

They are all over the place!
The exceptional high biodiversity
of dormice in the Early Miocene
of the Ribesalbes-Alcora Basin (Spain)

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ABSTRACT

The Campisano Ravine in the Ribesalbes-Alcora Basin (Spain, Early Miocene, Biozone C, MN 4) yielded a highly diverse and abundant assemblage of dormice, composed by sixteen taxa belonging to nine different genera, detailed as follows: three species of the genus *Microdryomys* De Bruijn, 1966 (*M. legidensis* Daams, 1981, *M. koenigswaldi* De Bruijn, 1966, and *M. aff. monspeliensis* Aguilar, 1977), we extend here the stratigraphic range of *M. aff. monspeliensis*; two taxa of *Prodryomys* De Bruijn, 1966 (*P. aff. satus* Mayr, 1979, and *P. aff. remmertii* Aguilar & Lazzari, 2006), we increase here the known stratigraphic distribution of *P. aff. satus* and report for the first time *P. aff. remmertii* in the Iberian Peninsula and biozone MN4; *Bransatoglis* cf. *infralactorensis* Baudelot & Collier, 1982, which

KEY WORDS
Gliridae,
Iberian Peninsula,
MN4,
Rodentia,
biostratigraphy,
palaeoecology.

we found for the first time in the Iberian Peninsula; two species of the genus *Peridyromys* Stehlin & Schaub, 1951: *P. murinus* (Pomel, 1853), the most common dormouse in the basin and *P. darocensis* Daams, 1999, with its youngest known record; *Pseudodryomys ibericus* De Bruijn, 1966, less abundant here than in other similar sites; three species of the genus *Simplomys*: *S. simplicidens* (De Bruijn, 1966), the most abundant representant of this genus in this basin, *S. julii* (Daams, 1989), more common than expected for the Iberian Peninsula, and the least frequent *S. meulenorum* García-Paredes, Peláez-Campomanes & Álvarez-Sierra, 2009; *Armantomys aragonensis* De Bruijn, 1966, scarcer here than in other Iberian basins; two species of the genus *Glirudinus*: the largest and rarest *G. undosus* Mayr, 1979, and the smaller, more common but occurring only in the second local area Cb *G. modestus* (Dehm, 1950); and finally, *Myoglis* cf. *antededens* Mayr, 1979, which is cited for the first time in the basin. Additionally, the palaeoecological significance of this assemblage is discussed.

RÉSUMÉ

Ils sont partout! L'exceptionnelle biodiversité des loirs au Miocène inférieur du bassin de Ribesalbes-Alcora (Espagne).

Le ravin de Campisano dans le bassin de Ribesalbes-Alcora (Espagne, Miocène inférieur, Biozone C, MN 4) a donné un assemblage très diversifié et abondant de loirs, composé de seize taxons appartenant à neuf genres différents, détaillés comme suit: trois espèces du genre *Microdryomys* De Bruijn, 1966 (*M. legidensis* Daams, 1981, *M. koenigswaldi* De Bruijn, 1966, et *M. aff. monspeliensis* Aguilar, 1977), nous étendons ici l'extension stratigraphique de *M. aff. monspeliensis*; deux taxons de *Prodryomys* De Bruijn, 1966 (*P. aff. satus* Mayr, 1979, et *P. aff. remmertii* Aguilar & Lazzari, 2006), nous augmentons ici la distribution stratigraphique connue de *P. aff. satus* et rapportons pour la première fois *P. aff. remmertii* dans la péninsule ibérique et la biozone MN4; *Bransatoglis* cf. *infralactorensis* Baudelot & Collier, 1982, que nous avons trouvé pour la première fois dans la péninsule ibérique; deux espèces du genre *Peridyromys* Stehlin & Schaub, 1951: *P. murinus* (Pomel, 1853), le loir le plus commun du bassin et *P. darocensis* Daams, 1999, avec son plus jeune signalement connu; *Pseudodryomys ibericus* De Bruijn, 1966, moins abondant ici que dans d'autres sites similaires; trois espèces du genre *Simplomys*: *S. simplicidens* (De Bruijn, 1966), le représentant le plus abondant de ce genre dans ce bassin, *S. julii* (Daams, 1989), plus commun que prévu pour la péninsule ibérique, et le moins fréquent *S. meulenorum* García-Paredes, Peláez-Campomanes & Álvarez-Sierra, 2009; *Armantomys aragonensis* De Bruijn, 1966, plus rare ici que dans d'autres bassins ibériques; deux espèces du genre *Glirudinus*: le plus grand et le plus rare *G. undosus* Mayr, 1979, et la plus petite, plus commune mais présente uniquement dans la deuxième zone locale Cb *G. modestus* (Dehm, 1950); et enfin, *Myoglis* cf. *antededens* Mayr, 1979, qui est citée pour la première fois dans le bassin. En outre, la signification paléo-écologique de cet assemblage est discutée.

MOTS CLÉS
Gliridae,
péninsule ibérique,
MN4,
Rodentia,
biostratigraphie,
paléocologie.

INTRODUCTION

The family Gliridae is an important group of extant rodents. At present, three subfamilies, nine genera and 29 species persist (Holden-Musser *et al.* 2016), constituting only a remnant of a once successful group, widely distributed throughout Eurasia and Africa (Daams 1999a).

The earliest representatives of this family are from the early Eocene of Europe (Escarguel 1999), although this may be questioned by some remains found in eastern Kazakhstan (Shevyreva 1992). Glirids reached a peak of diversity and abundance during the Early Miocene (Daams & De Bruijn 1995). At the end of the Early Miocene, with the migration into Europe of modern 'cricetids' and the predominance of a colder and more arid climate, the family started to decline, and from the Late Miocene to the present day it is characterized by minimum values in diversity and relative abundance (Daams 1999a; Zachos *et al.* 2001).

During the last part of the Early Miocene, the glirids were diverse and common in many European faunas (Daams & De Bruijn 1995; Daxner-Höck *et al.* 1998). In the Iberian Penin-

sula there is a first peak in glirid diversity during the Ramblian (MN3), with an even greater maximum of diversity reached during the early Aragonian (MN4). A decline is observed towards the end of this period (Daams & De Bruijn 1995).

The high ecological and morphological heterogeneity could be due to the presence of the gastric caecum, an element of the digestive system that would have allowed for more diverse diets, and which is lacking in the current representatives of the group (Freudenthal & Martín-Suárez 2013).

The aim of this article is to study the rich and diverse dormice fauna found in the Ribesalbes-Alcora Basin (Castelló, Spain). Although some dormice have already been described by Agustí *et al.* (1988), this paper studies other sites, increasing the diversity and number of dormice previously known.

The study of the dormice of this basin is one more piece of the puzzle that forms the ecosystem of the Ribesalbes-Alcora Basin during the end of the Early Miocene. Other important pieces already published are: the new species of the dimylid *Plesiodimylus ileravonicus* Crespo, Furió, Ruiz-Sánchez & Montoya, 2018 (Crespo *et al.* 2018), the bat *Cuvierimops*

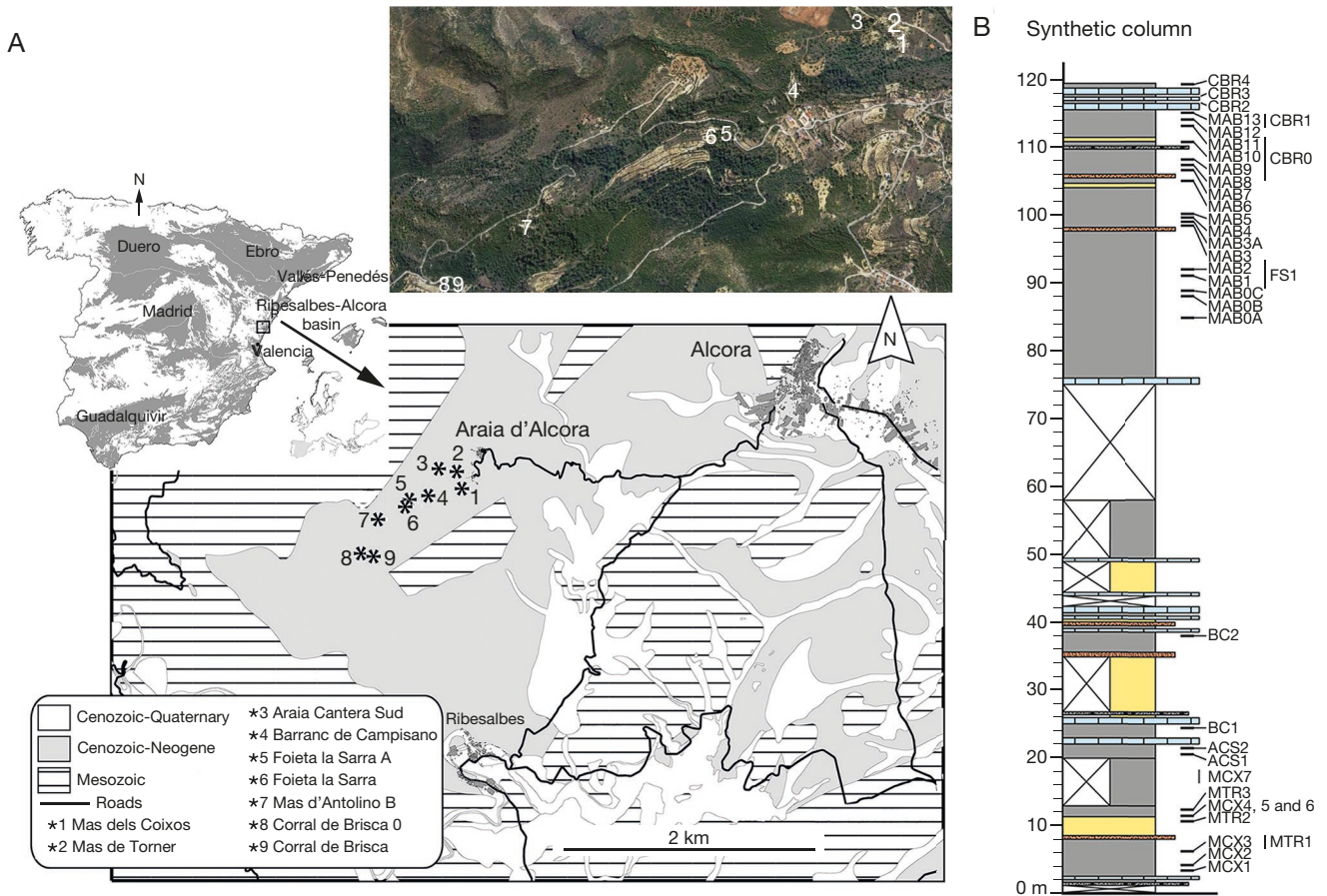


Fig. 1. — Geographic and geological setting of the Ribesalbes-Alcora Basin, showing the location of the outcrops of the Campisano Ravine. Modified from Crespo *et al.* (2018; 2019a).

penalveri Crespo, Sevilla, Montoya & Ruiz-Sánchez, 2020a (Crespo *et al.* 2020a), and the snail *Pseudamnicola roblesi* Albesa, López & Crespo, 2022 (Albesa *et al.* 2022); also worth noting are: the finding of the southernmost documented record of the herpetotheriid *Amphiperaterium frequens erkertshofense* (von Meyer, 1846) (Furió *et al.* 2012; Crespo *et al.* 2020b); the abundant remains of talpids (Crespo *et al.* 2019b); the diversity of soricids (Crespo *et al.* 2019c), erinaceids (Crespo *et al.* 2020b), squirrels (Crespo *et al.* 2021a), eomyids (Crespo *et al.* 2021b) bats (Crespo *et al.* 2020a), lagomorphs and *Cainotherium* (Crespo *et al.* 2022), snails (Albesa *et al.* 2022); relaborated Cretaceous batoids (Manzanares & Crespo 2023); and even a Konservat-Lagerstätte (Álvarez-Parra *et al.* 2021).

GEOGRAPHIC AND GEOLOGICAL SETTING

The Ribesalbes-Alcora Basin is located in the eastern part of the Iberian Peninsula; more specifically, the studied sites can be found near the village of Araia d'Alcora (Castelló, Spain; Fig. 1; Agustí *et al.* 1988, Crespo *et al.* 2019a). The synthetic stratigraphic column represented by the studied sites comprise seven sections, which have been named from oldest to youngest (with some overlap) as follows: Mas dels Coixos (MCX), Mas de Torner (MTR), Araia Cantera Sud (ACS), Barranc de Camp-

isano (BC), Foieta la Sarra (FS), Mas d'Antolino B (MAB), and Corral de Brisca (CBR). Lithologically, the Campisano Ravine where these sections are located is mainly composed by grey and yellow mudstones, limestones and sandstones, with a thickness of almost 100 m (Crespo *et al.* 2019a). These beds are included in 'Unit Three' of the Ribesalbes-Alcora Basin sensu Anadón *et al.* (1989) (Fig. 1). So far, up to 45 sites corresponding to the referred sections have been described and are detailed in Crespo (2017) and Crespo *et al.* (2019a).

The studied sections represent a stratigraphic succession corresponding to local biozone C from the Calatayud-Montalbán Basin (MN4, early Aragonian, Early Miocene), ranging from 16.5 to 16 Ma according to Van der Meulen *et al.* (2012) (Crespo *et al.* 2019a).

MATERIAL AND METHODS

The studied fossil material is currently deposited at the Natural History Museum of the University of Valencia (MUVHN), with the label MGUV (see Appendix 1).

Pictures of the specimens were taken with a Scanning Electron Microscope HITACHI 4800 at the Servei Central de Suport a la Investigació Experimental (SCSIE) of the University of València Estudi General (UVEG).

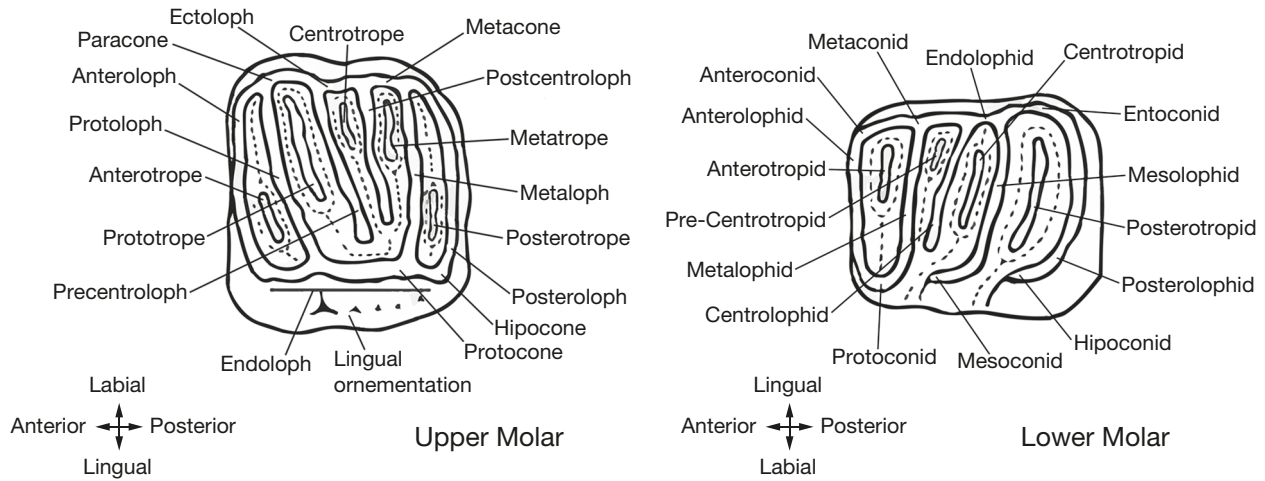


Fig. 2. — Terminology of the glirids teeth modified from Freudenthal (2004) and García-Paredes *et al.* (2009).

We follow the terminology and measuring methods of García-Paredes *et al.* (2009) and Freudenthal (2004) (Fig. 2). Measurements are given in millimetres; they were taken using a Leica MZ75 binocular microscope by displacing a mechanical stage, connected to a Sony Magnescale measuring equipment.

