

ON SOME LIXINAE TYPES OF I. C. FABRICIUS
(Coleoptera, Curculionidae)

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INTRODUCTION

The subfamily Lixinae includes over 1200 species and comprises two tribes, Lixini and Cleonini (Alonso-Zarazaga & Lyal 1999; Colonnelli 2003). It is well represented in the Palaearctic with approximately 700 species (Capiomont 1874a, 1874b, 1874c; Petri 1905, 1907; Csiki 1934; Ter-Minassian 1967, 1988). Most of Palaearctic Lixinae are confined to the steppes and other open landscapes in the southern and southeastern parts of Europe, North Africa, eastern European countries, the Caucasus, western and central Asia, southern Siberia, and Mongolia. Many species are abundant, and some of them are of paramount importance as pests of agricultural crops, and biocontrol agents for weeds (Zwölfer et al. 1971).

Taxonomic knowledge of Lixinae is still very incomplete due to their species richness particularly in the Palaearctic, and the wide intraspecific variability associated with the existence of several local forms. Therefore, a study of the types is of great importance since some confusion arose already about the earlier names, although most of subsequent authors neglected the study of types. The need to determine whether the use of the Fabrician names is correct resulted in this paper.

The Fabricius collection was checked in order to find Lixinae types, and to fix their names, designating lectotypes when necessary, according to the International Code of Zoological Nomenclature (1999). The known Lixinae types of the Fabricius collection are all (except some, see Zimsen 1964) preserved in the Zoologisk Museum, Copenhagen. According to Zimsen (1964), the Fabricius collection consisted of two parts: the "Sehested and Tønder Lund Collection"

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known also as “Copenhagen Collection”, presently preserved in Copenhagen, and the “Kiel Collection” - which was the Fabricius own collection - preserved in Kiel until the recent past when Dr. S. L. Tuxen arranged for it to be also deposited in the Zoologisk Museum, Copenhagen for an indefinite period. The abbreviation KC is used here for the “Kiel Collection”, and that of CC for the “Copenhagen Collection” in the comments to the species below.

Lixine specimens are generally in quite good condition, considering the age of the collection, a large part of it being more than 200 years old. There are no locality labels in the Fabricius collection, and peculiar are the very small name labels which Fabricius used since names of the species - but never those of the genera - usually were written only on a small scrap of paper. There is also a possibility that some of the labels were not written by him, according from information given by the curator. The names on the majority of the labels are still to be read, but some of them were eaten by Psocidae so that the writing has almost or partly disappeared.

Fabricius never mentioned upon how many specimens based his descriptions. For this reason, even when in his collection only a single example has been found, it was always designated as the lectotype. Subsequently added labels by curators, like the red printed one with “Type” or a green square one (not mentioned in the original description, and most probably indicating types) are always omitted. Only original Fabricius handwritten labels (or supposedly so) have been taken into account. All measurements exclude rostrum.

The order of the species is by the year of description, and by the number of page when more species were described in the same paper.

Curculio iaceae Fabricius, 1775

Curculio iaceae Fabricius, 1775: 129

TYPES. Of the six specimens in KC under the name *jaceae* only three females fit the description. The one in quite good condition (fig. 1) the body length of which is mm 8.1 is here selected as the lectotype with the red handwritten label “Lectotypus ♀, *Curculio iaceae* Fabricius, L. Gültekin des., 2005”: this female is pinned through



Fig. 1 – Lectotypes (from left to right and from top to bottom) of: *Larinus iaceae* (Fabricius), *L. planus* (Fabricius), *L. ursus* (Fabricius) and *L. onopordi* (Fabricius). Not at the same scale.

intervals 2 and 3 of the right elytron with the elytra divaricated, left middle claw segment, left hind tarsi and left fore tarsus beyond the first segment missing. The second specimen (length: mm 8.4), pinned through the intervals 3 and 4 of the right elytron by a large pin (thus elytra widely divaricated), and with right fore claw segment and hind tarsus beyond second segment missing is designated paralectotype with “Paralectotypus ♀, *Curculio iaceae* Fabricius, L. Gültekin des., 2005” [red, handwritten]. The third example the body length of which is mm 8.3, is in not so good shape since the thorax is attached only to the left part of abdomen: it is pinned through the right elytron on the intervals 3-4 by a large pin (thus elytra are widely divaricated), and the left funicle beyond the first segment, the left fore and middle legs completely, and the right middle leg apart the basal third of femur missing. It is here designated as paralectotype with “Paralectotypus ♀,

Curculio iaceae Fabricius, L. Gültekin des., 2005" [red, handwritten]. The remaining three specimens do not match the description, and are one male of *Larinus brevis* (Herbst, 1795) and two females of *Larinus turbinatus* Gyllenhal, 1836, respectively.

