



RESEARCH ARTICLE

A review of the Palaearctic species of *Larinus* Dejean (Coleoptera: Curculionidae) in C. J. Schoenherr collection: nomenclature and lectotype designations

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Abstract: The syntypes of 41 species of *Larinus* Dejean described by L. Gyllenhal and C. H. Boheman, housed at the C. J. Schoenherr collection in the Swedish Museum of Natural History, Stockholm and the Museum of Evolution, Uppsala University, are examined. Lectotypes are designated, a nomenclatural review performed, many previous synonyms confirmed and three new synonyms proposed: *Larinus planus* (Fabricius, 1792) (= *Larinus rusticanus* Gyllenhal, 1835 **syn. nov.**); *Larinus carlinae* (Olivier, 1807) (= *Larinus sulphurifer* Boheman, 1843 **syn. nov.**); *Larinus minutus* Gyllenhal, 1835 (= *Larinus puncticollis* Capiomont, 1874 **syn. nov.**). Colour images for 15 lectotypes are presented.

Key words: Lixinae, Gyllenhal, Boheman, new synonyms.

Introduction

Carl Johann Schoenherr (1772-1848) was a distinguished Swedish entomologist who advanced weevil (Coleoptera, Curculionoidea) taxonomy greatly by publishing a series of monographs between the years 1832 and 1847, in which Leonhard Gyllenhal, Carl Henrik Boheman, Eberhard Munk af Rosenschöld, Olof Immanuel Fåhraeus and other authors (e.g. Ernst Friedrich Germar) provided the species descriptions (Zimmerman 1993). His collection has been preserved at the Swedish Museum of Natural History (Naturhistoriska Riksmuseet), Stockholm.

The senior author has visited the Swedish Museum of Natural History twice (2006, 2010) including a short visit to the Museum of Evolution of the Uppsala University to study the Lixini collection. As a result, it has been possible to clarify the taxonomic position of species in the genera *Larinus* Dejean, 1821 and *Lixus* Fabricius, 1802. This paper focuses on *Larinus* species taxonomy, the nomenclatural review depending on lectotype designations for species described by Gyllenhal and Boheman from the Palaearctic region. In total, Gyllenhal (1827, 1835, 1837), Boheman (1843, 1845) and Schoenherr (1832) described 61 nominal *Larinus* species from the Palaearctic region. Of these, 32 names are synonyms, 10 names are homonyms, and 19 species are currently deemed valid up to date (Gültekin 2013a; Gültekin & Fremuth 2013).

The genus *Larinus* is a member of tribe Lixini (Curculionidae: Lixinae), and is distributed in the Palaearctic, Afrotropical and Oriental regions (Alonso-Zarazaga & Lyal 1999; Csiki 1934; Ter-Minasian 1967). According to the recent Catalogue of Palaearctic Coleoptera, 109 *Larinus* species are present in the Palaearctic region (Gültekin & Fremuth 2013). In the last decade, there have been several important taxonomic reviews (Gültekin 2006a, 2008, 2010, 2013a; Gültekin & Perrin 2006, 2011), new species descriptions (Gültekin 2006b,c, Gültekin & Podlussány 2012a; Gültekin & Alonso-Zarazaga 2013) and newly described allied genera (Gültekin 2012, 2013b,c) in the tribe Lixini. This paper provides many nomenclatural confirmations and a few new acts.

Material and methods

The studied type materials are deposited in the Swedish Museum of Natural History, Stockholm (SMNH) and the Museum of Evolution, Uppsala University, Uppsala (UUZM). Lectotype designations are made for taxonomic purposes following the International Code of Zoological Nomenclature (International Commission on Zoological Nomenclature, 1999) and are the responsibility of the senior author. Original diagnoses and type localities for each species are copied exactly from the descriptions made by Gyllenhal (1835) and Boheman (1843). The species are ordered by year and page of description. The colour pictures of the lectotypes were taken with a DP-71 digital camera attached to an Olympus stereo microscope and software AnalySIS was used for stack montage. The digital images were then imported into Adobe Photoshop 8.0 and CorelDRAWX6 for labelling and plate composition.

Results

Taxonomy

Larinus costirostris Gyllenhal, 1835: 105

Original diagnosis: *Oblongo-ovatus, niger, subtus et lateribus dense, supra maculatim cinereo-tomentosus, flavescenti-pollinosus, rostro sub-tricostato, thorace distincte carinato, elytris remote punctato-striatis, interstitiis discoidalibus anterieus elevatioribus.*

Type locality: Odessa. A Dom. Lundstedt amice communicatus. Etiam e Sicilia a Dom. Lefebvre missus. Mus. Schh.

Type material: In the Schoenherr collection at SMNH, under the name “*costirostris* Schh., 2-2, Ghl.” a male matching the description and bearing the handwritten labels “♂”, “Odessa, Lundstedt”, is designated here as lectotype: “Lectotypus, ♂, *Larinus costirostris* Gyll., L.

Gültekin des. 2006”, “*Larinus latus* (Hbst.) Gültekin det. 2006”. A female bearing the handwritten labels “♀”, “Sicilia, Lefebvre” is here designated paralectotype: “Paralectotypus, ♀, *Larinus costirostris* Gyll., L. Gültekin des. 2006”, “*Larinus cynarae* (F.) Gültekin det. 2006”. The lectotype is pinned through the right elytron with a long and relatively thick pin, thus the elytra are pulled apart. The paralectotype is pinned in the same way, but the elytra are in place.

Remarks: The second specimen label fits Gyllenhal’s description, but this is clearly *Larinus cynarae* (Fabricius, 1787). The current name of *Larinus costirostris* Gyllenhal is *Larinus latus* (Herbst, 1783) (Gültekin & Fremuth 2013).

***Larinus teretirostris* Gyllenhal, 1835: 108**

Original diagnosis: *Oblongo-ovatus, niger, subtus dense, supra maculatim cinereo-tomentosus, rostro tereti, subrecto, profundius rugoso-punctata, vertice canaliculato, elytris punctato-striatis, pone humeros ampliatis, interstitiis planis, aequalibus, transversim rugulosis.*

Type locality: Europa meridionalis, (Sicilia?) A Dom. Lefebvre amice donatus. Mus. Schh.

Type material: In the Schoenherr collection at SMNH, under the name “*Teretirostris* Schh., 5-5, Ghl.” a female matching the description and bearing the handwritten labels “♀”, “Europa merid., (Sicilia) Lefebvre”, is here designated lectotype: “Lectotypus, ♀, *Larinus teretirostris* Gyll., L. Gültekin des. 2006”, “*Larinus latus* (Hbst.) Gültekin det. 2006”. It is pinned through the right elytron with a long and relatively thick pin, thus the elytra are weakly pulled apart.

Remarks: The current name of this species is *Larinus latus* (Herbst, 1783) (Gültekin & Fremuth 2013).

***Larinus glabrirostris* Gyllenhal, 1835: 109**

Original diagnosis: *Oblongo-ellipticus, niger, subtus thoracisque lateribus dense, elytris maculatim cinereo-tomentosis, flavescenti-pollinosis, rostro carina unica anterius latiore, glabra instructo, elytris punctato-striatis, ad humeros parum ampliatis, interstitiis planis, subtiliter alutaceis.*

Type locality: Sicilia. A Dom. Lefebvre benevole cmmunicatus [sic!]. Mus. Schh.

Type material: In the Schoenherr collection at SMNH, under the name “*Glabrirostris* Schh., 6-6, Ghl.” a male matching the description and bearing the handwritten labels “♂”, “Sicilia, Lefebvre”, is here designated lectotype: “Lectotypus, ♂, *Larinus glabrirostris* Gyll., L. Gültekin des. 2006”, “*Larinus cynarae* (F.) Gültekin det. 2006”. A female bearing the labels “♀”, “Sicilia, Lefebvre”, is here designated paralectotype: “Paralectotypus, ♀, *Larinus glabrirostris* Gyll., L. Gültekin des. 2006”, “*Larinus cynarae* (F.) Gültekin det. 2006”. In the Gyllenhal Collection at UUZM, a male matching the description and bearing the labels “♂”, “*Lar. glabrirostris* n. b. Sicilia”, is here designated paralectotype: “Paralectotypus, ♂, *Larinus glabrirostris* Gyll., L. Gültekin des. 2006”, “*Larinus cynarae* (F.) Gültekin det. 2006”. The lectotype and paralectotype at SMNH are pinned through the right elytron by thick pins; the elytra are in place in the former, but weakly pulled apart in the latter. The paralectotype housed at UUZM is pinned through the right elytron, the elytra are pulled apart and the left hind tibia and tarsus are missing.

Remarks: There is a third specimen placed near to the lecto- and paralectotype in SMNH bearing the labels “♂”, “Hispania Mus Westring” but it does not belong to the type series and

not a male, and has been labelled "*Larinus cynarae* (F.) Gültekin det. 2006". The current name of *Larinus glabrirostris* Gyllenhal is *Larinus cynarae* (Fabricius, 1787) (Gültekin & Fremuth 2013).

***Larinus afer* Gyllenhal, 1835: 110**

Original diagnosis: *Oblongo-ovatus, niger, lateribus et subtus dense albo-tomentosus, rostro longiore, basi carinato, thorace in medio remote punctato, lateribus sub-rugoso, elytris punctato-striatis, interstitiis planis, sublaevibus.*

Type locality: Habitat ad Marocco. Dom. Schousboe. Mus. Schh.

Type material: In the Schoenherr collection at SMNH, under the name "*Afer*, Schh., 9-10, Ghl.", a male matching the description (Figs. 1-2) and bearing the handwritten labels "♂", "Marocco. D. Schousb.", is here designated lectotype: "Lectotypus, ♂, *Larinus afer* Gyll., L. Gültekin des. 2006". The lectotype is pinned through the right elytron with a thick pin, thus the elytra are pulled apart. The right fore tarsus beyond the 2nd segment and the right hind tarsus beyond the 1st segment are missing.

Remarks: This species has always been recognized correctly by subsequent authors; it is related to *Larinus gravidus* (Olivier, 1807) but clearly differs from the latter by the shorter rostrum, the bright polished black integument, the form of the pubescence and the pattern of the vestiture (Gültekin & Perrin 2011).

***Larinus bardus* Gyllenhal, 1835: 114**

Original diagnosis: *Ovatus, niger, subtus et lateribus dense cinereo-albido-tomentosus, rostro crasso, recto, supra obsolete rugoso, thorace transverso, pulvinate, antice subito angustiore, tubulato, lateribus rotundato, elytris punctato-striatis, obsolete cinereo-tessellatis.*

Type locality: Persia. A Dom. Faldermann et Ménériés, ad describendum, amice communicatus.

Type material: In the Schoenherr collection at SMNH, under the name "*Bardus*", a female matching the description and bearing the handwritten labels "♂", "Bardus, Ménériés", is here designated lectotype: "Lectotypus, ♀, *Larinus bardus* Gyll. L. Gültekin des. 2008". It is pinned through the right elytron, the body is intact but the right hind leg beyond the femur is missing.