We follow the supra-generic the classification proposed by McKenna & Bell (1997), including Gliridae as the family name instead of Myoxidae, since Myoxidae, in accordance with the International Commission on Zoological Nomenclature, retains *Glis* as the type genus instead of *Myoxus*. Nevertheless, for many experts the latter is still the type genus, so both forms can be found in the literature (Holden 2005).

SYSTEMATIC PALAEOLOGY

Infraorder GLIRIMORPHA Thaler, 1966
 Family GLIRIDAE Muirhead *in* Brewster, 1819
 Subfamily LEITHIINAE Lydekker, 1896
 Genus *Microdyromys* De Bruijn, 1966

Microdyromys legidensis Daams, 1981
 (Fig. 3A-AD)

LOCALITIES. — MAB3, MAB5, MAB11, CBR0B, CBR0D, and CBR1.

MATERIAL. — MAB3: 1 d4, 3 p4, 7 m1, 8 m2, 1 m3, 2 P4, 3 M1, 6 M2, 3 M3; MAB5: 4 p4, 3 m1, 2 m2, 2 m3, 6 P4, 7 M1, 4 M2, 8 M3; MAB11: 1 M2; CBR0B: 1 M2; CBR0D: 1 P4; CBR1: 2 M1.

MEASUREMENTS. — Appendix 2

DESCRIPTION

d4 (MAB3)

The tooth is subtriangular, with high and fine crestids. The anterolophid is short. The metalophid is long and connects both sides of the specimen. The mesolophid and the posterolophid are curved, long, and interconnected. The mesolophid is irregular.

p4 (MAB5)

The tooth is subtriangular in occlusal view, with high and fine crestids and narrow valleys. The anterolophid is short. The metalophid is short and semi-circular. The mesolophid and the posterolophid are long, curved and interconnected. The posterotropid may be well developed (in 1 out of 4 specimens), medium (2 out of 4) or short (1 out of 4). In one specimen the crestids are irregular. In the rest of sites, the material is similar to the one described here.

m1 (MAB3)

Tooth subrectangular in occlusal view. The anterolophid and the anterotropid are short. The metalophid is curved, and not connected in the lingual side in one specimen. The anteroconid and the metaconid are interconnected. The centrolophid is longer than half of the tooth width, and it is connected with an angle of 90° with the endolophid; in two specimens it is independent. The mesolophid and the posterolophid are long and well connected. The posterotropid is well developed and in one specimen it is connected in the lingual side. The labial cuspid are more developed than the lingual ones. In the material from MAB5 the centrolophid is always connected in the lingual side.

m2 (MAB3)

The tooth is of subrectangular shape in occlusal view. The anterolophid may be short (3 out of 7) or long (4 out of 7). The anterotropid may be short (3 out of 8) or long (5 out of 8), in two specimens this crestid is connected with the centrolophid, showing a shorter metalophid, which may be curved (4 out of 6) or straight (2 out of 6); in three specimens the metalophid is not connected in the lingual side. The anteroconid and the metaconid are connected. The centrolophid length exceeds half of the width of the tooth, and the crest is perpendicularly connected to the endolophid. The mesolophid and the posterolophid are long and well connected. There is a well-developed posterotropid. The labial cuspid are better developed than the lingual ones. In the material from MAB5 the anterolophid is always short, the anterotropid may be

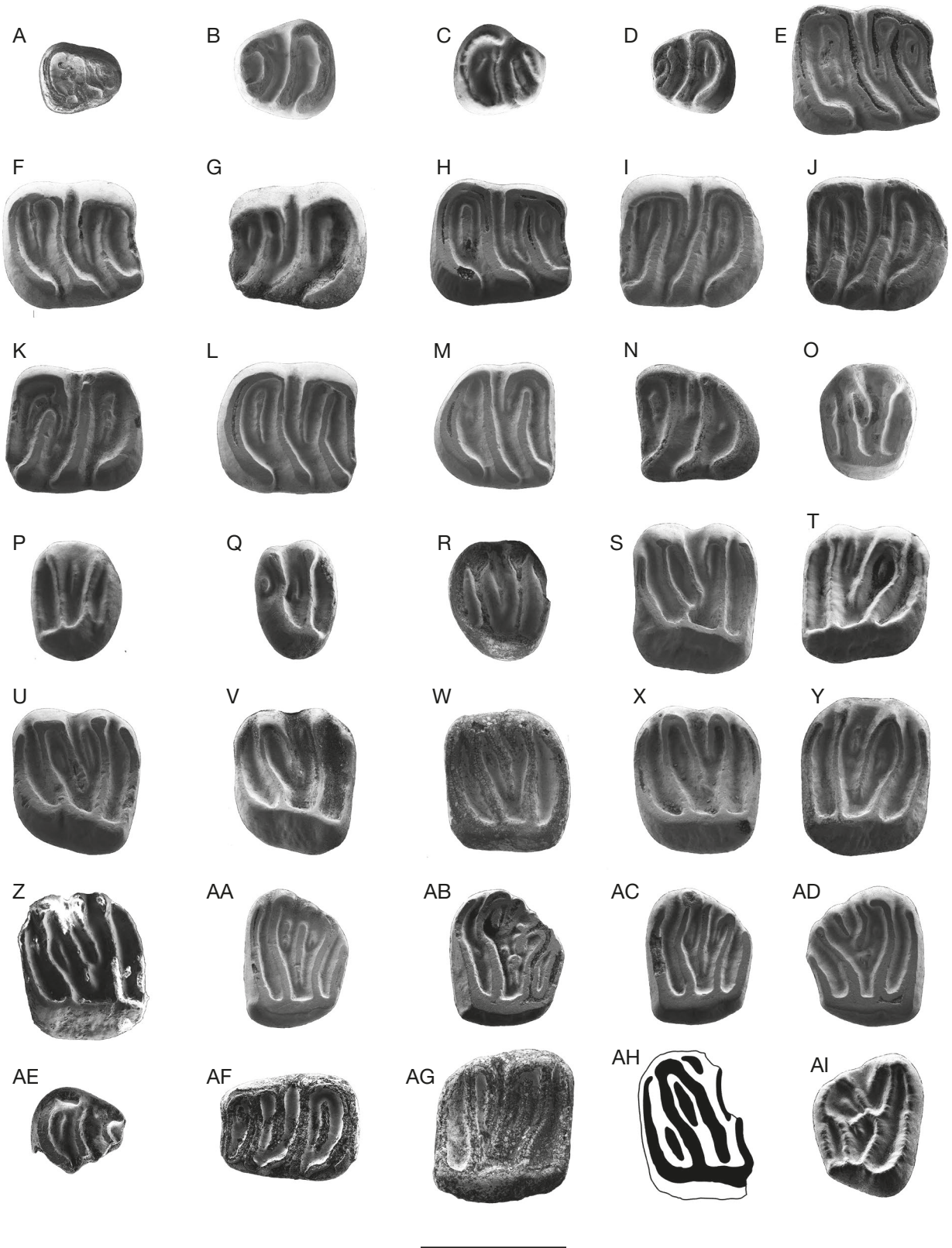


FIG. 3. — Gliridae from the Ribesalbes-Alcora Basin. *Microdyromys legidensis*: **A**, right d4 (MAB3-392); **B**, left p4 (MAB5-838); **C**, right p4 (MAB5-594); **D**, left p4 (MAB3-386); **E**, right m1 (MAB3-413); **F**, right m1 (MAB5-417); **G**, left m1 (MAB3-428); **H**, right m1 (MAB5-847); **I**, left m2 (MAB3-412); **J**, right m2 (MAB3-416); **K**, left m2 (MAB3-466); **L**, right m2 (MAB5-245); **M**, right m3 (MAB5-855); **N**, left m3 (MAB3-486); **O**, right P4 (MAB5-813); **P**, right P4 (MAB5-813); **Q**, left P4 (MAB5-126); **R**, left P4 (MAB3-264); **S**, left M1 (MAB5-278); **T**, right M1 (MAB5-563); **U**, left M1 (MAB3-309); **V**, left M1 (MAB3-315); **W**, left M2 (MAB3-413); **X**, left M2 (MAB3-314); **Y**, right M2 (MAB5-279); **Z**, left M2 (CBR0B-29); **AA**, left M3 (MAB3-355); **AB**, left M3 (MAB3-357); **AC**, left M3 (MAB5-581); **AD**, right M3 (MAB5-829). *Microdyromys koenigswaldi*: **AE**, right p4 (FS1-41); **AF**, left m1 (FS1-46); **AG**, right M1 (BC1-130); **AH**, left M1 (FS1-37); **AI**, right M3 (BC1-10). Scale bar: 1 mm.

absent, the metalophid is always curved and not connected in the lingual side, and the centrolophid is lower than in the MAB3 material.

m3 (MAB5)

The outline in occlusal view is subtriangular. The anterolophid has a medium size. The metalophid is curved and not connected with the endolophid. The anteroconid and the metaconid are connected. The centrolophid is as long as half of the tooth width, and is not connected with the metalophid. The mesolophid and the posterolophid are long and well connected. The posterotropid is low. The labial cuspids are better developed than the lingual ones. The material from MAB3 has a developed anterotropid and the centrolophid is never isolated.

P4 (MAB5)

Tooth with a rounded outline in occlusal view. The endoloph may be present and complete (2 out of 4) or lacking (2 out of 4). The anteroloph is variable: it may be long and labially isolated (1 out of 5), short and connected to both sides (1 out of 5), completely isolated (2 out of 5) or absent (1 out of 5). The protoloph and the metaloph are long, straight, and isolated. The precentroloph may be long and isolated (2 out of 5), or connected (3 out of 5). The postcentroloph may be absent (4 out of 5), or long (1 out of 5). The posteroloph is longer than the anteroloph and labially isolated. In the MAB3 material the endoloph is complete and the anteroloph is always short. The tooth from CBR0D is similar to the material from MAB5 described before.

M1 (MAB5)

Tooth with a subquadrate outline in occlusal view. The anteroloph may be relatively short (5 out of 6) or long (1 out of 6). The endoloph is complete, although it is narrower in its contact with the anteroloph. The protoloph and the metaloph are independent. The prototrope may be either long (1 out of 6), short and low (3 out of 6), or it may be absent (2 out of 6). The precentroloph is longer than half of the tooth width and may almost reach the lingual side (4 out of 6) or slightly beyond half of the tooth width (2 out of 6); in one specimen it is connected to the protoloph. The postcentroloph may be absent (1 out of 6), and when present it may be short (3 out of 6) or long (2 out of 6), and it may be isolated (2 out of 5) or not (3 out of 5). The posteroloph is short and not-connected in the labial side. The labial cusps are more developed than the lingual ones. The lingual ornamentation is poorly developed. The material from MAB3 and CBR1 is similar to the one found in MAB5.

M2 (MAB3)

The tooth is subquadrate in occlusal view. The anteroloph may be relatively short (2 out of 4) or long (2 out of 4). The endoloph is complete. The protoloph and the metaloph are independent. The prototrope may be either long and low (2 out of 6), short and low (1 out of 6), or it may be absent (3 out of 6). The precentroloph is longer than half of the tooth width, and almost reaching the lingual side (5 out of 6), or

only slightly longer than half of the width tooth (1 out of 6). The postcentroloph is short, and it may show a connection to another crest (2 out of 5), or not (3 out of 5). The posteroloph is short and independent in the labial side. The labial cusps are more developed than the lingual ones. The lingual ornamentation is poorly developed. The material from MAB5, MAB11 and CBR0B is similar to the one described here.

M3 (MAB5)

The tooth is trapezoidal in occlusal view. The anteroloph is long. The endoloph is complete. The protoloph and the metaloph are independent. The prototrope may be absent (2 out of 6) or present, in which case it is low and can be either long (3 out of 6) or short (1 out of 6). The precentroloph is either longer than half of the tooth width and almost reaching the lingual side (5 out of 6), or just until half of the tooth (1 out of 6); this crest may be isolated (4 out of 5) or not (1 out of 5); in one specimen it is connected to the metaloph. The postcentroloph may be absent (1 out of 6), but when present it is either short (4 out of 6) or long (1 out of 6); it may be either disconnected (4 out of 5) or connected to the endoloph (1 out of 5). In one specimen there is a metatrope, in another one the pattern of crests is chaotic and not easily distinguished. The posteroloph is short and without connection in the labial side. The labial cusps are more developed than the lingual ones. The lingual ornamentation is poorly developed. The MAB3 material is similar to the one described here.

REMARKS

The genus *Microdyromys* is widely distributed along the European Cenozoic (Freudenthal & Martín-Suárez, 2007a), and it is probably paraphyletic (Lu *et al.* 2021; Dalmaso *et al.* 2022). The first record of this genus is in the locality of Aguatón 2D from the upper Eocene (Freudenthal 2004), while the last representative is *Microdyromys sinuosus* (Álvarez-Sierra, 1986) from the Upper Miocene of Ampudia 3 (MN10). This genus has also been reported in the Middle Miocene of Asia (Álvarez-Sierra & García-Moreno 1986; García-Paredes *et al.* 2010).

Three taxa of the genus *Microdyromys* are present in the Ribesalbes-Alcora Basin as listed below, and they are described for the first time in this basin. After Vianey-Liaud (2003) they can be distinguished based on the following criteria: *Microdyromys* aff. *monspeliensis* Aguilar, 1977 is the smallest one and the simplest in teeth morphology, with less extra crests; *Microdyromys koenigswaldi* De Bruijn, 1966, is the largest species, with a long and well-developed extra crest; and *Microdyromys legidensis* is the most abundant species, intermediate in size and with short and low extra crests.

Microdyromys legidensis is a species typical from the Early-Middle Miocene basins of the interior region of the Iberian Peninsula (Vianey-Liaud 2003; Van der Meulen *et al.* 2012), and has been described by Daams (1981) in Villafeliche 2A (local biozone B, MN4). Daams (1981) described different morphotypes depending on the presence or absence of centroloph/ids and extra crests in the upper and lower molars. In the Ribesalbes-Alcora Basin, the dominant morphotypes for upper molars are morphotype H, with the presence of a

prototrope, and to a lesser degree morphotype G, characterized by lacking extra crests. This combination of morphotypes is typical of the Calatayud-Montalbán Basin. As for the lower molars, all specimens belong to morphotype 3, with more or less developed anterotropids and posterotropids. It is also the prevailing morphotype in *M. legidensis* (Daams 1981). The combination of upper and lower molars morphotypes is the expected one for this species according to Vianey-Liaud (2003).

Our material is similar in size to the specimens assigned to *M. legidensis* and described in Bouzigues, St. Victor la Coste and Villafeliche 2A (Daams 1981), and it is slightly larger than the populations described in Coderet and Montalvos 2 (Hugueney 1969; Hordijk *et al.* 2015).

Microdyromys koenigswaldi De Bruijn, 1966
(Fig. 3AE-AI)

LOCALITIES. — BC1 and FS1.

MATERIAL. — BC1: 1 M2, 1 M3; FS1: 1 p4, 1 m1, 1 M2, 1 M3.

MEASUREMENTS. — Appendix 3

DESCRIPTION

p4 (FS1)

The tooth is subtriangular in occlusal view with high crestids and narrow valleys. The anterolophid is short. The metalophid is short and semicircular. The mesolophid and the posterolophid are long, curved and connected. The posterotropid is well developed.

m1 (FS1)

An elongated tooth with a rectangular outline in occlusal view, with narrow valleys and straight and wide crestids. The anterolophid is short. There is a small anterotropid. The metalophid is long and connected to the endolophid. The centrolophid is long. The mesolophid and the posterolophid are long and well connected in the lingual side. There is a well-developed posterotropid. The labial cuspids are better developed than the lingual ones.

M2 (BC1)

Tooth subcuadrangular in occlusal view. The anteroloph is relatively short. The endoloph is complete. The protoloph and the metaloph are independent. The prototrope is long and well developed. The precentroloph is longer than half of the tooth width, and almost reaches the lingual side. The postcentroloph is long. The posteroloph is short and disconnected in the labial side. The posterotrope is small. The labial cuspids are better developed than the lingual ones. The lingual ornamentation is poorly developed. In the FS1 specimen there is an anterotrope and the prototrope is shorter than in the BC1 material.