REMARKS. The current name of this species is *Larinus* (*Phyllonomeus*) *iaceae* (Fabricius, 1775). The name "iaceae" of the original description may appear as a misprint since Fabricius (1775: 129) writes: "Habitat in *Centaurea jacea* Prof. Hermann". However, this spelling was confirmed twice by the author after 12 years when Fabricius (1787) cited again on page 98 this species as *Curculio iaceae*, and - writing about the following species *Curculio punctulatus* on the same page - he remarks: "Statura *C. Iaceae* aut paullo minor". After five years Fabricius (1792: 400) spelled this species "Jacea", whereas - while commenting on the same page 400 both the following species "26. *Curculio planus*" and "27. *Curculio punctulatus*" - he writes "Statura omnino *C. Jaceae* at minor" for the first, and "Paullo minor *C. Jaceae*" for the second. Only in 1801 he used exclusively the spelling "jaceae" (Fabricius, 1801), that is also that of the (probably) original handwritten label found in Copenhagen. Due to the above reasons, and nonetheless the vast majority of subsequent authors till Wanat and Mokrzycki (2005) - with the noteworthy exceptions of Germar (1824), Alonso-Zarazaga and Lyal (1999) and Colonnelli (2003) - used the spelling "jaceae", this must be considered an incorrect subsequent spelling. The fact that Fabricius himself confirmed in 1787 the spelling "iaceae", then in 1792, he arbitrarily changed it in "jacea" and "jaceae", and that the correct "iaceae" was (although uncommonly) used in a span of some 150 years, makes it impossible to enforce the the rules of the art. 33.3.1 (ICZN 1999).

As a result of the study of types of both, the new synonymy *Larinus iaceae* (Fabricius, 1787) [= *L. contractus* Faust, 1885, **syn. n.**] is also established.

Curculio angustatus Fabricius, 1775

Curculio angustatus Fabricius, 1775: 135

TYPES. Under the name *angustatus* there are two specimens

in KC, one female and one male, both fitting the description. The female, which is in relatively good condition, is here selected as the lectotype with “Lectotypus ♀, *Curculio angustatus* Fabricius, L. Gültekin des., 2005” [red, handwritten]. The lectotype is mm 15.3 long, and is obliquely pinned through intervals 5 and 6 of the right elytron with only both hind tarsi missing. The male is here designated as paralectotype by adding the red handwritten label “Paralectotypus ♂, *Curculio angustatus* Fabricius, L. Gültekin des., 2005”. The paralectotypus is mm 16.4 long, and is pinned very near the base of the right elytron through the intervals 2 and 3. It is in good condition, but the whole right hind leg, and the left hind and middle claw segments are missing.

REMARKS. The current name this species is *Lixus (Dilixellus) angustatus* (Fabricius, 1775). See also under *Curculio ferrugatus* and *Lixus amphora* Fabricius, 1801 below for synonymic remarks.

***Curculio filiformis* Fabricius, 1781**

Curculio filiformis Fabricius, 1781: 172

TYPES. Only a male specimen agreeing with the description is under the name *filiformis* in KC, and it was thus designated as the lectotype with “Lectotypus ♂, *Curculio filiformis* Fabricius, L. Gültekin des., 2005” [red, handwritten]. The body length is 6.7 mm, and it is in relatively good condition, having been pinned by a thick pin through the left elytron on intervals 2-4 (thus elytra are weakly divaricated), but the specimen is almost intact since only the right funicle beyond the segment 3 is missing. Another female specimen matching the description and bearing the handwritten label “Fabricius, d. d: Mus: S: & T.L. *filiformis* F.” is located in CC, and is here selected as paralectotype with “Paralectotypus ♀, *Curculio filiformis* Fabricius, L. Gültekin des., 2005” [red, handwritten]. It is pinned by a pin thinner than the original one through the intervals 2-3 of the right elytron, whereas the hole of the thick original pin is visible on intervals 2-5 though filled by glue. The body length of the paralectotype is mm 5.8, and the insect is intact, apart the right hind leg missing.

REMARKS. The current name this species is *Lixus (Epimeces) filiformis* (Fabricius, 1781).

Curculio cynarae Fabricius, 1787

Curculio cynarae Fabricius, 1787: 98

TYPES. Under the name *cynarae* there are five specimens in KC, only one of them corresponding to the original description. This is designated here as the male lectotype with “Lectotypus ♂, *Curculio cynarae* Fabricius, L. Gültekin des., 2005” [red, handwritten]. Its length is mm 19.1, and it is pinned through the right elytron on intervals 2-3. The lectotype is in good condition, only the left middle and hind claw segment are missing. The other four specimens are considered not typical, three of them (2♂♂, 1♀) being *Larinus latus* (Herbst, 1784) and the last one (♀) *Larinus scolymi* (Olivier, 1807). In CC there are two male specimens, both of them matching the description. One bears the label “Tumis Vahl, Mus: S: & T: L: *Rhynchaenus cynarae* F.” beside the added appropriate red, handwritten label “Paralectotypus ♂, *Curculio cynarae* Fabricius, L. Gültekin des., 2005”. It is pinned near base of the second interval of the right elytron by a not original pin since there is a wider hole closed by transparent glue on the second interval of the left elytron. The insect is in good condition, and its length is mm 19.1. The other male is here designated paralectotype by adding “Paralectotypus ♂, *Curculio cynarae* Fabricius, L. Gültekin des., 2005” [red, handwritten]. The original pin was also replaced with a thinner one on the second interval of right elytron and, since the curator used the same hole of the previous pin, he was forced to glue a small square paper under the sternum. Apart this, the specimen is in good condition, being its length 19.7 mm.

REMARKS. The selected lectotype matches the current meaning of *Larinus (Larinus) cynarae* (Fabricius, 1787).