Remarks: Gyllenhal's determination of sex is found incorrect; it is obviously a female because the pygidium is lifted and the ovipositor can be seen clearly. We agree with Capiomont (1874: 295), who established that *Larinus sulphuratus* Gyllenhal, 1835 is a synonym of *Larinus bardus* Gyllenhal, 1835. However, these names were considered to represent different species by Petri (1907: 99) and Csiki (1934) followed him. We found this action incorrect after the comparison of the types of both species. This situation most probably originated from the fact that the gender of the type specimen was mistaken by Gyllenhal, because the rostrum of the female is longer than that of the male. *Larinus bardus* is a variable species especially in body size, vestiture and sculpturing of the dorsal surface of the rostrum. Recently, Gültekin (2013a) proposed three new synonyms: *Larinus bardus* Gyllenhal, 1835 (= *Larinus sulphuratus* Gyllenhal, 1835 = *Larinus persicus* Stierlin, 1891 = *Larinus tauricus* Desbrochers, 1897). This lectotype designation confirms and supports that action.

***Larinus timidus* Gyllenhal, 1835: 115**

Original diagnosis: *Oblongo-ovatus, niger, subtus et lateribus albido-tomentosus, rostro crasso, sub-arcuato, basi supra distincte carinato, apice glabro, thorace transverso, antice subito angustiore, sub-tubulato, supra ruguloso-punctato, elytris sub-remote punctato-striatis, obsolete pallido-tessellatis.*

Type locality: Rossia meridionalis. Ex Musaeo Dom. Faldermann descriptus.

Type material: In the Schoenherr collection at SMNH, under the name “*Timidus*, Schh., 18-18, Ghl.”, a female matching the description and bearing a handwritten label “Ross. mer. Falderm.”, is here designated lectotype: “Lectotypus, ♀, *Larinus timidus* Gyll. L. Gültekin des. 2006”, “*Larinus cynarae* (F.), Gültekin det. 2006”. It is pinned through the right elytron, the thorax and abdomen are pulled apart because of this pinning. These parts are fastened to the pin by a covering of glue. The hind right leg was broken beyond the trochanter and it is glued to the abdomen.

Remarks: The current name of *Larinus timidus* Gyllenhal is *Larinus cynarae* (Fabricius, 1787) and lectotype designation confirms this synonymy.

***Larinus sulphuratus* Gyllenhal, 1835: 116**

Original diagnosis: *Ovatus, niger, subtus dense cinereo-tomentosus, rostro obsolete tricarinato, thorace longiore, disperse punctato, alutaceo, vitta laterali flava ornato, elytris remote punctato-striatis, fasciculatim flavo tomentosus, interstitiis subtiliter alutaceis.*

Type locality: Persia. A Dom. Faldermann amice communicatus Mus. Schh.

Type material: In the Schoenherr collection at SMNH, under the name “*Sulphuratus*, Schh., 19-19, Ghl.”, a female matching the description (Figs. 3-4) and bearing the handwritten labels “♂”, “Persia, Falderman”, is here designated lectotype: “Lectotypus, ♀, *Larinus sulphuratus* Gyll. L. Gültekin des. 2006”, “*Larinus bardus* Gyll., Gültekin det. 2006”. It is pinned through the right elytron, but the body is intact.

Remarks: Gyllenhal’s identification of gender is incorrect; it is obviously a female because the pygidium is open and the ovipositor can be clearly seen. Recently, Gültekin (2013a) proposed a new synonym: *Larinus bardus* Gyllenhal, 1835 (= *Larinus sulphuratus* Gyllenhal, 1835) and the present lectotype designation confirms this synonymy. For further comments and synonyms, see under *Larinus bardus* Gyllenhal above.

***Larinus vitellinus* Gyllenhal, 1835: 117**

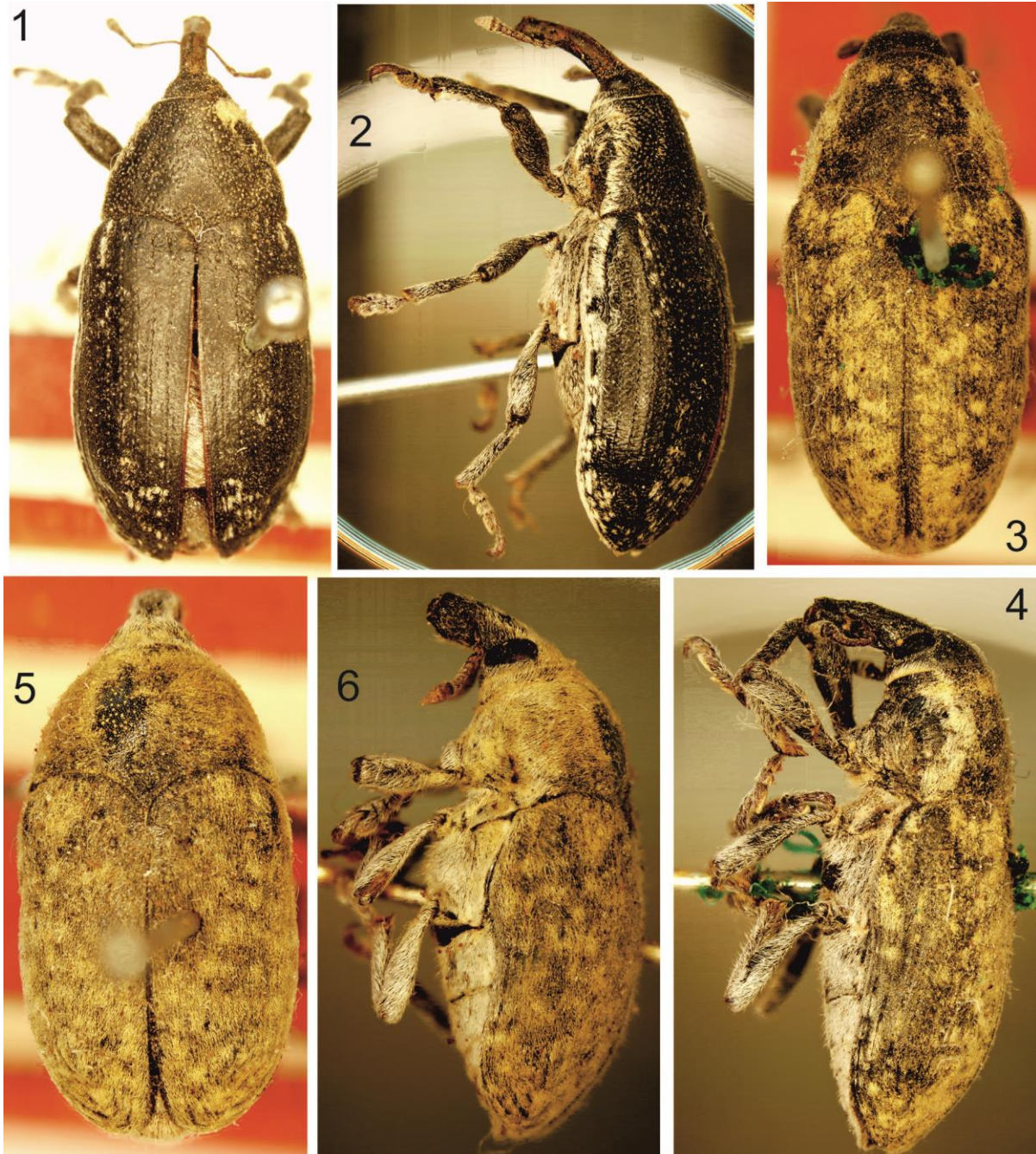
Original diagnosis: *Brevior, ovatus, niger, subtus dense pallido-tomentosus, antennarum clava ferruginea, rostro basi leviter carinato, thorace transverso, pulvinato, subtiliter granulato, dense flavo-tomentoso, elytris remote punctato-striatis, tomento flavo fasciculatim condensato, vestitis, apice obtusissime rotundatis.*

Type locality: Persia. Ex Musaeo Dom. Faldermann, ad describendum, amice communicatus.

Type material: In the Schoenherr collection at SMNH, under the name “*Vitellinus*, Schh., 21-23, Ghl.”, a male matching the description (Figs. 5-6) and bearing a handwritten label “Persia, Falderman”, is here designated lectotype: “Lectotypus, ♂, *Larinus vitellinus* Gyll. L. Gültekin des. 2006”. It is pinned through the right elytron; the body is intact.

Remarks: This species is related to *Larinus curtus* Hochhuth, 1851 and to *Larinus palaestinus* Talamelli, 1999 but differs from the latter by the wider 3rd tarsal segment and

from the former by the larger body. All subsequent authors misidentified this species because they did not examine its type material. Furthermore, Desbrochers des Loges (1895) and Ter-Minasian (1962) described and named Gyllenhal's species again and recently Gültekin (2013a) established these two nominal species as new synonyms: *Larinus vitellinus* Gyllenhal, 1835 (= *Larinus crassiusculus* Desbrochers des Loges, 1895 = *Larinus khnzoriani* Ter-Minasian, 1962). The present lectotype designation confirms these latter synonyms.



Figures 1–6. Lectotypes of *Larinus* spp.. 1–2, *Larinus afer* Gyllenhal, 1835, 1, dorsal view; 2, lateral view; 3–4, *Larinus sulphuratus* Gyllenhal, 1835, 3, dorsal view; 4, lateral view; 5–6, *Larinus vitellinus* Gyllenhal, 1835, 5, dorsal view; 6, lateral view.

***Larinus nubeculosus* Gyllenhal, 1835: 117**

Original diagnosis: *Oblongus, niger, subtus dense cinereo-tomentosus, rostro leviter carinato, thorace depresso, confertim granulato-rugoso, lateribus vitta flava ornato, elytris sub-remote punctato-striatis, flavescenti-fasciculatis, apice obtusissime rotundatis.*

Type locality: Persia. Ex Musaeo Dom. Faldermann, ad describendum, amice communicatus.

Type material: In the Schoenherr collection at SMNH, under the name “*Nubeculosus*”, a female matching the description and bearing a handwritten label “Persia, Falderm.”, is here designated lectotype: “Lectotypus, ♀, *Larinus nubeculosus* Gyll. L. Gültekin des. 2008”. It is pinned through the right elytron, the body is intact, but the right middle tarsus beyond the 2nd segment is missing.

Remarks: It is a valid species, easily recognized by the depressed lateral surface of the rostrum near the base, large eyes, and sharp central carina on the dorsum of the rostrum. Gültekin (2013a) proposed a new synonym: *Larinus nubeculosus* Gyllenhal, 1835 (= *Larinus canescens rugulosus* Petri, 1907) based on the study of type material and the present lectotype designation confirms this nomenclatural act.

***Larinus stellaris* Gyllenhal, 1835: 120**

Original diagnosis: *Ovatus, niger, supra parce griseo-tessulatus, rostro thoraci sub-aequali, distincte carinato, thorace punctato, sub-rugoso, elytris sub-remote punctato-striatis, interstitiis planis, confertim subtiliter rugulosus.*

Type locality: Elisabethgrad, Gubern. Chers. Ex Musaeo Dom. Steven, sub hoc nomine amice communicatus.

Type material: In the Schoenherr collection at SMNH, under the name “*Stellaris*”, a female matching the description and bearing a handwritten label “Elisabethgrad, Steven”, is here designated lectotype: “Lectotypus, ♂, *Larinus stellaris* Gyll. L. Gültekin des. 2010”, and identified as “*Larinus sturnus* (Schaller), Gültekin det. 2010”. It is pinned through the right elytron, the right legs are absent, and the left fore tarsus is missing too.

