4 exx.** (1♂!) Laxenburg / A. Otto // ex. Museo A. Carret 1908 // *Longitarsus lateripunctatus personatus* det. S. Doguet, 1984 (MSNM-Ber);

Slovenia: **1 ex.** Pirano Is. (MHNH-Heik); **1 ex.** (1♀!) SLO Mota / Hrastje / 25.IV.2002 / leg. B. Drovenik // *Longitarsus lateripunctatus personatus* det. M. Döberl, 2003 (MSNM-Ber); **1 ex.** SLO / Bunčani / 25.IV.2002 / leg. B. Drovenik // *Longitarsus lateripunctatus personatus* det. M. Döberl, 2003 (MSNM-Ber);

Hungary: **2 exx.** Siófok / Lichtneckert // *Longitarsus lateripunctatus personatus* Weise det. Z. Kaszab, 1962 (HNHM); **1 ex.** BPST Ungbg. / Budai hegys // coll. Dr. J. Fodor // *Longitarsus lateripunctatus personatus* Weise det. B. Gruev (HNHM); **2 exx.** Bpst környéke / Budai hegys / coll. H. Diener // *Longitarsus lateripunctatus personatus* Weise det. Z. Kaszab, 1962 (HNHM) (Fig. 5); **2 exx.** (2♂♂!) Hung. 26.IV.1931 / Budakeszi erdő / coll. H. Diener // *Longitarsus lateripunctatus personatus* Weise det. Z. Kaszab, 1962 (HNHM); **1 ex.** Hu. Pest m. Monor / 7.VI.1936 / leg. Dr. J. Fodor // *Longitarsus lateripunctatus personatus* Weise B. Gruev (HNHM); **1 ex.** (1♂!)



Figs. 13-22 – *Spermatheca*. 13-17) *L. lateripunctatus*. 18-22) *L. personatus*. Localities / Località: 13) Laignueglia; 14) Talamone; 15) Circummarpiccolo; 16) Monti Peloritani; 17) Corfù, Valle di Ropa; 18) Corfù; 19) Messina, San Pier Niceto; 20) Fiume Lato; 21) Riano; 22) Sant'Ilario Ligure.

Dp. Kara-hegy / 16.V.1950 / Révy D. / coll. Dr. Révy D. // *Longitarsus lateripunctatus personatus* Weise det. Z. Kaszab, 1962 (HNHM); **1 ex.** Mecsek, Pécs / Misina É. / 26.V.1954 leg. Kaszab // *Longitarsus lateripunctatus personatus* Weise det. Z. Kaszab, 1962 (HNHM); **1 ex.** Hu. Vértes h. / Fány Völgy // 2.VIII.1961 / Hámoriné // *Longitarsus lateripunctatus personatus* Weise det. B. Gruev (HNHM); **1 ex.** Hung. Békés m. Sarkad / Remeteierdő 90 m // *Festuco pseudovinae* / *Quercetum* // egyelész / 24.V.1982 / leg. Adám // *Longitarsus lateripunctatus* Rosenhauer ssp. *personatus* Weise (HNHM); **1 ex.** (1♀!) Hung. Pest m. / Tahitófaln / Cseresznyés-völgy // fuhálózás / 27.V.1984 / leg. O. Merkl // *Quercetum petrae-cerris* / 300 m // *Longitarsus lateripunctatus personatus* Weise det. B. Gruev (HNHM); **1 ex.** (1♂!) Hung. Szabolcs – Sz. M. / Bátorliget / Bátorligeti-láp // 29.IX.1990 / leg. Papp. J. // *Longitarsus lateripunctatus personatus* Weise det. O. Merkl 1991 (HNHM); **3 ex.** (1♂!) Fünfkirchen [=Pécs] / Hungar. // *lateripunctatus* det. F. Heikertinger (MHNH-Heik); **2 ex.** Fünfkirchen / Hungar. // *Longitarsus* / v. *personatus* // v. *personatus* / ?Shinam // *cotypus* (MHNH-Heik); **1 ex.** (1♀!) Ungarn (MSNM);

**Croatia:** **1 ex.** Dalmatia c. / Ins. Brazza / Milna V.1936 / Stöcklein (MHNH);

**Bosnia-Herzegovina:** **1 ex.** (1♀) Apfelbeck / Sarajevo // *Longitarsus lateripunctatus* coll. Apfelbeck // *L. lateripunctatus* Rosh. det. A. Warchalowski, 1962 (HNHM);

**Serbia:** **1 ex.** (1♀!) Slavonia Ruma / Schwieger // *Longitarsus lateripunctatus* Rosenhauer det. M. Biondi, 1985 (MSNG);

**Rumania:** **1 ex.** Herkulsfürdő / coll. Mihók // *Longitarsus lateripunctatus personatus* Weise det. Z. Kaszab, 1962 (HNHM); **1 ex.** Herkulsfürdő / 1880 Pável // *Longitarsus lateripunctatus personatus* Weise det. Z. Kaszab, 1962 (HNHM); **1 ex.** Herkulesbad / Sd Ung. Breit // ex Orig. Samig. J. Breit Wien (MHNH);

**Greece:** **1 ex.** (1♂!) Greece / Peloponnes SE / Kalamata oberhalb // Kastania N36°52'19" E22°18'50" 850 m // 1.X.2014 leg. C. Germann // *Longitarsus personatus* Weise det. L. Farina, 2019 (CGCB); **3 ex.** Kreta Rethimnon d. 08 / Eleftherna Archea El. / 300 m NN / 14.4.2019 Fritzlär leg. // *Longitarsus lateripunctatus* det. F. Fritzlär, 2019 (FFCJ); **1 ex.** Morea / Hagios Wlastis Breuske // *Longitarsus lateripunctatus* Rosenhauer coll. Reitter (HNHM); **1 ex.** (1♂!) Corfù / Paganetti // *lateripunctatus* det. K. Lopatin (HNHM); **1 ex.** Peloponneso / Tripoli dintorni Dahra / 4.VIII.1980 / leg. P. Audisio e M.C. Aneelié (MBCA); **1 ex.** (1♂!) Isola di Kos / Asklipiion fiume / 23.III.1989 P. Audisio (MBCA); **1 ex.** Karp. M. / Motrul Sec. (MHNH); **1 ex.** Volo / Thessalien // Moctarski // *lateripunctatus* (MHNH-Heik); **2 ex.** (1♀!) Corfù / Paganetti // *lateripunctatus* det. F. Heikertinger (MHNH-Heik) (Fig. 18); **1 ex.** (1♀!) Vardarebene / Macedonia / A. Shatzmayr (MSNG-Dod); **1 ex.** (1♀!) Rodi / 21.II.1931 / Torre Tasso (MSNM); **1 ex.** (1♂!) Kriti-Hanjà (44) / Aghio-pandes / Vryses 6 km NW / 28.V.2006 Liberti (MSNM); **1 ex.** Grèce Laconie Aeropoli / Neo Itilio 15.IV.1997 / J-M Maldes & A. Madocq leg. (MSNM-Ber); **1 ex.** (1♀!) Crète (Rethimnon) / Agios Silas / 1.V.1999 / M. Bergeal leg. (MSNM-Ber); **1 ex.** (1♀!) GR. Peloponnes Arka-

dia / Eleniko 9.IV.2000 / Bords de Kouraikos / B. et M. Bergeal leg. (MSNM-Ber); **1 ex.** GR. Peloponnes Mavi / Kokkala 12.IV.2000 / B. et M. Bergeal leg. (MSNM-Ber); **1 ex.** (1♀!) GR. Peloponnes Ahaia / Mega Spileo 15.IV.2000 / Bords de Kouraikos / B. & M. Bergeal leg. (MSNM-Ber); **1 ex.** GR. env. Xanthi / Bords de rivière / 22.V.2001 / B. et M. Bergeal leg. (MSNM-Ber);

**Cyprus:** **1 ex.** (1♀!) Cyprus W 38 / Lemessos 35 km WNW / Gerovasa S 500 m / 10.IV.2006 Fritzlär leg. // *Longitarsus lateripunctatus* det. F. Fritzlär, 2007 (FFCJ); **3 ex.** (1♀!) Cyprus S 63 / Lemessos 20 km NW / Pachna E 800 m / 3. IV.2009 Fritzlär leg. // *Longitarsus lateripunctatus* det. F. Fritzlär, 2009 (FFCJ); **2 ex.** (1♂!) Cyprus S 67 / Lemessos 30 km NW / Omodos W 1000 m / 6. IV.2009 Fritzlär leg. // *Longitarsus lateripunctatus* det. F. Fritzlär, 2009 (FFCJ); **1 ex.** (1♀!) CY Prov. / Larnaka 71a / Tochni NE Macchia / ehem. Friedhof 100 m / 12.III.2012 Fritzlär leg. // *Longitarsus lateripunctatus* det. F. Fritzlär, 2012 (FFCJ); **3 ex.** (1♀!) CY Prov. Larnaka 72 / Lefkara 4 km WSW Vavla 350 m / 13.III.2012 Fritzlär leg. // *Longitarsus lateripunctatus* det. F. Fritzlär, 2012 (FFCJ); **1 ex.** CY Prov. Larnaka 76 / Choirokoitia 2 km NW / Loulas Farm 100 m / 17.III.2012 Fritzlär leg. // *Longitarsus lateripunctatus* det. F. Fritzlär, 2012 (FFCJ); **1 ex.** CY Prov. Paphos 111 / Polis 2 km SSE / Steni 200 m NN / 34°59'58»N 32°28'26»E / 23.III.2018 Fritzlär leg. // *Longitarsus lateripunctatus* det. F. Fritzlär, 2018 (FFCJ); **1 ex.** CY Prov. Paphos 104 / Polis 16 km SE / Fyti 650 m / 34°55'46»N 32°32'47»E / 24.III.2018 Fritzlär leg. // *Longitarsus lateripunctatus* det. F. Fritzlär, 2018 (FFCJ); **1 ex.** CY Prov. Paphos 109a / Polis 9km W Neo Chorio / Pissouromoutti 350m / 35°01'13»N 32°20'01»E / 27.III.2018 Fritzlär leg. // *Longitarsus lateripunctatus* det. F. Fritzlär, 2018 (FFCJ); **1 ex.** CY Prov. Paphos 110 / Polis 7km NW Akamas / Aphrodite-Bad Kliff 20m / 35°03'28»N 32°20'47»E / 28.III.2018 Fritzlär leg. // *Longitarsus lateripunctatus* det. F. Fritzlär, 2018 (FFCJ); **1 ex.** Mt. Armenien / Cypern / *lateripunctatus* det. Heikertinger / *personatus* mit Schulterteule (MHNH-Heik); **2 ex.** (2♂♂!) Chypre (Akamas) / Drouseia 500 m / N3456919 E03224917 / B. et M. Bergeal leg. (MSNM-Ber);

**Turkey:** **1 ex.** (1♀!) Turcia d. Antalya 7 / Kiris b. Kemer 5 km w / Forellenhof 350 m / N:36°36.27' E:30°28.54' / 30.III.2000 Fritzlär leg. // *Longitarsus lateripunctatus personatus* det. F. Fritzlär, 2000 (FFCJ); **1 ex.** Turcia d. Antalya 15 / Kiris b. Kemer 7 km w / Gedelme Dorf 750 m / N:36°37.04' E:30°26.29' / 31.III.2000 Fritzlär leg. // *Longitarsus lateripunctatus personatus* det. F. Fritzlär, 2000 (FFCJ); **1 ex.** Türkei d. Antalya 02 / Alanya 20 km E 50 m NN, Mahmutlar E, Karicak / N:36°27'28" E:032°07'42" / 9.IV.2001 Fritzlär leg. // *Longitarsus lateripunctatus personatus* det. F. Fritzlär, 2002 (FFCJ); **1 ex.** Türkei d. Antalya 10 / Alanya 15 km ENE 200 m NN / Kestel N Gärten / N:36°31'53" E:032°05'53" / 13.IV.2001 Fritzlär leg. // *Longitarsus lateripunctatus personatus* det. F. Fritzlär, 2002 (FFCJ); **1 ex.** Türkei d. Antalya 13 / Alanya 40 km E, 200 m NN, Demirtaş 5 km N Wegrund / N:36°29'43" E:032°16'01" / 15.IV.2001 Fritzlär leg. // *Longitarsus lateripunctatus personatus* det. F. Fritzlär, 2002 (FFCJ); **2 ex.** Turcia d. Antalya 15 / Kiris b. Kemer 7 km w / Gedelme Dorf 750 m / N:36°37.04' E:30°26.29