Curculio onopordi Fabricius, 1787

Curculio onopordi Fabricius, 1787: 98

TYPES. Of the two specimens under the name *onopordi* in KC only one fits the original description, and was selected as the male lectotype (fig. 1) by adding the red handwritten label “Lectotypus ♀, *Curculio onopordi* Fabricius, L. Gültekin des., 2005”. Its length is mm 15.3, and it is pinned through the right elytron near the base of the second interval this causing the elytra slightly divaricate. The lectotype is in good shape apart joints 4-7 and club of right antenna, and right middle claw segment missing. The above mentioned other male is a *Larinus buccinator* (Olivier, 1807). Under the same name *onopordi* was located a female specimen in CC which fits the description. Consequently it is here designated paralectotype with “Paralectotypus ♀, *Curculio onopordi* Fabricius, L. Gültekin des., 2005” [red, handwritten]. The paralectotype length is mm 17.7, and the specimen is pinned through the third interval of the right elytron by a pin which is not original since the original hole is wider than the present one. In addition, the right middle leg and the left middle claw segment are missing.

REMARKS. The present name of this species, always correctly identified, is *Larinus (Larinus) onopordi* (Fabricius). As a consequence of the study of types of both, the new synonymy *Larinus onopordi* (Fabricius, 1787) [= *Larinus uniformis* Petri, 1907, **syn. n.**] is here established. The type of *Larinus uniformis* Petri, 1907, loaned to B. Korotyaev, and examined by me in St. Petersburg in 2003, is merely a small specimen of *L. onopordi*.

Curculio umbellatarum Fabricius, 1787

Curculio umbellatarum Fabricius, 1787: 103

TYPES. Under the name *umbellatarum* there is a male specimen in KC fitting the description, and it is here designated as the lectotype with “Lectotypus ♂, *Curculio umbellatarum* Fabricius, L. Gültekin des., 2005” [red, handwritten]. The lectotype is mm 8.7 long, and is pinned by a thick pin through the intervals 2-4 of the left elytron which caused the elytra are weakly divaricated, but is in good shape. A second female specimen, bearing the handwritten label “Tumis Vahl., Mus: S: & T.L. *umbellatarum* F.” is located in CC is here selected as paralectotype with “Paralectotypus ♀, *Curculio umbellatarum* Fa-

bricius, L. Gültekin des., 2005" [red, handwritten]. Its length is 11.0 mm and it is in good condition, except the left middle tarsus beyond the first segment missing. The paralectotype was originally pinned by a thick pin through the left elytron on intervals 2-4, then the pin was removed (and the hole filled with glue), and now it is pinned by a thin pin piercing the third interval of the right elytron.

REMARKS. The species was correctly identified by subsequent authors, and its current name is *Lixus* (*Eulixus*) *umbellatarum* (Fabricius, 1787).

Curculio bardanae Fabricius, 1787

Curculio bardanae Fabricius, 1787: 104

TYPES. Among the three specimens under the name *bardanae* in KC, only one female fits the description. It is here designated as the lectotype with "Lectotypus ♀, *Curculio bardanae* Fabricius, L. Gültekin des., 2005" [red, handwritten]. Its length is mm 8.2, and the insect is obliquely pinned by a thick pin through the intervals 1-4 of the right elytron so that the pin reached the bottom of the left side causing the elytra are a little cracked and divaricated. Left middle leg and right funicle beyond the second joint are missing. The above recorded two specimens are a male of *Lixus angustus* (Herbst, 1795) and a female of *Hypolixus truncatulus* (Fabricius, 1798), respectively.

REMARKS. The present name of this species is *Lixus* (*Dilixellus*) *bardanae* (Fabricius, 1787).

Curculio albidus Fabricius, 1787

Curculio albidus Fabricius, 1787: 114

TYPES. Under the name *albidus* there are six specimens in KC and five of them (one male and four females) fit the description, being thus here designated lectotypes as follows. The male lectotype bears the red handwritten label "Lectotypus ♂, *Curculio albidus* Fabricius,

L. Gültekin des., 2005". It is pinned through the right elytron by a thick pin near the base, with joints 2-7 and club of the left antenna, right middle tarsus beyond first segment, left middle tarsus beyond second segment, left hind claw segment and right hind claws missing, and its length is mm 8.0. The four females are designated here as paralectotypes, and accordingly labelled "Paralectotypus ♀, *Curculio albidus* Fabricius, L. Gültekin des., 2005" [red, handwritten] each. The first one, pinned through the right elytron by a thick pin, is in good condition and is long mm 7.5. The second is pinned near the base of the right elytron, its right funicle beyond segment 1, right middle leg completely, left middle claw segment are missing, and its length is mm 8.3. The third female is pinned through the right elytron by a so thick pin that elytra are transversely broken; its right hind leg and middle claw segment are missing, and its body length is mm 7.8. The fourth headless paralectotype is pinned through the right elytron, being its right middle tarsus beyond segment 2, the left fore tarsus beyond segment 1, the left middle and hind tarsus completely and the right hind claw segment missing: pronotum and elytra are long mm 8.4 together. The remaining specimen, not considered typical, is a female of *Mecaspis striatellus* (Fabricius, 1792).

REMARKS. The present name of this species is *Chromoderus fasciatus* (O. F. Müller, 1776), and the current synonymy *Curculio fasciatus* O. F. Müller, 1776 [= *Curculio albidus* Fabricius, 1787] was found correct.

***Curculio emarginatus* Fabricius, 1787**

Curculio emarginatus Fabricius, 1787: 114

TYPE. The male lectotype designated here by adding the red handwritten label "Lectotypus ♂, *Curculio emarginatus* Fabricius, L. Gültekin des., 2005" is the single one under the name *emarginatus* in KC. This specimen in good condition is pinned through the right elytron, is mm 8.9 long, and corresponds to the description.

REMARKS. This always correctly recognised species is presently named *Mecaspis emarginatus* (Fabricius, 1787).