M3 (BC1)

The shape of the tooth is subrectangular in occlusal view. The anteroloph is long and forms a closed ellipse with the protoloph. The precentroloph is short and the postcentroloph is long; some small crests are independent and others are con-

nected to the protoloph, thus yielding a chaotic appearance. The protoloph and the metaloph are not connected in the lingual side and form a U-shaped crest. The metaloph is very short and connected with the posteroloph in the middle of the tooth forming an ellipse. The posteroloph is long. The FS1 material is characterized by an anteroloph and a shorter posteroloph isolated in the lingual side.

REMARKS

Microdyromys koenigswaldi is the scarcer species of this genus represented in the Ribesalbes-Alcora Basin. As discussed later, it was probably linked to drier environments. Compared to other species of the genus, *M. koenigswaldi* is larger in size, shows better-developed accessory crests, and some specimens present an anterotrope, which is rather unusual in *Microdyromys*.

After Vianey-Liaud (2003), and following the classification of Daams (1981), the upper molars mainly belong to morphotype H, although, unlike *M. legidensis*, morphotype K is also present, with an extra crest out of the trigone. On the other hand, the lower molars belong to morphotype 3. The distinction between *M. legidensis* and *M. koenigswaldi* is under discussion (e.g. Hordijk *et al.* 2015), and both species have often been recorded together (e.g. Van der Meulen *et al.* 2012). However, the sites studied here provide enough diagnostic characteristics to distinguish them.

The biometric data show that the material from the Ribesalbes-Alcora Basin is similar in size to the one recovered in the site Vargas 1A, though with slightly larger upper molars, also like *M. aff. koenigswaldi* from Blanquatère and *M. koenigswaldi* from Bouzigues 2, Erkertshofen 2, Valdemoros 1A, 3B and 3E (De Bruijn 1966; Daams 1981; Wu 1993; Aguilar *et al.* 1997; Aguilar & Lazzari 2006; García-Paredes *et al.* 2010), and larger than *M. aff. koenigswaldi* from Bouzigues (Aguilar 1974). In addition, the m1 is longer than in *M. koenigswaldi* from Cases de la Valenciana and Puente de Praga 92 (Hernández-Ballarín *et al.* 2017; Jovells-Vaqué *et al.* 2018), although the m1 from FS1 has the narrowest width described so far.

Microdyromys aff. monspeliensis Aguilar, 1977
(Fig. 4A-T)

LOCALITIES. — BC1, MAB0B, MAB3, MAB5, MAB11, CBR0E, and CBR0G.

MATERIAL. — BC1: 2 m2; MAB0B: 1 d4, 1 M1; MAB3: 2 p4, 4 m1, 2 m2, 1 m3, 2 P4, 6 M1, 3 M2, 2 M3; MAB5: 4 m1, 1 m2, 1 m3, 3 P4, 3 M1, 4 M2, 1 M3; MAB11: 1 M1; CBR0E: 1 m2, 1 M2; CBR0G: 1 M3.

MEASUREMENTS. — Appendix 4

DESCRIPTION

d4 (MAB0B)

The tooth is subtriangular in occlusal view with high and fine crestids and narrow valleys. The anterolophid is long. The metalophid is long and isolated and enlarged in the lingual side. The mesolophid and the posterolophid are long, curved, and connected. The posterotropid is well developed.

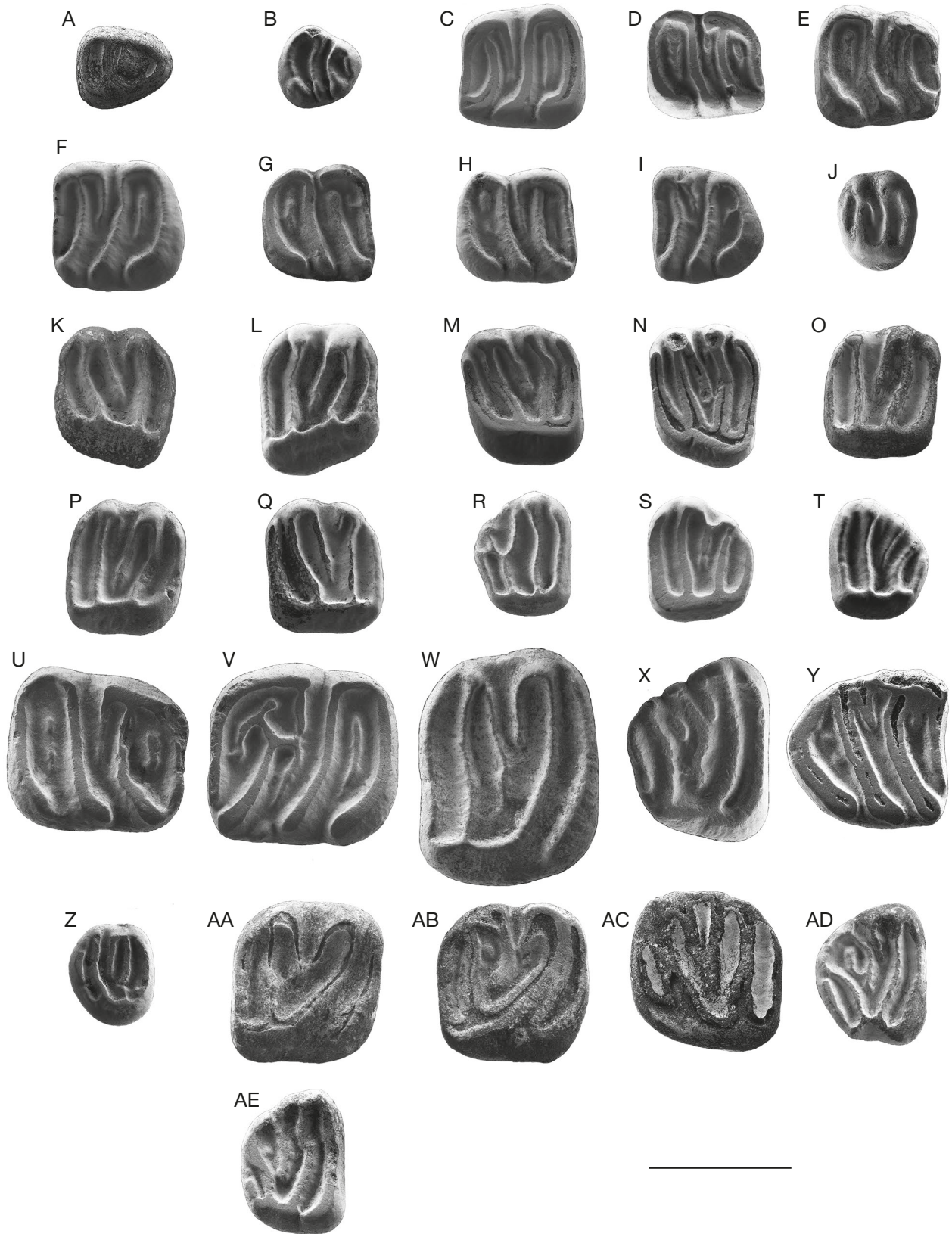


FIG. 4. — Gliridae from the Ribesalbes-Alcora Basin. *Microdryomys* aff. *monspeliensis*: **A**, right d4 (MAB0B-24); **B**, right p4 (MAB3-391); **C**, left m1 (MAB5-848); **D**, right m1 (MAB5-614); **E**, right m1 (MAB3-424); **F**, left m2 (MAB3-426); **G**, right m2 (MAB5-613); **H**, right m2 (BC1-126); **I**, left m3 (MAB5-857); **J**, left P4 (MAB5-848); **K**, left M1 (MAB3-310); **L**, right M1 (MAB3-316); **M**, left M1 (MAB5-281); **N**, left M1 (MAB11-67); **O**, right M2 (MAB5-573); **P**, right M2 (MAB5-118); **Q**, left M2 (MAB3-313); **R**, right M3 (MAB5-584); **S**, left M3 (CBR0G-1); **T**, left M3 (MAB3-361). *Prodryomys* aff. *satus*: **U**, right m1 (MAB5-240); **V**, left m2 (MAB5-271); **W**, right M2 (MAB5-14); **X**, right M3 (MAB3-372). *Prodryomys* aff. *remmert*: **Y**, left m3 (MAB3-473); **Z**, left P4 (MAB3-265); **AA**, right M1 (MAB3-332); **AB**, right M1 (MAB5-285); **AC**, left M2 (MAB3-349); **AD**, right M3 (MAB5-125); **AE**, right M3 (MAB5-125). Scale bar: 1 mm.

p4 (MAB3)

Subtriangular tooth with high, fine crestids and narrow valleys. The anterolophid is short. The metalophid is short and semicircular. The mesolophid and the posterolophid are curved, long and connected. The posterotrophid may be small (1 out of 2) or absent (1 out of 2).

m1 (MAB3)

Tooth subrectangular in occlusal view. The anterolophid is short. The metalophid is curved. The anteroconid and the metaconid are connected. The centrolophid is longer than half of the tooth width, and perpendicularly connected to the endolophid; in one specimen it is independent. The mesolophid and the posterolophid are long and well-connected. The posterotrophid may be large (2 out of 3) or of intermediate size (1 out of 3). The labial cuspids are better developed than the lingual ones. A specimen in the MAB5 material has an anterotrophid, and a better developed posterotrophid.

m2 (MAB3)

The tooth shows a subrectangular outline in occlusal view. The anterolophid is long. The metalophid is longer than in the m1. The anteroconid and the metaconid are connected. The centrolophid is longer than half of the tooth width and perpendicularly connected to the lingual side. The mesolophid and the posterolophid are long and well connected. The posterotrophid may be well (2 out of 3) or poorly developed (1 out of 3). The labial cuspids are better developed than the lingual ones. In the BC1 material there is a specimen with anterotrophid, a more curved metalophid isolated in the lingual side, and a posterotrophid divided in two; in MAB5 the anterolophid is shorter; in one specimen there is an anterotrophid and a more curved metalophid; in CBR0E the metalophid is also more curved.

m3 (MAB3)

The tooth is subrectangular in occlusal view. The anterolophid is short. The metalophid is curved. The anteroconid and the metaconid are connected. The centrolophid exceeds half of the tooth width and perpendicularly connected in the lingual side. The mesolophid and the posterolophid are long and well connected. The posterotrophid is low. The labial cuspids are better developed than the lingual ones. These characteristics are also found in the MAB5 material.

P4 (MAB3)

The tooth has a rounded outline. The endoloph is complete. The anteroloph is short and labially isolated. The protoloph and the metaloph are long, straight and isolated. The precentroloph is long and isolated. The posteroloph is longer than the anteroloph and it is labially isolated. In the MAB5 material a specimen shows an isolated anteroloph and another specimen a non-isolated centroloph.

M1 (MAB3)

The tooth is subquadrate in occlusal view. The anteroloph is relatively short. The endoloph is complete and becomes nar-

rower near the anteroloph. The protoloph and the metaloph are independent. The prototrope may be well developed (1 out of 6) or absent (5 out of 6). The precentroloph is longer than half (4 out of 6) or about three-quarters (2 out of 6) of the tooth width. The postcentroloph is short, about half of the tooth width (1 out of 5) or very short (4 out of 5), and it may be either independent (2 out of 5) or not (3 out of 5). The posteroloph is long and without labial connections. The labial cusps are better developed than the lingual ones. The lingual ornamentation is poorly developed. In the material from MAB0B there is an extra crest in the precentroloph. 2 out of 3 specimens from MAB5 lack a postcentroloph. On the other hand, the MAB11 specimens show no significant differences with the material from MAB3.

M2 (MAB5)

The outline is subquadrate. The anteroloph may be relatively short (2 out of 4) or long (2 out of 4). The endoloph is complete, although it is narrow in the contact with the anteroloph. The protoloph and the metaloph are independent. The prototrope may be low and short (2 out of 4) or absent (2 out of 4). The precentroloph is well developed to just over half of the tooth width. The postcentroloph may be very short (1 out of 4) or just short (3 out of 4), and it may be independent (3 out of 4) or not (1 out of 4). The posteroloph is short and without connection in the labial side. The labial cusps are more developed than the lingual ones. The lingual ornamentation is poorly developed. In the material from MAB3 the postcentroloph is mostly independent. The specimen from CBR0E shows no differences with the described MAB5 material.

M3 (MAB3)

The outline of the tooth is trapezoid. The anteroloph is long. The endoloph is complete. The protoloph and the metaloph are independent. The precentroloph may be either longer (1 out of 2) or shorter (1 out of 2) than half of the tooth width. The postcentroloph may be long (1 out of 2) or absent (1 out of 2). The posteroloph is short and without labial connections. The labial cusps are more developed than the lingual ones. The lingual ornamentation is poorly developed. In the CBR0G material both centrolophs are joined in a single crest; the MAB5 specimen is similar to the already described MAB3 material.

REMARKS

This is the smallest and morphologically simplest *Microdyromys* species found in the Ribesalbes-Alcora Basin. It was described by Aguilar (1977) in the lowermost Miocene (MN1) of France. In the Iberian Peninsula it first appears in the locality of Buñol (local biozone Cb, MN4), and becomes extinct in the local biozone H (MN7/8-9) of the site of Nombrevilla 1 from the Calatayud-Montalbán Basin (Daams 1981).

Later, Daams (1999a) and Vianey-Liaud (2003) proposed that the material assigned to this species in the Iberian Peninsula should instead be ascribed to the species *M. legidensis*, thus restricting the distribution of *M. monspeliensis* to the MN1-2 in Europe. Subsequent authors accept *M. monspeliensis* as the

lowermost Miocene species, while the populations from the uppermost Early Miocene and Middle Miocene are ascribed to *M. aff. Monspeliensis*, which is probably a new species.

According to the morphological classification of Daams (1981), the rank of abundance of the upper molar morphotypes present in this species are (from most to less abundant): the morphotype G (short precentroloph, long postcentroloph, and without prototrope and metatrope), the morphotype H (long precentroloph, postcentroloph longer than precentroloph, prototrope present and metatrope absent) and the morphotype J (similar to the morphotype H, but with presence of the prototrope). The same abundance pattern is found in the material here studied: predominance of the morphotype G, followed by the morphotype H, while the remaining morphotypes are absent. On the other hand, in the localities of Buñol or Las Planas 4A, the morphotypes G, H, and J are equally abundant (Daams 1981). As for the lower molars, all specimens are included in morphotype 2 (with a posterotropid and a long centrolophid) of Daams (1981), excepting one specimen that belongs to morphotype 3 (similar to morphotype 2, but with an anterotropid). This distribution is like the one observed in the site of Buñol, although in Buñol morphotype 3 is better represented and there is an exceptional appearance of morphotype 1 (without anterotropid, posterotropid and short centrolophid). Biometrically, the material studied here corresponds to the lower size ranges described in Buñol and the sites studied by Daams (1981).

The material described here in the first local biozone of Crespo *et al.* (2019a), within the Ribesalbes-Alcora Basin, constitutes the oldest known record of this taxon so far.

Genus *Prodryomys* De Bruijn, 1966

Prodryomys aff. *satus* Mayr, 1979
(Fig. 4U-X)

LOCALITIES. — MAB3 and MAB5.

MATERIAL. — MAB3: 1 M3; MAB5: 1 m1, 1 m2, 1 M2.

MEASUREMENTS. — Appendix 5

DESCRIPTION

m1 (MAB5)

The tooth is rectangular in occlusal view, with wide valleys and low and straight crestids. The anterolophid is short, and connected to the endoloph. There is an anterotropid. The metalophid is long, with a narrow contact with the endoloph. The centrolophid is long. The mesolophid and the posterolophid are long and they are well connected in the lingual side. The posterotropid is well developed. The labial cuspids are better developed than the lingual ones.

m2 (MAB5)

The tooth is subrectangular in occlusal view, and it has narrow irregular crestids and wide valleys. The anterolophid is long and connected with the endolophid. There is a low antero-

tropid that connects the anterolophid and the metalophid. The metaconid is connected to the anteroconid. The metalophid is curved, irregular and not connected to the metalophid. The centrolophid is irregular, longer than half of the tooth width, and connected to the metalophid. The mesolophid is long, and connected to the posterolophid. There is a posterotropid. The posterior valley is wide. The labial cuspids are better developed than the lingual ones.