/ 31.III.2000 Fritzlar leg. // *Longitarsus lateripunctatus personatus* det. F. Fritzlar, 2000 (LFCC); **1 ex.** (1♂!) Turchia vil. Izmir / 5 km N di Bergama m. 500 / 3.V.1991 / Audiso-Biondi-Bologna (MBCA);

**Syria:** **1 ex.** Syria Prov. Homs / 25 km NE of Homs / 475 m E34°53.285' N36°56.066' / 4.V.2006 / leg. Gy Rozner // *Longitarsus lateripunctatus personatus* Weise, 1893 det. J. Bezdék, 2015 (HNHM);

**Israel:** **2 exx.** (1♂! 1♀!) Israel Upper Galilee / Nachal Amud / 26.X.1977 / leg. D. G. Furth // on *Symphytum palaestinum* // macropterous // *Longitarsus lateripunctatus* Rosenhauer det. D.G. Furth, 1977 (MSNM); **1 ex.** N. Amud // micropterous // Upper Galilee // on *Symphytum palaestinum* / 21.III.1974 / leg. D. Furth // *Longitarsus lateripunctatus* Rosenhauer det. D. G. Furth, 1975 (MSNVR);

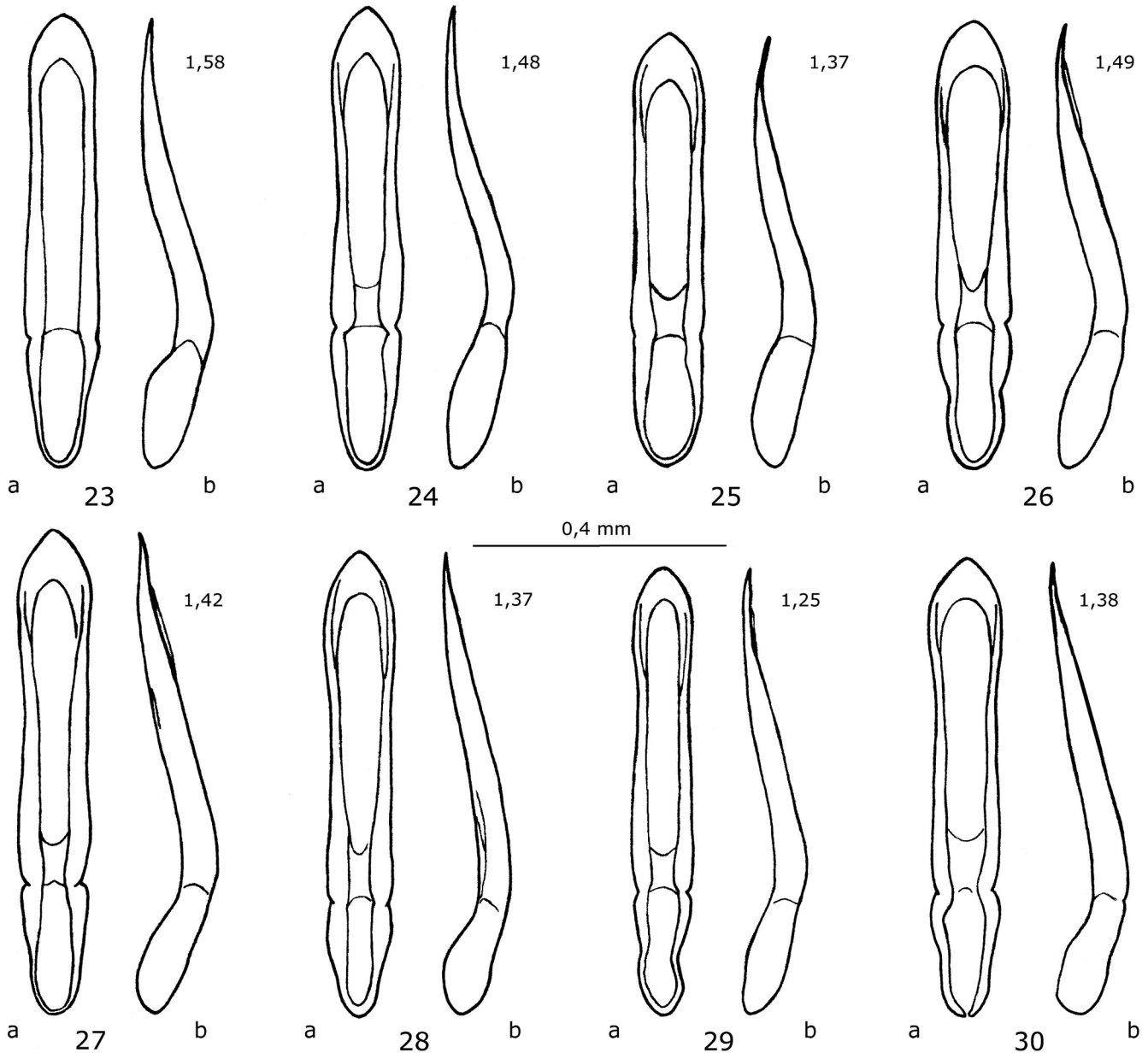
**North Africa:** **1 ex.** (1♀!) Algier / Reitter Leder //

*Longitarsus lateripunctatus* Rosenhauer coll. Reitter (HNHM); **1 ex.** Algier / Reitter // *Longitarsus lateripunctatus* coll. Reitter (HNHM).

Dissected specimens: 33 ♂♂; 33 ♀♀.

The author reports also these data from Israel (DFCA) taken from the photos of specimens kindly sent by David Furth. On the labels there is interesting information about host plants. These specimens were not studied by the author, but they seem to have the characteristics (typical coloring) of *L. personatus*:

**1 ex.** Israel / N. Amud / 17.X.1972 / leg. D.G. Furth // on *Symphytum palaestinum*; **1 ex.** Israel: Upper Jordan Valley / Kare Deshe / 1.XII.1972 / leg. D.G. Furth; **4 exx.** Israel / N. Amud / 8.V.1973 / leg. D.G. Furth // on *Symphytum palaestinum*; **4 exx.** Israel / N. Amud / 26.VI.1973



Figs. 23-30 – Aedeagus: median lobe / lobo mediano: a) ventral view / vista ventrale; b) lateral view / vista laterale. 23-26) *L. lateripunctatus*. 27-30) *L. personatus*. Localities / Località: 23) Algeciras; 24) Tunisi; 25) Giglio island; 26) Marina di Modica; 27) Peretola; 28, Trieste; 29-30) Krems.

/ leg. D.G. Furth / on *Symphytum palaestinum*; **1 ex.** Israel: Upper Jordan Valley / Betecha / 27.IV.1974 / leg. D.G. Furth; **1 ex.** Israel: Lower Galilee / Merom 1100 m / 29.IV.1974 / leg. D.G. Furth; **1 ex.** Israel: Carmel Ridge / N. Oren / 30.IV.1974 / leg. D.G. Furth / on *Salvia hierosolymitana*; **1 ex.** Israel / Golan Hts. / Qusbiye / 31.I.1978 / leg. D.G. Furth; **5 exx.** Israel / N. Amud / 23.II.1978 / leg. D.G. Furth / on *Symphytum palaestinum*; **3 exx.** Israel: Northern Coastal Plain / Nahal Keziv / 4.IV.1978 / leg. D.G. Furth / on *Symphytum palaestinum*; **2 exx.** Israel: Golan Hts. / Merom HaGolan / 27.IV.1978 / leg. D.G. Furth; **10 exx.** Israel / N. Amud / 30.IV.1978 / leg. D.G. Furth / on *Symphytum palaestinum*; **3 exx.** Israel: Carmel / Nahal Oren / 4.V.1978 / leg. D.G. Furth; **2 exx.** Israel / N. Amud / 7.V.1978 / leg. D.G. Furth; **1 ex.** Israel: Judean Foothills / Shores / 20.V.1978 / leg. D.G. Furth; **1 ex.** Israel: Mt. Hermon / Nimrod castle 800 m / 14.VI.1978 / leg. D.G. Furth; **2 exx.** Israel: Upper Jordan Valley / Ein Gev / 15.I.1979 / leg. D.G. Furth; **5 exx.** Israel: Samaria / Ein Sinya / 15.I.1979 / leg. D.G. Furth / on *Symphytum palaestinum*; **1 ex.** Israel: Upper Galilee / Nahal Betzet / 17.I.1979 / leg. D.G. Furth / on *Symphytum palaestinum*; **1 ex.** Israel: Upper Galilee / Elon / 17.I.1979 / leg. D.G. Furth / on *Cynoglossum creticum*; **1 ex.** Israel: Upper Galilee / Banias / 22.II.1979 / leg. D.G. Furth; **1 ex.** Israel: Carmel Ridge / N. Oren / 3.III.1979 / leg. D.G. Furth / on *Cynoglossum creticum*; **1 ex.** Israel: Upper Galilee / Ha Tanur / 6.V.1979 / leg. D.G. Furth; **3 exx.** Israel: Upper Galilee / Banias / 23.V.1979 / leg. D.G. Furth / on *Symphytum palaestinum*; **8 exx.** Israel: Carmel Ridge / N. Oren / 2.I.1980 / leg. D.G. Furth / on *Echium judaeum*; **2 exx.** Israel: Lower Galilee / Ha Solelim / 2.I.1980 / leg. D.G. Furth / on *Cynoglossum* sp. // *Longitarsus lateripunctatus* det. D.G. Furth, 1980; **1 ex.** Israel: Lower Galilee / Nazareth / 2.I.1980 / leg. D.G. Furth / on *Echium glomeratum* // *Longitarsus lateripunctatus* det. D.G. Furth, 1980; **1 ex.** Israel: Upper Jordan Valley / Tiberias / 10.I.1980 / leg. D.G. Furth on *Echium judaeum*; **1 ex.** Israel: Carmel Ridge / N. Oren / 4.V.1980 // leg. D.G. Furth // *Longitarsus lateripunctatus* det. D.G. Furth, 1980; **1 ex.** Israel / Carmel / 6.XI.1980 / leg. A. Freidberg; **2 exx.** Israel: Upper Galilee / Banias / 2.II.1981 / leg. D.G. Furth / on *Cynoglossum* sp.; **6 exx.** Israel: Carmel Ridge / N. Oren / 4.II.1981 / leg. D.G. Furth / on *Echium judaeum* // *Longitarsus lateripunctatus* det. D.G. Furth, 1981; **1 ex.** Israel: Carmel / N. Oren / 20.I.1984 / leg. D.G. Furth / on *Cynoglossum creticum*; **1 ex.** Israel: Carmel / N. Oren / 20.I.1984 / leg. D.G. Furth / on *Echium judaeum*; **1 ex.** Israel: Yizrael valley / Tel Qashish / 20.I.1984 / leg. D.G. Furth; **3 exx.** Israel: Lower Galilee / Ha Solelim, oak forest / 22.I.1984 / leg. D.G. Furth / on *Cynoglossum creticum*.

***Longitarsus lateripunctatus* (Rosenhauer 1856)** (Fig. 6)

*Teinodactyla lateripunctata* Rosenhauer, 1856: 339. Loc. typ.: Spagna: Andalusia (Algeciras).

Allard, 1860: 116-117; Allard, 1866: 133, 241-242 [*Thyamis*]; Portevin, 1934: 304; Kutschera, 1863: 292, 300-302 [*Longitarsus*]; Oertzen, 1866: 290; Weise, 1893: 964; Kolbe, 1920: 402-403; Heikertinger, 1930: 1328; Porta, 1934: 357; Normand, 1937: 133; Csiki & Heikertinger,

1940: *pars* 166, 134; Müller, 1949-1953: 524, 536; Mohr, 1966: 228 (Fig. 51: 34); Warchalowski, 1978: 49, 50 (Figs. 243-245); Furth, 1980: 101 [possibly all Israeli specimens belong to *L. personatus*]; Doguet, 1989: 172; Biondi, 1990b: 168; Biondi, 1990c: 346; Borges, 1990: 114; Gruev, 1990: 327; Doguet, 1994: 220-221, 224 (Fig. 93c), 297 (Fig. 122f); Lucht, 1994: 319; Warchalowski, 1995a: 254-256 (Figs. 954-955); Warchalowski, 1996: 137-138, 141 (Fig. 589), 142 (Fig. 590); Gruev & Döberl, 1997: 181; Warchalowski, 2003: 413; Gruev & Döberl, 2005: 90; Baviera & Biondi, 2015: 19.