Remarks: In the Junk catalogue, Csiki (1934) cited the authorship of *Larinus stellaris* as “Steven, Bull. Soc. Nat. Mosc. I, 1829, p. 284” and placed this name as a synonym of *Larinus iaceae* (Fabricius, 1775) (as *jaceae*). Both actions are completely incorrect. Steven (1829) neither described nor named this species, the authorship belonging to Gyllenhal (1835: 120) and, based on type material examination, Gültekin (2013a) proposed a new synonym: *Larinus sturnus* (Schaller, 1783) (= *Larinus stellaris* Gyllenhal, 1835) with correct authorship.

***Larinus carinirostris* Gyllenhal, 1835: 121**

Original diagnosis: *Ovatus, niger, sub-nitidus, tomento longiore albido inaequaliter adpersus, rostro thorace brevior, distincte carinato, thorace canaliculato, inaequaliter punctato, elytris obsolete punctato-striatis, interstitiis confertissime rugulosus.*

Type locality: Graecia. Ex Musaeo Dom. Bartels descriptus.

Type material: In the Schoenherr collection at SMNH, under the name “*Carinirostris*”, a male matching the description and bearing the handwritten labels “♂”, “Graecia, Bartels”, is here designated lectotype: “Lectotypus, ♂, *Larinus carinirostris* Gyll. L. Gültekin des. 2008”. There is a second male specimen bearing the label “Rumelia, Gon., Montipolis, Sommer”

which does not belong to the type series and has also been labelled “*Larinus carinirostris* Gyll., Gültekin det. 2008”. The lectotype is pinned through the right elytron; the body is intact, but the right middle and hind tarsi, and the left hind tibia and tarsus are completely missing.

Remarks: This is a valid species, and related to *Larinus ursus* (Fabricius, 1792) but differs from the latter by the distinctly curved tibiae, especially the middle and hind ones, which are also clothed with long hairs on the inner surface.

***Larinus lineatocollis* Gyllenhal, 1835: 121**

Original diagnosis: *Ovatus, niger, sub-opacus, inaequaliter cinereo-albido-tomentosus, rostro thorace brevior, basi tantum carinato, thorace confertim granulato et ruguloso, vittis sub-quinis albido-tomentosis notato, elytris sub-remote punctato-striatis, albido-tessellatis, interstitiis confertim alutaceis.*

Type locality: Rossia meridionalis. Ex Musaeo Dom. Faldermann descriptus.

Type material: In the Schoenherr collection at SMNH, under the name “*Lineato-collis*, Schh., 29-33, Ghl.”, a male matching the description and bearing a handwritten label “Rossia mer., Falderm.”, is here designated lectotype: “Lectotypus, ♂, *Larinus lineatocollis* Gyll. L. Gültekin des. 2006”, “*Larinus pollinis* (Laich.), Gültekin det. 2006”. It is pinned through the right elytron; the body is intact.

Remarks: The current name of this species is *Larinus pollinis* (Laicharting, 1781) and *Larinus lineatocollis* Gyllenhal, 1835 was correctly synonymized.

***Larinus rusticanus* Gyllenhal, 1835: 123**

Original diagnosis: *Oblongus, niger, opacus, subtus dense, supra maculatim cinereo-tomentosus, flavescens-pollinosus, rostro thoraci sub-aequali, basi breviter carinato, thorace sub-pulvinato, inaequaliter punctato, elytris remote punctato-striatis, interstitiis confertim subtiliter alutaceis.*

Type locality: Graecia. A Dom. Lefebvre amice communicatus. Mus. Schh. et Dom. Bartels.

Type material: In the Schoenherr collection at SMNH, under the name “*Rusticanus*, Schh., 31-36, Ghl.”, a male matching the description (Figs. 7-8) and bearing the handwritten labels “♂”, “Graecia, Lefebvre”, is here designated lectotype: “Lectotypus, ♂, *Larinus rusticanus* Gyll., L. Gültekin des. 2006”. Another male, bearing the same labels, is designated as paralectotype: “Paralectotypus, ♂, *Larinus rusticanus* Gyll., L. Gültekin des. 2006”. Both specimens are pinned through the right elytron, the elytra are pulled apart.

Remarks: *Larinus planus* (Fabricius) sensu Germar, 1824 (Germar 1824: 389) is not *Curculio planus* Fabricius, 1792. However, during the examination of Fabrician Lixinae types by Gültekin (2006a) it became evident that *Larinus planus* (Fabricius, 1792) is identical with the well known Palearctic species *Larinus rusticanus* Gyllenhal, 1835, and that the current synonymy of *Larinus planus* with *L. carlinae* (Olivier, 1807) is based on a misidentified *Larinus planus* (Fabricius) sensu Germar, 1824, not *Larinus planus* (Fabricius, 1792). Gültekin (2006a), while placing *Larinus planus* (Fabricius, 1792) in synonymy of *Larinus rusticanus* Gyllenhal, 1835, considered it to be a *nomen oblitum* but failed to give the evidence requested by Art. 23.9.2. The fact that the taxon was misidentified does not invalidate the use of the name, since it has been used as a valid name after 1899 (ICZN, Art. 23.9.1.1). For this reason, *Larinus planus* (Fabricius, 1792) becomes the correct name for

Larinus rusticanus Gyllenhal, 1835. This species is closely related to *Larinus tenuicorpus* Ter-Minasian, 1962 but the latter differs by its flatter body and shorter rostrum.

Larinus carlinae (Olivier, 1807) is a well known Palearctic species introduced also into North America. Its senior synonym *Curculio ebeneus* Marsham, 1802, has not been used as valid since 1899, so Gültekin (2013a) declared it *nomen oblitum*, while *Larinus carlinae* was declared *nomen protectum* according to ICZN Art. 23.9.1.

***Larinus immitis* Gyllenhal, 1835: 124**

Original diagnosis: *Oblongo-ovatus, niger, parce cinereo-tomentosus, rostro longitudine thoracis, cylindrico, sub-arcuato, thorace subtiliter ruguloso-punctato, rugulis impunctatis, elytris confertim rugulosis, punctato-striatis, cinereo-tessulatis.*

Type locality: Habitat in Isthmo Thracico. Dom. Hedenborg. Mus. Reg. Acad. Scient. Holm.

Type material: In the Schoenherr collection at SMNH, under the name “*immitis*, Schh., 32-38, Ghl.”, a female matching the description (Figs. 9-10) and bearing the labels “Isthm., Thrac. Hedenborg” printed, “W. Acad., 328” handwritten on yellow paper, is here designated lectotype: “Lectotypus, ♀, *Larinus immitis* Gyll., L. Gültekin des. 2006”, “*Larinus iaceae* (F.) Gültekin det. 2006”. It is pinned through the right elytron, the body is intact, but the right fore tarsus beyond the 2nd segment is missing.

Remarks: Examination of the types of *Larinus* in the Fabricius (Gültekin 2006a) and Schoenherr collections have established that *Larinus immitis* Gyllenhal, 1835 is identical with *Larinus iaceae* (Fabricius, 1775), and thus Gültekin (2013a) placed it as a new synonym of that species. *Larinus iaceae* (Fabricius, 1775) is a common and variable species especially in length and apical constriction of the female rostrum proximad of the antennal insertion, and the somewhat ovate to slightly elongate body shape (depending on the wide host plant spectrum and the geographical distribution). In contrast, the penis always has the same shape. *Larinus immitis* Gyllenhal, 1835 was misidentified by Capiomont (1874: 327) and subsequently by Petri (1907: 125); *Larinus immitis* sensu Capiomont and Petri corresponds to *L. leuzeae* Fabre, 1870.

***Larinus longirostris* Gyllenhal, 1835: 124**

Original diagnosis: *Oblongo-ovatus, niger, subtus dense cinereo-tomentosus, supra variegatus, rostro longitudine thoracis, valde arcuato, extrorsum tenuiore, laevi, nitido, thorace confertim ruguloso-punctato, rugulis punctulatis, elytris sub-remote punctato-striatis, interstitiis planis, alutaceis.*

Type locality: Europa meridionalis. A Dom. Lefebvre amice communicatus. Mus. Schh.

Type material: In the Schoenherr collection at SMNH, under the name “*Longirostris*, Schh., 29-33, Ghl.”, a female matching the description (Figs. 11-12) and bearing the handwritten labels “♀”, “Eup. mer. Lefebvre”, is here designated lectotype: “Lectotypus, ♀, *Larinus longirostris* Gyll., L. Gültekin des. 2006”. It is pinned through the right elytron, the body is intact.

Remarks: This species is closely related to *Larinus albocinctus* Chevrolat, 1866 and *Larinus villosicollis* Desbrochers des Loges, 1892 but differs from the former by the more distinctly bent rostrum, with a widened apex, the more rounded pronotum and the slightly different vestitural pattern on the elytra; and the latter differs by the longer female rostrum and the apex of the penis with a sharper triangular form.



Figures 7–12. Lectotypes of *Larinus* spp.. 7–8, *Larinus rusticanus* Gyllenhal, 1835, 7, dorsal view; 8, lateral view; 9–10, *Larinus immitis* Gyllenhal, 1835, 9, dorsal view; 10, lateral view; 11–12, *Larinus longirostris* Gyllenhal, 1835, 11, dorsal view; 12, lateral view.

***Larinus turbinatus* Gyllenhal, 1835: 125**

Original diagnosis: *Ovatus, niger, griseo-tomentosus, rostro crasso, recto, antrorsum attenuato, thorace confertim ruguloso, rugulis punctulatis, elytris rugulosis, punctato-striatis, griseo-tessulatis.*

Type locality: Habitat in Hispania, Galliae Alpibus, Caucaso, Volhynia, Isthmo Thracico. Mus. Schh.

Type material: In the Schoenherr collection at SMNH, under the name “*Turbinatus*, Dejean, 34-40, Ghl.” a male matching the description and bearing the handwritten labels “♂” “*Rhin. carlina* ? Caucasus, Steven”, is here designated lectotype: “Lectotypus, ♂, *Larinus turbinatus* Gyll., L. Gültekin des. 2006”. Another female bearing labels “♀”, “*L. turbinatus*, Dinia, Gall. Alp, Dejean” is here designated as paralectotype: “Paralectotypus, ♀, *Larinus turbinatus* Gyll., L. Gültekin des. 2006”. In the Gyllenhal collection at UUZM, a female matching the description and bearing the labels “♀”, “Caucasus, Steven”, is here designated paralectotype: “Paralectotypus, ♀, *Larinus turbinatus* Gyll., L. Gültekin des. 2006”. There is an additional female specimen placed near the paralectotype (SMNH) bearing a label “Astrabad-Persie, Karelin” which does not belong to the type series (Astrabad is present-day Gorgan, not in any of the originally mentioned regions). The lectotype is pinned through the right elytron; the elytra are weakly pulled apart, and there is also a pin hole on the left elytron. The paralectotype is pinned through the right elytron; the body is intact. The paralectotype at UUZM is pinned through the right elytron; the elytra are strongly pulled apart.

Remarks: This species is easily recognized by its overall subconical rostrum; in dorsal view, the prorostrum is subparallel-sided, and the metarostrum is gradually tapered towards the antennal insertion.