M2 (MAB5)

The tooth is quadrate in occlusal view, and it has delicate crests and wide valleys. The anteroloph is long and isolated. The protoloph and the metaloph are U-shaped, and they join in the lingual side. The precentroloph is of medium size, and the postcentroloph is long and prolonged until the lingual side. There is no connection between the centrolophs. The posteroloph is short and isolated. The enamel is slightly rugose.

M3 (MAB3)

The tooth is subrectangular in occlusal view. The anteroloph is long and forms a closed ellipse with the protoloph, although in the labial side the connection is low, and in the lingual one it is not connected with the protoloph. The precentroloph is short and the postcentroloph is long and isolated from the metatrope. The protoloph and the metaloph are U-shaped and not connected until the lingual side. The metaloph and the posteroloph are not connected in the labial side. The posteroloph is short.

REMARKS

The genus *Prodryomys* is included in a series of genera like *Peridyromys*, *Miodyromys*, *Myomimus*, and *Pseudodryomys* (Wu 1990; Álvarez-Sierra *et al.* 1990; Daams & De Bruijn 1995; Daams 1999a; De Bruijn *et al.* 2003; Heissig 2006; Freudenthal & Martín-Suárez 2006; García-Paredes *et al.* 2009) which are difficult to assign taxonomically. Although more recent phylogenetic analyses result in the genus *Prodryomys* as monophyletic (Dalmasso *et al.* 2022). Solving this controversy would require an in-depth review since the differences between them are not clear, but this is beyond the aim of this paper.

The oldest record of *Prodryomys* in the Iberian Peninsula corresponds to the site of Vargas 2A, at the end of the MN4 (Van der Meulen *et al.* 2012); therefore, the remains found in the Ribesalbes-Alcora Basin constitute one of the oldest findings of this genus in the Iberian Peninsula.

The material described here shows the typical characters of *Prodryomys satus*, such as the posterior centroloph longer than the anterior ones, narrow crests with wide valleys, and a more rounded outline of the teeth, like that described by Wu (1990) in the material from Puttenhausen. Our specimens do not belong to *Prodryomys remmertii* Aguilar & Lazzari, 2006 because the latter taxon is characterized by having wide crests and the trigone ending in a V-shape and not in a U-shape as in the material in study. *Prodryomys gregarius* (Dehm, 1950) is also discarded due to its higher number of extra crests and higher complexity. Our material is clearly less brachyodont than that of *Prodryomys brailloni* (Thaler, 1966) (Wu 1993,

Aguilar & Lazzari, 2006). Although, the material described here is morphologically like *P. satus*, it is significantly larger than in other populations of this species, so we preferred to name it as *Prodryomys* aff. *satus*.

Although the M2 was first ascribed to the genus *Altomiramys* (Crespo *et al.* 2012), the finding of more material allowed the comparison with other peninsular populations. According to the new data, the shape and distribution of the crests and valleys, especially the centrolophs, in these teeth allow to discard their ascription to *Altomiramys*.

Prodryomys aff. *remmertii* Aguilar & Lazzari, 2006
(Fig. 4Y-AE)

LOCALITIES. — MAB3 and MAB5.

MATERIAL. — MAB3: 2 m3, 1 P4, 1 M1, 1 M2; MAB5: 1 M1, 3 M3.

MEASUREMENTS. — Appendix 6

DESCRIPTION

m3 (MAB3)

The tooth is D-shaped in occlusal view and shows no reduction in its posterior part. The anterolophid is long. The endolophid may be complete (1 out of 2) or not (1 out of 2). There is a small anterotripid, which may be connected (1 out of 2) or not (1 out of 2) to the endolophid. The centrolophid is short. There may be a centrotripid (1 out of 2) or not (1 out of 2), and the posterotripid is short. The posterolophid and the mesolophid have a low connection.

P4 (MAB3)

The tooth is rounded in occlusal view. The endoloph is complete. The anteroloph is short and isolated in the labial side. The protoloph and the metaloph are long, straight and isolated. The postcentroloph is long. The posteroloph is longer than the anteroloph and it is isolated labially.

M1 (MAB3)

The tooth is quadrate in occlusal view, with narrow crests and wide valleys. The anteroloph is medium in size and isolated. The protoloph and the metaloph are connected in the lingual side forming a V-shape. The precentroloph is shorter than the postcentroloph, and the first crest is of medium size. Both centrolophs are interconnected forming a Y-shape and connected to the metaloph. The posteroloph is of intermediate size, but shorter than the anteroloph, and the posteroloph is well connected in the lingual side and isolated in the labial side. The MAB5 material has a more medial protoloph-metaloph connection, the centrolophs are not interconnected, and the posteroloph is shorter, lingually isolated and connected in the labial side.

M2 (MAB3)

The tooth is broken, but still shows a subquadrate outline in occlusal view, wide valleys and narrow crests. There are two centrolophs, the anterior one is shorter than the posterior one

and they are connected forming a Y-shape. The postcentroloph almost reaches the lingual side of the tooth.

M3 (MAB5)

The tooth is trapezoid in occlusal view. The anteroloph is long. The endoloph is complete. The protoloph and the metaloph are independent. The precentroloph may be absent (1 out of 3); when present it is short and may be connected in the lingual side (2 out of 3). The postcentroloph is long and connected in the lingual side. The metalope is present in two specimens. The posteroloph is short and isolated in the labial side. The labial cusps are better developed than the lingual ones.

REMARKS

The record of *Prodryomys remmertii* is restricted to its type locality of Blaquatère 1 (Aguilar & Lazzari 2006). Therefore, the material here described constitutes the first discovery of this species in the Iberian Peninsula.

The material described here displays typical characteristics of the genus *Prodryomys*. These include longer posterior centrolophs, fine crests and wide valleys, although less than in *P. satus*, as well as a rounded outline and a V-shaped trigon. Morphologically, our material is similar but significantly larger than the one described by Aguilar & Lazzari (2006). It differs from *P. satus* in its morphology and from *P. gregarius* in its size. It is also smaller and less brachydont than *P. brailloni* (Wu 1993; Daams 1999a; Aguilar & Lazzari 2006).

Genus *Bransatoglis* Huguene, 1967

Bransatoglis cf. *infralactorensis* Baudelot & Collier, 1982
(Fig. 5A-G)

LOCALITIES. — MAB0A, MAB0B, MAB3, MAB5, and MAB11.

MATERIAL. — MAB0A: 2 m2, 1 m3; MAB0B: 1 m2; MAB3: 1 p4, 1 m1, 2 m2, 1 M3; MAB5: 1 m2; MAB11: 1 m1, 1 m3.

MEASUREMENTS. — Appendix 7

DESCRIPTION

p4 (MAB3)

The tooth is subrectangular in occlusal view, and has wide and high crestids and deep valleys. The anterolophid is short. The anterotripid is well developed. The metalophid is labially connected to the anterolophid. The metalophid is lingually isolated. There are no centrolophids. The mesolophid is completely isolated. The posterotripid is well developed. The posterolophid is long, curved and isolated. There is no difference between the labial and lingual cusps.

m1 (MAB3)

The tooth is rectangular in occlusal view, with narrow valleys and straight and wide crestids. The anterolophid is short and connected to the endolophid. The anterotripid is connected to the anterolophid. The metalophid is long and without

contact with the endolophid. The centrolophid is long. The mesolophid and the posterolophid are long and they are well interconnected in the lingual side. The posterotropid is well developed. The labial cuspids are larger than the lingual ones. The m1 from MAB11 is similar to the one described here.

m2 (MAB5)

The tooth is rectangular in occlusal view, with narrow valleys and wide crestids. The anterolophid is long. The endolophid is divided in two. The anterotropid is present. The metalophid is long and not in contact with the endolophid. The centrolophid is long. The mesolophid and the posterolophid are long and interconnected in the lingual side. The posterotropid is well developed. The labial cuspids are more developed than the lingual ones. The material found in MAB0B and MAB3 is similar to the one just described, but in the specimen from MAB0A the crestids are more irregular and the posterior side is more rounded.

m3 (MAB0A)

The tooth is elongated and D-shaped in occlusal view, with narrow valleys and wide crestids. The anterolophid is of intermediate size. The endolophid is interrupted. There is a long anterotropid. The metalophid is long and without contact with the endolophid. The centrolophid is long and isolated. The mesolophid and the posterolophid are long and they are interconnected in the lingual side. The posterotropid is well developed. The labial cuspids are more developed than the lingual ones. The enamel is slightly wrinkled. The m3 from MAB11 also fits in this description.

M3 (MAB3)

The tooth is broken, and it has narrow valleys and wide crests. The anteroloph is long and isolated lingually, and labially its contact is low. The precentroloph is short, and the postcentroloph is long. The protoloph and the metaloph are connected in the lingual side, forming a V-shape.

REMARKS

The systematics of this genus needs a deep review. Some authors, such as Freudenthal & Martín-Suárez (2007b, 2019) divide this genus into three distinct ones (*Bransatoglis*, *Paraglis*, and *Oligodyromys*); but, since the main difference between them is size, others authors like De Bruijn *et al.* (2013) only accept *Bransatoglis*. This genus is characterized by a long geologic record, which extends from the upper Eocene to the Upper Miocene. The Miocene species are *Bransatoglis cadeoti* Bulot, 1978, *Bransatoglis concavidens* Hugueney, 1967, *Bransatoglis spectabilis* (Dehm, 1950), *Bransatoglis astaracensis* (Baudelot, 1970), *Bransatoglis infralactorensis* (Baudelot & Collier 1982), *Bransatoglis fugax* (Hugueney, 1967), and *Bransatoglis complicatus* Ünay, 1994 (De Bruijn *et al.* 2013). Most of the species described in the Miocene are very rare in the fossil assemblages, and have a high intraspecific variability; so their distinction was initially based on size. However, these species can be differentiated into two large groups based on the complexity and number of crests (De Bruijn *et al.* 2013).

The size and morphology of the material found in the Ribesalbes-Alcora Basin approach those of *B. infralactorensis* from Estrepouy (MN3) and *B. cf. infralactorensis* from Belchatow C (MN4) (Baudelot & Collier 1982; Kowalski 1997); *B. infralactorensis* is more similar to the older *B. fugax* (De Bruijn *et al.* 2013) and smaller than *B. cadeoti* from La Romieu and *B. concavidens* from Ulm Westtangente (Bulot 1978, Werner 1994). *Bransatoglis astaracensis* is morphologically similar to our material, but its larger size allows us to discard this ascription (Baudelot & Collier 1982). *Bransatoglis infralactorensis* differs from *Bransatoglis bosniensis* De Bruijn, Markovic & Wessels, 2013, *B. spectabilis* and *B. concavidens* in its reduced number of extra crests (Bulot 1978; Werner 1994; De Bruijn *et al.* 2013). The m2 in our material is like the m2 of *B. ingens* from Ulm Westtangente and Jugingen, but the m1 is less chaotic than the m1 from these localities (Werner 1994). Therefore, and because of the scarcity of material and the lack of upper molars, we decided to leave the ascription of specimens from the Ribesalbes-Alcora Basin as *B. cf. infralactorensis*.

Genus *Peridyromys* Stehlin & Schaub, 1951

Peridyromys murinus (Pomel, 1853)
(Figs 5H-AE; 6A-Z)

LOCALITIES. — MCX1, MCX3, MCX7, MTR1, MTR2, BC1, BC2, FS1, MAB0A, MAB0B, MAB0C, MAB3, MAB5, MAB10, MAB11, MAB13, and CBR0B.

MATERIAL. — MCX1: 1 M1/M2; MCX3: 2 p4, 1 m1, 1 D4, 2 P4, 5 M1/M2; MCX7: 1 p4, 1 m1, 1 m2, 2 P4, 2 M1/M2; MTR1: 1 m1; MTR2: 1 p4, 6 m1, 6 m2, 6 m3, 5 D4, 8 P4, 21 M1/M2; BC1: 4 p4, 4 m1, 4 m2, 3 m3, 2 D4, 3 P4, 5 M1/M2; BC2: 1 m2, 1 M3; FS1: 2 m2; MAB0A: 1 m1, 1 M1/M2; MAB0B: 1 p4, 1 M1/M2; MAB0C: 1 d4; MAB3: 2 p4, 4 m1, 4 m2, 2 m3, 1 P4, 15 M1/M2, 2 M3; MAB5: 2 p4, 4 m1, 2 m2, 3 m3, 1 D4, 2 P4, 9 M1/M2; MAB10: 1 M1/M2; MAB11: 1 p4, 1 m1, 3 m2, 1 m3, 1 P4, 3 M1/M2, 1 M3; MAB13: 1 p4; CBR0B: 1 M1/M2.

MEASUREMENTS. — Appendix 8

DESCRIPTION

d4 (MAB0C)

The tooth has a subtriangular outline. The anterolophid is long and semicircular. The metalophid is delicate, short and surrounds a well-developed central cuspid. There is a long centrolophid. The mesolophid and the posterolophid are long and developed; they show a low interconnection forming an ellipse.

p4 (BC1)

The tooth has a subtriangular outline. The anterolophid is long and semicircular. The metalophid may be a spur of the anterolophid (2 out of 3), or form an ellipse with the anterolophid but without making contact with it (1 out of 3). The mesolophid may be long and labially connected to the anterolophid (1 out of 3) or long and isolated (2 out of 3). The posterolophid may be long and connected

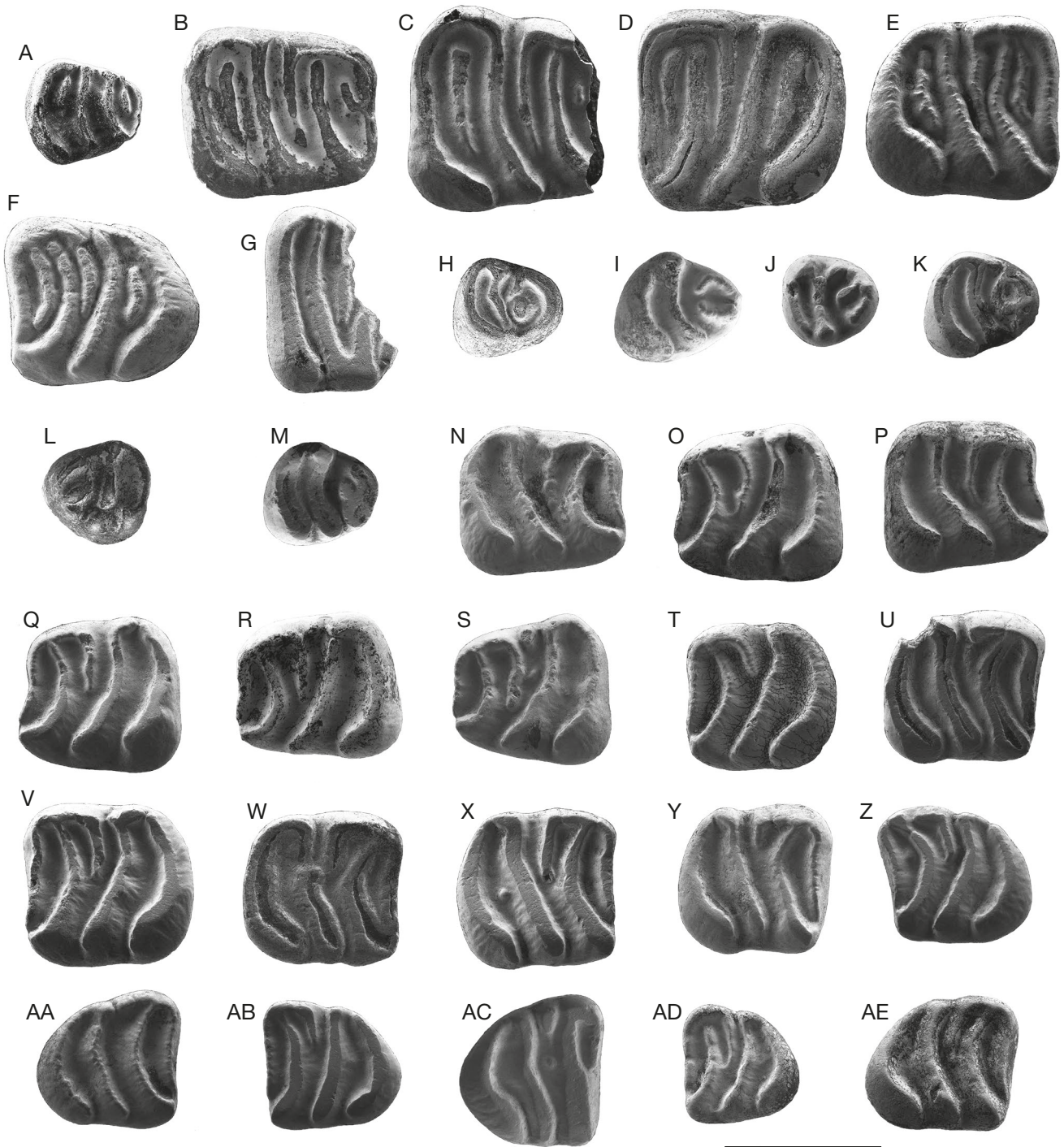


FIG. 5. — Gliridae from the Ribesalbes-Alcora Basin. *Bransatoglis* cf. *infracorensis*: A, right p4 (MAB3-382); B, right m1 (MAB3-399); C, right m1 (MAB11-78); D, left m2 (MAB5-258); E, right m2 (MAB0A-75); F, left m3 (MAB0A-74); G, left M3 (MAB3-295). *Peridyromys murinus*: H, right d4 (MAB0C-1); I, right p4 (BC1-15); J, right p4 (BC1-113); K, right p4 (MAB3-380); L, left p4 (MAB13-2); M, right p4 (MTR2-130); N, right m1 (MTR2-133); O, left m1 (MTR2-132); P, right m1 (MTR2-131); Q, left m1 (MCX7-3); R, left m1 (MAB5-608); S, left m1 (MAB3-418); T, left m2 (MTR2-141); U, right m2 (MTR2-139); V, left m2 (MTR2-15); W, right m2 (MAB11-79); X, right m2 (FS1-44); Y, right m2 (BC1-120); Z, left m3 (MTR2-147); AA, right m3 (MTR2-146); AB, left m3 (MTR2-145); AC, right m3 (MAB3-468); AD, left m3 (MAB5-856); AE, right m3 (BC1-140). Scale bar: 1 mm.