= *Longitarsus azoricus* Israelson, 1991: 1-4 [synonymized by Gruev & Döberl, 1997: 181]

= *Haltica signata* Reiche et de Saucy, 1858: 49 [synonymized by Allard, 1860: 116]

= *Teinodactyla biguttata* Foudras, 1860: 172 [synonymized by Allard, 1860: 116]

**Distribution**

*L. lateripunctatus* is distributed primarily in the western Mediterranean area.

Gruev & Döberl (1997: 181; 2005: 90) report the following regions:

**Europe:** Croatia (Dalmatia: Is. Vis), France (South; incl. Corsica), Greece (incl. Ionian Islands), Italy (South; incl. Sardinia and Sicily), Malta, Portugal, Spain (incl. Balears).

**Asia:** Cyprus, Greece (Rhodos), Israel.

**North Africa:** Algeria, Morocco, Tunisia.

**Atlantic islands:** Azores (Portugal).

**Materials studied**

**Portugal:** **1 ex.** S. Martinho / Portugal // ex Orig. Samig. J. Breit Wien (MHNB); **1 ex.** Port Setubal / Palma 25.IV.1996 / M. Bergeal leg. (MSNM-Ber); **1 ex.** Port Algarve / Serra de Monchique / Silves 26.IV.1996 / M. Bergeal leg. (MSNM-Ber); **1 ex.** (1♂!) Port Alto Alentejo / Serra de Sao Mamede / Alegrete 28.IV.1996 / M. Bergeal leg. (MSNM-Ber); **1 ex.** Port Beira Baxa / Serra da Estrela / Corvilha 29.IV.1996 / M. Bergeal leg. (MSNM-Ber);

**Spain:** **9 exx.** (1♂!) Spagna prov. Cadiz / dint. San Roque / Valle F. Guadarranque / m. 100-300 10.V.1979 / leg. M. Biondi // *Longitarsus lateripunctatus* Rosenhauer det. M. Biondi (MBCA); **2 exx.** (1♂!) Algeciras / Andalusien / prof. G. Strobl // *lateripunctatus* det. F. Heikertinger (MHNB-Heik) (Fig. 23); **1 ex.** (1♀!) Süd-Spanien / Ur. Fr. Ohaner / vend. 26.IV.1915 // Algeciras (MSNM); **1 ex.** P. Chanta 5 km / westlich (teich) / 17.IV.1995 leg. Stüben / Sammlung Dieter Silde (MSNM-Ber); **10 exx.** (7♀♀! 1♂!) E. Pr. Cadix / Los Barrios / 21.IV.1995 / M. Bergeal leg. (MSNM-Ber); **2 exx.** E. Pr. Malaga / Ronda 18.IV.1996 / Al Monte Corto / M. Bergeal leg. (MSNM-Ber); **1 ex.** E Andalusien Conil / Cadix 18.II.2007 Mesutat // det. M. Bergeal, 2006 (MSNM-Ber);

**France:** **1 ex.** (1♀!) Corsica / Étang de Biguglia / 16.IV.1927 b. Furiani // *Longitarsus lateripunctatus* det. F. Heikertinger (MHNB); **4 exx.** Le Cannet / AM / 22.IV.1951 / P. Bonadona (MSNM-Ber);

**Italy:** Liguria: **1 ex.** (1♂!) Liguria (SV) Sassello / 5 km N (Ponte Erro) / 44°31.3'N 8°28.2'E / 300 m 5.VI.2017 leg. Liberti (LFCC); **1 ex.** Liguria (IM) / San Remo / leg.

Schneider // *lateripunctatus* det. F. Heikertinger (MHN-B-Heik); **1 ex.** (1♀!) Liguria / P.M. Fusan // *Longitarsus lateripunctatus* teste Dodero (MSNG); **1 ex.** (1♀!) Laigueglia / Liguria occidentale Solari (MSNM) (Fig. 13); **1 ex.** (1♀!) Alassio / Liguria occidentale / 1943 // 22.V.1943 (MSNM); **1 ex.** (1♀!) Liguria occidentale / Laigueglia / 6.VI.1961 Liberti (MSNM); **1 ex.** Finale Ligure (SV) / Altipiano di S. Bernardino / 16.VI.1987 / S. Zoia (SZCM);

Toscana: **1 ex.** (1♀!) Is. Giglio / IV.1901 / G. Doria // *Longitarsus lateripunctatus* Rosenhauer teste Springer (MSNG); **1 ex.** Is. Giglio / V.1901 / G. Doria // *Longitarsus lateripunctatus* Rosenhauer teste Springer (MSNG); **1 ex.** (1♂!) Toscana (GR) / Is. Giglio / XI.1902 / G. Doria // *Longitarsus lateripunctatus* Rosenhauer teste Springer (MSNG) (Fig. 25); **1 ex.** Toscana (LI) / Isola Capraia / Toscana / S. Rocco / VI.1930 C. Mancini // *Longitarsus lateripunctatus* Rosenhauer teste Springer (MSNG); **2 exx.** Toscana (GR) / Is. Giglio / G. Doria (MSNG-Dod); **1 ex.** (1♀!) Is. Giglio / V.1901 / G. Doria (MSNM); **1 ex.** (1♀!) Ric. zone umide della Toscana / Osa-La Selva / Talamone / (GR) / Bordoni 5.VI.2001 // *Longitarsus lateripunctatus s.str.* det. C. Leonardi, 2003 (MSNM) (Fig. 14); **1 ex.** Riserva zone umide della Toscana / Osa (GR) / Bordoni 29.V.2002 // *Longitarsus lateripunctatus s.str.* det. C. Leonardi, 2003 (MSNM);

Lazio: **2 exx.** Lazio Torvaianica / 4.VI.1978 / leg. M. Biondi (MBCA); **9 exx.** Roma / Nuova Florida / 4.VII.1978 leg. M. Biondi (MBCA); **1 ex.** Lazio / Torvaianica / 15.VII.1978 / leg. M. Biondi (MBCA); **1 ex.** Lazio Roma / Settecamini / m. 100 25.X.1978 / leg. Italo Mercati (MBCA); **1 ex.** Lazio Roma / Riano Flaminio / 1.IV.1979 M. Biondi (MBCA); **2 exx.** Lazio Roma / Nuova Florida / 16.IV.1979 / leg. M. Biondi (MBCA); **3 exx.** Roma / Nuova Florida / 9.IV.1986 / leg. M. Biondi // su *Cerintho* sp. (MBCA); **1 ex.** Roma Marcigliana / stazione ENEL di Bufalotta / 11.V.1999 Colonnelli (MBCA);

Sardegna: **1 ex.** (1♀!) Sardegna (SS) / Ploaghe 4 Km N / 40°41.9'N 8°43.5'E / 500 m 18.V.2017 leg. G. Liberti (LFCC); **1 ex.** Sardegna 12.X.1984 / Asinara M. Scomunica pendici / M. Biondi (MBCA); **2 exx.** Sardegna Is. San Pietro / Bacino acquedotto / 11.V.1988 Osella (MBCA); **1 ex.** Sardegna 12.V.1988 / Loc. Sa Scrocca Manna / S. Antioco M. Biondi (MBCA); **1 ex.** (1♀!) Sardegna (OR) Oristano / Sardinia (MHN-B); **2 exx.** (1♂! 1♀!) Sardegna (CA) Sardegna / V. 1873 / Cagliari / R. Gestro // *Longitarsus lateripunctatus* det. Dodero (MSNG); **1 ex.** (1♂!) Sardegna (OR) Asuni / Sardegna / Dr. A. Krausse / coll. A. Dodero (MSNG-Bin); **1 ex.** Sardegna (CA) Cagliari / Marzo / Lostia (MSNG-Bin); **1 ex.** (1♀!) Sardegna (SU) Domusnovas / Sardegna / 26.V.1892 A. Dodero (MSNG-Bin); **5 exx.** (2♂♂!) Sardegna (SU) Carloforte / Sardegna

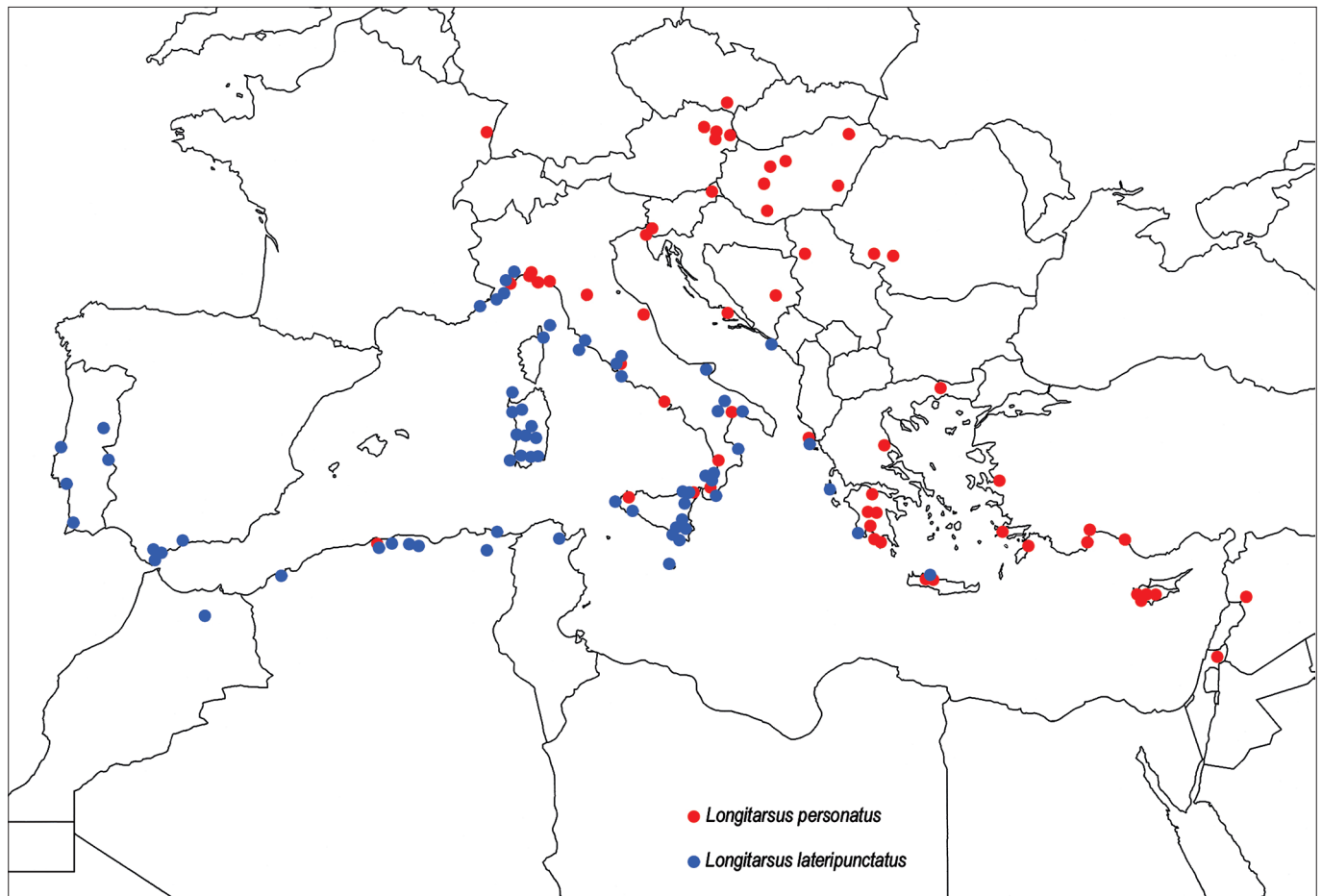


Fig. 31 – European and Mediterranean distribution of *L. lateripunctatus* and *L. personatus*. / Distribuzione europea e mediterranea di *L. lateripunctatus* e *L. personatus*. Blank map modified from / Cartina modificata da: [https://d-maps.com/carte.php?num\\_car=3127&lang=it](https://d-maps.com/carte.php?num_car=3127&lang=it)