***Larinus canescens* Gyllenhal, 1835: 126**

Original diagnosis: *Ovatus, niger, griseo-tomentosus, rostro brevi, lineari, leviter carinato, thorace transverso, lateribus ampliato, elytris punctato-striatis, griseo-nebulosis.*

Type locality: Hungaria. Dom. Sturm; Caucasus. Dom. Steven. Var. β, Podolia. Dom. Besser; Persia. Dom. Faldermann; et ab illis benevole communicatus. Mus. Schh.

Type material: In the Schoenherr collection at SMNH, under the name “*Canescens*, Schh., 35-41, Ghl.”, a female matching the description (Figs. 13-14) and bearing a handwritten label “*L. cinerascens*, Hungary, Sturm”, is here designated lectotype: “Lectotypus, ♀, *Larinus canescens* Gyll., L. Gültekin des. 2006”. Another female bearing the label “Caucasus, Steven” is here designated paralectotype: “Paralectotypus, ♀, *Larinus canescens* Gyll., L. Gültekin des. 2006”. In the Gyllenhal Collection at UUZM, a male bearing a handwritten label “Caucasus, Steven”, and a red printed one “Uppsala Univ. Zool. Mus., Gyllenhal saml. Typ. nr. 1686”, is here designated paralectotype: “Paralectotypus, ♂, *Larinus canescens* Gyll., L. Gültekin des. 2006”. The lectotype was pinned through the right elytron and the elytra were weakly pulled apart. It has been glued on a paper card by LG. The paralectotype is pinned through the right elytron, the body is intact, but the right middle leg is missing. The specimen at UUZM is pinned through the scutellar angle, thus the elytra are strongly pulled apart.

Remarks: In the Schoenherr collection, there is a male pinned near the types bearing a label “Eur. mer.” but this does not belong to the type series because the description does not mention material of this provenance and also because it is a member of a different species; it has been labelled “*Larinus flavescens* Germar, Gültekin det. 2006”. In addition, there are three specimens under VAR. β. *cinerascens* Dej. which was an unavailable name at that time. These two males and the single female, bearing labels “*Larinus Podolia* Besser” and “*Larinus cinerascens*, Sturm, Hungary Dej.” respectively, are specimens of *Larinus canescens* Gyllenhal but they differ from the lectotype by their larger body size.

***Larinus obtusus* Gyllenhal, 1835: 128**

Original diagnosis: *Breviter ovatus, niger, tomento fusco-flavescente variegatus, rostro brevi, crasso, incurvo, supra leviter carinato, sub-angulato, thorace brevi, punctato, elytris punctato-striatis, interstitiis planis, subtiliter granulatis.*

Type locality: Habitat in Austria, Bannatu, Caucaso, Tauria, Volhynia. Mus. Schh. et Ghl.

Type material: In the Schoenherr collection at SMNH, under the name “*Obtusus*, Schh., 38-44, Ghl.”, a male matching the description (Figs. 15-16) and bearing the handwritten labels “♂”, “*R. maculosus* / Meg., austria, Meg.”, is here designated lectotype: “Lectotypus, ♂, *Larinus obtusus* Gyll., L. Gültekin des. 2006”. Two females bearing labels “♀”, “*R. maculosus* / Meg., austria, Meg.”, and “♀”, “*Lar. obtusus* Sturm, Bannat, Sturm”, respectively, are here designated as paralectotypes: “Paralectotypus, ♀♀, *Larinus obtusus* Gyll., L. Gültekin des. 2006”. In the Gyllenhal collection at UUZM, a female matching the description and bearing the handwritten labels “ii90”, “*Rhinobatus maculosus*, Meg. austria”, is here designated paralectotype: “Paralectotypus, ♀, *Larinus obtusus* Gyll., L. Gültekin des. 2006”. In the SMNH, there is an additional specimen pinned near the lectotype, bearing a label “*L. ovatus* Chevrol., *brevis, crassirostris* Desbr., algier, Chevrolat” which does not belong to the type series, and has been identified as “*Larinus ferrugatus* Gyll. Gültekin det. 2006”. The lectotype is pinned through the right elytron but near the lateral margin, thus the elytra are weakly pulled apart; the right fore leg, right hind and left fore onychia, and the middle and hind tarsi are missing. The paralectotypes are each pinned through the right elytron, the first one with a large pin near the sutural margin, thus the elytra are cracked and also pulled apart; the second one has the body intact, but the left hind onychium is missing. The paralectotype at UUZM is pinned through the right elytron, the elytra are weakly pulled apart, and the left hind leg is missing.

Remarks: *Larinus obtusus* is related to *L. minutus* Gyllenhal but differs by the more rounded body form and the shape of the penis. Gültekin (2013a) established the new synonymy *Larinus obtusus* Gyllenhal, 1835 (= *Larinus australis* Capiomont, 1874) based on the study of type material and the present lectotype designation supports this act. See more complete synonymic records under the next species.

***Larinus brevis* Gyllenhal, 1835: 129**

Original diagnosis: *Breviter ovatus, niger, tomento cinereo subtus dense tectus, supra parcius inaequaliter vestitus; rostro crasso, subrecto, vix carinato, thorace brevi, subtilius punctato, elytris obsolete punctato-striatis, interstitiis planis, subtiliter alutaceis.*

Type locality: Persia. Ex Musaeo Dom. Faldermann, ad describendum, amice communicatus.

Type material: In the Schoenherr collection at SMNH, under the name “*Brevis*, Schh.”, there is a specimen (sex could not be discriminated) bearing a handwritten label “*L. ovalis* De: *L. brevis* Bepes (?), *crasrostris* Dej., algier”. This is neither a syntype nor fits the description, and has been identified as a *Larinus ferrugatus* Gyll. (Gültekin det. 2006).

Remarks: The name *Larinus brevis* Gyllenhal, 1835 is a junior homonym of *Larinus brevis* (Herbst, 1795) and cannot be used as a valid name. For this reason, Gemminger (1871) replaced this name with *L. gyllenhalii*. The description of *Larinus brevis* Gyllenhal, 1835 clearly overlaps that of *Larinus curtus* Hochhuth, 1851. Subsequently, Capiomont (1874: 290) described a new species naming it *Larinus brevis* but his description is later than that of Gyllenhal's species and it is a synonym of *Larinus ferrugatus* Gyllenhal, 1835. In the Capiomont collection at MNHN-Paris, there were three specimens (2♀, 1♂) under the name

Larinus brevis; they have been identified as “*Larinus ferrugatus* Gyll., L. Gültekin det. 2005”. *Larinus brevis* Capiomont, 1874 is also an invalid name. A neotype for *Larinus brevis* Gyllenhal may be required but it is not designated here.

***Larinus minutus* Gyllenhal, 1835: 129**

Original diagnosis: *Breviter ovatus, niger, tomento griseo-albido subtus dense, supra parcius vestitus; rostro brevi, crasso, supra carinato, fronte impressa, thorace brevi, convexo, punctato, elytris sub-remote punctato-striatis, interstitiis planis, subtiliter alutaceis.*

Type locality: Caucasus. Ex Musaeo Dom. Steven, ad describendum, amice missus.

Type material: In the Schoenherr collection at SMNH, under the name “*Minutus*, Steven, 40-46, *Rhinocyll: brevis*, indet spec”, a male matching the description (Figs. 17-18) and bearing a handwritten label “*L. minutus* / Caucas. Stev.”, is here designated lectotype: “Lectotypus, ♂, *Larinus minutus* Gyll., L. Gültekin des. 2006”. Another male bearing a label “Caucas., Steven”, is here designated as paralectotype: “Paralectotypus, ♂, *Larinus minutus* Gyll., L. Gültekin des. 2006” There are two additional specimens that do not belong to the type series, placed near the paralectotype and bearing labels, respectively; “♀”, “on *Rh. tereti* var: ?Gremien, D. Besser”, “*Larinus minutus* Gyll., Gültekin det. 2006” (a male), and “*Rhinocyllus brevis* III p. 150, Podol. Besser” “*Larinus obtusus* Gyll., Gültekin det. 2006”. The lectotype is pinned through the right elytron, the elytra are strongly pulled apart, and the right fore tarsus is missing. The paralectotype is pinned through the right elytron but near the outer margin, and thus it is cracked.

Remarks: This is one of the smallest species in the genus *Larinus*. In a given species of *Larinus*, the size of body can vary, the range depending on the different larval host plants. This situation is clearly seen in *Larinus puncticollis* Capiomont, 1874 (Figs. 19-20, paralectotype). A comparative examination of the type materials and several dissections of specimens from different geographical regions with different host plants revealed that the description of *L. puncticollis* stayed within the infraspecific variation. For this reason, establishing a new synonym is necessary: *Larinus minutus* Gyllenhal, 1835 (= *Larinus puncticollis* Capiomont, 1874 **syn. nov.**). The new catalogue by Gültekin & Fremuth (2013) contains an erroneous distribution record for *Larinus minutus*; this species is not distributed in Spain.

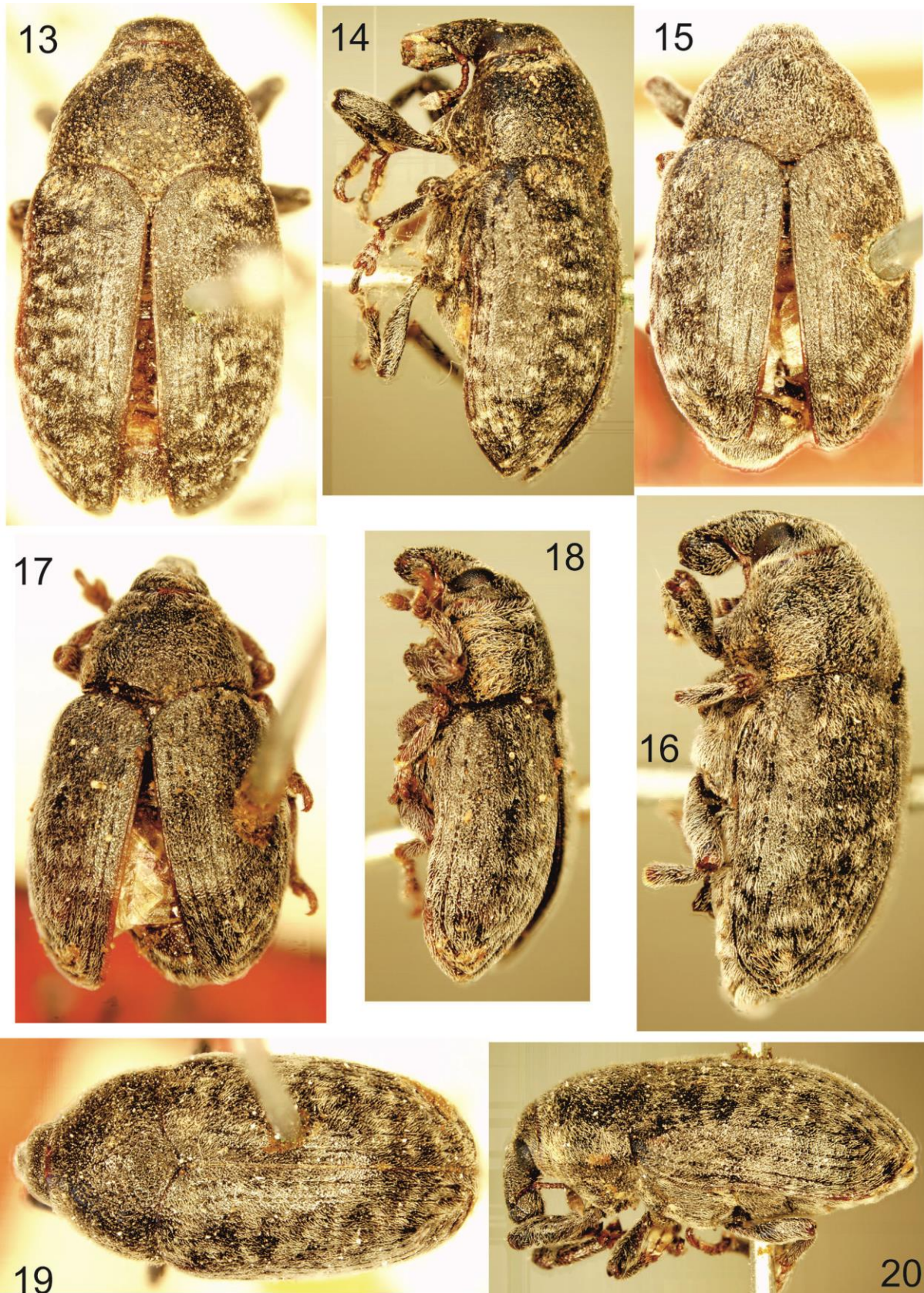
***Larinus foveicollis* Gyllenhal, 1835: 130**