Curculio ursus Fabricius, 1792

Curculio ursus Fabricius, 1792: 399

TYPE. Under the name *ursus* there are two female specimens in KC, only one of them fitting the description. This is here designated lectotype (fig. 1) with the red, handwritten label “Lectotypus ♀, *Curculio ursus* Fabricius, L. Gültekin des., 2005”. Its body length is mm 11.4. The thorax is glued to the elytra because it was surely displaced in the past, and for this reason thorax and elytra are a little divaricated along the connected area. The specimen is pinned through the third interval of the left elytron near the base, and the left fore leg is missing, besides the left middle claw segment, the joints 2-4 of the right fore tarsus and the right hind tarsus. The above mentioned second female does not correspond to the description, and it is indeed a *Xanthochelus perlatus* (Fabricius, 1787).

REMARKS. The present name of this species is *Larinus* (*Larinus*) *ursus* (Fabricius, 1792). Note that Fabricius himself (1792) changed the name of his *Curculio vittatus* Fabricius, 1781 in that of *ursus* having noted that Linné (1767) had already used this name for another species. The synonymy between *L. ursus* (Fabricius, 1792) and *L. carinirostris* Gyllenhal, 1836 established by Colonnelli (2003) was found incorrect. *Larinus carinirostris* Gyllenhal, 1836, **stat. res.**, of which I have examined in St. Petersburg syntypes loaned to B. Korotyaev, is a species different from *L. ursus*, and although females of these two weevils are easy to confuse, *L. carinirostris* can clearly be distinguished by its obviously outcurved tibiae and by the inner margin of middle and hind tibiae bearing relatively long semi-erect setaceous hairs. Re-descriptions and drawings will be presented in a forthcoming revision of *ursus* species group.

Curculio ocularis Fabricius, 1792

Curculio ocularis Fabricius, 1792: 400

TYPES. Under the name *ocularis* there are two specimens in KC both fitting the original description. The male lectotype (designated

here with “Lectotypus ♂, *Curculio ocularis* Fabricius, L. Gültekin des., 2005” [red, handwritten]) is mm 14.2 long and is pinned through the interval 4 of the left elytron. It is in good condition since only the right fore claw segment is missing. The female specimen is here designated paralectotype with the red handwritten label “Paralectotypus ♀, *Curculio ocularis* Fabricius, L. Gültekin des., 2005”. Its body length is mm 14.4, is pinned through the pronotum, and is in good condition apart the right fore claw segment missing.

REMARKS. The current name of this species is *Lixomorphus algirus* (Linnaeus, 1758). The synonymy *Curculio algirus* (Linnaeus, 1758) [= *Curculio ocularis* Fabricius, 1792] was established by Thompson and Alonso-Zarazaga (1988) and confirmed by the present lectotype designation.

Curculio planus Fabricius, 1792

Curculio planus Fabricius, 1792: 400

TYPE. Under the name *planus* there are six specimens in the “Kiel Collection”, of which only one small male fits the description. This is here selected as the lectotype (fig. 1) with “Lectotypus ♂, *Curculio planus* Fabricius, L. Gültekin des., 2005” [red, handwritten]. The length of the lectotype is mm 8.9, and the specimen is in good condition, pinned very near the base through the second interval of the right elytron by a large pin this causing the elytra divaricated. Other specimens here considered not typical are one male and one female of *Larinus sturnus* (Schaller, 1783), one male of *Larinus brevis* (Herbst, 1795), one male of *Larinus flavescens* Germar, 1824, and one female of *Larinus scolymi* (Olivier, 1807).

REMARKS. The type of *L. planus* is an example of the species presently known as *Larinus* (*Phyllonomeus*) *rusticanus* Gyllenhal, 1836. The relatively short description of Fabricius (1792) says for this species “longirostris niger immomaculatus, rostro cylindrico, elytris striatis”, and indeed the word “immomaculatus” does not fit the character of the species misidentified by Germar (1824: 389) and by most of the subsequent authors as *L. planus*. In the meanwhile Olivier

(1807) had described with the name of *Lixus carlinae* the species currently wrongly known as *L. planus*. The name of *Larinus carlinae* was used by Capiomont (1874: 313) and by a number of following authors, e.g. Bedel (1886), Hoffmann (1954), Zwölfer et al. (1971) and White (1972). Bedel (1886: 271) considered *L. planus* in the meaning of Germar as a synonym of *L. carlinae*, and maybe for this Weise (1891) was induced to wrongly synonymize *L. carlinae* with *L. planus* (Fabricius). The name *L. planus* was thus used (with the exception of some French authors above cited) as a senior synonym of *L. carlinae* by the absolute majority of subsequent authors. However, none of them has ever used *planus* as the valid name of *L. rusticanus* so that the rules of the art. 23.9.1. of the Code (ICZN 1999) about prevailing usage are fully met in this case. Consequently, the following new synonymies must be established: *Larinus (Phyllonomeus) rusticanus* Gyllenhal, 1836 nomen protectum [= *Curculio planus* Fabricius, 1792 nomen oblitum, **syn. n.**], and *Larinus carlinae* (Olivier, 1807), **stat. res.** [= *Larinus planus* (Fabricius) sensu Germar, 1824 not *Curculio planus* Fabricius, 1792, **syn. n.**].

Curculio mucronatus Fabricius, 1792

Curculio mucronatus Fabricius, 1792: 415

TYPE. The only male specimen under the name *mucronatus* in KC fits the description, and is here designated as the lectotype with "Lectotypus ♂, *Curculio mucronatus* Fabricius, L. Gültekin des., 2005" [red, handwritten]. Its length is 12.0 mm, and the example is pinned by a large pin through 1-2 interval of the right elytron, thus elytra are widely divaricated and transversely cracked by the pin hole: the left hind leg is also missing.