/ 2.V.1912 A. Dodero (MSNG-Bin); **1 ex.** Cagliari Cor. / 2.VI.1901 A. Dodero (MSNG-Dod); **9 exx.** (1♂!) Sardegna / Flumini / 3-8.V.1971 / leg. C. Leonardi (MSNM); **4 exx.** (3♂♂!) Sardegna Ruinas / 10-13.V.1972 / leg. C. Leonardi (MSNM); **2 exx.** (1♂! 1♀!) Sardegna / Riola / 12.V.1972 / leg. C. Leonardi (MSNM); **12 exx.** (3♀♀! 1♂!) Sardegna (SU) / Sadali / 17.V.1972 / leg. C. Leonardi (MSNM); **6 exx.** (1♂! 1♀!) Sardegna / Ortuero / 19.V.1972 / leg. C. Leonardi (MSNM); **2 exx.** Sardegna / Alghero / 23.V.1973 / leg. C. Leonardi (MSNM); **1 ex.** Iglesias Lago Corsi / (Cagliari) m 250 ca / 20.IV.1997 C. Giusto (SZCM);

Basilicata: **1 ex.** (1♂!) Basilicata / str. Irsina-Grassano / su F. Bradano (MT) 150 m / 22.IX.1996 leg. Angelini (MSNM-Ber);

Puglia: **3 exx.** (3♂♂!) Puglia Promontorio del Gargano W Vieste / N41°53'07"E16°07'54" 23 m / Olivenhain / 2.IV.2016 / leg. C. Germann // *Longitarsus lateripunctatus* Rosenhauer det. L. Farina, 2020 (CGCB) (Fig. 6); **2 exx.** Puglia (TA) / Bosco di San Basilio / 12.V.2018 / leg. F. Montemurro (FMCT); **5 exx.** Puglia (TA) / Bosco di San Basilio / 27.V.2018 / leg. F. Montemurro (FMCT); **1 ex.** (1♀!) Puglia (TA) / Circummarpiccolo / 26.V.2012 / leg. F. Montemurro (LFCC) (Fig. 15); **1 ex.** (1♂!) Puglia / Murge Tarantine / San Basilio 25.VI.2011 / leg. C. Leonardi (MSNM);

Calabria: **1 ex.** Calabria (CZ) / Marina di Nicotera / 12.XI.1989 / Duna costiera / leg. M. Bologna & C. Marangoni (MBCA); **2 exx.** (1♂!) Calabria / Vibo Valentia / 22.IV.1990 / leg. C. Leonardi (MSNM); **5 exx.** (1♂! 1♀!) Calabria / Capo Vaticano / 22.IV.1990 / leg. C. Leonardi (MSNM); **2 exx.** (1♂) Calabria / fra Ioppolo e Nicotera 23.IV.1990 / leg. C. Leonardi (MSNM); **2 exx.** Calabria / Samo / 25.IV.1990 / leg. C. Leonardi (MSNM); **1 ex.** Calabria (RC) / Samo / 25.IV.1990 / leg. C. Leonardi (MSNM); **3 exx.** Calabria / Cirò Marina / 29.IV.1990 / leg. C. Leonardi (MSNM);

Sicilia: **5 exx.** (1♂!) Sicilia (SR) Pachino / 13-17.V.1908 / A. Dodero (MSNG-Dod); **1 ex.** (1♂!) Sicilia (ME) Messina / Sicilia / F. Vitale (MSNG-Man); **1 ex.** (1♀!) Messina / Peloritani / 8.II.1916 / Schatzmayr (MSNM) (Fig. 16); **5 exx.** (1♂!) Sicilia / Grotta Monello (SR) / 18.VI.1991 / leg. Sabella // *Longitarsus lateripunctatus* det. C. Leonardi (MSNM); **5 exx.** (1♀!) Sicilia / Grotta Monello (SR) / 28.VIII.1991 / leg. Sabella // *Longitarsus lateripunctatus* det. C. Leonardi (MSNM); **45 exx.** (1♂! 1♀!) Sicilia / Kamarina 6.V.1992 / leg. C. Leonardi (MSNM); **1 ex.** Sicilia 13.V.1992 / foce Fiume Belice / leg. C. Leonardi (MSNM); **1 ex.** (1♂!) Sicilia Siracusa Lentini / su piante di agrumi / 17.V.2000 / leg. L.S.A. // *Longitarsus lateripunctatus* (Rosenh.) det. C. Leonardi, 2004 (MSNM); **19 exx.** (1♂!) Sicilia 23.IV.2004 / Marina di Modica / leg. C. Leonardi (MSNM); **1 ex.** Sicilia 23.IV.2004 / Pozzallo-Marina di Modica / leg. C. Leonardi (MSNM) (Fig. 26); **1 ex.** Favignana / M.S. Caterina 250 m / 37°55.7N 12°18.8E / 12.V.2008 Liberti (MSNM); **1 ex.** (1♂!) Favignana / M.S. Caterina 250 m / 37°55.7N 12°18.8E / 18.V.2008 Liberti (MSNM); **1 ex.** Fiumara Tono (Messina) // Sicilia / VI.1959 // *Longitarsus lateripunctatus* (Rosh.) det. A. Warchalowski (MSNVR); **1 ex.** Cava d'Ispica (RG) / 3-13.VI.2014 leg. R. Papi (RPCR);

**Malta: 1 ex.** (1♂!) Malte / Mellieha 1.VI.2004 / Rolf Rober (MSNM-Ber);

**Montenegro: 1 ex.** (1♀!) Sutorina / leg. Paganetti // *lateripunctatus* det. F. Heikertinger (MHNH-Heik);

**Greece: 1 ex.** (1♀!) Peloponnes S-Pylos / Mesochori / env. 36.880430, 21.713645 25 m / 27.IX.2016 leg. C. Germann (CGCB); **1 ex.** (1♂!) Corfù / Paganetti // *Longitarsus lateripunctatus* Rosenhauer det. K. Lopatin (HNHM); **1 ex.** Corfù / Paganetti // coll. Dr. J. Fodor // *Longitarsus lateripunctatus* Rosenhauer det. B. Gruev (HNHM); **1 ex.** Creta 9.IV.1989 / Foci del Petrés / P. Audisio (MBCA); **1 ex.** (1♀!) Corfù / V. d. Ropa // ex Orig. Samig. J. Breit Wien (MHNH) (Fig. 17); **1 ex.** (1♀!) Kephallenia / leg. Paganetti // ex Orig. Samig. J. Breit Wien (MHNH); **1 ex.** Corfù / leg. Paganetti // *lateripunctatus* Rosenhauer det. F. Heikertinger (MHNH-Heik);

**North Africa: 1 ex.** Algier / Reitter Leder / coll. F. Speiser // *Longitarsus lateripunctatus* det. Warchalowski 1960 (HNHM); **1 ex.** Algeria m. 1000 / P.N. d'Akfadou / for. Des Beni Ghorbi / 13.IV.1988 Colonnelli (MBCA); **1 ex.** Algeria m. 600 / wil. Tizi Ouzou / Col de Chergoui / 16.IV.1988 Colonnelli (MBCA); **7 exx.** (2♂♂ 1♀!) Algeria // leg. Peyerimhoff // *lateripunctatus* Rosenhauer det. Heikertinger (MHNH-Heik); **1 ex.** St. Charles / Algérie / A. Thery (MHNH-Heik); **1 ex.** (1♂!) Les Glacières / Bli-da Jordan (MHNH-Heik); **3 exx.** (1♂!) Mustapha / Algeria (MSNG-Man); **5 exx.** Sellaoua Announa / 29.III.1985 Algeria / M. Bergeal leg. (MSNM-Ber); **1 ex.** (1♀!) DI. Mahouna / Guelma (Algerie) / M. Bergeal 4.IV.1985 (MSNM-Ber); **1 ex.** (1♀!) Oued Mafraq / Annaba (Algerie) / M. Bergeal leg. 6.IV.1985 (MSNM-Ber);

**1 ex.** Tunis 1904 / Ujbeiyi // *Longitarsus lateripunctatus* det. Warchalowski 1962 (HNHM); **1 ex.** (1♀!) Tunis / Hamm. Lif. // Nahtsaum erweitert Schulterfleck // *Longitarsus lateripunctatus* det. F. Heikertinger (MHNH-Heik); **1 ex.** (1♂!) Tunisi dint. / 1881 G. e L. Doria // *Longitarsus lateripunctatus teste* Dodero (MSNG) (Fig. 24);

**1 ex.** (1♂!) Marocco prov. Taza / Cascade di Ras-el-Oued / 15.V.1979 m. 900 ca / leg. M. Biondi (MBCA).

Dissected specimens: 40 ♂♂; 38 ♀♀.

***Longitarsus monticola* Kutschera 1863** (Fig. 7) and ***Longitarsus curtus* (Allard 1860)** (Fig. 8)

*L. monticola* was originally described on a few specimens from Styria. Kutschera (1863: 294) reported apterism and colour differences against *L. curtus*. Later on, most authors considered *monticola* as a variety or a subspecies of *curtus*. First Doguet (1984: 302-303; 1994: 289-293) in careful studies of both species reported significant differences in the habitus and shape of genitalia. Döberl (1994: 110; 1995: 40-41) considered these two taxa as valid species reporting diagnostic characters based on a substantial sample.

#### Comparative distribution

According to Döberl (1995: 40-41), *L. curtus* is widespread in Europe, while *L. monticola* is mainly distributed in the Alpine Region. According to Doguet (1994: 289-293), *L. curtus* seemingly shows a more western European distribution than *L. monticola*. Later, a map of the

Palaeartic distribution of both species was reported by Warchalowski (1996: 118 Fig. 571).

Although several papers provided more information about their Italian distribution (Leonardi, 1973: 35; Biondi, 1988: 135; 2005; D'Alessandro & Biondi, 2005: 91, 96, 104, 108; D'Alessandro & Biondi, 2007: 465, 471; Baviera & Biondi, 2015: 21; Angelini, 2020: 196), in the author's opinion, the knowledge of their ranges in Italy is still incomplete, also due to the possible confusion between these similar species.

As a result of the study of a large sample, it has been possible to provide both new diagnostic characters and new distributional data and to attempt the production of Italian distribution maps for both species (Fig. 44). As can be seen, *L. curtus* is widespread in Northern Italy and *L. monticola* is occurring almost everywhere in the Peninsula, showing a preference for mountain areas.

All the specimens in MBCA, from Central and Southern Italy, are *L. monticola*. The other specimens (reported as *L. curtus*) indicated in the Checkmap (Biondi, 2005) from Apennines and Southern Italy (and not studied in the present work) in the author's opinion, are also attributable to *L. monticola*.

### Comparative description

A morphological description of both species can be found in Doguet, 1984: 302-303; 1994: 289-293; Döberl, 1995a: 40-41 and Warchalowski, 1995b: 107-110; 1996: 87-89, 157-158. It is worth noting that these species include both forms with complete wings and forms with reduced wings. For discriminant characters see Table 2.