Original diagnosis: *Breviter ovatus, niger, parce cinereo-tomentosus, rostro mediocri, subarcuato, thorace punctato, foveis tribus magnis impresso, elytris punctato-striatis, interstitiis planis, subtiliter granulato-punctatis, cinereo-tessellatis.*

Type locality: Habitat in Sibiria. Dom. Gebler. Mus. Schh.

Type material: In the Schoenherr collection at SMNH, under the name “*Foveicollis*, Schh, 41-47, Ghl.”, a male matching the description and bearing a handwritten label “*Rh. jacea* ? Sibiria, Gebl.”, is here designated lectotype: “Lectotypus, ♂, *Larinus foveicollis* Gyll., L. Gültekin des. 2006”, “*Larinus iaceae* F., Gültekin det. 2006”. It is pinned through the right elytron with a thick pin, thus the elytra are strongly pulled apart.

Remarks: The present lectotype designation confirms the synonymy between *Larinus iaceae* (Fabricius, 1775) and *Larinus foveicollis* Gyllenhal, 1835.



Figures 13–20. Lectotypes of *Larinus* spp.. **13–14**, *Larinus canescens* Gyllenhal, 1835, **13**, dorsal view; **14**, lateral view; **15–16**, *Larinus obtusus* Gyllenhal, 1835, **15**, dorsal view; **16**, lateral view; **17–18**, *Larinus minutus* Gyllenhal, 1835, **17**, dorsal view; **18**, lateral view; **19–20**, paralectotype of *Larinus puncticollis* Capiomont, 1874, **19**, dorsal view; **20**, lateral view.

***Larinus sibiricus* Gyllenhal, 1835: 131**

Original diagnosis: *Ovatus, niger, subtus et lateribus dense, supra parcius cinereo-tomentosus; rostro mediocri punctulato, thorace brevi, sub-carinato, inaequaliter punctato, elytris punctato-striatis, interstitiis planis, confertissime subtiliter alutaceis.*

Type locality: Sibiria. Ex Musaeo Dom. Steven, ad describendum, amice missus.

Type material: In the Schoenherr collection at SMNH, under the name “*Sibiricus*, Schh, 42-48, Ghl.” a female matching the description (Figs. 21-22) and bearing a handwritten label “Sibiria, Steven”, “315/79” partly printed on red paper, is here designated lectotype: “Lectotypus, ♀, *Larinus sibiricus* Gyll., L. Gültekin des. 2006”. It is pinned through its right elytron, otherwise its body is intact.

Remarks: In two recent taxonomic papers by Gültekin & Perrin (2006) and Gültekin (2013a), three new synonymies were proposed: *Larinus sibiricus* Gyllenhal, 1835 (= *Larinus aeruginosus* Hochhuth, 1851 = *Larinus distinguendus* Desbrochers des Loges, 1892 = *Larinus bulgaricus* Voss, 1943). The present lectotype designation confirms and supports these nomenclatural acts. *Larinus sibiricus* is closely related to *Larinus fucatus* Faust, 1891 but differs from the latter by the unique shape of the penis of which the apex is prolonged like a spearhead.

***Larinus ferrugatus* Gyllenhal, 1835: 132**

Original diagnosis: *Breviter ovatus, parum convexus, niger, supra dense ferrugineo-tomentosus, rostro plano, carinato, thorace brevi, punctulato, elytris obsolete punctato-striatis, interstitiis subtiliter granulatis.*

Type locality: Habitat ad Alger. Mus. Reg. Acad. Scient. Holm. E Mus. Dom. Paykull.

Type material: In the Schoenherr collection at SMNH under the name “*Ferrugatus*, Schh., 43-49, Ghl.”, a female matching the description (Figs. 23-24) and bearing a handwritten label “Paykull, 158, Alger” on yellow paper, is here designated lectotype: “Lectotypus, ♀, *Larinus ferrugatus* Gyll., L. Gültekin des. 2006”. It was pinned through the side of its right elytron, otherwise its body is intact. The lectotype has been remounted on a card during this research.

Remarks: *Larinus ferrugatus* Gyllenhal is a valid species related to *Larinus maroccanus* Capiomont, 1874. In Csiki (1934) the species *Larinus hololeucus* Motschulsky, 1845 is placed as a synonym of two different species: *Larinus idoneus* Gyllenhal, 1835 and *Larinus ferrugatus*. The latter is an incorrect placement, since *Larinus hololeucus* Motschulsky cannot be a synonym of *Larinus ferrugatus* Gyllenhal according to the original description. It is a synonym of *Larinus idoneus* Gyllenhal, 1835 as correctly presented by Gültekin & Fremuth (2013). In addition, in the same work, *Larinus suborbicularis* Capiomont, 1874 was proposed as a new synonym of *Larinus ferrugatus* based on the study of type material. This lectotype designation confirms this act.

***Larinus morio* Gyllenhal, 1835: 132**

Original diagnosis: *Ovatus, ater, parce cinereo-tomentosus, rostro crasso, recto, supra basi distincte carinato, thorace confertim rugoso, lobo scutellari acuminato, elytris remote punctato-striatis, interstitiis confertim alutaceis, tibiis arcuatis, interne crenulatis.*

Type locality: Gallia meridionalis. A Dom. Faldermann amice communicatus. Mus. Schh.

Type material: In the Schoenherr collection at SMNH, under the name “*Morio*, Schh., 44-50, Ghl.”, a male matching the description and bearing the handwritten labels “Gallia mer., Falderman”, is here designated lectotype: “Lectotypus, ♂, *Larinus morio* Gyll., L. Gültekin des. 2006”, “*Larinus pollinis* (Laich.), Gültekin det. 2006”. It is pinned through the right elytron; the right fore tarsus is missing beyond the 1st segment.

Remarks: Csiki (1934) placed this name under the synonymy of *Larinus brevis* (Herbst, 1795) with a question mark. However, Gültekin & Fremuth (2013) correctly placed this name under *Larinus pollinis* (Laicharting, 1781). The present lectotype designation confirms that *Larinus morio* Gyllenhal, 1835 is a synonym of *Larinus pollinis* (Laicharting, 1781).

***Larinus grisescens* Gyllenhal, 1835: 134**

Original diagnosis: *Ovatus, niger, tomento cinereo-albido subtus dense vestitus, supra fasciculatim variegatus, rostro longo, tenui, arcuato, tarsorum articulo unguiculari mediocri.*

Type location: Persia. Ex Musaeo Dom. Faldermann, ad describendum, amice communicatus.

Type material: In the Schoenherr collection at SMNH, under the name “*Grisescens*”, a male matching the description and bearing a handwritten label “Persia, Falderm.”, is here designated lectotype: “Lectotypus, ♂, *Larinus grisescens* Gyll., L. Gültekin des. 2008”. It is pinned through its right elytron, the elytra are pulled apart, and the coxa of the right hind leg is separated and glued on the ventrite behind the coxal cavity.

Remarks: *Larinus grisescens* Gyllenhal, 1835 is a valid species and closely related to *Larinus gigas* Petri, 1907 and *Larinus araxicola* Gültekin, 2006; it differs from the first in its smaller size and from the latter in its curved rostrum. Gültekin (2013a) proposed two new synonyms for this species based on type material examination: *Larinus grisescens* Gyllenhal, 1835 (= *Larinus orientalis* Capiomont, 1874 = *Larinus hierosolymae* Desbrochers des Loges, 1896). The present lectotype designation confirms and supports these nomenclatural acts.

***Larinus acanthiae* Gyllenhal, 1835: 135**

Original diagnosis: *Oblongo-sub-ellipticus, niger, cinereo-tomentosus, rostro longitudine thoracis, cylindrico, arcuato, basi supra carinato, thorace obsolete canaliculato, sub-disperse punctato, elytris distincte punctato-striatis, interstitiis planis, subtilissime strigosis, albido irroratis.*

Type location: Lusitania. A Dom. Schuppel benevole communicatus. Mus. Schh.

Type material: In the Schoenherr collection at SMNH, under the name “*Acanthiae*, Hoffmanns, 56”, a female matching the description and bearing handwritten labels “*Lix: Acanthia*, Hoffmanns, Lusitania Schüpp.”, is here designated lectotype: “Lectotypus, ♀, *Larinus acanthiae* Gyll., L. Gültekin des. 2006”, *Larinus afer* Gyll., Gültekin det. 2006”. It is pinned through the right elytron, the body otherwise intact.

Remarks: A comparative examination of type materials confirms that *Larinus acanthiae* Gyllenhal, 1835 was correctly synonymized with *Larinus afer* Gyllenhal, 1835.

***Larinus syriacus* Gyllenhal, 1835: 136**

Original diagnosis: *Oblongo-ovatus, niger, subtus dense, supra parcius cinereo-tomentosus, rostro brevi, crasso, interrupte carinato, thorace transverso, inaequaliter punctato, elytris subtilius punctato-sub-sulcatis, interstitiis planis, subtiliter alutaceis.*

Type locality: Syria. Dom. Hedenborg. Ex Musaeo Reg. Acad. Scient. Holm. descriptus.

Type material: In the Schoenherr collection at SMNH, under the name “*Syriacus*, Schh., 51-62, Ghl.”, a male matching the description and bearing a handwritten label “Syria, Hedenborg”, is here designated lectotype: “Lectotypus, ♂, *Larinus syriacus* Gyll., L. Gültekin des. 2006”. It is pinned through the side of the right elytron with a large and long pin, but the body is intact; the right middle leg is missing.

Remarks: *Larinus syriacus* Gyllenhal is a valid species related to *Larinus scolymi* (Olivier, 1807) (= *Larinus flavescens* Germar, 1824), but differs from the latter by the longer rostrum of the female and the stronger dilatation proximad of the antennal insertion. There were a further three (2♂, 1♀) specimens bearing printed labels “Syria”, “Hedb.” but we consider they are not syntypes because the labels are printed, and the specimens probably came to the collection after the description. Six additional specimens are pinned near the above-mentioned material bearing a printed label “Rhodus, Hedenb.”, which do not belong to the type series because the description does not mention material from this island. All specimens were identified as “*Larinus syriacus* Gyll. Gültekin det. 2006”.