to the mesolophid lingually (2 out of 3) or labially (1 out of 3). The specimens found in MCX3 are similar to those just described. In MCX7 the anterolophid is short and the posterolophid is isolated. In the specimens found in MTR2, MAB0B and MAB11 the metalophid is a posterior

spur of the anterolophid (and in MTR2 and MAB0B the posterolophid may be isolated). In MAB3 the endolophid is a spur of the mesolophid. In MAB5, the anterolophid and metalophid are short. In MAB13, the posterolophid and the mesolophid are isolated.

m1 (MTR2)

The tooth is rectangular with high crestids and wide valleys. The anterolophid is short. The metaconid is connected to the anteroconid. The metalophid is curved and long. The centrolophid is well developed and exceeds half of the tooth width, one specimen it isolated labially and perpendicularly connected to the endolophid. The endolophid may be a spur of the centrolophid (4 out of 5) or be absent (1 out of 5). The mesolophid and the posterolophid may be long and show a low (4 out of 6) or a high (2 out of 6) connection. The labial cuspids are better developed than the lingual cuspids. The posterior valley is the widest one. There are no accessory crestids. The enamel is rough. The specimens found in MAB11 are similar to the ones just described. In MCX3 and MAB5 the anterolophid is generally shorter. In MCX7 and MTR1 the mesolophid and the posterolophid are not connected and in BC1 the centrolophids may be shorter than in the MTR2 material (2 out of 3). In MAB0A there is a small centrotrophid. In MAB3 the length of the anterolophid is more variable than in the material here described; in one specimen there is a small centrotrophid with a cuspid as high as the extra crestid.

m2 (MTR2)

The outline is sub-rectangular with high crestids. The anterolophid may be long (2 out of 6) or of medium length (4 out of 6). The metaconid is connected to the anteroconid. The metalophid is either complete (3 out of 6) or it is curved, long and with a narrowing that almost separates it from the metaconid (3 out of 6). The centrolophid may be well developed up to the middle of the tooth (2 out of 6) or it may not reach this point (4 out of 6). The endolophid may be a spur of the entoconid (5 out of 6) or be absent (1 out of 6). The mesolophid and the posterolophid are long and they may show a low (2 out of 5) or a high (2 out of 5) connection, or they may end together but without connection (1 out of 5). The labial cuspids are more developed than the lingual cuspids. The posterior valley is the widest one. No accessory crestids. The specimens found in MCX7, BC2, MAB3 and MAB5 fit in this description. In one specimen from BC1 the centrolophid is isolated and the mesolophid and the posterolophid have a low connection. In one individual from FS1 there is a very short posterotrophid, barely discernible. In another specimen from MAB11 the mesolophid is divided in two.

m3 (MTR2)

The tooth has a D-shaped outline, lacking a reduced posterior part. The anterolophid is long; in one individual the lingual connection is low. The metalophid is curved and attached to the anteroconid and the metaconid; in one specimen the anteroconid is isolated from the metaconid. The centrolophid is of medium size and does not exceed half of the tooth width; in one specimen it is absent. The endolophid may either be well developed (1 out of 5), be merely a spur (4 out of 5) or be absent (1 out of 5). The mesolophid and the posterolophid may be long and connected in a low connection (3 out of 6) or not connected at all (3 out of 6). In one specimen the

metaconid is separate from the mesolophid. The posterior valley is the widest one. There are no accessory crestids. In BC1, MAB3, MAB5 and MAB11 the centrolophids are longer than in MTR2; in one individual from MAB3 there is a spur behind the posterolophid and another specimen has a short anterolophid; in a specimen from MAB5 the spur is located behind the mesolophid. Also, in MAB5 there is a specimen with an anterotrophid and another one with a posterotrophid.

D4 (MTR2)

The outline is subtriangular, with fine crests and wide valleys. The anteroloph may be short (4 out of 5) or long (1 out of 5) and labially connected to the paracone. The protocone is poorly developed. The protoloph and the metaloph form a Y. The centroloph may be short and isolated (1 out of 5) or attached to the metacone (4 out of 5). The posteroloph is long (longer than the anteroloph, except in one specimen) and it may be labially attached (3 out of 5) or independent (2 out of 5). In MCX3, BC1 and MAB5 there is no centroloph. In BC1 there is one specimen with an isolated protoloph.

P4 (MTR2)

The tooth has a subrounded outline, with fine crests and wide valleys. The anteroloph may be short (6 out of 8) or long (2 out of 8) and isolated. The protocone is poorly developed. The protoloph and the metaloph may form a Y-shape (6 out of 8) or a V-shape (2 out of 8). There is a short, independent centroloph, which is absent in two specimens. The posteroloph is longer than the anteroloph and it may be either isolated (6 out of 8) or connected with the protoloph-protocone (2 out of 8). The specimens found in MCX3, MCX7 and MAB11 are similar to those just described. In BC1 and MAB5 the posteroloph may be connected on both sides. In MAB3 the metaloph is short and isolated. In one specimen from MAB5 the metaloph is divided in two.

M1/M2 (MTR2)

The tooth has a square outline, with narrow valleys and broad crests. The anteroloph may be long (7 out of 18) or medium (11 out of 18) and it may be isolated (12 out of 17) or with a low and labial connection (5 out of 17). In one specimen the protoloph shows an anterior spur, in another specimen this spur connects with the anteroloph and in another one it is labially isolated. The protoloph and the metaloph form the typical Y-shape, and they may join near the lingual side (10 out of 21), or form a V-shape, joining at the lingual side (8 out of 21), or form a U-shape (3 out of 21). The precentroloph is longer than the postcentroloph, although in one individual they are of equal size; they may join in the center of the tooth forming a Y (8 out of 21), or a V (1 out of 21) or be disconnected (12 out of 21). In five specimens there is a metatrope. In two specimens the precentroloph connects with the metaloph. The postcentroloph may be intermediate (11 out of 21), short (7 out of 21) or very short (3 out of 21); in five individuals it is isolated labially and in one it is divided in two. In one specimen the metaloph has an anterior spur. The posteroloph

may be long but shorter than the anteroloph (7 out of 21), or short (14 out of 21); it may be either isolated (7 out of 20), connected on the lingual side and isolated on the labial side (9 out of 20), or connected on both sides (4 out of 20). The enamel tends to be rough. The specimens found in MCX1, BC1, MAB0A, MAB0B, MAB10, MAB11 and CBR0B fit in the description above. In one individual from MCX3 there is a small metatropes; in another specimen the precentroloph is short and the posterior is long and unconnected; in another one the postcentroloph is long. In MCX7 the postcentrolophs are longer than in MTR2. In MAB3 there are three specimens with metatropes. In one individual from MAB5 the paracone has an anterior spur and the metacone a posterior one.

M3 (MAB3)

The tooth is of sub-rectangular outline. The anteroloph is long and forms a closed ellipse with the protoloph. The endoloph is continuous. The precentroloph may be short (1 out of 2) or absent (1 out of 2). The postcentroloph is labially isolated and it may be lingually connected to the metaloph (1 out of 2) or not (1 out of 2). The protoloph and the metaloph meet forming an X-shape near the lingual part. The metaloph and the posteroloph do not contact on the labial side. The posteroloph is short. In BC2 the protoloph and the metaloph contact each other in a U-shape. In MAB11 the centrolophs differ from MTR2 in that the precentroloph is longer, while the posterior one is delicate and shorter, and connected on both sides. The two centrolophs are connected forming an X-shape.

REMARKS

Peridyromys murinus from the upper Oligocene (MP28a) of France (Pech Desse; Vianey-Liaud 2003) is the oldest species of the genus. An unspecified representative of this genus has been recorded at the Iberian site of Canales, which belongs to the same stratigraphic zone (MP28a) as the French site (Álvarez-Sierra *et al.* 1999). *Peridyromys* probably became extinct at the end of the Aragonian. As previously mentioned, its validity is under discussion; according to Daams & De Bruijn (1995), it could be the ancestor of several Miocene genera. Probably, the species *P. murinus* is a wastebasket taxon that may include several species with similar morphologies, due to its lasting presence spanning from the late Oligocene (MP28) to the end of the Middle Miocene (MN7-8), for a total of almost 14 m.y.

Following this controversy, Álvarez-Sierra *et al.* (1990) assigned to *Pseudodryomys* the larger species with broad, robust crests and deep valleys, while the relatively small species with broad crests and hypsodont teeth were ascribed to *Peridyromys*. Some authors such as Hordijk *et al.* (2015) suggest that both genera are synonyms, and Bilgin *et al.* (2021) include the genus *Myomimus*. This shows that a thorough revision of the three genera is necessary.

Peridyromys murinus is the most abundant taxon in the Ribesalbes-Alcora Basin and was already cited in the classic locality of Araya (Agustí *et al.* 1988). It is present in all the sites

with a representative sample. The metric values and morphology are very similar among the different sites, with no clear trend in the variation of their biometry. This is already noted by Daams (1981), who did not observe any variation from the late Oligocene to the Middle Miocene in different European sites. Furthermore, it has been decided not to separate the M1 from the M2, since in some cases their morphology is very similar, and they cannot be distinguished. Nevertheless, other authors such as Freudenthal & Martín-Suárez (2019) propose two lineages in this long-range species.

In some sites it is difficult to distinguish *P. murinus* from *Ps. ibericus*, as for example in Montalvos 2. In this site, Hordijk *et al.* (2015) ascribed these two species to a single group *Ps. aff. ibericus*, based on their simple morphology like in *P. murinus*, and their large size, as in *Ps. ibericus*. In our material *P. murinus* is smaller and simpler than *Ps. ibericus*, so they can be easily distinguished, with only some difficulties in ascribing the premolars and third molars.

According to the classification of Daams (1981), the lower molars would all belong to category 1, as in the rest of the sites, where they are in the majority of this dormouse, except in the locality of Buñol. As expected in this species, the upper molars belong mainly to morphotype C, with a few specimens ascribed to morphotype D, like in the rest of the European sites. The measurements fit within the variability expected and described by Daams (1981).

Peridyromys darocensis Daams, 1999 (Fig. 6AA-AF)

LOCALITIES. — MAB5, MAB6, MAB11, and CBR0C.

MATERIAL. — MAB5: 1 m1, 1 m2, 1 M1/M2; MAB6: 1 m1; MAB11: 1 p4, 1 m1, 3 m2, 1 m3, 1 M3; CBR0C: 1 m2.

MEASUREMENTS. — Appendix 9

DESCRIPTION

p4 (MAB11)

The tooth is subtriangular in shape. The anterolophid is long and forms a circumference with the metalophid. There is a short centrolophid. The mesolophid and the posterolophid are short and lingually connected.

m1 (MAB11)

The tooth is of sub-rectangular outline, with fine crestids and broad valleys. The anterolophid is short. There is a low anterotropid. The metaconid is connected to the anteroconid. The metalophid is curved, irregular and with a low connection to the endolophid. The centrolophid is irregular, longer than half of the width of the tooth, divided in two and with a median connection to the metalophid. The mesolophid is irregular and not connected to the posterolophid. There is a low posterotropid. The labial cuspids are more developed than the lingual cuspids. The posterior valley is wide. The specimen found in MAB6 is similar to the one described here.

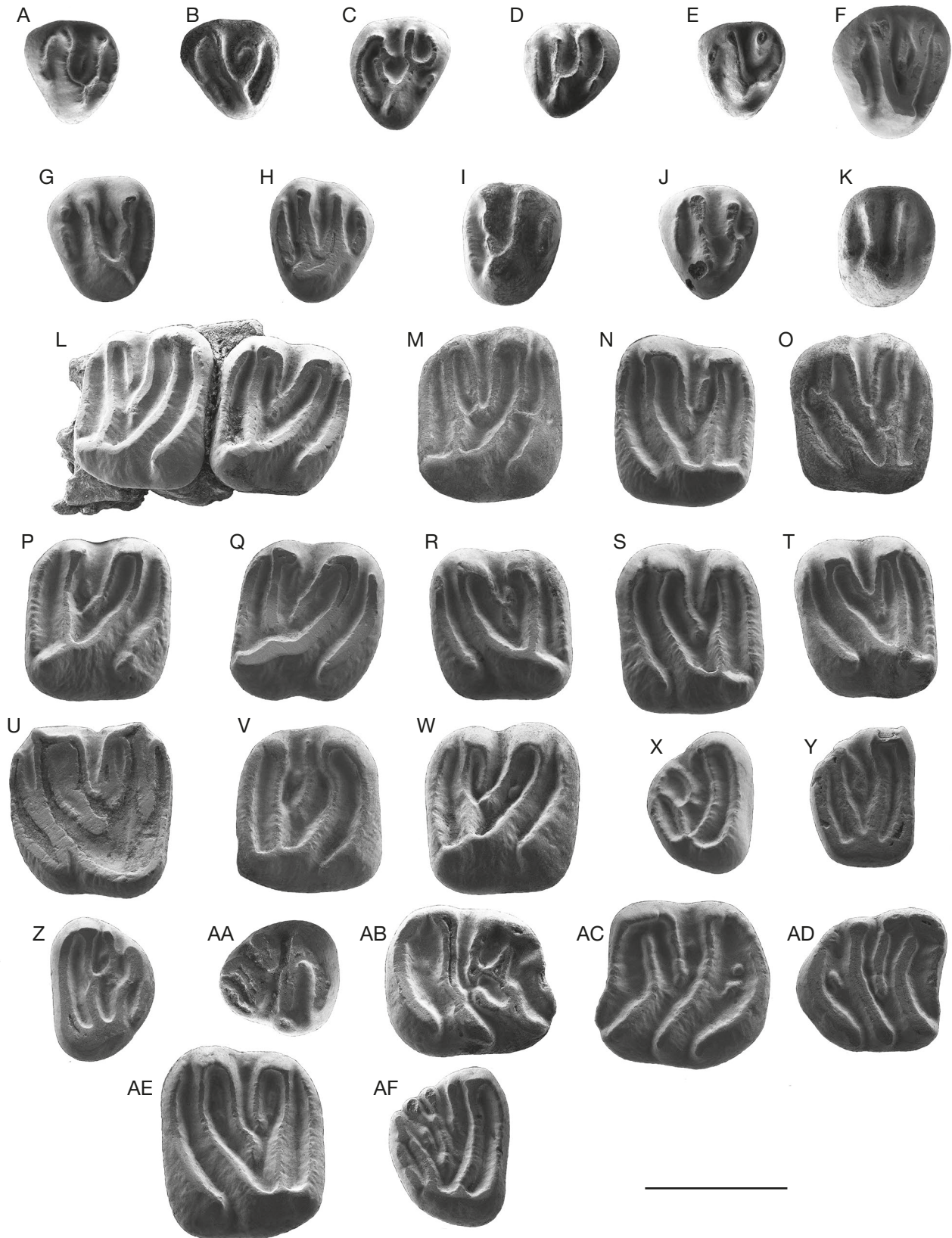


FIG. 6. — Gliridae from the Ribesalbes-Alcora Basin. *Peridyromys murinus* (continued): **A**, left D4 (MTR2-108); **B**, right D4 (MTR2-107); **C**, right D4 (MTR2-105); **D**, right D4 (MAB5-553); **E**, right D4 (BC1-14); **F**, left P4 (MTR2-103); **G**, left P4 (MTR2-99); **H**, right P4 (MTR2-10); **I**, right P4 (MAB5-811); **J**, right P4 (MAB3-252); **K**, right P4 (BC1-83); **L**, right maxilla M1+M2 (MCX3-100); **M**, right M1/M2 (MTR2-123); **N**, left M1/M2 (MTR2-121); **O**, left M1/M2 (MTR2-114); **P**, right M1/M2 (MTR2-113); **Q**, right M1/M2 (MTR2-110); **R**, left M1/M2 (MTR2-13); **S**, left M1/M2 (MTR2-12); **T**, left M1/M2 (MCX7-5); **U**, left M1/M2 (MAB5-558); **V**, right M1/M2 (MAB5-254); **W**, right M1/M2 (MAB3-326); **X**, right M3 (MAB3-356); **Y**, right M3 (MAB3-358); **Z**, left M3 (MAB11-70). *Peridyromys darocensis*: **AA**, left p4 (MAB11-73); **AB**, right m1 (MAB11-76); **AC**, right m2 (MAB11-77); **AD**, right m3 (MAB11-82); **AE**, left M1/M2 (MAB5-270); **AF**, right M3 (MAB11-68). Scale bar: 1 mm.