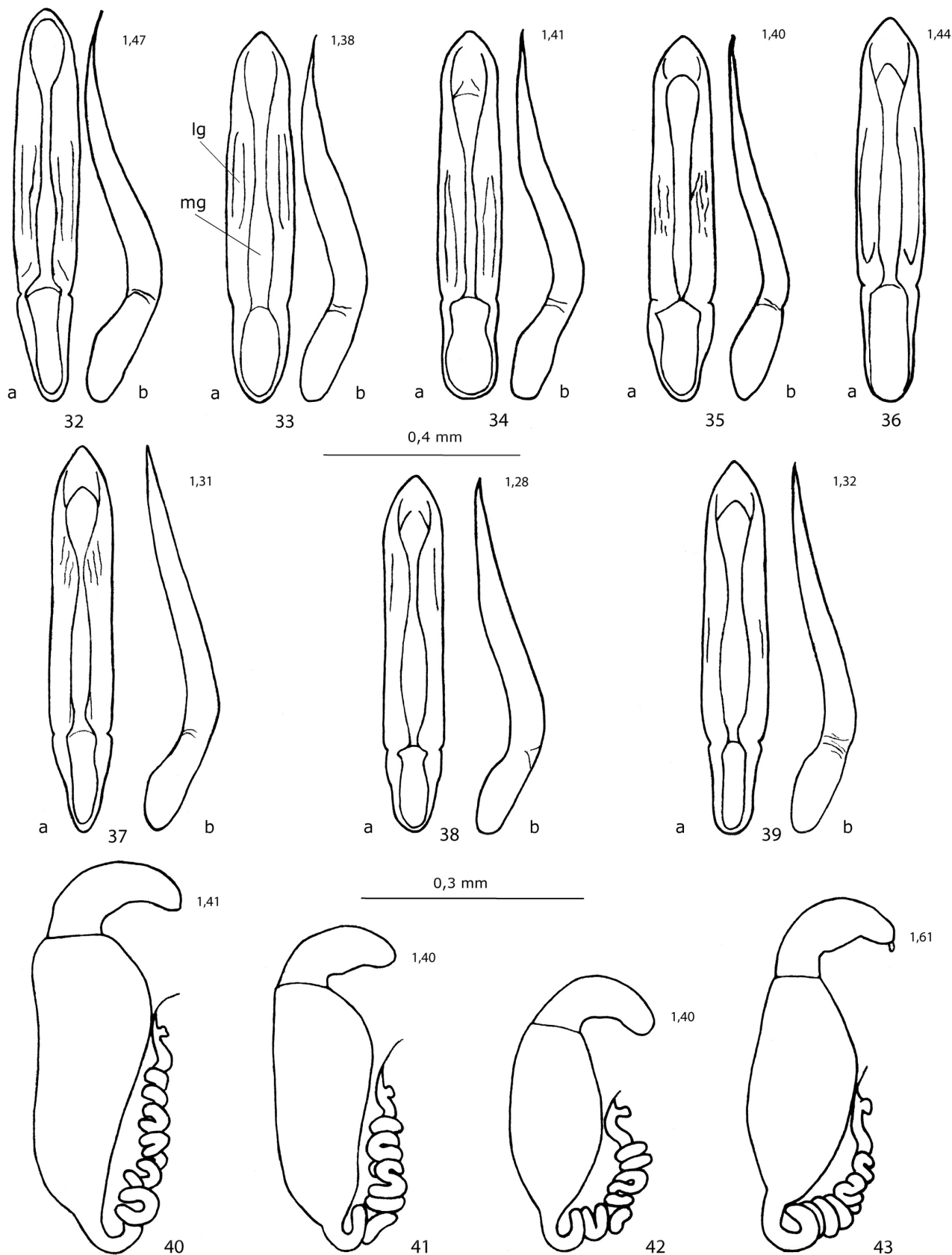
### *Longitarsus monticola* Kutschera 1863

*Longitarsus monticola* Kutschera, 1863: 294; VIII, 1864: 44-46; pag. Sp.: 22, 259. Locality indicated: Austria: Styria [= Steiermark] (Maria Zell) [type lost].

Allard, 1866: 136, 204-205 [*Thyamis*]; Redtenbacher, 1874: 506 [*Longitarsus*]; Döberl, 1994: 110, 139 (Figs. 317-319); Doguet, 1994: 272 (Fig. 110d), 292-293, 300 (Fig. 124h) [in the description of the species the author wrote "Remarque: longtemps considérée comme synonyme de *L. curtus*, cette espèce a été récemment réhabilitée (Döberl, *op. cit.*)". In the references Doguet put the paper of Döberl with this indication: "*Longitarsus monticola* Kutschera, 1863 *spec. propria* (sous presse)"]; Lucht, 1994: 319; Döberl, 1995a: 40-41 [definition of the Neotype, ♀, NHMW, typ. loc. Kärnten]; Döberl, 1995b: 57 ("In die Sammlungen gewöhnlich als "*curtus*" aufgenommen"); Warchalowski, 1995a: 180 (Figs. 724-725), 183 (Fig. 749), 229-231 (Fig. 936); Warchalowski, 1995b: 107-110; Rozner, 1996: 255; Warchalowski, 1996: 76 (Figs. 359, 360), 79 (Fig. 384), 157-158; Geiser, 1997: 68; Gruev & Döberl, 1997: 191-192; Fritzlar, 1998: 203, 210; Gruev & Tomov, 1998: 95; Fritzlar, 1999: 68, 75; Döberl *et al.*, 2000: 70; Bezděk & Züber, 2001: 149 ("*L. monticola* resurrected by Döberl"); Geiser, 2001: 465; Kapp, 2001: 63, 507; Vig, 2002: 125; Brelih *et al.*, 2003: 100-101; Fritzlar, 2003: 130; Warchalowski, 2003: 445; Geiser, 2004: 19; Biondi, 2005: data on CD-Rom; D'Alessandro & Biondi, 2005: 91, 96, 104, 108; Fritzlar, 2005: 232, 238-239; Gruev & Döberl, 2005: 95; Čížek, 2006: 26, 27 (Fig. 78); D'Alessandro & Biondi, 2007: 465, 471; Fritzlar, 2009: 195, 207; Baviera & Biondi, 2015: 21; Fritzlar, 2017: 81; Angelini, 2020: 196.

Tab. 2 - Taxonomically discriminant characters of *L. monticola* and *L. curtus*. / Caratteri tassonomici discriminanti in *L. monticola* e *L. curtus*.

Character	<i>L. monticola</i> Kutschera 1863	<i>L. curtus</i> (Allard 1860)
Median lobe of <i>aedeagus</i>	Median lobe of <i>aedeagus</i> (Figs. 32-36) in ventral-dorsal view with straight (slightly sinuous) sides, narrowed apically. Next to median groove (mg, Fig. 33a) a weak and short lateral groove (lg, Fig. 33a), sometimes replaced by longitudinal wrinkles (Fig. 35a). In lateral view distal 2/3s clearly bent, apically shortly sinuate, apical tip usually bent upwards.	Median lobe of <i>aedeagus</i> (Figs. 37-39) in ventral-dorsal view with straight sides, less narrowed apically. Both margins sometimes with weak wrinkles, without grooves. In lateral view almost straight, in a few specimens distal 2/3s slightly bent, but at apex straight or almost so.
<i>Spermatheca</i>	Basal part of <i>spermatheca</i> narrow and gradually widened apically (Figs. 40-41; also: Doguet, 1984: 302-303; Döberl, 1995: 40-41; Warchalowski, 1995a: 107-110). <i>Ductus</i> insertion in basal part located slightly forwards (but a variable character).	Basal part of <i>spermatheca</i> wider in the middle, sometimes sub-cylindric (Figs. 42-43; also: Doguet, 1984: 302-303; Döberl, 1995: 40-41; Warchalowski, 1995a: 107-110). <i>Ductus</i> insertion in basal part often located slightly backwards (but a variable character).
Wings	Hind wings reduced, humeral calli not or weakly developed in most examined specimens (82%).	Hind wings usually well-developed, humeral calli evident in most examined specimens (62%). In the sample, among the winged specimens, females are the majority (67%) while among the reduced wings specimens, males prevail (68%).



Figs. 32-43 – 32-39) *Aedeagus*: median lobe / lobo mediano: a) ventral view / vista ventrale; b) lateral view / vista laterale. 32-36) *L. monticola*. 37-39) *L. curtus*. 40-43) *Spermatheca*. 40-41) *L. monticola*. 42-43) *L. curtus*. Localities / Località: 32) Raibl; 33) Orso-marso, Grisolia Pantanelle; 34) Costacciaro Monte Cucco; 35) Westfalen; 36) Paularo; 37) Cattaro; 38) Nevea Cregnedul; 39) Beira Altas Manteigas; 40) Campigna; 41) Costacciaro Colle d'Orlando; 42) Nevea Cregnedul; 43) Beira Altas Manteigas. mg) median groove / solco mediano; lg) lateral groove / solco laterale.



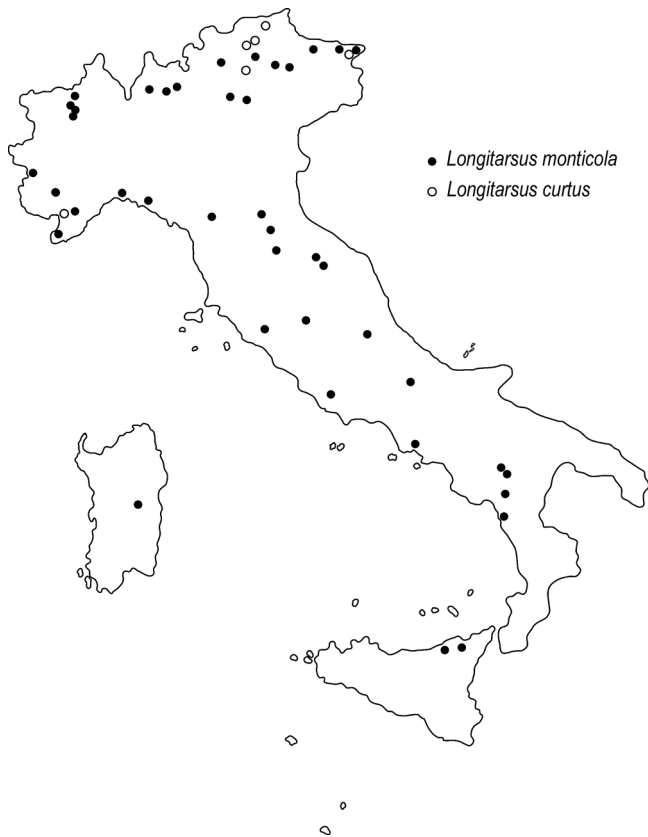


Fig. 44 – Italian distribution of *L. monticola* and *L. curtus*. / Distribuzione italiana di *L. monticola* e *L. curtus*.

= *Longitarsus curtus*, Leonardi, 1973: 35 (Fig. 62); Gruev & Tomov, 1986: 206-207 (Fig. 225); Biondi, 1988: 135; Döberl, 1995b: 53

= *L. curtus* ab. *monticola*, Heikertinger, 1930: 1326 (*forma aptera*); Csiki & Heikertinger, 1940: *pars* 166, 119; Kaszab, 1962: 311.

= *L. curtus* fa. *monticola*, Král, 1945: 32; Mohr, 1962: 71 (Fig. 56), 88-89

= *L. curtus* mut. *monticola*, Kolbe, 1920: 402-403, 404 [referring to *monticola* Kolbe wrote “es ist anscheinend eine werdende neue Art”].

= *L. curtus* var. *monticola*, Weise, 1893: 977; Heikertinger, 1912: 193; Kuhnt, 1913: 885; Porta, 1934: 359; Portevin, 1934: 303; Müller, 1949-1953: 524; Mohr, 1966: 229 (Fig. 51: 18), 230; Warchalowski, 1978: 64 (Figs. 346-347), 66 (Fig. 363), 68; Doguet, 1984: 302-303.

### Distribution

*L. monticola* shows a preference for mountain areas.

Gruev & Döberl (1997: 191; 2005: 95) report the following regions:

**Europe:** mountain of Albania (Kelmend, Nikci/Shkenbejt e Jarnes), Austria, Bulgaria, Carpathian Basin, Czechia, France, Germany (South, Middle, West), Hungary, Italy, Poland, Rumania (Transylvania), Slovakia, Slovenia, Switzerland.

**Asia:** Caucasus, Russia, Tajikistan.

According to several papers on the Italian distribution of these two species, *L. monticola* is recorded from sev-

eral localities: Raibl (Leonardi, 1973: 35 Fig. 32); Monte Raut (Carnia), Gressoney (Aosta), Nava (Maritime Alps), Monte Penna (Ligurian Apennines), Gargonza (Arezzo), Campigna (Romagna), Maddalena Mountains (Potenza), Monti Peloritani, Boschi di Malabotta (Messina), Monti Peloritani and Nebrodi (Biondi, 1988: 135; Baviera & Biondi, 2015: 21); Rocca di Cambio (L’Aquila) (Biondi, 2005: data on CD-Rom); Altopiano delle Rocche (Sirente-Velino mountain area) (D’Alessandro & Biondi, 2005: 91, 96, 104, 108; D’Alessandro & Biondi, 2007: 465, 471); Central Lucan Apennines (Angelini, 2020: 196).