REMARKS. The current name of this species is *Lixus (Compsolixus) anguinus* (Linné, 1767), and *Curculio mucronatus* is correctly placed under its synonyms in Csiki (1934).

Curculio ferrugatus Fabricius, 1792

Curculio ferrugatus Fabricius, 1792: 416

TYPES. Under the name *ferrugatus* there are two female specimens in KC which match the description. That the length of which is mm 16.6 is here designated lectotype with “Lectotypus ♀, *Curculio ferrugatus* Fabricius, L. Gültekin des., 2005” [red, handwritten]. The lectotype is pinned through intervals 2-4 of the left elytron by a thick pin, and the body is intact apart the right middle claw segment broken beyond basal half. The second specimen is designated paralectotype with “Paralectotypus ♀, *Curculio ferrugatus* Fabricius, L. Gültekin des., 2005” [red, handwritten], its length is mm 14.8, and it is pinned through intervals 1.2 of the left elytron by a thick pin for which elytra are widely divaricated and the left elytron is transversely cracked towards humeri. Apart this, the specimen is only missing the hind right claw segment.

REMARKS. The current name of this species is *Lixus (Dilixellus) angustatus* (Fabricius, 1775), and the present lectotype designation confirms Csiki (1934) placement of *Curculio ferrugatus* under the synonyms of *L. angustatus*. The only difference between lectotypes of the two species is that the dorsal surface of the body of the type of *L. ferrugatus* is clothed by more reddish dust, but except for this, it is identical with that of *L. angustatus*.

***Curculio mixtus* Fabricius, 1792**

Curculio mixtus Fabricius, 1792: 417

TYPE. Under the name *mixtus* there is a single male specimen fitting the original description in KC. It is here designated as lectotype, and the appropriate label: “Lectotypus ♂, *Curculio mixtus* Fabricius, L. Gültekin des., 2005” [red, handwritten] was added. The specimen is in good shape, pinned though the intervals 3 to 6 of the left elytron by a headless pin. The right middle claw segment is missing. Its body length is mm 11,0.

REMARKS. The lectotype belongs to the species currently known as *Conorhynchus (Conorhynchus) conicirostris* (Olivier, 1807). The relatively short description of Fabricius (1792) reads: “rostrum reliquis brevius, crassiusculum, nigricans. Thorax cinereo fuscoque

mixtus punctisque elevates atris, scaber. Elytra vix striata uti totum corpus colore fusco cineroque mixto”, and these are exactly the characters of the lectotype. In particular the short rostrum “reliquis brevius” described by Fabricius (1792) is that of a *Conorhynchus* Motschulsky, 1860 and not that of a *Rhabdorrhynchus* Motschulsky, 1860, genus where *mixtus* was placed by Faust who included it in *Pachycerus* Schönherr, 1823 subgenus *Rhabdorrhynchus* (Faust 1904: 224), evidently without examining the type and only taking into account the “elytra colore fusco cineroque mixto” of the description. However, the first author to misidentify this species was Olivier (1807, under *Lixus mixtus*), and the misidentification caused he named this weevil *Lixus conicirostris*. As a consequence, *Lixus conicirostris* Olivier, 1807 becomes a junior synonym of *C. mixtus* as follows: *Conorhynchus* (*Conorhynchus*) *mixtus* (Fabricius, 1792), **comb. n.** [= *Lixus conicirostris* Olivier, 1807, **syn. n.**].

In addition, since there are no synonyms for the species thus far incorrectly named *Rhabdorrhynchus mixtus* (Fabricius) a new name must be proposed for it. The synonymy is: *Rhabdorrhynchus vilhelmseni* Gültekin, **nomen novum** [= *Lixus mixtus* Olivier, 1807 not *Curculio mixtus* Fabricius, 1792, **syn. n.**]. The name is in honour of Dr. Lars Vilhelmsen who was of unvaluable help to achieve this task during my visit to Copenhagen.

Curculio morbillosus Fabricius, 1792

Curculio morbillosus Fabricius, 1792: 457

TYPE. Under the name *morbillosus* there is a single female specimen in KC, well matching the original description. It is here designated as the lectotype, and the red handwritten label “Lectotypus ♀, *Curculio morbillosus* Fabricius, L. Gültekin des., 2005” was added. Its body length is mm 15.5, and it is pinned from toward the lateral side of the left elytron by a large pin causing the elytra being slightly divaricated.

REMARKS. The species has been always correctly identified, and its present name is *Cyphocleonus morbillosus* (Fabricius, 1792).

Curculio dispar Fabricius, 1792

Curculio dispar Fabricius, 1792: 460

TYPES. Under the name *dispar* there are two female specimens in KC both matching the description. That body length of which is mm 9.8, is here selected as lectotype with “Lectotypus ♀, *Curculio dispar* Fabricius, L. Gültekin des., 2005” [red, handwritten]. It is pinned exactly between both sutural intervals at the base of elytra by a thick pin which caused elytra are widely divaricated, the left wing is completely extended and the right one half so. In addition, both antennae are broken from near the base of scape, and the claws of fore legs are missing. The second specimen, whose length is mm 9.6, is here designated as the paralectotype with “Paralectotypus ♀, *Curculio dispar* Fabricius, L. Gültekin des., 2005” [red, handwritten]. It is pinned the same way on the same place as the lectotypus, being however the pin formerly situated through the intervals 1-2 of the left elytron: elytra are as widely divaricated as in the lectotypus, and the wings are completely extended.