***Larinus idoneus* Gyllenhal, 1835: 137**

Original diagnosis: *Lineari-elongatus, niger, cinereo-tomentosus, antennis pedibusque rufoferrugineis, rostro sub-carinato, thorace canaliculato, lateribus albido vittato, elytris remote punctato-striatis, interstitiis planis, subtilissime rugulosis.*

Type locality: Habitat in Iberia. Dom. Steven. Mus. Schh.

Type material: In the Schoenherr collection at SMNH, under the name “*Idoneus*, Schh., 59-63, Ghl.”, a male matching the description (Figs. 25-26) and bearing the handwritten labels “Iberia, Steven”, “241/79”, is here designated lectotype: “Lectotypus, ♂, *Larinus idoneus* Gyll., L. Gültekin des. 2006”. It is pinned through the right elytron, with the elytra weakly pulled apart.

Remarks: The ‘Iberia’ here recorded occupied an area centered in present-day Georgia in the Caucasus, where Steven collected during his residence there. Recently, Gültekin (2013a) proposed a new synonym: *Larinus idoneus* Gyllenhal, 1835: (= *Larinus schmidtii* Faust, 1894) based on study of type materials. This lectotype designation confirms and supports this act. We have detected some missing and erroneous distribution records of this species in Gültekin & Fremuth (2013). For this reason, it is necessary to correct this general distribution as follows: Georgia, Kyrgyzstan, Poland, Russia, Turkey, Ukraine and Uzbekistan (Gültekin & Podlussány 2012b; Gültekin & Fremuth 2013).

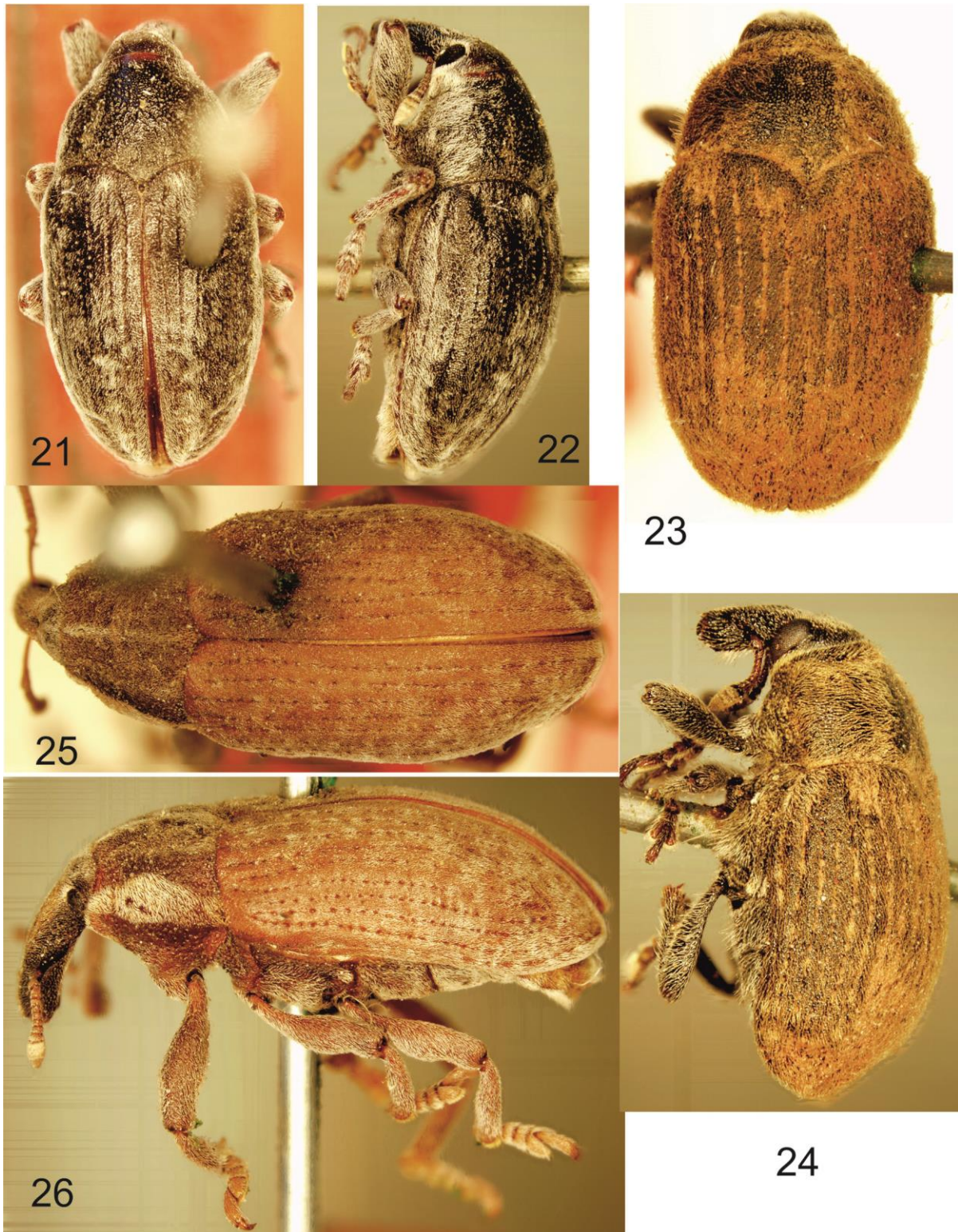
***Larinus tubicen* Boheman, 1843: 6**

Original diagnosis: *Oblongo-ovatus, brevior, niger, inaequaliter cinereo-albido-tomentosus; rostro basi carinato, utrinque obsolete impresso, thorace lateribus tuberculato, ibique et in linea dorsali albidius tomentosus, antice sub-tubulato, dorso canaliculato et in canalicula tenuiter carinato; elytris sub-punctato-striatis; interstitiis planis, confertim alutaceis.*

Type locality: Hispania forte. A Dom. Gyllenhal communicatus. Mus. Schh.

Type material: In the Schoenherr collection at SMNH, under the name “*Tubicen*, Schh., 8, Bhn., *L. Buccinator* Oliv.”, a female matching the description and bearing the handwritten labels “♀”, “Mus. Ghli.”, is here designated lectotype: “Lectotypus, ♀, *Larinus tubicen* Boh., L. Gültekin des. 2006”, “*Larinus buccinator* Ol., Gültekin det. 2006”. It is pinned

through the right elytron by a large and long pin, otherwise the body is intact, except that the last visible ventrite is damaged and all onychia and the hind tarsus beyond the 1st segment are missing.



Figures 21–26. Lectotypes of *Larinus* spp.. **21–22**, *Larinus sibiricus* Gyllenhal, 1835, **21**, dorsal view; **22**, lateral view; **23–24**, *Larinus ferrugatus* Gyllenhal, 1835, **23**, dorsal view; **24**, lateral view; **25–26**, *Larinus idoneus* Gyllenhal, 1835, **25**, dorsal view; **26**, lateral view.

Remarks: This lectotype designation confirms that *Larinus tubicen* Boheman, 1843 was correctly synonymized with *Larinus buccinator* (Olivier, 1807). Csiki (1934: 72) used the incorrect subsequent spelling *Larinus tubicen*.

***Larinus virescens* Boheman, 1843: 9**

Original diagnosis: *Oblongus, niger, dense flavo-pollinosus et breviter cinereo-pubescentis; rostro longiori, parum arcuato, basi tenuiter carinato, thorace transverso, punctatissimo, antice angustato, basi leviter bi-sinuato; elytris mediocriter punctato-striatis, insterstitiis confertim alutaceis, lateribus parcius pollinosis.*

Type locality: Dalmatia. Dom. Parreyss. Mus. Imp. Acad. Alexandr. Sicilia a Dom. Ménériés communicatus.

Type material: In the Schoenherr collection at SMNH, under the name “*virescens*, Parreys, 21, Bhn.”, a female matching the description and bearing the labels “♀” printed, “Sicilia, Ménériés” handwritten, is here designated lectotype: “Lectotypus, ♀, *Larinus virescens* Boh. L. Gültekin des. 2006”, “*Larinus rusticanus* Gyll., Gültekin det. 2006”. In the description, some additional type material was indicated from “Dalmatia”, but it could not be traced. The lectotype is pinned through the right elytron; the body is intact.

Remarks: The name *Rhinobatus virescens* was used for the first time by Dejean (1821: 97) without a description, so it is unavailable. Subsequently, Boheman described this species with the same specific name under the genus *Larinus*. Although this lectotype was identified as *Larinus rusticanus* at the time of this study, the present name of the species is *Larinus planus* (Fabricius, 1792) (= *Larinus rusticanus* Gyllenhal, 1835 syn. nov., see above).

***Larinus sulphurifer* Boheman, 1843: 10**

Original diagnosis: *Oblongus, niger, inaequaliter sulphureo-pollinosus; rostro longiori, tenuiori, parum arcuato, thorace sub-conico, parum convexo, disperse crebre punctulato, basi profunde bi-sinuato, lateribus dense flavo-pollinoso; elytris dorso subplanis, remote punctato-striatis, tomento flavo fasciculatim condensato, lateribus denso vestitis, apice obtusissime rotundatis.*

Type locality: Barbaria. Mus. Dom, Chevrolat.

Type material: In the Schoenherr collection at SMNH, under the name “*Larinus sulphurifer* Bhn., in Cap. mor, Sardinia D. Géné, 22”, a female matching the description (Figs. 27-28) and bearing the handwritten labels “G95”, “G. 75 Chevr., Barbaria”, “Chevr., *sulphurifer*”, and printed “Coll. Chevrol.”, is here designated lectotype: “Lectotypus, ♀, *Larinus sulphurifer* Boh., L. Gültekin des. 2006”. It is pinned through the right elytron, the elytra are weakly pulled apart, and the right fore leg is missing (Figs. 27-28).

Remarks: The lectotype is a slightly larger than usual female specimen; however it is still identical with *Larinus carlinae* (Olivier, 1807). Dissection of the genitalia of larger specimens from North Africa reflects no differences. Thus, a new synonym is here proposed: *Larinus carlinae* (Olivier, 1807) (= *Larinus sulphurifer* Boheman, 1843 **syn. nov.**).

***Larinus granicollis* Boheman, 1843: 11**

Original diagnosis: *Ovatus, convexus, niger; rostro brevi, valido, sub-recto, basi bisulcato, tri-carinato, thorace angustiori, confertim evidenter ruguloso, dorso tenuissime carinato, basi profunde bi-sinuato, lateribus albo-flavescenti, pubescenti et pollinoso; elytris*



Figures 27–29. Lectotypes of *Larinus* spp.. **27–28**, *Larinus sulphurifer* Boheman, 1843, **29**, dorsal view; **28**, lateral view; **29**, *Larinus chevrolatii* Boheman, 1843, lateral view.

sub-remote punctato-striatis; interstitiis confertim alutaceis, fasciculis albo-tomentosis, adspersis.

Type locality: Habitat ad Irkutsch Sibiriae. A Dom. Faldermann ad describendum missus.