### Materials studied

**Germany:** 2 exx. (1♂! 1♀!) Bayerischer Wald / Regental b. Teisnach / 15.VIII.1987 / leg. Döberl // *Longitarsus monticola* det. Döberl (MBCA); 1 ex. (1♂!) Bayerischer Wald / Rusel +700 m / 3.IX.1980 leg. Döberl // *Longitarsus monticola* det. M. Döberl, 1981 (MSNM-Ber); 2 exx. (1♂! 1♀!) Bayerischer Wald N. Teisnach / 30.VIII.1984 leg. Döberl (MSNM-Ber); 1 ex. (1♂!) D. Bayer. Wald / 27.VII.1988 M. Bergeal (MSNM-Ber); 1 ex. (1♀!) Au Col des Brunner / 3.VIII.1991 / M. Bergeal // *Longitarsus monticola* / det. M. Bergeal 1994 (MSNM-Ber); 2 exx. (1♂!) Umg. Weilheim Obb. / Hardt-Wald / leg. Steinhausen // *Longitarsus monticola* det. Steinhausen (ZSM);

**Italy:** Piemonte: 1 ex. (1♂!) Piemonte (CN) Limone / Piemonte / Agosto 1892 / Dodero (MHNH-Heik); 2 exx. (2♂♂!) Piemonte / Coll. Fej (MSNG); 2 exx. (1♂! 1♀!) Piemonte (BI) / Alpe Finestre / 24.VI.1922 / leg. F. Capra (MSNG); 2 exx. (1♂!) Piemonte (BI) / Piedicavallo / Val Cervo / Biella Piemonte / 10.IX.1956 F. Capra // *Longitarsus curtus* det. M. Biondi 1989 (MSNG); 1 ex. (1♀!) Piemonte // *Longitarsus curtus* det. Springer (MSNG-Bin); 9 exx. (1♂! 7♀♀!) Piemonte (BI) / Santuario di Oropa / Biellese (Piemonte) / VII.1927 / A. Dodero (MSNG-Bin); 2 exx. (2♀♀!) Piemonte (CN) / Crissolo Baucl (MSNG-Dod); 4 exx. (2♂♂! 2♀♀!) Piemonte (CN) / Limone / Piemonte / Agosto 1892 / A. Dodero (MSNG-Dod); 1 ex. (1♀!) Piemonte (BI) / Santuario di Oropa / Biellese (Piemonte) / VIII.1926 / A. Dodero (MSNG-Dod); 1 ex. (1♀!) Piemonte (BI) / Santuario di Oropa / Biellese (Piemonte) / VI.1927 / A. Dodero (MSNG-Dod); 4 exx. (2♀♀!) Piemonte (BI) / Santuario di Oropa / Biellese (Piemonte) / VII.1927 / A. Dodero (MSNG-Dod); 1 ex. (1♀!) Piemonte (VC) / Val Sesia // *Longitarsus curtus* All. det. Springer (MSNG-Man);

Lombardia: 16 exx. (1♂! 1♀!) Pasturo / Monte Grigna Settentrionale versante E / Foppa del Ger 1420-1500 m / 12.IX.2013 / R. Regalin (FLCC) (Fig. 7); 1 ex. (1♀!) Antea VII.1959 S. Pellegrino / Leonardi (MSNM); 1 ex. (1♀!) Lombardia / Bratto / 7.VII.1973 / leg. C. Leonardi (MSNM);

Trentino Alto Adige: 1 ex. (1♂!) Trentino (TN) Moena Val di Fassa / Trentino m. 1300 / 5.VIII.1941 C. Conci // *Longitarsus curtus* det. C. Leonardi (MSNG); 1 ex. (1♂!) Trentino (TN) Südtirol Nonstal / St. Felix 1250 m / 2.IX.1979 Döberl // *Longitarsus monticola* det. M. Döberl 1982 (MSNM-Ber);

Veneto: 1 ex. (1♀!) Lessini Alpen / Ital. Grigital // *Longitarsus curtus* All. det. Warchalowski (HNHM); 3 exx. (1♂!) Veneto (BL) Cansiglio / Pian Osteria 2 km E / 46°03.7’N 12°25.5’E / 1052 m 4.VII.2017 Liberti (LFCC); 2 exx. (1♂!) Cadore / Voltago / m. 800 / 24.VIII.1958 /

leg. Italo Mercati (MBCA); **1 ex.** (1♀!) Belluno / Voltago Agordine / m. 850 25.VIII.1959 / leg. Italo Mercati (MBCA); **1 ex.** (1♀!) Dolomiti / Voltago / Mercati // m. 800 / 2.IX.1959 (MBCA); **1 ex.** (1♂!) Belluno / Voltago Agordino / m. 850 4.VIII.1961 / leg. Italo Mercati (MBCA); **6 exx.** (1♂! 3♀♀!) Dolomiti / Agordino / Colonnelli leg. // Voltago / m. 900 / 16.VIII.1970 (MSNM); **1 ex.** (1♀!) VR Lessini / 16.V.1976 leg. Sette // Fittanze / mt. 1300 // *curtus* / det. C. Leonardi (MSNM); **1 ex.** (1♀!) Prealpi vicentine // Laghi / Vanzi 18.V.1980 (MSNM); **26 exx.** (2♂♂! 1♀!) Veneto (BL) / I-Dolomiti Agordino Voltago / VIII.1959 leg. Mercati (MSNM-Ber); **1 ex.** (1♀!) VR / Prun // 15.IX.1969 / leg. Zanetti // *Long. curtus* det. Mohr (MSNVR);

Friuli Venezia Giulia: **2 exx.** (1♂! 1♀!) Carnia / Forni di Sopra / A. Gagliardi (MSNM); **2 exx.** (2♂♂!) Friuli Venezia Giulia (UD) / Raibl / VIII.1928 / Scharfe / Springer (MSNM) (Fig. 32); **5 exx.** (4♂♂!) Friuli Venezia Giulia (UD) / Paularo / VIII.1929 / A. Gagliardi (MSNM) (Fig. 36); **2 exx.** (1♂! 1♀!) Carnia VIII.1929 / Paularo (MSNM); **1 ex.** Friuli Venezia Giulia (UD) / Jul. Alp. Raibl / Scharré / 1948 / Springer (MSNM);

Liguria: **1 ex.** (1♀!) Alpi Liguri Collardente / Foresta Gerbonte m. 1800 / 25.VIII.1991 leg. M. Biondi (MBCA); **1 ex.** (1♂!) Liguria (GE) / Monte Penna / Agosto 1897 / Dodero (MHNB-Heik); **9 exx.** (1♂! 7♀♀!) Liguria (GE) / Monte Penna / Agosto 1897 / A. Dodero (MSNG-Bin); **7 exx.** (4♀♀!) Liguria (GE) / Monte Penna / Agosto 1897 / A. Dodero (MSNG-Dod); **4 exx.** (1♂! 2♀♀!) Liguria (GE) / S. Lorenzo di Cas. / Genova / F. Solari (MSNM); **4 exx.** (4♂♂!) Liguria / Monte Penna / 3.VIII.1972 / leg. C. Leonardi (MSNM); **1 ex.** (1♀!) Alpi Liguri (Garessio) / pendici Nord M. Galero / 1300 m 29-30.V.1976 / A. e L. Briganti (SZCM);

Emilia Romagna: **1 ex.** (1♀!) Romagna / Foresta di Campigna / 18-23.VIII.2018 / leg. F. Montemurro (FMCT); **1 ex.** (1♀!) Campigna (FC) / 23.VI.1972 / leg. Leonardi (MSNM) (Fig. 40); **1 ex.** (1♀!) Romagna / Foresta di Campigna / 20-23.VIII.2017 / leg. F. Montemurro (MSNM);

Toscana: **3 exx.** (1♂! 1♀!) Toscana (AR) / F. Camaldoli / 26.VIII.2005 / Zoia (LFCC); **3 exx.** (2♀♀!) Toscana (PT) / Boscolungo Pistoiese / VII-VIII.1891 / A. Dodero (MSNG-Dod);

Umbria: **1 ex.** (1♀!) Umbria (PG) / Lippiano / Arezzo / Andreini // *Longitarsus / curtus* / det. M. Biondi, 1989 (MSNG) (on April, 15th 1927 the municipality of Santa Maria, with Lippiano, became Province of Perugia, RDL 31/3/1927 n. 468, GU n. 86 del 13/4/1927); **1 ex.** (1♂!) Umbria (PG) / Lippiano Arezzo / VII-VIII.1921 / A. Andreini // *Longitarsus curtus* det. M. Biondi 1989 (MSNG); **1 ex.** (1♂!) Umbria (PG) Scheggia e Pascelupo / loc. Valdorobia / rive f. Sentiero 520 m / 3.V.2015 M. Bocci (MSNM); **1 ex.** (1♂!) Umbria (PG) Costacciaro / str. per Monte Cucco sentiero / n. 24 650 m 18.X.2015 / leg. M. Bocci (MSNM) (Fig. 34); **1 ex.** (1♀!) Umbria (PG) Scheggia e Pascelupo / Perticano Fossa / Rave 400 m 19.VI.2016 / leg. F. Angelini & M. Bocci (MSNM); **1 ex.** (1♀!) Umbria (PG) Costacciaro / Colle d'Orlando / Fonte Acqua Passera 1140 m / 15.V.2016 leg. M. Bocci (MSNM) (Fig. 41); **1 ex.** (1♂!) Umbria (TR) / Italien /

Umbrien b. Orvieto c.a. 500 m NN / VIII.1997 leg. M. Langer (MSNM-Ber);

Lazio: **1 ex.** (1♀!) Colli Albani / M. Artemisio / 4.IV.1980 / P. Audisio (MBCA); **1 ex.** (1♀!) Lazio (VT) / Selva di Lamone / F.so Olpeta 9.VIV.1983 / leg. P. Audisio (MBCA); **1 ex.** (1♀!) Capricchia (RI) / m. 1100-1500 // M.ti della Laga / IX.1968 (MSNVR);

Abruzzo: **1 ex.** (1♂!) Abruzzo Zittola (AQ) / Castel di Sangro / 17.XI.1990 / Fiordigigli-Osella (MBCA); **3 exx.** (1♂! 1♀!) dint. N Pratola Peligna / m 340 (L'Aquila) / 8.IX.1990 / S. Zoia leg. (SZCM);

Sardegna: **1 ex.** (1♂!) Sardinia / Reitter // *Longitarsus curtus* coll. Reitter (HNHM) (generally indicated for Sardinia on the map Fig. 44);

Campania: **1 ex.** (1♀!) Campania (NA) Ottaviano / sentiero per i Cognoli 600 m. ca. / pitfall traps castagneta mista / UTM: 33TVF54102040 / leg. G. Nardi (MBCA);

Basilicata: **1 ex.** Abriola (PZ) / leg. Angelini (MSNM); **1 ex.** (1♂!) Basilicata / Pignola / Lago di Pantano (PZ) 770 m / 19.X.1996 / trapp. aceto / leg. Angelini (MSNM); **1 ex.** (1♀!) Basilicata 800 m / Castelsaraceno (PZ) / Torrente Cagliandrino / 28.X.2001 / leg. Angelini // *Longitarsus monticola* Kutschera det. C. Leonardi (MSNM); **1 ex.** (1♀!) Basilicata / La Maddalena (PZ) / Abriola 1400 m / 9.V.2003 Angelini // *Longitarsus monticola* Kutschera det. C. Leonardi (MSNM);

Calabria: **1 ex.** (1♂!) Calabria Orsomarso / Grisolia Pantanelle (CS) / 11.IX.1993 700 m / leg. F. Montemurro // *Longitarsus monticola* Kutschera det. C. Leonardi (MSNM) (Fig. 33);