REMARKS. Fabricius described three times this species. The first one (Fabricius 1792) was when he named this weevil *Curculio dispar*, evidently unaware of the previous description of another *Curculio dispar* from south America by Linnaeus (1758), currently *Estenorhinus dispar* (Linnaeus, 1758), a member of Brentidae (Alonso-Zarazaga & Lyal 1999). Few years later he renamed the same species two times as *Curculio pica* and *Curculio volvulus* on the same page (Fabricius, 1798: 167). The study of types of these three taxa revealed that there is no difference between them except for color variation. The lectotypus of *Curculio dispar* Fabricius is identical with the species currently known as *Hypolixus nubilosus* (Boheman, 1836). Note that both Winkler (1932) and Csiki (1934) overlooked this species in their catalogues.

For a complete synonymical discussion, see under *Curculio pica* below.

Curculio obliquus Fabricius, 1792

Curculio obliquus Fabricius, 1792: 460

TYPES. Under the name *obliquus* there are two males in KC, both corresponding to the description. The one the length of which is mm 13.0, pinned through the right elytron by a headless pin on intervals 4-5 and in good shape is here designated as the lectotype with "Lectotypus ♂, *Curculio obliquus* Fabricius, L. Gültekin des., 2005" [red, handwritten]. The other, mm 11.5 long, pinned through the intervals 3-4 of the right elytron near base, and intact apart the left fore tarsus and left hind claw segment missing, is here designated as paralectotype by adding "Paralectotypus ♂, *Curculio obliquus* Fabricius, L. Gültekin des., 2005" [red, handwritten].

REMARKS. The current synonymy *Coniocleonus nigrosuturatus* (Goeze, 1777) [= *Curculio obliquus* Fabricius, 1792] was found correct.

Curculio marmoratus Fabricius, 1792

Curculio marmoratus Fabricius, 1792: 485

TYPES. Four specimens are in KC under the name *marmoratus*, of which only two fit the original description. The male is here designated as the lectotype, and the red handwritten label "Lectotypus ♂, *Curculio marmoratus* Fabricius, L. Gültekin des., 2005" was added. The specimen is pinned through the right elytron by a very thick and short pin on intervals 1-5, nonetheless elytra are only feebly divaricated and the insect is intact: its body length is mm 10.2. The female is here designated as paralectotype by labelling it "Paralectotypus ♀, *Curculio marmoratus* Fabricius, L. Gültekin des., 2005" [red, handwritten]. The length of this specimen is mm 10.9, and it is pinned by a relatively thin and long pin through the right elytron on intervals 3 and 4. The paralectotype is in good shape, apart for the hind right leg completely, the right fore and middle tarsus, the left fore tarsus (first joint excepted), the left middle claw segment missing. The other two male specimens do not fit the original description (Fabricius, 1792) since both of them are *Cleonis pigra* (Scopoli, 1763).

REMARKS. The following new synonymy is here proposed: *Cyphocleonus dealbatus* ([Gmelin], 1790) [= *Curculio marmoratus* Fabricius, 1792, **syn. n.**].

Curculio pica Fabricius, 1798

Curculio pica Fabricius, 1798: 167

TYPES. Under the name *pica* there are one female specimen in KC and five examples in CC, all fitting the description. The example in KC is here selected as the lectotype with "Lectotypus ♀, *Curculio pica* Fabricius, L. Gültekin des., 2005" [red, handwritten]. Its length is mm 9.4, and the specimen is pinned through intervals 2-4 of the right elytron by a thick and short pin, being the body intact apart the left middle tarsus beyond the second joint missing. Two females and three males paralectotypes are designated here, and accordingly labelled "Paralectotypus ♂ (or ♀, respectively), *Curculio pica* Fabricius, L. Gültekin des., 2005" [red, handwritten]. The first female - bearing the label "Ind: orient. Daldomst, Mus. S:& T.L. *Pica* F." - is 7.8 mm long, and was formerly pinned through the first interval of the left elytron, but later the pin was replaced by a thinner one piercing the interval 2 of the right elytron. The elytra of this insect are slightly divaricated, and the left fore and middle claw segments, the right middle and hind tarsus and the hind leg are missing. The second female, bearing like all the other paralectotypes whose description follows only a green square label, was formerly pinned through the intervals 1 to 5 of the right elytron by a thick pin, which was later replaced by a thinner one and the of former wide hole filled by glue. The length of this example is 7.9 mm, and only its middle tarsus is missing beyond the first segment. The third paralectotype is a male the length of which is mm 7.8, and it was formerly pinned from left elytron by a thick pin on the intervals 2-5, causing the elytron cracked along interval 4 near the base, and later pinned by a thinner pin through the intervals 1-2 of the right elytron, but again this place was cracked: in addition, the right middle leg is missing. The fourth male is 7.8 mm long, and it was formerly pinned from right elytron by a thick pin on intervals 2-4, but also in this case the pin was replaced and the wide hole of the former pin filled by glue. The right funicle, right middle claw segment,

and claws of the left middle and hind tarsus are missing. The fifth male paralectotype the length of which is mm 8.3 was also formerly pinned through intervals 1-4 of the right elytron by a thick pin which transversely cracked the elytron along the first interval, but later the pin was replaced by a thinner one and the wide hole filled by glue. The left funicle beyond the first joint of this specimen is missing and the right antenna has only the scape, besides the left fore and hind claws, whereas of the right middle tarsus remains only the first segment in addition of the right claws missing.