Type material: In the Schoenherr collection at SMNH, under the name “*Granicollis*, Schh., 25, Bhn.”, a male matching the description and bearing a handwritten label, “irkuthsh, Falderm.”, is here designated lectotype: “Lectotypus, ♂, *Larinus granicollis* Boh. L. Gültekin des. 2006”, “*Larinus pollinis* (Laich.), Gültekin det. 2006”. It is pinned through the right elytron, with the elytra pulled apart.

Remarks: The present lectotype designation confirms that *Larinus granicollis* Boheman, 1843 is a correct synonym of *Larinus pollinis* (Laicharting, 1781).

***Larinus conspersus* Boheman, 1843: 12**

Original diagnosis: *Breviter ovatus, niger; rostro punctulato, basi leviter carinato, thorace lato, sub-triangulari, crebre punctato, rugoso, lateribus cinereo-vel flavescenti-tomentoso; elytris punctato-striatis, transversim rugulosis, tomento cinereo vel flavo tessellatis.*

Type locality: Gallia, Podolia, Volhynia, Caucasus. Mus. Schh.

Type material: In the Schoenherr collection at SMNH, under the name “*Conspersus*, Dejean, 27, Bhn.”, a male matching the description and bearing the handwritten labels, “♂”, “*Rh. fringilla*, Gallia, Dej.”, is here designated lectotype: “Lectotypus, ♂, *Larinus conspersus* Boh. L. Gültekin des. 2006”, “*Larinus sturnus* (Schaller), Gültekin det. 2006”. Two females and a male matching the description as well are here designated paralectotypes, their handwritten labels reading, respectively; “♀”, “*Rh. fringilla*, Gallia, Dej.”, “Paralectotypus, ♀, *Larinus*

conspersus Boh. L. Gültekin des. 2006”, “*Larinus sturnus* (Schaller), Gültekin det. 2006”; “♀”, “*Rhin. jacea*, Caucas. Steven”, “Paralectotypus, ♀, *Larinus conspersus* Boh. L. Gültekin des. 2006”, “*Larinus sturnus* (Schaller), Gültekin det. 2006”; “♂”, “*Rh. jacea* var. m raccept (an), nutant. c. Volhyn. D. Besser”, “Paralectotypus, ♂, *Larinus conspersus* Boh. L. Gültekin des. 2006”, “*Larinus sturnus* (Schaller), Gültekin det. 2006”. A female bearing labels “♀”, “*Rhinobat*: Sibiria, Steven” does not belong to the type series because the description does not mention any material from “Sibiria”; it has been labelled “*Larinus sturnus* (Schaller), Gültekin det. 2006”. The lectotype and the first paralectotype were pinned through the right elytron, and their bodies are intact; the elytra are pulled apart in the second paralectotype, but the body is intact in the last one, which is a teneral adult with reddish brown integument, and of which the left hind leg is missing.

Remarks: The present lectotype designation confirms that *Larinus conspersus* Boheman, 1843 is a correct synonym of *Larinus sturnus* (Schaller, 1783).

***Larinus guttifer* Boheman, 1843: 13**

Original diagnosis: *Ovatus, niger, cinereo-tomentosus; rostro thorace breviori, valido, subrecto, punctulato, basi obsolete carinato, thorace confertim punctato-rugoso, utrinque vitta laterali, antice attenuata, albida decorato; elytris subtiliter coriaceis, mediocriter punctato-striatis, guttulis nonnullis albidis obsitis.*

Type locality: Sicilia. Dom. Ménériés. Mus. Schh.

Type material: In the Schoenherr collection at SMNH, under the name “*Guttifer*, Schh., 35, Bhn.”, a male matching the description and bearing a handwritten label “Sicilia, Ménériés”, is here designated lectotype: “Lectotypus, ♂, *Larinus guttifer* Boh., L. Gültekin des. 2006”, “*Larinus maurus* (Ol.) Gültekin det. 2006”. It is pinned through the right elytron, its body otherwise is intact.

Remarks: The present lectotype designation confirms that *Larinus guttifer* Boheman, 1843 is a correct synonym of *Larinus maurus* (Olivier, 1807).

***Larinus sericatus* Boheman, 1843: 14**

Original diagnosis: *Oblongus, piceus, parum nitidus, supra parcius subtus dense aequaliter cinereo-tomentosus, parce flavescenti-pollinosus; antennis pedibusque piceo-ferrugineis, fronto depressa, rostro valido, recto, carinato, thorace sub-pulvinate, confertim ruguloso-punctato; elytris subtiliter remote punctato-striatis, interstitiis confertim alutaceis.*

Type locality: Persia occidentalis. Dom. Faldermann. Mus. Schh.

Type material: In the Schoenherr collection at SMNH, under the name “*Sericatus*, Schh., 37, Bhn.”, a male matching the description and bearing handwritten labels “♂”, “Persia, Falderm.”, is here designated lectotype: “Lectotypus, ♂, *Larinus sericatus* Boh., L. Gültekin des. 2006”, “*Larinus syriacus* Gyll., Gültekin det. 2006”. A female bearing the same labels is designated as paralectotype: “Paralectotypus, ♀, *Larinus sericatus* Boh., L. Gültekin des. 2006”, “*Larinus syriacus* Gyll., Gültekin det. 2006”. Both samples are separately pinned through the right elytron; their bodies are intact, except for the right part of the apex of the rostrum of the lectotype being damaged.

Remarks: The present lectotype designation confirms that *Larinus sericatus* Boheman, 1843 is a correct synonym of *Larinus syriacus* Gyllenhal, 1835.

***Larinus carinifer* Boheman, 1843: 16**

Original diagnosis: *Oblongus, niger, parce cinereo-tomentosus; rostro thorace brevior, valido, sub-recto, supra tricarinato, carinis lateralibus arcuatis, basi abbreviatis, thorace confertim ruguloso-punctato; elytris parce cinereo-tessellatis, mediocriter punctato-striatis, interstitiis planis, subtiliter confertim alutaceis, striis 1 et 2 basi connexis, interstitio ibique impresso.*

Type locality: Sicilia. Dom. Ménériés. Mus. Schh.

Type material: In the Schoenherr collection at SMNH, under the name “*Carinifer*, Schh., 52, Bhn.”, a female matching the description and bearing a handwritten label “Sicilia, Ménériés”, is here designated lectotype: “Lectotypus, ♀, *Larinus carinifer* Boh., L. Gültekin des. 2006”, “*Larinus flavescens* Germ., Gültekin det. 2006”. There is an additional specimen pinned near the lectotype and bearing a label “Hispania, Westring” which does not belong to the type series, and has been identified as “*Larinus flavescens* Germ., Gültekin det. 2006”. The lectotype is pinned through the right elytron; the body is intact.

Remarks: The present lectotype designation confirms that *Larinus carinifer* Boheman, 1843 is a correct synonym of *Larinus scolymi* Olivier, 1807 (= *Larinus flavescens* Germar, 1824).

***Larinus genei* Boheman, 1843: 17**

Original diagnosis: *Ovatus, niger, dense flavescens-tomentosus et pollinosus; rostro longitudine thoracis, medice arcuato, basi carinato, obsolete bi-sulcato, thorace sub-conico, subtiliter alutaceo, linea angusta dorsali vittaque utrinque laterali, albidis, ornato; elytris subtiliter punctato-striatis; interstitiis planis, subtiliter alutaceis, vitta dorsali aliaque intra-laterali, albido-tomentosis, notatis.*

Type locality: Sardinia. A Dom. Chevrolat communicatus. Mus. Schh.

Type material: In the Schoenherr collection at SMNH, under the name “*Génei*, Schh., 58, Bhn.”, a female matching the description and bearing the labels “♀” printed, “*Lar. ursus: Genei*, Sardin: Chev.” handwritten, is here designated lectotype: “Lectotypus, ♀, *Larinus genei* Boh., L. Gültekin des. 2006”, “*Larinus ursus* (F.), Gültekin det. 2006”. The lectotype is pinned through the right elytron, with its head glued to the pronotum; there is a pin hole on the sutural interval near the apex.

Remarks: The present lectotype designation confirms that *Larinus genei* Boheman, 1843 is a correct synonym of *Larinus ursus* (Fabricius, 1792).

***Larinus rugicollis* Boheman, 1843: 18**

Original diagnosis: *Ovatus, niger, tomento cinereo-albido undique obsitus; rostro longiori, basi bi-sulcato, carinato, thorace breviori, lateribus ampliato, confertim evidenter ruguloso, dorso tenuissime carinato; elytris evidenter punctato-striatis, interstitiis rugulosis, lateribus albido-tomentosis.*

Type locality: Barbaria. Mus. Dom. Chevrolat.

Type material: In the Schoenherr collection at SMNH, under the name “*Larinus rugicollis* (Schn.) Bhn., in Schh., VII, 2, P18, Type, Barbaria, 60” on blue paper, a male matching the description and bearing the handwritten labels “orange square paper”, “S45”, “Chevrolat, Barbaria”, “*rugicollis* Capiom.”, “white square paper”, “*Larinus rugicollis* Schn., suppl. *rugicollis rubicollis* n. sp., ...ffect, Barbaria”, “Coll. Chevrol.” printed, is here designated

lectotype: “Lectotypus, ♂, *Larinus rugicollis* Boh., L. Gültekin des. 2006”, “*Larinus ursus* (F.), Gültekin det. 2006”. The lectotype is pinned through the right elytron, with its body intact.

Remarks: The present lectotype designation confirms that *Larinus rugicollis* Boheman, 1843 is a correct synonymy of *Larinus ursus* (Fabricius, 1792).

***Larinus reconditus* Boheman, 1843: 19**

Original diagnosis: *Breviter ovatus, niger, subtus dense supra maculatim cinereo-tomentosus; rostro longiori, recto, carinato, basi bi-sulcato, thorace breviori, pulvinate, antice tubulato, obsolete sub-remote varioloso-punctato, dorso tenuissime carinato; elytris subtiliter punctato-striatis; interstitiis confertim alutaceis, apice conjunctim obtuse rotundatis.*

Type locality: Gallia meridionalis. E Mus. Reg. Gall. missus. Mus. Schh.

Type material: In the Schoenherr collection at SMNH, under the name “*Reconditus*, Schh., 61, Bhn.”, a female matching the description and bearing a handwritten label “Gallia mer. Mus. R. Gall.”, is here designated lectotype: “Lectotypus, ♀, *Larinus reconditus* Boh., L. Gültekin des. 2006”, “*Larinus vulpes* (Ol.), Gültekin det. 2006”. It is pinned through the right elytron, with the elytra weakly pulled apart.

Remarks: The present lectotype designation confirms that *Larinus reconditus* Boheman, 1843 is a correct synonym of *Larinus vulpes* (Olivier, 1807).

***Larinus bicolor* Boheman, 1843: 20**

Original diagnosis: *Oblongo-ovatus, niger, dense albo-tomentosus; rostro longiori, cylindrico, cum capite rufescenti-tomentoso, thorace sub-conico, obsolete rugoso-punctato, vitta utrinque sub-denudata ornato, dorso ferrugineo-variegato; elytris sub-remote subtiliter punctato-striatis, interstitiis confertissime coriaceis.*

Type locality: Rossia meridionalis. A Dom. Fischer communicatus. Mus. Schh.