m2 (MAB11)

The tooth is sub-rectangular in shape with fine irregular crestids and wide valleys. The anterolophid is long. A low anterotropid may be connected with the metalophid (1 out of 3), barely visible (1 out of 3) or not present (1 out of 3). The metaconid is connected to the anteroconid. The metalophid is curved, irregular and it may show a low connection to the endolophid (1 out of 3) or not (2 out of 3). The centrolophid is irregular, longer than half of the width of the tooth and it may end with a further connection to the metalophid (1 out of 3) or not (2 out of 3). There may be a centrotropid (2 out of 3) or not (1 out of 3). The mesolophid is irregular and connects to the posterolophid. There is a low posterotropid. The labial cuspids are more developed than the lingual cuspids. The posterior valley is wide. The crestids are irregular. The specimens found in CBR0C fit in this description.

m3 (MAB11)

The tooth is D-shaped, without a reduced posterior part. The anterolophid is short and independent. The metalophid is curved and isolated. The anteroconid and the metaconid show a low connection. The centrolophid is long and exceeds half of the tooth width, with two constrictions. The mesolophid and the posterolophid are long and isolated. A small posterotropid is present.

M1/M2 (MAB5)

The tooth shows a subquadrangular outline, with broad crests and relatively wide valleys. The anteroloph is intermediate in size and isolated. The protoloph and the metaloph form the typical V shape, joining at the lingual side. The anterior precentroloph is longer than the posterior one and they do not connect. The prototrope and the metatrope are present. The postcentroloph is of medium size. The posteroloph is long, but shorter than the anteroloph, and both are well connected on both sides.

M3 (MAB11)

The outline is sub-rectangular. The anteroloph is long and forms a closed ellipse with the protoloph. The endoloph is almost complete, except for the posteroloph. The precentroloph is short and the postcentroloph is long, and both are isolated. The metatrope is isolated and divided in two, the labial part is connected to the postcentroloph. The metaloph and the posteroloph are not interconnected. The posteroloph is short.

REMARKS

This species is part of the lineage formed by *P. darocensis* and *Peridyromys sondaari* Daams, 1999, described by Daams (1999b) and Dalmasso *et al.* (2022). While *P. darocensis* has only been found in the late Ramblian (MN3, local area A) of the Calatayud-Montalbán Basin, *P. sondaari* is known from the middle Aragonian (MN5, local area D). According to Daams (1999b), the populations belonging to the local zone C of the MN4, would represent a transition between the two

species, none of which have been found in the local biozone B. These species are clearly differentiated from *P. murinus* by their more chaotic pattern and higher number of extra crests in lower and upper molars, *P. darocensis* being simpler and less chaotic than *P. sondaari* (Daams 1999b).

The material of *P. darocensis* from the Ribesalbes-Alcora Basin is very scarce; it only appears in the second local area and is more abundant in MAB11. Biometrically, our material is similar to both *P. sondaari* and *P. darocensis* but it shows the same morphological pattern as the latter one, which is simpler than in *P. sondaari*. We can therefore reject the possibility that our material belongs to the transitional population occurring in the MN4 of the Calatayud-Montalbán Basin. This would then be the first record of this lineage outside the Calatayud-Montalbán Basin and in the MN4.

Genus *Pseudodryomys* De Bruijn, 1966*Pseudodryomys ibericus* De Bruijn, 1966

(Fig. 7)

LOCALITIES. — MCX1, MCX3, MCX7, MTR2, BC1, FS1, MAB0A, MAB0B, MAB3, MAB3A, MAB5, MAB8, MAB11, MAB11B, CBR0B, CBR0C, CBR0G, CBR1, and CBR4.

MATERIAL. — MCX1: 1 M2; MCX3: 1 m2, 1 D4, 1 P4, 1 M1; MCX7: 1 P4, 1 M1, 1 M2; MTR2: 1 m3, 1 M1; BC1: 2 p4, 1 m3, 1 D4, 1 P4, 1 M3; FS1: 1 m1, 1 m2, 2 P4; MAB0A: 2 D4, 1 P4, 1 M3; MAB0B: 1 P4, 1 M2; MAB3: 2 p4, 2 m1, 5 m2, 1 m3, 2 D4, 1 P4, 5 M1, 3 M2, 2 M3; MAB3A: 1 p4, 1 m2, 1 M1, MAB5: 1 d4, 2 p4, 2 m1, 2 m3, 1 P4, 1 M3; MAB8: 1 d4; MAB11: 1 m1, 1 M2; MAB11B: 1 D4; CBR0B: 2 m1, 1 D4, 1 P4; CBR0C: 1 D4; CBR0G: 1 D4; CBR1: 1 D4, 1 P4, 1 M3; CBR4: 1 m1.

MEASUREMENTS. — Appendix 10

DESCRIPTION

d4 (MAB5)

The tooth has a subtriangular shape. The anterolophid is short and connected to the anteroconid and the protoconid. The metalophid is a spur of the protoconid. The mesolophid is long and has a small ridge on the antero-labial side. The mesolophid contacts the posterolophid, forming a large ellipse closed at the lingual side, and with a low connection on the labial part. A posterotropid is present. The posterolophid is thin and relatively short. The morphology of the material from MAB8 is simpler than the one described above, with no extra crestids and with the anterolophid connected only to the metalophid.

p4 (MAB3)

The tooth is subtriangular and hypsodont. The anterolophid may be short (1 out of 2) or absent (1 out of 2). The metalophid may be merely a posterior spur of the anterolophid (1 out of 2) or long (1 out of 2) and curved to form almost an ellipse. The endolophid may be small (1 out of 2) or absent (1 out of 2). The mesolophid is long, connected to a well-developed posterolophid. In the p4 from BC1

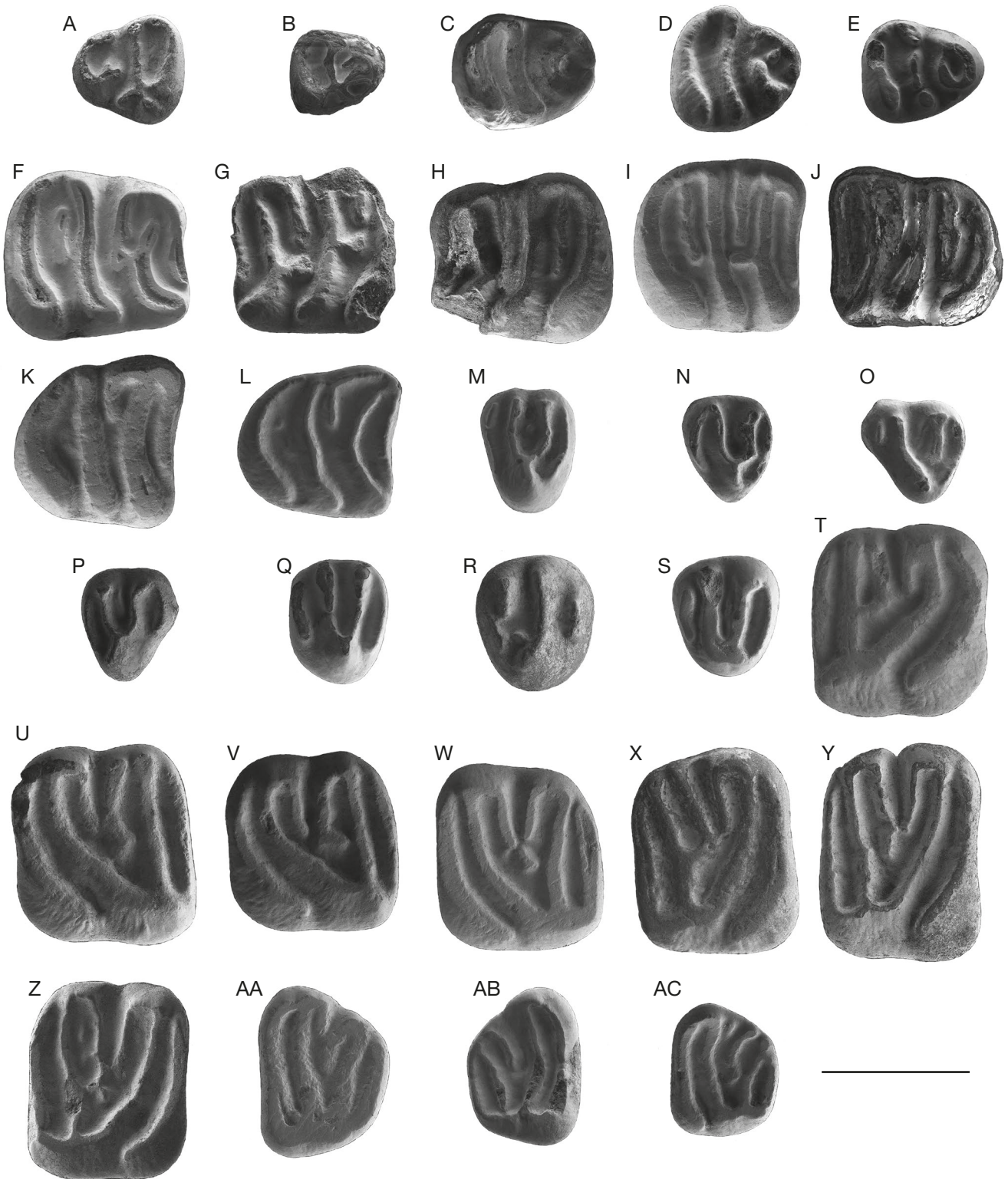


FIG. 7. — Gliridae from the Ribesalbes-Alcora Basin. *Pseudodryomys ibericus*: **A**, left d4 (MAB5-839); **B**, right d4 (MAB8-12); **C**, right p4 (MAB3-381); **D**, right p4 (MAB3A-4); **E**, right p4 (BC1-143); **F**, right m1 (MAB5-600); **G**, left m1 (MAB3-456); **H**, left m1 (MAB11-75); **I**, right m2 (MAB3-449); **J**, left m2 (MAB3A-2); **K**, right m3 (MAB3-472); **L**, right m3 (MTR2-148); **M**, left D4 (MAB3-259); **N**, left D4 (BC1-86); **O**, left D4 (CBR0G-2); **P**, right D4 (CBR0C-3); **Q**, left P4 (MAB3-258); **R**, right P4 (MAB5-124); **S**, left P4 (MAB0B-21); **T**, right M1 (MAB3-286); **U**, left M1 (MAB3-297); **V**, right M1 (MTR2-127); **W**, left M2 (MAB3-291); **X**, right M2 (MAB3-289); **Y**, right M2 (MAB0B-18); **Z**, right M2 (MCX1-4); **AA**, left M3 (MAB3-371); **AB**, right M3 (MAB5-861); **AC**, left M3 (BC1-111). Scale bar: 1 mm.

the mesolophid and the posterolophid are irregular and divided into several parts. The specimen from MAB3A has a metalophid divided in two and a long centrolophid. The

material from MAB5 shows a mesolophid that contacts the posterolophid forming a large ellipse closed on the lingual side and with a low connection on the labial side.

m1 (MAB5)

Tooth rectangular in shape with high crestids and narrow valleys. The anterolophid is short. The metaconid is connected to the anteroconid. The metalophid is curved and long, in one specimen it is divided into three parts. The centrolophid is well developed up to the middle part of the tooth. The mesolophid and the posterolophid may be isolated (1 out of 2) or connected (1 out of 2). The posterotropid may be long and isolated (1 out of 2), or it may be connected to the lingual part (1 out of 2). The labial cuspids are more developed than the lingual cuspids. The posterior valley is the widest one. The specimens found in CBR4 are similar to the one described above. In FS1 the metalophid is straighter. In MAB3 the anterolophid is longer, and this crestid has a posterior spur. In MAB11 the anterolophid is longer, with a small extra cuspid behind the centrolophid. In CBR0B the centrolophid is divided in two.

m2 (MAB3)

Sub-rectangular tooth with high crestids and narrow valleys. The anterolophid may be medium to long (2 out of 4) or short (2 out of 4). The metaconid is connected to the anteroconid. The metalophid is straight and long, with a narrower part that almost separates it from the metaconid; a posterior spur in the middle of the tooth may connect the metalophid to the mesolophid (1 out of 4), to the centrolophid (1 out of 4) or it may be absent (2 out of 4). The centrolophid is well developed up to the middle of the tooth and isolated on the lingual side, in two cases it is connected to the endolophid. The mesolophid and the posterolophid are long and connected on the lingual part (3 out of 4) or not connected (1 out of 4). The posterotropid is either long and independent (1 out of 4) or attached to the lingual side (3 out of 4). The labial cuspids are more developed than the lingual ones. The posterior valley is the widest one. The specimens found in MCX3, FS1 and MAB3A follow the previous description.

m3 (MAB3)

The tooth is slightly reduced, D-shaped in occlusal view, and more or less elongated. The anterolophid is long. The metalophid is long and slightly curved. The endolophid is developed. The anterior centrolophid is long, almost reaching the middle of the tooth. The mesolophid is long and straight. The mesolophid and the posterolophid are well connected. Both the posterior valley and the posterolophid are well developed. The specimens found in MTR2 are similar to the one described above. The specimen in BC1 has the shortest centrolophid. In MAB5 the metalophid may be isolated, and a posterotropid may appear in the posterior valley.

D4 (MAB3)

The tooth has a subtriangular outline, with fine crests and wide valleys. The anteroloph may be long, but shorter than the posteroloph and it may be either attached to the proto-loph on the labial side (1 out of 2) or long, isolated and

divided in two (1 out of 2). The proto-loph and the metaloph are long and contact each other forming a Y-shape. The centroloph may be a small cusp (1 out of 2) or be absent (1 out of 2). The protocone is poorly developed. The posteroloph is long and it may be connected on the labial face (1 out of 2) or on both faces (1 out of 2). There are two open roots. The specimens found in CBR1 fit in this description. In MCX3 the posteroloph is isolated on both sides. In BC1 the tooth is more rounded. In MAB0A the anteroloph is shorter, there are two centrolophs, a short anterior one and a long posterior one, which contacts the proto-loph and the posteroloph may be isolated. In the material of MAB11B, CBR0B, CBR0C, and CBR0G there is a long postcentroloph connected on both sides.