REMARKS. By comparison of lectotypes of both it is evident that *Curculio pica* is identical with *Curculio dispar* Fabricius, 1792 (see above). Also, it is clear that *Curculio volvulus* Fabricius, 1798 is another synonym of it (see below). It was already specified that the species is currently known as *Hypolixus nubilus* (Boheman, 1836), and no author has ever used the name *pica* as valid after Olivier (1807). However, since the conditions of art. 23.9.1. of the Code (ICZN 1999) about prevailing usage are not fully met, the following new synonymy is here established: *Hypolixus pica* (Fabricius, 1798), **stat. res.** and **comb. n.** [= *Curculio dispar* Fabricius, 1792 not *Curculio dispar* Linnaeus, 1758, **syn. n.**, = *Curculio volvulus* Fabricius, 1798, **syn. n.**, = *Lixus nubilus* (Boheman, 1836), **syn. n.**].

Curculio volvulus Fabricius, 1798

Curculio volvulus Fabricius, 1798: 167

TYPE. Under the name *volvulus* there is single male in KC fitting the description, and which is here designated lectotype with "Lectotypus ♂, *Curculio volvulus* Fabricius, L. Gültekin des., 2005" [red, handwritten]. Its length is mm 8.3 mm, and it is pinned through intervals 1-2 of the left elytron by a thick and relatively long pin (so elytra are slightly divaricated), but in good shape apart the right fore tarsus and the claw segment of the middle tarsus missing.

REMARKS. This is another synonym of *Hypolixus pica*, lectotypes of both species differing in nothing. More details are under the comments to *Curculio pica* above.

Lixus pulverulentus Fabricius, 1801

Lixus pulverulentus Fabricius, 1801: 499

TYPE. Only a single male fitting the description is under the name *pulverulentus* in KC. It is here selected as the lectotype with “Lectotypus ♂, *Lixus pulverulentus* Fabricius, L. Gültekin des., 2005” [red, handwritten]. The lectotype length is mm 12.3, and it is pinned through the intervals 2-3 of the right elytron being intact, but the left middle and hind tarsus missing beyond segment 2.

REMARKS. The type of *L. pulverulentus* belongs to the well known Palaearctic species *Lixus iridis* Olivier, 1807. It is not surprising that Olivier (1807) had described this species as new, since he was unaware not only of the identity of Fabricians species, but even of its existence so that he described another *Lixus pulverulentus* from Cayenne (Olivier 1807: 255) which is the type species of the genus *Ileomus* Schoenherr, 1823, and a synonym of *Curculio mucoreus* Linnaeus, 1758. Since in this case the conditions of the art. 23.9.1. of the Code (ICZN 1999) about prevailing usage are fully met, the following new synonymy is established: *Lixus (Eulixus) iridis* Olivier, 1807, nomen protectum [= *Lixus pulverulentus* Fabricius, 1801, nomen oblitum, **syn. n.**].

Lixus amphora Fabricius, 1801

Lixus amphora Fabricius, 1801: 502

TYPE. Under the name *amphora* there is a single female in KC matching the description and thus here designated lectotype by adding the red handwritten label “Lectotypus ♀, *Lixus amphora* Fabricius, L. Gültekin des., 2005”. It is in good shape, although elytra are widely divaricate by a thick pin inserted through sutural intervals of both elytra, and its body length is mm 17.1.

REMARKS. There is no difference between lectotypes of *L. amphora* and *L. angustatus*. Thus, it is necessary to establish the synonymy: *Lixus (Dilixellus) angustatus* (Fabricius, 1775) [= *Lixus amphora* Fabricius, 1801 **syn. n.**].

Curculio senilis Fabricius, 1801

Curculio senilis Fabricius, 1801: 515

TYPE. Under the name *senilis* there is a single female in the KC fitting the original description. This example is here designated as the lectotype with “Lectotypus ♀, *Curculio senilis* Fabricius, L. Gültekin des., 2005” [red, handwritten]. Its body length is mm 9.0, and the specimen is pinned through the right elytron on intervals 4-5 near the base, and is in good condition.

REMARKS. The present name of this species is *Larinus* (*Larinus*) *brevis* (Herbst, 1795) and the Csiki (1934) placement of *Curculio senilis* Fabricius as a synonym of *Curculio brevis* Herbst was found correct. *Larinus brevis* is closely related to *L. ursus* (Fabricius) and differs from the latter by the shorter rostrum and the distinct aedeagal shape.