Type material: In the Schoenherr collection at SMNH, under the name “*Bicolor*, Fischer et Wladl., 65, Bhn.”, a male matching the description and bearing the labels “♂” printed, “*L. bicolor* Fischer, Rossia mer., Fischer” handwritten, is here designated lectotype: “Lectotypus, ♂, *Larinus bicolor* Boh., L. Gültekin des. 2006”, “*Larinus idoneus* Gyll., Gültekin det. 2006”. A female bearing the same label is here designated as paralectotype: “Paralectotypus, ♀, *Larinus bicolor* Boh., L. Gültekin des. 2006”, “*Larinus idoneus* Gyll., Gültekin det. 2006”. The lectotype is pinned through the right elytron by a large pin, so that the elytra are cracked and the ventrites damaged. The paralectotype is pinned through the right elytron with a headless pin; the body is intact.

Remarks: The present lectotype designation confirms that *Larinus bicolor* Boheman, 1843 is a correct synonym of *Larinus idoneus* Gyllenhal, 1835.

***Larinus chevrolatii* Boheman, 1843: 22**

Original diagnosis: *Oblongus, niger, supra parce subtus dense albo-tomentosus; rostro thorace breviori, parum arcuato; thorace sub-triangulari, subtiliter punctulato, linea angusta media, vitta utrinque lata laterali, antice angustata, dense niveo-squamosis, ornato; elytris apicem versus attenuatis, mediocriter punctato-striatis, dorso lateribusque niveo-tomentosis.*

Type locality: Sicilia et Senegallia. A DD. Chevrolat et Schüppel communicatus. Mus. Schh.

Type material: In the Schoenherr collection at SMNH, under the name “*Chevrolati*, Helfe., 67, Bhn.”, a male matching the description (Fig. 29) and bearing a handwritten label “Sicilia, Schüppel”, is here designated lectotype: “Lectotypus, ♂, *Larinus chevrolatii* Boh., L. Gültekin des. 2006”, “*Larinus siculus* Boh., Gültekin det. 2006”. According to the description, there should be at least one additional syntype from “Senegallia”, but it could not be traced. The lectotype is pinned through the right elytron, and the elytra are weakly pulled apart (Fig. 29).

Remarks: The present lectotype designation confirms that *Larinus chevrolatii* Boheman, 1843 is a correct synonym of *Larinus siculus* Boheman, 1843.

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References

- Alonso-Zarazaga M. A. & Lyal C. H. C. 1999.** *A world catalogue of families and genera of Curculionoidea (Insecta: Coleoptera) (Excepting Scolytidae and Platypodidae)*. Entomopraxis, Barcelona, 315 pp.
- Boheman C. H. 1843.** [new taxa]. In: Schoenherr, C. J. 1843. *Genera et species curculionidum, cum synonymia hujus familiae. Species novae aut hactenus minus cognitae, descriptionibus a Dom. L. Gyllenhal, C. H. Boheman, O. J. Fahraeus, et entomologiis aliis illustratae*. Tomus septimus.- Pars secunda. 1843. Supplementum continens. Roret, Paris; Fleischer, Lipsiae, VIII + 1–461 pp.
- Boheman C. H. 1845.** [new taxa]. In: Schoenherr C. J. 1845: *Genera et species curculionidum, cum synonymia hujus familiae, Species novae aut hactenus minus cognitae, descriptionibus a Dom. Leonardo Gyllenhal, C. H. Boheman, et entomologis aliis illustratae*. Paris, Roret, 8 (2), 1–504.
- Capiomont G. 1874.** 2^e mémoire. Monographie des *Larinus*. 2^e partie. Mise en ordre d'après les manuscrits de l'auteur par M. C.-E. Leprieur. *Annales de la Société entomologique de France* (5)4(3): 283–328
- Csiki E. 1934.** Curculionidae: Subfam. Cleoninae. Pars. 134. In: Schenkling, S. (ed.): *Coleopterorum Catalogus auspiciis et auxilio W. Junk. W. Junk, s'Gravenhage*, 152 pp.
- Dejean P. F. M. A. 1821.** *Catalogue de la collection de Coléoptères de M. le Baron Dejean*. Crevot, Paris, [2] + VIII + 136 p.
- Desbrochers des Loges J. 1895.** Espèces inédites de Curculionides de l'Ancien Monde IV. (Cont.). *Le Frelon* 4(6): 81–96.
- Gemminger M. 1871.** Curculionidae. In Gemminger M. & Harold E. de. *Catalogus Coleopterorum hucusque descriptorum synonymicus et systematicus. Tom. VIII. Monachii: E. H. Gummi (G. Beck), pp. 2183–2668 + [11]*.

- Germar E. F. 1824.** *Insectorum species novae aut minus cognitae, descriptionibus illustratae*. Halae: Impensis J. C. Hendelii et filii, xxiv + 624 pp., 2 pl.
- Gültekin L. 2006a.** On some Lixinae types of J. C. Fabricius (Coleoptera, Curculionidae). *Fragmenta entomologica* 38(1): 111–133.
- Gültekin L. 2006b.** A new species of the weevil genus *Larinus* Dejean from Turkey and Syria (Coleoptera: Curculionidae: Lixinae). *Zootaxa* 1248: 21–26.
- Gültekin L. 2006c.** A new weevil species *Larinus araxicola* sp. n. (Coleoptera: Curculionidae: Lixinae) from northeastern Turkey with biological notes. *Proceedings of the Russian Entomological Society* 77: 44–47.
- Gültekin L. 2008.** Taxonomic review of the stem-inhabiting trehala-constructing *Larinus* Dejean, 1821 (Coleoptera: Curculionidae): New species, systematics and ecology. *Zootaxa* 1714: 1–18.
- Gültekin L. 2010.** Taxonomic remarks on some genera of Lixini Schoenherr, 1823 (Coleoptera: Curculionidae). *Zootaxa* 2411: 1–21.
- Gültekin L. 2012.** *Allolarinus*, a new genus and species of Lixini (Coleoptera: Curculionidae: Lixinae) from Congo. *Annales de la Société entomologique de France* 48(1-2): 57–65.
- Gültekin L. 2013a.** Lixini, p. 102–110. – In: Löbl I. & Smetana A. (eds): *Catalogue of Palaearctic Coleoptera. Curculionoidea II*. Volume 8. Leiden, Brill, 700 pp.
- Gültekin L. 2013b.** *Afrolarinus*, a new genus of Lixini (Coleoptera: Curculionidae: Lixinae) from Afrotropical region with taxonomic revision. *Deutsche Entomologische Zeitschrift* 60(2): 255–264.
- Gültekin L. 2013c.** A revision of the new weevil genus *Nefis* gen. nov. (Coleoptera: Curculionidae). *Journal of Insect Biodiversity* 1(3): 1–51.
- Gültekin L. & Alonso-Zarazaga M. A. 2013.** *Larinus berti* sp. nov. (Coleoptera: Curculionidae: Lixinae) from North Africa. *ZooKeys* 342: 21–28.
- Gültekin L. & Fremuth J. 2013.** Lixini, p. 456–572. – In: Löbl I. & Smetana A. (eds): *Catalogue of Palaearctic Coleoptera. Curculionoidea II*. Volume 8. Leiden, Brill, 700 pp.
- Gültekin L. & Perrin H. 2006.** The species of *Larinus* Dejean, 1821 (Coleoptera: Curculionidae) described by J. Desbrochers: lectotype designations and new synonymies. *Zootaxa* 1350: 55–68.
- Gültekin L. & Perrin H. 2011.** Study of a part of the A. G. Olivier Lixini collection (Coleoptera: Curculionidae): lectotype designations, new synonymies and nomenclatural acts. *Zootaxa* 2943: 45–57.
- Gültekin L. & Podlussány A. 2012a.** Two new species of *Larinus* (Coleoptera: Curculionidae: Lixinae) from Iran. *Acta Entomologica Musei Nationalis Pragae* 52(1): 245–258.
- Gültekin L. & Podlussány A. 2012b.** New faunistic data on selected Palaearctic species of the genus *Larinus* Dejean, 1821 (Coleoptera: Curculionidae, Lixinae). *Journal of the Entomological Research Society* 14(2): 71–85.
- Gyllenhal L. 1827.** *Insecta Svecica descripta a Leonardo Gyllenhal. Classis I. Coleoptera sive Eleuterata. Tomi I. Pars IV*. Lipsiae: Friedericum Fleischer. viii + [2] + 761 + (1 Enm.).
- Gyllenhal L. 1835.** [new taxa]. In: Schoenherr C. J. 1835: *Genera et species curculionidum, cum synonymia hujus familiae. Species novae aut hactenus minus cognitae, descriptionibus a Dom. Leonardo Gyllenhal, C. H. Boheman, et entomologis aliis*

- illustratae*. Tomus tertius. Pars prima. [1836]. Roret, Paris; Fleischer, Lipsiae: [6] + 1–505 pp.
- Gyllenhal L. 1837.** [new taxa]. In: Faldermann F. 1837: Fauna entomologica trans-caucasica. Coleoptera. Pars II. *Nouveaux Mémoires de la Société Impériale des Naturalistes de Moscou* 5: 1–433, 15 pls.
- International Commission on Zoological Nomenclature. 1999.** *International code of zoological nomenclature. Fourth edition adopted by the International Union of Biological Sciences*. London: International Trust for Zoological Nomenclature. XXIX + 306 p.
- Petri K. 1907.** Bestimmungs-Tabelle der Gattungen *Larinus* Germ. (incl. *Stolatus* Muls.), *Microlarinus* Hochhuth, *Rhinocyllus* Germar und *Bangasternus* Gozis aus dem europäischen, mediterran, west- und nordasiatischen Faunengebiete. *Verhandlungen des naturforschenden Vereines in Brünn* 45[1906]: 51–146.
- Schoenherr C. J. 1832.** [Curculionoidea]. In: Ménétriés, E.: *Catalogue raisonné des objets de zoologie recueillis dans un voyage au Caucase et jusqu'aux frontières actuelles de la Perse. Entrepris par ordre de S. M. l'Empereur*. St. Petersburg, Académie Impériale des Sciences, xxxii + [2] + 271 + v pp.
- Steven C. von. 1829.** Notice sur quelques Insectes de la collection de C. Steven. *Bulletin de la Société Impériale des Naturalistes de Moscou* 1(9): 284–288.
- Ter-Minasian M. E. 1962.** Novye vidy dolgonosikov podsemejstva Cleoninae (Coleoptera, Curculionidae) v faune SSSR. *Trudy Zoologičeskogo Instituta Akademii Nauk SSSR* 30: 258–259.
- Ter-Minasian M. E. 1967.** Zhuki-dolgonosiki podsemejstva Cleoninae fauny SSSR. *Tsvetozhily i stebleedy (triba Lixini)*. Nauka, Leningrad, 140 [+ 1 unnumbered] p. (Translated 1978. *Weevils of the subfamily Cleoninae in the fauna of the USSR. Tribe Lixini*. ARS-USDA and National Science Foundation, Washington. Amerind Publishing Co., New Delhi, vi + 166 p.)
- Zimmerman E. C. 1993.** *Australian Weevils (Coleoptera: Curculionidae). Volume III. Nanophyidae, Rhynchophoridae, Erihrinidae, Curculionidae: Amycterinae, Literature Consulted*. CSIRO Publishers, Melbourne, Australia, pp. i–x, 1–854, figures 1–259.

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<http://www.insectbiodiversity.org>