P4 (MAB3)

Tooth with a subrounded outline. The anteroloph is long and isolated. The proto-loph and the metaloph are long and contact with the protocone, forming a V-shape. The proto-loph is divided into two parts. The protocone is poorly developed. The posteroloph is long and independent. In MCX3 the anteroloph is short and the protocone is more developed. In MCX7 and BC1 there is a medium-sized centroloph. In FS1 and MAB0B the teeth have a short centroloph, or this last crest is connected to the metaloph while the posteroloph is connected on both sides. In MAB0A there is a short centroloph and the posteroloph is connected on the labial side. In MAB5 the proto-loph and the metaloph form a Y-shape and the metaloph is divided in two parts, which meet with the posteroloph. The centroloph in CBR0B is short. In CBR1, MCX3, MCX7, BC1, MAB0A, MAB5 and CBR0B the proto-loph and the metaloph form a Y-shape.

M1 (MAB3)

Tooth square with broad crests and valleys. The anteroloph is long and isolated. The proto-loph and the metaloph may form a V (2 out of 4) or a Y (2 out of 4). The precentroloph may be short (1 out of 5) or of medium size (4 out of 5), and it is shorter than the posterior centroloph. The postcentroloph is longer than half the width of the tooth and it may be isolated on both sides (2 out of 5), it may contact the metaloph on both sides (2 out of 5), or it may form a Y-shape with the precentroloph (1 out of 5). The posteroloph is short and isolated. The specimens found in MAB3A are similar to the ones just described. In MCX3 and MCX7 the anteroloph is shorter and the posteroloph is lingually connected and longer. The MTR2 specimen shows a longer posteroloph.

M2 (MAB3)

The tooth is square in shape and with broad crests and valleys. The anteroloph is long, lingually isolated and with a low connection on the labial side. The proto-loph and the metaloph may form the typical U (1 out of 2) or V shape (1 out of 2), connecting at the lingual side. The precentroloph is short and the postcentroloph is long and joins the metaloph on the lingual side, it may be isolated on the labial side (1

out of 2) or of similar size with a cusp on the labial side where the two crests connect (1 out of 2). One specimen shows a low connection between the two centrolophs. The posteroloph is intermediate in size, connected lingually to the protocone and isolated labially. The specimens found in MCX7 fit in the description above. In MCX1 the anteroloph is isolated and there is a prototrope. In MAB0B the anteroloph is isolated, and the protoloph-metaloph together with the centrolophs form a Y. In MAB11 only the protoloph-metaloph forms a Y.

M3 (MAB3)

The tooth is sub-rectangular in outline. The anteroloph is long and forms a closed ellipse with the protoloph, although on the labial side the contact is low. In two specimens the lingual end of the anteroloph does not contact the protoloph. The precentroloph is short and the posterior is longer than the anterior one. The protoloph and the metaloph do not contact until they reach the lingual side, forming a U-shape. The metaloph and the posteroloph do not contact on the labial side. The posteroloph is short. In BC1, the anteroloph is long and contacts on the labial side of the protoloph and it is isolated on the lingual side, and the metaloph and the posteroloph contact on the labial side, but in the middle of the metaloph. In MAB0A the specimen has only a post-centroloph. In MAB5, the metaloph and the posteroloph contact on both sides. In CBR1 the specimen has only a postcentroloph and the protoloph and the metaloph meet in a Y-shape near the lingual side.

REMARKS

Pseudodryomys is another genus with a problematic taxonomic status due to its possible synonymy with *Peridyromys* and *Myomimus* (see discussion above), as indicated by Dalmasso *et al.* (2022). The species *Ps. ibericus* is one of the most widespread dormice, both temporally and geographically (Daams 1999a). Remains of this species are found from the early-Lower Miocene to the Middle Miocene in much of Europe (Daams 1999a). This species differs from *P. murinus* in its larger size, greater complexity, and higher number of crests. It differs from *Pr. satus* in its larger size and more developed crests. The morphology of the premolars and third molars of *Ps. ibericus* can be easily confused with those of *P. murinus*.

Pseudodryomys ibericus has already been described from the sites of Araya and Mas de Antolino 2 (Agustí *et al.* 1988). In general, this species does not have a great morphological variability, presenting a similar size among the different sites under study. Although it is very abundant in other basins, it is scarce in the sites under study. Morphologically, our material is like that from other basins, upper molars correspond to morphotype C and lower molars to morphotype L, as described by Daams (1974). Biometric data show that the upper molars are slightly smaller than those from the Calatayud-Montalbán Basin whereas the lower molars are of similar size (Daams 1974; García-Paredes *et al.* 2009).

Genus *Simplomys* García-Paredes, Peláez-Campomanes & Álvarez-Sierra, 2009

Simplomys simplicidens (De Bruijn, 1966) (Fig. 8)

LOCALITIES. — MCX3, MCX4, MCX5, MCX6, MTR2, MTR3, BC1, BC2, MAB0A, MAB0B, MAB3, MAB5, MAB11, CBR0B, and CBR1.

MATERIAL. — MCX3: 1 m1, 3 m2, 1 m3, 2 M1, 2 M2, 4 M3; MCX4: 1 M1, 1 M2; MCX5: 1 M2; MCX6: 1 m1; MTR2: 1 m2, 1 P4, 1 M1, 2 M2; MTR3: 1 M1/M2; BC1: 1 p4, 5 m1, 4 m2, 3 m3, 1 P4, 3 M1, 6 M2, 3 M3; BC2: 1 m2; MAB0A: 3 m1, 1 m2; MAB0B: 1 m1, 1 m2, 1 M3; MAB3: 1 d4, 5 p4, 7 m1, 3 m2, 4 m3, 5 P4, 2 M1, 1 M2, 1 M3; MAB5: 5 p4, 2 m1, 3 m2, 5 m3, 3 P4, 5 M1, 3 M2, 2 M3; MAB11: 1 D4, 1 M2, 1 M3; CBR0B: 1 m2, 1 M2, 1 M3; CBR1: 1 m1, 1 m2, 2 m3, 1 M1.

MEASUREMENTS. — Appendix 11

DESCRIPTION

d4 (MAB3)

The outline is subtriangular. The anterolophid is long and attached to the sinusoid metalophid on the lingual side and attached to a sinusoid posterolophid on the labial side.

p4 (MAB3)

Tooth hypsodont and subtriangular in shape. The anterolophid may be short (3 out of 5) or absent (2 out of 5). The metalophid may be a posterior spur of the anterolophid (2 out of 5), short and attached to the anterolophid (1 out of 5) or long (2 out of 5). The mesolophid may be absent (2 out of 5), if present it may be long and irregular (1 out of 5), short (1 out of 5), or a spur of the metalophid (1 of 5). The mesolophid is connected to a well-developed posterolophid. There is only one root. The specimens found in BC1 fit in this description. The specimens from MAB5 show the following differences: the shape in occlusal view is variable; the metalophid may be absent; in one individual there is a centrolophid; the mesolophid in another specimen has a small crestid that joins with the anterior part of the tooth; in one specimen there is a large labial cuspid which is connected to a short posterolophid; finally, one tooth shows a divided posterolophid.

m1 (MAB3)

The outline is sub-rectangular with high crestids. The anterolophid may be short (4 out of 6) or intermediate in size (2 out of 6). The metaconid is connected to the anteroconid. The metalophid is curved and long. The centrolophid may be developed to almost half of the tooth width (5 out of 6) or until the middle of the tooth (1 out of 6). The mesolophid and the posterolophid may be long and connected (1 out of 5) or with a low connection (4 out of 5). In one specimen the mesolophid is almost divided. The labial cuspids are more developed than the lingual cuspids. The posterolophid has a small spur. There are no accessory crestids. The specimens found in CBR1 are similar to those described above. In MCX3, the mesolophid and the posterolophid are not connected. In MCX6 the centrolophid is slightly longer. In BC1

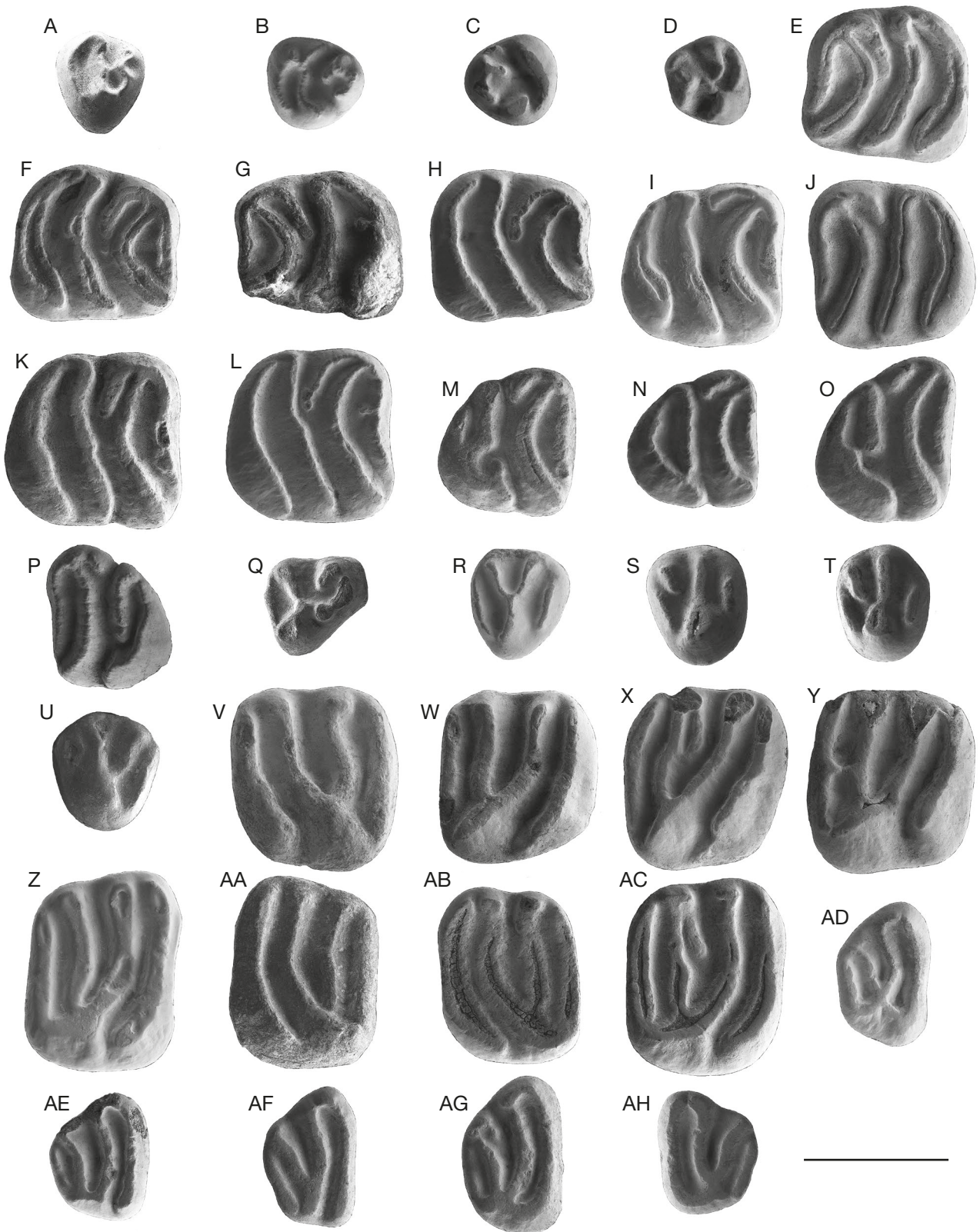


FIG. 8. — Gliridae from the Ribesalbes-Alcora Basin. *Simplomyx simplicidens*: **A**, right d4 (MAB3-247); **B**, right p4 (MAB3-375); **C**, left p4 (MAB3-377); **D**, left p4 (MAB5-840); **E**, left m1 (MAB3-439); **F**, right m1 (MAB3-440); **G**, left m1 (MAB5-244); **H**, right m1 (MCX3-6); **I**, right m2 (BC1-6); **J**, left m2 (BC1-128); **K**, right m2 (MAB5-607); **L**, right m2 (MCX3-5); **M**, right m3 (MAB5-617); **N**, right m3 (MAB5-262); **O**, right m3 (MAB3-469); **P**, left m3 (MCX3-109); **Q**, right D4 (MAB11-56); **R**, right P4 (MAB3-254); **S**, right P4 (MAB3-257); **T**, left P4 (MAB5-287); **U**, left P4 (MTR2-102); **V**, left M1 (BC1-108); **W**, right M1 (BC1-110); **X**, right M1 (MAB5-567); **Y**, right M1 (MTR2-128); **Z**, right M2 (MTR2-43); **AA**, left M2 (MCX3-1); **AB**, left M2 (MAB11-59); **AC**, right M2 (MAB5-269); **AD**, right M3 (MCX3-103); **AE**, right M3 (BC1-141); **AF**, right M3 (MAB0B-22); **AG**, right M3 (MAB5-578); **AH**, left M3 (MAB11-72). Scale bar: 1 mm.

the centrolophid is shorter and there is one specimen without the mesolophid-posterolophid connection. In MAB0A, the centrolophid is usually divided and there is one individual without the mesolophid-posterolophid connection. In MAB0B the mesolophid has a posterior spur. In a specimen from MAB5 the posterolophid has an anterior spur.

m2 (BC1)

Tooth sub-rectangular with high crestids. The anterolophid is long. The metaconid is connected to the anteroconid. The metalophid is curved and long, in one specimen it does not contact the anteroconid. The centrolophid may be short (3 out of 4) or almost inappreciable (1 out of 4). In one specimen the endolophid is a spur of the centrolophid. The mesolophid and the posterolophid are long and may be well connected (1 out of 3) or weakly connected (2 out of 3). In one specimen the entoconid is poorly developed. The labial cuspids are more developed than the lingual cuspids. The posterior valley is the widest one. No extra crestids. The specimens found in BC2, MAB0A, MAB3, CBR0B and CBR1 are similar to those just described. In MCX3 one specimen has a posterior spur on the anterolophid and another specimen on the metalophid; in another specimen the centrolophid contacts the metalophid. In MTR2 the anterolophid is shorter. In MAB0B there is no mesolophid-posterolophid connection. In MAB5 there is an individual with an isolated metalophid and in another one the mesolophid is divided.

m3 (MAB5)

The tooth is slightly reduced and very variable. It is D-shaped and more or less elongated in occlusal view. The anterolophid may be long (4 out of 5) or intermediate in size (1 out of 5). The metalophid is long and curved. The endolophid is short. The centrolophid may be absent (3 out of 5) or barely extend into the valley (2 out of 5). The mesolophid is short and may be connected (1 out of 5) or not (4 out of 5) to the hypoconid. It may be disconnected from both the hypoconid and the posterolophid (3 out of 5), or in contact with the posterolophid either on the labial side (1 out of 5) or in the middle of the tooth (1 out of 5). The posterior valley is well developed, as is the posterolophid. The specimens found in MCX3 follow the previous description. In BC1 the metalophid is straighter and the mesolophid longer. In MAB3 the mesolophid is also usually longer. In CBR1 the mesolophid is divided in two.

D4 (MAB11)

The tooth is subtriangular in shape. The anteroloph is very short. The protoloph is divided in two and one of the parts is connected to the protocone. Both the metaloph and the posteroloph are long and connected to the protocone.

P4 (MAB3)

The outline is sub-rounded. The anteroloph may be long (3 out of 5) or short (2 out of 5) and it may be attached to the protoloph on the labial part (2 out of 5) or isolated (3 out of 5). The protoloph may be better developed than the metaloph (2 out of 5) or both may be well developed (3 out of 5); they

may be isolated from each other (2 out of 5) or connected forming a typical Y-shape (3 out of 5). The posteroloph may be long (2 out of 5), medium (3 out of 5) or short (1 out of 5), with a metaloph attached to the middle of the tooth (1 out of 5) or with an isolated posteroloph (4 out of 5). The specimens found in MTR2 and BC1 are similar to those described above. In MAB5 there are two specimens with a divided protoloph and one with the metaloph divided in three parts.