Sicilia: **1 ex.** (1♂!) Sicilia (ME) M.ti Peloritani / Foresta di Malabotta m. 1185 / cerreta 24.V.1981 / leg. M. Biondi (MBCA); **1 ex.** (1♀!) Sicilia (ME) M.ti Peloritani / Foresta di Malabotta m. 1185 / cerreta 19.VII.1981 / leg. M. Biondi (MBCA); **1 ex.** (1♂!) Sicilia (ME) M.ti Peloritani / Foresta di Malabotta m. 1185 / cerreta 10.VIII.1981 / leg. M. Biondi (MBCA); **8 exx.** (4♂♂! 4♀♀!) Sicilia (ME) M.ti Peloritani / Foresta di Malabotta m. 1185 / cerreta 17.IX.1981 / leg. M. Biondi (MBCA); **1 ex.** (1♀!) Sicilia (ME) M.ti Peloritani / Foresta di Malabotta m. 1215 / faggeta X.1981 / leg. M. Biondi (MBCA); **1 ex.** (1♀!) Sicilia (ME) M.ti Peloritani / Foresta di Malabotta m. 1185 / cerreta 26.X.1981 / leg. M. Biondi (MBCA); **1 ex.** (1♂!) Sicilia (ME) M.ti Nebrodi / P.lla Maulazzo m. 1460 / faggeta 21.XI.1981 / faggeta X.1981 / leg. M. Biondi (MBCA); **1 ex.** (1♂!) Sicilia (ME) M.ti Peloritani / Foresta di Malabotta m. 1185 / cerreta 2.III.1982 / leg. M. Biondi (MBCA); **1 ex.** (1♂!) Sicilia (ME) M.ti Peloritani / Foresta di Malabotta m. 1185 / cerreta 30.III.1982 / leg. M. Biondi (MBCA);

Lithuania: **1 ex.** (1♂!) Babiagura / Natterer // 30.VII.1911 (MHNB-Heik);

Poland: **2 exx.** (2♀♀!) Obizowa / P. Zaleserpyti / 18.IX.1936 // Polonia / S. Tenk Taum (MHNB-Heik);

Austria: **1 ex.** (1♂!) Lunz / Schuster // *monticola* Kutschera det. Z. Kaszab (HNHM); **1 ex.** (1♂!) Hesusd. / IX.1924 / Heikertinger *Longitarsus curtus* All. det. Dr. Z. Kaszab 1962 (HNHM); **1 ex.** (1♂!) Turnau / Styr. Bor. // ex Orig. Samig. J. Breit Wien // *Longitarsus curtus* det. C. Leonardi (MHNB); **1 ex.** (1♂!) Neudorf Hu. / Ödenbg. Com. // ex Orig. Samig. J. Breit Wien // *Longitarsus curtus*

det. C. Leonardi (MHNB); **1 ex.** (1♀!) Helmgeblet / Tyr IX.1928 // *curtus* det. F. Heikertinger (MHNB); **1 ex.** (1♂!) Villgratnertal / Tyr VIII.1929 // *curtus* det. F. Heikertinger (MHNB); **1 ex.** (1♀!) Weitlanbrunn / Tyr 25.VIII.1931 // *curtus* det. F. Heikertinger (MHNB); **1 ex.** (1♂!) Westfalen (MHNB-Heik) (Fig. 35); **1 ex.** (1♀!) Damberg / Austr. Sup. Mont. / Petz (MHNB-Heik); **1 ex.** (1♂!) Lunz / Schuster // *L. viduus* / don. Reitter // v. Reitter als *L. viduus* erhalten! (MHNB-Heik); **2 exx.** (1♂! 1♀!) Shoberstein / Austr. Sup. / Mont. Petz (MHNB-Heik); **1 ex.** (1♀!) Carinthia / v. Weise (MHNB-Heik); **2 exx.** (2♀♀!) Maria Zell 700-1000 / 21.VIII.1908 / Heikertinger (MHNB-Heik); **1 ex.** (1♀!) Neuhaus b. Gam / 22.VIII.1908 Heikertinger // *curtus* det. F. Heikertinger (MHNB-Heik); **1 ex.** (1♀!) Hof Mor. / Scheerpeltz // *Longitarsus curtus* det. F. Heikertinger // coll. A. Simonis dupleta coll. Winkler (MSNG); **1 ex.** (1♀!) Wien Umg / Heikertinger (MSNM); **1 ex.** (1♀!) Lautsch. / Alp Styr / Messa (MSNM); **1 ex.** (1♀!) Territorio del Dobratsch / A. Sazmaier (MSNM); **1 ex.** (1♀!) Austria Kärnten / Karawanken / doch-Obir 9.VIII.1983 / leg. M. Döberl // *Longitarsus curtus* det. M. Döberl, 1984 (MSNM-Ber); **1 ex.** (1♂!) Austria / b. Fiss c.a. 1440 m / 26.VIII.1998 leg. M. Langer (MSNM-Ber); **1 ex.** (1♂!) A. Tirol (LA) / b. Fiss c.a. 1440 m / IX.2000 leg. M. Langer gekeschert (MSNM-Ber);

**Slovenia:** **1 ex.** (1♀!) Waladir / *Longitarsus curtus* det. F. Heikertinger // *L. curtus* coll. Reitter (HNHM);

**Hungary:** **1 ex.** (1♀!) Lazsiscsinai völgy // Marmaros / leg. Pável 1875 *Longitarsus curtus* All. det. Dr. Z. Kaszab 1962 (HNHM); **1 ex.** (1♀!) Tátra / 16.VIII.1890 / Biró L. // *Longitarsus curtus* All. det. Dr. Z. Kaszab 1962 (HNHM); **1 ex.** (1♂!) Hu. Occ. 1951 / Velencei-hegys / Nadap / Meleg-hegy // X.1915 / erdőszél rostálva // legit Dr. Kaszab // *monticola* Kutschera det. Z. Kaszab (HNHM); **2 exx.** (1♂! 1♀!) Dobogó-kő / 10-19.VIII.1917 / Révy D. // coll. Dr. D. Révy // *monticola* Kutsch. det. Z. Kaszab (HNHM); **1 ex.** (1♀!) Hung. N.P. Miskolc / Nagy-mező 850 m / *Lolio-Cynosuretum* / fűhálózás / 23.IX.1982 / leg. Vágó E. // *Longitarsus curtus* All. det. B. Gruev (HNHM); **1 ex.** (1♀!) Hung. Bükki N. P. / Bükkzsére / Szarba-völgy // *Phyllitidi-Aceretum* / fényre / 29.IX.1982 / leg. Vágó E. // *Longitarsus curtus* All. det. B. Gruev (HNHM); **1 ex.** (1♀!) Hung. Bukki N.P. / Kisgyőr 450 m / Gyertyán-völgy / *Quercus petrae-Carpinetum* // fűhálózás / 18.IX.1984 / leg. Merkl O. // *Longitarsus curtus* det. B. Gruev (HNHM); **1 ex.** (1♀!) Stirnhöcker / deutlich // Hungar (MHNB-Heik);

**Romania:** **1 ex.** (1♂!) Sugatag / Uhl // *monticola* Kutschera det. Z. Kaszab (HNHM); **1 ex.** (1♀!) Transsylv. Csik m. / hidegség / Hegyes-havas 10.IX.1918 / leg. Dr. J. Fodor // *Longitarsus curtus* All. det. B. Gruev (HNHM); **1 ex.** (1♀!) Transs. / Deubel // *curtus* v. *monticola apteris* von Weise // *Longitarsus curtus* v. *monticola* Weise *Cotylpus* (MHNB-Heik).

Dissected specimens: 70 ♂♂; 99 ♀♀.

### *Longitarsus curtus* (Allard 1860)

*Teinodactyla curta* Allard, 1860, 8: 137, 143, 832 Loc. typ.: France: Paris.

Kutschera, 1863: 294; 1864: 41-43; Allard, 1866: 135, 242-243 [*Thyamis*]; Bedel, 1892: 306; Portevin, 1934:

303; Redtenbacher, 1874: 507 [*Longitarsus*]; Weise, 1893: 977; Heikertinger, 1912: 193; Kuhnt, 1913: 885; Heikertinger, 1930: 1326; Porta, 1934: 358; Csiki & Heikertinger, 1940: 118; Mequignon, 1948: 80 [var. *ciliifer* as in Löbl & Smetana, 2010: 524]; Müller, 1949-1953: 514 (Fig. 15), 524, 532; Kaszab, 1962: 311 [ab. *Lichtneckerti*, unavailable name (ICZN 1999, Art. 45.6.2)]; Mohr, 1962: 88-89; Mohr, 1966: 230; Warchalowski, 1978: 68; Doguet, 1984: 302-303 [definition of the Lectotype (typ. loc.: Retz) and Paralectotype (typ. loc.: Paris)]; Bourdonné & Doguet, 1986: 21; Gruev, 1990: 325; Döberl, 1994: 110, 137 (Figs. 314-316); Doguet, 1994: 272 (Fig. 110c), 289-292; 300 (Fig. 124g); Döberl, 1995a: 40-41; Döberl, 1995b: 53 (“Alle bisher überprüften ‘*curtus*’-Stücke erwiesen sich als *monticola*. Das Vorkommen in der Schweiz muß neu bestätigt werden”); Warchalowski, 1995a: 180 (Figs. 722-723), 183 (Fig. 748), 229-231 (Fig. 936); Warchalowski, 1995b: 107-110; Rozner, 1996: 255; Vig, 1996: 123; Warchalowski, 1996: 76 (Figs. 357-358), 79 (Fig. 383), 87-89, 118 (Fig. 571); Gruev & Döberl, 1997: 161-162; Vig, 1997: 195; Fritzlär, 1998: 203; Gruev & Tomov, 1998: 90; Fritzlär, 1999: 75; Baselga & Novoa, 2000: 18; Bezděk & Zúber, 2001: 149; Geiser, 2001: 465; Kapp, 2001: 63, 506; Vig, 2002: 119-120; Brelih *et al.*, 2003: 100; Fritzlär, 2003: 129; Warchalowski, 2003: 445; Geiser, 2004: 19; Biondi, 2005: data on CD-Rom; Fritzlär, 2005: 232, 238-239; Gruev & Döberl, 2005: 82; Čížek, 2006: 25, 27 (Fig. 77); Fritzlär, 2009: 193.

= *Thyamis liliputana* Allard, 1866: 138, 180-181; Bedel, 1889-1901: 191, 306; Heikertinger, 1930: 1326 [*Longitarsus*] [synonymized by Heikertinger, 1930: 1326]

= ?*Thyamis moscovita* Allard, 1866: 135, 247 [synonymized by Heikertinger, 1930: 1326]

= *Thyamis papaveris* Allard, 1866: 133, 226-227; Bedel, 1889-1901: 191, 306 [synonymized by Bedel, 1892: 306]

= *Teinodactyla pratensis* Allard, 1860: 137, 832 (*pratensis auct. nec* Panzer) [synonymized by Allard, 1860: 832: “J’ai donné à tort le nom de *Teinodactyla pratensis* à l’espèce que j’ai décrite à la page 137 n° 84; il faut lui substituer celui de *Teinodactyla curta* Allard”]

= *Thyamis subquadrata* Allard, 1866: 138, 246 [synonymized by Döberl in Löbl & Smetana, 2010: 524]

= *Thyamis vidua* Allard, 1866: 139, 172-173; Leesberg 1882: 160, 171 [*Longitarsus*]; Bedel, 1892: 306 [synonymized by Bedel, 1892: 306]

### Distribution

*L. curtus* is widespread in Europe.

Gruev & Döberl (1997: 161-162; 2005: 82) report the following regions:

**Europe:** Albania, Austria, Belgium, Bosnia-Herzegovina, Bulgaria, Byelorussia, Carpathian Basin, Croatia (included Adriatic islands), Czechia, Denmark, United Kingdom, Isle of Man, Estonia, Finland, France (also Corsica and East), Germany, Greece (Ionian Islands), Hungary, Ireland, Italy (including Sicily), Latvia, Lithuania, Luxembourg, Montenegro, Netherlands, Poland, Rumania, Russia (incl. Karelia), Serbia, Slovakia, Slovenia, Spain, Sweden, ?Switzerland (Döberl, 1995b: 53), Ukraine.