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SUMMARY

Several types of Lixinae described by I.C. Fabricius were studied. Lectotypes are designated for: *Curculio mixtus* F., *C. marmoratus* F., *C. obliquus* F., *C. morbillosus* F., *C. albidus* F., *C. emarginatus* F., *C. ocularis* F., *C. onopordi* F., *C. cynarae* F., *C. ursus* F., *C. senilis* F., *C. iaceae* F., *C. planus* F., *C. mucronatus* F., *C. umbellatarum* F., *C. angustatus* F., *C. ferrugatus* F., *C. filiformis* F., *C. bardanae* F., *C. dispar* F., *C. pica* F., *C. volvulus* F., *Lixus pulverulentus* F. and *L. amphora* F. The following new synonymies and combinations are proposed: *Temnorhinus mixtus* (Fabricius, 1792) **comb. n.** [= *Lixus conicirostris* Olivier, 1807, **syn. n.**]; *Cyphocleonus dealbatus* ([Gmelin], 1790) [= *Curculio marmoratus* Fabricius, 1792, **syn. n.**]; *Larinus onopordi* (Fabricius, 1787) [= *Larinus uniformis* Petri, 1907, **syn. n.**]; *Larinus iaceae* (Fabricius, 1775) [= *Larinus contractus* Faust, 1885 **syn. n.**]; *Larinus rusticanus* Gyllenhal, 1836, nomen protectum [= *Curculio planus* (Fabricius, 1792), nomen oblitum, **syn. n.**]; *Lixus iridis* Olivier, 1807, nomen protectum [= *Lixus pulverulentus* Fabricius, 1801, nomen oblitum, **syn. n.**]; *Lixus angustatus* (Fabricius, 1775) [= *Lixus amphora* Fabricius, 1801, **syn. n.**]; *Hypolixus pica* (Fabricius, 1798), **stat. res.** and **comb. n.** [= *Curculio dispar* Fabricius, 1792 not *Curculio dispar* Linnaeus, 1758, **syn. n.**, = *Curculio volvulus* Fabricius, 1798,

syn. n., = *Lixus nubilosus* (Boheman, 1836), **syn. n.**]. The new name of *Rhabdorrhynchus vilhelmseni* Gültekin, **nomen novum** is proposed for *Lixus mixtus* Olivier, 1807 not *Curculio mixtus* Fabricius, 1792, and the following **new synonymy** is established: *Rhabdorrhynchus vilhelmseni* Gültekin, **nomen novum** [= *Lixus mixtus* Olivier, 1807 not *Curculio mixtus* Fabricius, 1792, **syn. n.**]. *Larinus carlinae* (Olivier, 1807), **stat. res.** is the valid name of the species thus far misidentified as *Larinus planus* (F.), and the following new synonymy is established: *Larinus carlinae* (Olivier, 1807), **stat. res.** [= *Larinus planus* (Fabricius) sensu Germar, 1824 not *Curculio planus* Fabricius, 1792, **syn. n.**]. *Larinus carinirostris* Gyllenhal, 1836, **stat. res.**, is a self-standing species, not a synonym of *L. ursus* (F.).

RIASSUNTO

Su alcuni tipi di Lixinae descritti da I. C. Fabricius (Coleoptera, Curculionidae).

Molti dei tipi di Lixinae descritti da I.C. Fabricius vengono esaminati e discussi in questa nota. Sono designati lectotipi delle seguenti specie: *Curculio mixtus* F., *C. marmoratus* F., *C. obliquus* F., *C. morbillosus* F., *C. albidus* F., *C. emarginatus* F., *C. ocularis* F., *C. onopordi* F., *C. cynarae* F., *C. ursus* F., *C. senilis* F., *C. iaceae* F., *C. planus* F., *C. mucronatus* F., *C. umbellatarum* F., *C. angustatus* F., *C. ferrugatus* F., *C. filiformis* F., *C. bardanae* F., *C. dispar* F., *C. pica* F., *C. volvulus* F., *Lixus pulverulentus* F. and *L. amphora* F. Le seguenti nuove combinazioni e/o nuove sinonimie sono proposte: *Temnorhinus mixtus* (Fabricius, 1792) **comb. n.** [= *Lixus conicirostris* Olivier, 1807, **syn. n.**]; *Cyphocleonus dealbatus* ([Gmelin], 1790) [= *Curculio marmoratus* Fabricius, 1792, **syn. n.**]; *Larinus onopordi* (Fabricius, 1787) [= *Larinus uniformis* Petri, 1907, **syn. n.**]; *Larinus iaceae* (Fabricius, 1775) [= *Larinus contractus* Faust, 1885 **syn. n.**]; *Larinus rusticanus* Gyllenhal, 1836, nomen protectum [= *Curculio planus* (Fabricius, 1792), nomen oblitum, **syn. n.**]; *Lixus iridis* Olivier, 1807, nomen protectum [= *Lixus pulverulentus* Fabricius, 1801, nomen oblitum, **syn. n.**]; *Lixus angustatus* (Fabricius, 1775) [= *Lixus amphora* Fabricius, 1801, **syn. n.**]; *Hypolixus pica* (Fabricius, 1798), **stat. res.** and **comb. n.** [= *Curculio dispar* Fabricius, 1792 nec *Curculio dispar* Linnaeus, 1758, **syn. n.**, = *Curculio volvulus* Fabricius, 1798, **syn. n.**, = *Lixus nubilosus* (Boheman, 1836), **syn. n.**]. Il nome di *Rhabdorrhynchus vilhelmseni* Gültekin, **nomen novum** è proposto per *Lixus mixtus* Olivier, 1807 nec *Curculio mixtus* Fabricius, 1792, insieme alla seguente nuova sinonimia: *Rhabdorrhynchus vilhelmseni* Gültekin, **nomen novum** [= *Lixus mixtus* Olivier, 1807 nec *Curculio mixtus* Fabricius, 1792, **syn. n.**]. *Larinus carlinae* (Olivier, 1807), **stat. res.** è considerato il nome valido per la specie finora confusa con *Larinus planus* (F.), e la seguente nuova sinonimia è proposta: *Larinus carlinae* (Olivier, 1807), **stat. res.** [= *Larinus planus* (Fabricius) sensu Germar, 1824 nec *Curculio planus* Fabricius, 1792, **syn. n.**]. *Larinus carinirostris* Gyllenhal, 1836, **stat. res.**, viene considerato buona specie e non sinonimo di *L. ursus* (F.).

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