**Asia:** Afghanistan, Caucasus, Daghestan, Russia (Transbaikalia: Buriatia), Tajikistan, Turkestan.

### Materials studied

**Portugal:** 3 exx. (2♀♀! 1♂!) Portugal / Beira Altas Manteigas / Gletschertal / Zêzere 1300 m / N40°19'58" W7°34'14" / Betula-Hangwald / 26.IV.2014 / leg. C. Germann // *Longitarsus curtus* Allard det. L. Farina, 2018 (CGCB) (Figs. 39, 43); 1 ex. (1♀!) Portugal / Beira Alta Manteigas / Gletschertal / Zêzere 1300 m / N40°19'58" W7°34'14" / Betula-Hangwald / 26.IV.2014 leg. C. Germann (LFCC);

**Spain:** 3 exx. (2♂♂!) Spagna Pirenei / sopra Salardù 1700-1900 m / 10.VIII.1986 / leg. M. Biondi (MBCA); 2 exx. (2♂♂!) Spagna (Avila) 1400 m / Navacepeda de Tormes / 4.V.1989 / M. Biondi P. Audisio (MBCA); 1 ex. (1♀!) Spagna (Salamanca) / Candelario 1200 m / 10.V.1989 / M. Biondi P. Audisio (MBCA); 1 ex. (1♂!) España-Castilla / Navacepeda dint. / 26.VI.1991 / C. Giusto leg. (SZCM);

**France:** 1 ex. (1♀!) Gallia / coll. Lichtneckert // *Longitarsus curtus* All. det. B. Gruev (HNHM); 1 ex. (1♀!) Gallia / Pyr. Or. / Le Vernet / 6.VIII.1904 / A. Dodero (MSNG-Dod); 1 ex. (1♀!) Vichy (Gallia) / 9.VII.1934 / Tasso / Schatzm. (MSNM); 1 ex. (1♂!) Francia06 / 1353 m 9.VII.2010 / Le Bourguet 3 km S (pont de la Serra) / 44°11.875N 006°57.167E / Leonardi (MSNM); 1 ex. (1♂!) Riom // *Longitarsus curtus* det. M. Bergeal 1994 (MSNM-Ber); 12 exx. (6♀♀!) F-03 / Chemilly 26.V.1987 / M. Bergeal // *Longitarsus curtus* det. M. Bergeal 1994 (MSNM-Ber); 1 ex. (1♂!) Meyrueis / 19.VIII.1987 / M. Bergeal (MSNM-Ber); 4 exx. (2♀♀! 2♂♂!) F-48 / Meyrueis / 20.VIII.1988 / M. Bergeal // *Longitarsus curtus* det. M. Bergeal, 1994 (MSNM-Ber);

**Sweden:** 1 ex. (1♂!) S. Sk. Hovdala / 26.XI.1983 / G. Gillerfors (MSNM) (specimen with an anomalous dark brown coloring on *elytrae*); 2 exx. (2♂♂!) Gotland Sundre / 25.VIII.1961 / E. Wirén // *Longitarsus curtus* det. M. Bergeal, 1996 (MSNM-Ber);

**Finland:** 1 ex. (1♀!) Fennia / Kb. Hammaslaakari / P. Kontkanen // 22.VIII.1928 // *curtus* det. F. Heikertinger (MHNH-Heik);

**Germany:** 1 ex. (1♀!) Bayern / Stadt / *curtus* / Fld. Stark / Weitlänf. Pkt. (MHNH-Heik);

**Switzerland:** 2 exx. (1♂! 1♀!) Zermatt / Wallis (MHNH-Heik);

**Italy:** Trentino Alto Adige: 1 ex. (1♀!) Tirol / Seis. // *curtus* det. Heikertinger // coll. A. Simonis dupleta coll. Winkler (MSNG); 2 exx. (2♀♀!) Trentino (TN) Levico / Ag.-Ott. 1884 / C. Doria (MSNG); 1 ex. Alto Adige (BZ) / Pusteria Brunico / 26.VII.1934 / G. Binaghi (MSNG); 1 ex. (1♀!) Alto Adige (BZ) Renon mt. 1100 / 14.IX.1968 / Mercati (MSNM);

Friuli Venezia Giulia: 1 ex. (1♂!) Jul. Alp. / Nevea Cregnedul / 1800 m 18.IX.1949 / Springer (MSNM) (Fig. 38); 1 ex. (1♂!) Jul. Alp. / Nevea Cregnedul / 7.X.1949 / 1700 m Springer (MSNM); 1 ex. (1♂!) Jul. Alp. / Nevea Cregnedul Springer // 1900 m 7.X.1949 (MSNM); 1 ex. (1♂!) Jul. Alp. / Nevea Cregnedul / VII.1950 / Springer (MSNM); 1 ex. (1♀!) Jul. Alp. / Nevea Cregnedul / VI-II.1950 Springer (MSNM); 5 exx. (2♂♂! 3♀♀!) Friuli

Venezia Giulia (UD) Jul. Alp. / Nevea / Cregnedul / 10.IX.1950 / Springer (MSNM) (Fig. 42); 1 ex. (1♀!) Jul. Alp. / Nevea Cregnedul / 17.IX.1950 / Springer (MSNM);

Liguria: 1 ex. (1♀!) Alpi Liguri / Viozene 1745 m / IX.1942 // ex. collez. A. Porta (MSNM);

**Poland:** 1 ex. (1♂!) Krakau / Natterer // 6.III.1907 (MHNH-Heik); 1 ex. (1♀!) Krakau / Natterer // 23.VII.1907 (MHNH-Heik); 1 ex. (1♀!) Polonia / Lukawica / Prov. Lis Ro. / 6.VIII.1926 (MSNM);

**Czechia:** 1 ex. (1♀!) Erzgebirge Bohemia // ex. coll. Dr. I. Peregi (HNHM); 1 ex. (1♂!) Friedberg / Bohem. Wald / Skalitzky (MHNH-Heik); 1 ex. (1♀!) Moravia / Seitendorf / Zanchtel / 21.VIII.1915 (MHNH-Heik); 1 ex. (1♀!) Soběšice / rexocanb / Czechoslov. (ZSM); 1 ex. Slov. 4.IX.1948 / L'adová u Dobš / leg. Josef Král // Czechoslov. // *Longitarsus curtus* det. B. Gruev (ZSM);

**Austria:** 1 ex. (1♀!) St. Radegund / Dr. Beszédes // *Longitarsus curtus* det. B. Gruev // coll. Dr. J. Fodor (HNHM); 2 exx. (1♀!) Boehm-Wald // ex Orig. Samig. J. Breit Wien // *Longitarsus curtus* det. C. Leonardi (MHNH-Heik); 1 ex. (1♀!) Puntigam-Au / Styr 19.IX.1932 // *curtus* det. P. Heymes (MHNH); 1 ex. (1♀!) Bohemia Barzdorf / coll. Dr. Tölg (MHNH-Heik); 1 ex. (1♀!) Bohemia / Eleonorenh / Natterer (MHNH-Heik); 2 exx. (1♀!) Bohemia / Barzdorf / August / Coll. Dr. Tölg // *curtus* / Halschild / dunkel (MHNH-Heik); 1 ex. (1♀!) Bohemia / Barzdorf / Coll. Dr. Tölg // *curtus* / Halschild / dunkel (MHNH-Heik); 1 ex. Wien / Umg A. Winkler (MHNH-Heik); 1 ex. (1♂!) Carinthia / Weise (MHNH-Heik); 1 ex. (1♂!) Stiria bor. / Dr. Krauss // *curtus* Stirnhöcka (MHNH-Heik); 1 ex. Otto 1893 / Ferlach (MHNH-Heik); 1 ex. Bisamberg A. i. / 14.IX.1907 / Heikertinger (MHNH-Heik) (Fig. 8); 1 ex. A. Baden / Natterer // 15.IX.1907 (MHNH-Heik); 2 exx. (2♂♂!) Taffatal bei Horn A.i. 1908 / Heikertinger (MHNH-Heik); 3 exx. (2♂♂!) Taffatal b. Horn A.i. / 1.IX.1908 / Heikertinger // *Longitarsus curtus* det. Heikertinger (MHNH-Heik); 1 ex. (1♂!) Föhrenwald / b. Eggenburg / 6.IX.1908 / Heikertinger (MHNH-Heik); 1 ex. (1♀!) Wien erstein / 20.IX.1908 / Heikertinger // *curtus* det. F. Heikertinger (MHNH-Heik); 1 ex. (1♀!) Frankenfels / VII.1913 // *Longitarsus curtus* det. Heikertinger // coll. A. Simonis dupleta coll. Winkler (MSNG); 2 exx. (1♂!) Territorio del Dobratsch / A. Sazmaier (MSNM); 1 ex. (1♂!) St. Johann / Herb. / Bezirk. Hartberg / Tierpark 400 / 20.VI.1995 / leg. E. Holzer (MSNM-Ber); 1 ex. (1♂!) STMK. Arzberg / Bez. Weiz Grösser / Raabklamm 500 / 28.IX.1997 / leg. E. Holzer (MSNM-Ber);

**Slovenia:** 1 ex. Paskau / Reitter // coll. Reitter // *Longitarsus curtus* All. det. A. Warchalowski, 1960 (HNHM); 1 ex. (1♂!) Laibach / 17.IX.1931 / Dr. Staudacher (MSNM); 1 ex. (1♂!) Julisch. Alp. / Raibl VIII.1948 / leg. Springer // *Longitarsus curtus* det. C. Leonardi (ZSM);

**Hungary:** 1 ex. (1♂!) Siófok / Lichtneckert // *monticola* Kutschera det. Z. Kaszab (HNHM); 1 ex. (1♂!) Hungaria / Marostordam / Ehik & Loksa // Gödemestersháza 750 m / 1-15.VIII.1943 // *monticola* Kutschera det. Z. Kaszab (HNHM); 1 ex. (1♂!) Vértes h. Hu. / Fáni völgy / rostálva 11.IV.1961 / Endrődy / Hungary (ZSM); 1 ex. (1♂!) Hu. Vértes h. / Fáni völgy // 2-4.VIII.1961 / Hámoriné (ZSM); 1 ex. Hung. Bukki N.P. / Szilvás-

váradi / Rakmava 600 m / *Sambucetum ebuli* / egyelés / 12.VII.1983 / leg. Ádám (ZSM); **1 ex.** Hung. Bükki N.P. / Felsótárkány Tav. -kó 900 m // *Tilio-Fraxinetum* // tala-jcsapda / 4.X.1983 / leg. Ádám (ZSM); **1 ex.** (1♂!) Hung. Bükki N.P. / Bükk szemkeveszt / Pénzpaták-tető 600 m // ablakcsapda / 20.IX.1984 leg. Merkl O. // *Quercus petraeae-Carpinetum* (ZSM);

**Croatia: 1 ex.** (1♀!) Pakrac / Apfelbeck / *monticola* Kutschera det. Z. Kaszab (HNHM);

**Montenegro: 2 exx.** Krivosije / Paganetti // *Longitarsus luridus* Scop. det. A. Warchalowski, 1960 (HNHM); **1 ex.** (1♂!) Cattaro / Dalmat. // Cattaro / VI-VII.1906 (MHNH-Heik) (Fig. 37);

**Albania: 1 ex.** (1♀!) Albania / Ipek Akad Balk. Exp. / Csiki 1917 (HNHM); **1 ex.** (1♀!) Albania / Ipek / VI.1927 / Akad Balk. Exp. (HNHM);

**Greece: 1 ex.** (1♀!) Grecia nom. Trikala / M.ti Voutsikaki dint. / Moskhofiton tra M.te Khatzi e M. te Avgo m. 1000-1400 / 23.V.1982 M. Biondi (MBCA);

**Russia: 2 exx.** (1♂! 1♀!) Russia Belgorod / 15.VII.1957 / leg. L.M. Medvedev (MSNM-Ber); **1 ex.** (1♂!) Ud.S.S.R. / Streleckaja / step. 1.IX.1970 / leg. B. Gruev // *Longitarsus curtus* det. B. Gruev, 1972 (ZSM);

**Asia: 19 exx.** (1♂! 3♀♀!) Armenia / Gegamskij / Mts Hosrov res. / 1-16.VI.1987 / V. Karasjov (MSNM).

Dissected specimens: 44 ♂♂; 50 ♀♀.

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