M1 (BC1)

The tooth is hypsodont and with a square outline. The anteroloph is of intermediate size and isolated lingually. The protoloph and the metaloph form the typical Y, joining near the lingual face. The centrolophs are absent. The posteroloph is isolated and short, in one specimen it is long. The specimens found in MTR3 fit in this description. In MCX3, the protocone and the hypocone are joined by a crest on the lingual side, while the anteroloph has a spur directed towards the protoloph and the metaloph shows another spur directed towards the posteroloph. In MCX4 the metaloph has a small spur on the anterolabial side. In MTR2 the anteroloph is longer. In MAB3 the anteroloph is long and isolated, the specimens have a postcentroloph which may be long or short and the posteroloph may be connected to the metaloph on the lingual side. In MAB5 the anteroloph is isolated, while in three specimens the postcentroloph is long. In CBR1 the postcentroloph is medium in size, the protoloph has a posterior spur and the posteroloph is isolated.

M2 (BC1)

The tooth is hypsodont and square. The anteroloph is long, lingually isolated and labially attached (3 out of 5), or totally isolated (2 out of 5). The protoloph and the metaloph form the typical Y, joining near the lingual side. The centrolophs are absent. The posteroloph may be long and connected at both ends (1 out of 5), or shorter and isolated (4 out of 5). The specimens found in MCX4 and MCX5 are similar to those described. In MCX3 (figure IV.171b) the anteroloph is isolated. In MTR2, the anteroloph is isolated, and the metaloph has a low connection on the Y. At MAB3 and CBR0B there is a small crest before the anteroloph, which is isolated. In MAB5 (figure IV.171d), the anteroloph is isolated, and in two specimens there is a postcentroloph. In MAB11 (figure IV.171c) the anteroloph is isolated.

M3 (MCX3)

The tooth has a sub-rectangular outline. The anteroloph is long and forms a closed ellipse with the protoloph. There are no centrolophs. The protoloph and the metaloph may be connected forming an X-shape (2 out of 3) or a Y-shape (2 out of 4) near the lingual part. The metaloph and the posteroloph may be connected on the labial side (1 out of 4), or disconnected (3 out of 4). The posteroloph may be short (3 out of 4) or medium-long (1 out of 4). The specimens found in MAB3 fit in this description. In BC1 the anteroloph may be isolated on the labial side and in one specimen the protoloph and the metaloph are joined on the lingual side. In MAB0B

the anteroloph is isolated on the lingual side. In one individual of each of the sites MAB5, MAB11 and CBR0B, the anteroloph is isolated on the labial side. In one specimen of MAB11 the posterior part is less reduced. In CBR0B there is a small postcentroloph, the protoloph and the metaloph merge on the lingual side and the metaloph has an anterior spur.

REMARKS

This genus was defined to differentiate the more hypsodont, simple species with smaller third molars and premolars of the genus *Pseudodryomys* from the more brachyodont and more complex teeth (García-Paredes *et al.* 2009), although the uniformity of the genus *Pseudodryomys* has previously been questioned (Huguene *et al.* 1978; Daams 1989, 1999a; Martín-Suárez *et al.* 1993; Daams & De Bruijn 1995). This genus occurs in Portugal, Spain, France, Switzerland and Germany from the Early to Middle Miocene (García-Paredes *et al.* 2009).

The stratigraphic range of *S. simplicidens* extends from the Early Miocene (MN2) to the Middle Miocene (MN5) (García-Paredes *et al.* 2009; Prieto *et al.* 2018; 2019). This species was described by De Bruijn (1966) based on the simplest material of the genus *Pseudodryomys* from the Calatayud-Montalbán Basin; later García-Paredes *et al.* (2009) described the new genus *Simplomys* to include this species.

The material from the Ribesalbes-Alcora Basin is characterized by a relatively long centrolophid and a higher percentage of specimens without postcentroloph (Daams 1974; Daams *et al.* 1987; García-Paredes *et al.* 2009). This species was already described by Agustí *et al.* (1988) at the localities of Araya and Mas de Antolino 1. Metrically, they are within the variability observed in the deposits of zone C, with only a slightly narrower M1 in MAB5 (Daams 1974; Daams *et al.* 1987; García-Paredes *et al.* 2009). The m3 variability surpasses that described by García-Paredes *et al.* (2009), ranging from specimens with minimal mesolophid reduction, as in the oldest deposits described by these authors, to others with a short mesolophid and a wide posterior valley. In the Early Miocene deposits of the Iberian Peninsula, it is a very abundant taxon; nevertheless, although occurring in many sites, it is certainly not abundant in the Ribesalbes-Alcora Basin.

Simplomys julii (Daams, 1989) (Fig. 9)

LOCALITIES. — MCX3, BC1, FS1, MAB0A, MAB0C, MAB3, MAB4, MAB5, MAB9, MAB10, MAB11, CBR0B, CBR0C and CBR1).

MATERIAL. — MCX3: 1 M1, 2 M2; BC1: 1 d4, 3 m2, 1 m3, 3 P4, 2 M1, 4 M2; FS1: 1 m2, 3 M1, 1 M2, 1 M3; MAB0A: 1 p4, 4 m1, 2 m2, 1 m3, 1 D4, 2 P4, 1 M1, 3 M2, 2 M3; MAB0C: 1 M3; MAB3: 1 p4, 3 m1, 2 m2, 4 m3, 1 D4, 2 P4, 3 M1, 6 M2, 2 M3; MAB4: 1 m3; MAB5: 3 p4, 5 m1, 6 m2, 3 m3, 1 D4, 6 P4, 9 M1, 7 M2, 8 M3; MAB9: 1 m3; MAB10: 1 m1, 1 P4; MAB11: 2 m1, 1 m3, 1 P4, 1 M1, 2 M2, 2 M3; CBR0B: 2 m1, 1 m2, 4 M1, 1 M2, 2 M3; CBR0C: 1 M2; CBR1: 1 p4, 1 m2, 1 m3.

MEASUREMENTS. — Appendix 12

DESCRIPTION

d4 (BC1)

The tooth has a sub-rounded outline. A crestid encircles it, surrounding a deep valley, and connected to a cuspid near the posterolabial part. Two roots are present and openly arranged. In MAB0A the mesoconid is completely isolated. In MAB3 the anterolophid is short and attached to the protolophid, the mesolophid and the posterolophid, forming an ellipse.

p4 (MAB5)

Tooth rounded in outline. The anterolophid may be small and isolated (1 out of 3), low and attached to the posterior crestids (1 out of 3) or absent (1 out of 3). In two specimens the metalophid is well developed and less developed in the others. The anteroconid, the entoconid and the hypoconid are well developed. The entoconid and the hypoconid may be connected by a long posteroloph (2 out of 3), or the mesolophid may be short and isolated and the posterolophid long and connected to the hypoconid (1 out of 3). A root is present. The specimens found in CBR1 are similar to those described here.

m1 (MAB5)

The tooth is sub-rectangular and with high crestids. The anterolophid may be short (4 out of 5) or of medium size (1 out of 5). The metaconid may be disconnected (4 out of 5), or with a low connection to the anteroconid (1 out of 5). The metalophid is curved and short. Both the centrolophid and the endolophid may be absent (3 out of 5), or the endolophid may be present but merely as a spur (2 out of 5). The mesolophid and the posterolophid are long and not connected. In one specimen the mesolophid is divided. The labial cuspids are more developed than the lingual cuspids. There are no accessory crestids. The specimens found in MAB10, MAB11 and CBR0B follow this description. In MAB0A there is one individual with endolophid and another one with the mesolophid and the posterolophid connected. In MAB3 there are two specimens with the anteroconid and the metaconid well connected, and the mesolophid and the posterolophid with a low connection.

m2 (MAB5)

The tooth is rectangular in outline and with high crestids. The anterolophid may be long (2 out of 6) or of intermediate size (4 out of 6). The metaconid is low-connected to the anteroconid. The metalophid is curved and long. The centrolophid is absent. The endolophid is only a spur. The mesolophid and the posterolophid are long, curved and may be low-connected (1 out of 5) or disconnected (4 out of 5). In one specimen the mesolophid is divided and has a posterior spur. The labial cuspids are more developed than the lingual ones. The posterior valley is only slightly wider than the other ones. There are no extra crestids. The specimens found in MAB3 and CBR1 are similar to those described here. In BC1 the metalophid is split in two and the endolophid is absent. In FS1 and MAB0A there is no endolophid. In CBR0B the anterolophid is isolated, the metalophid is split in two, and the mesolophid is slightly divided.

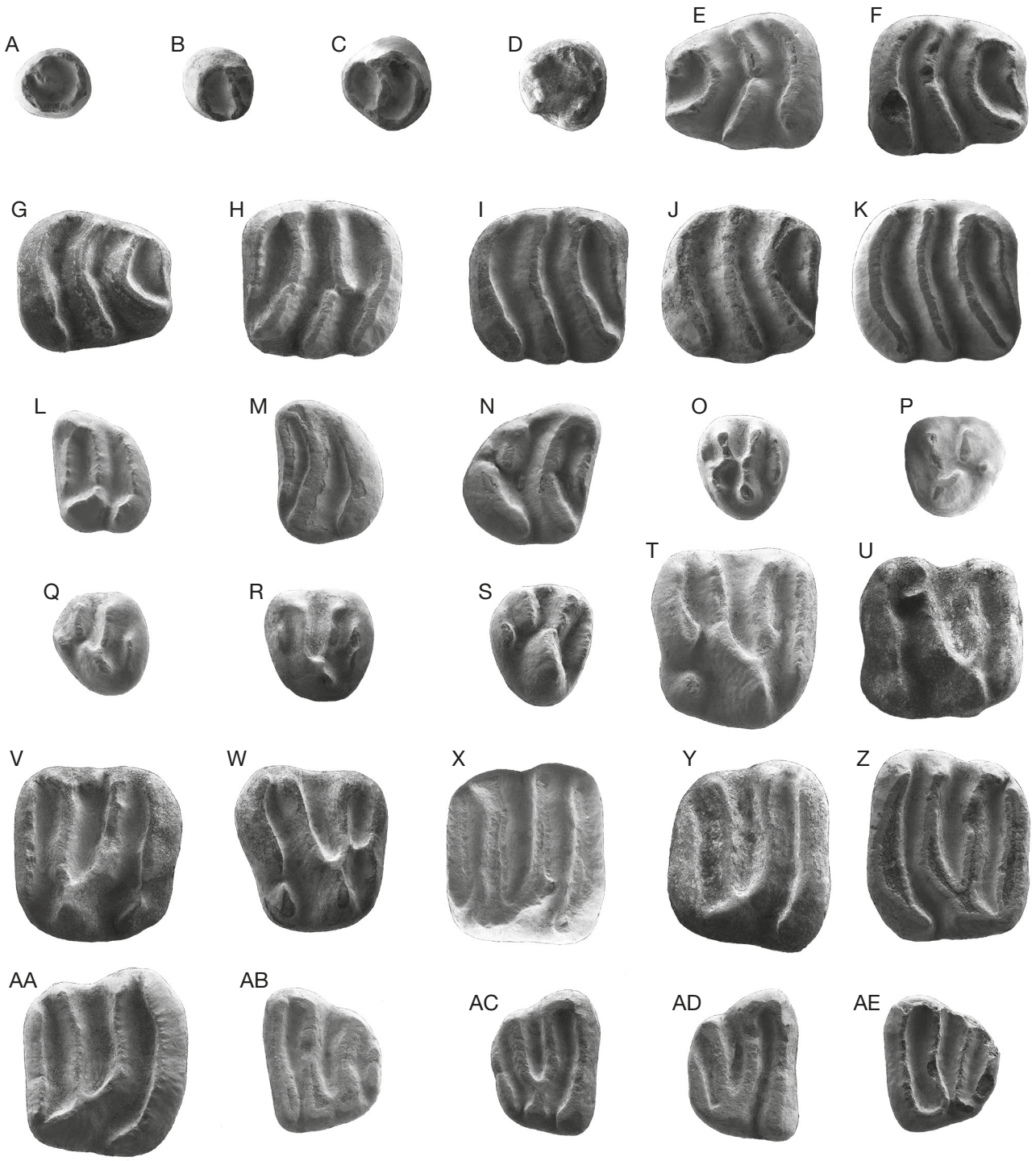


FIG. 9. — Gliridae from the Ribesalbes-Alcora Basin. *Simplomys julii*: **A**, left d4 (BC1-119); **B**, right p4 (MAB3-383); **C**, left p4 (MAB5-819); **D**, right p4 (MAB5-132); **E**, left m1 (MAB5-601); **F**, right m1 (MAB5-598); **G**, left m1 (MAB3-437); **H**, left m2 (MAB5-248); **I**, right m2 (MAB5-15); **J**, right m2 (FS1-43); **K**, right m2 (BC1-132); **L**, left m3 (MAB5-619); **M**, left m3 (MAB3-489); **N**, right m3 (BC1-9); **O**, right D4 (MAB5-552); **P**, right P4 (MAB5-549); **Q**, left P4 (MAB5-548); **R**, left P4 (MAB3-250); **S**, left P4 (BC1-87); **T**, left M1 (MAB5-275); **U**, left M1 (MAB5-274); **V**, right M1 (MAB5-234); **W**, left M1 (MAB3-334); **X**, right M2 (MAB5-253); **Y**, right M2 (MAB5-235); **Z**, left M2 (MAB3-333); **AA**, right M2 (BC1-101); **AB**, left M3 (MAB5-858); **AC**, right M3 (MAB5-583); **AD**, right M3 (MAB5-579); **AE**, left M3 (MAB3-491). Scale bar: 1 mm.

m3 (MAB5)

The tooth is reduced and D-shaped in occlusal view. The anterolophid may be short and isolated (1 out of 3), or long and connected to the anteroconid (2 out of 3). The metalophid is long, curved and in one specimen it is divided in two. The

endolophid is absent and without centrolophids. The mesolophid and the posterolophid are fused, forming a robust crestid and isolated from the anterior crestid. The specimens found in MAB3, MAB4, MAB9, MAB11, and CBR1 are similar to those described above. In BC1 the anterolophid is short and

connected to the anteroconid, the mesolophid is short and isolated, and the posterolophid is highly developed. In MAB0A the mesolophid and the posterolophid are long and disconnected.

D4 (MAB5)

The outline is subtriangular. The anteroloph is short, located in the labial part and isolated at its ends; it is connected in the middle part of the tooth with the protoloph. The protoloph is divided and connected to the anteroloph and the metaloph. The metaloph is well developed. The protocone is poorly developed. The posteroloph is short but longer than the anteroloph and isolated. In MAB0A the anteroloph is isolated and the protoloph is short and isolated.

P4 (MAB5)

The tooth has a sub-rounded outline. The anteroloph is very short, located on the labial side and isolated. The protoloph and the metaloph are well developed, arranged in a Y-shape. In two specimens the protoloph is divided. The protocone may be highly developed (3 out of 6) or not (3 out of 6). The posteroloph is short, but longer than the anteroloph and it is isolated. The specimens found in MAB0A and MAB11 fit in this description. In the specimens from BC1 both the protoloph and the metaloph may be connected to the protocone, or only the metaloph may be connected or they may be isolated. In MAB3, the anteroloph may be long and connected to the protoloph, the metaloph may be isolated, and the posteroloph may be short. In MAB10 the protoloph and the metaloph are short and the posteroloph is connected to the protocone.

M1 (MAB5)

The tooth is hypsodont and subquadrangular in shape. The anteroloph is long, in one specimen it is short and the anterolabial cusp is independent and lingually and labially isolated. The protoloph and the metaloph form the typical Y, joining near the lingual face. In two specimens the protoloph has a spur towards the anterior part. In another individual there is an ectoloph isolated from the rest of the crests. The centrolophs are absent. The posteroloph is long and is isolated at both of its ends. The specimens found in MCX3 are similar to those described here. In BC1 the posteroloph is short. In two teeth from FS1 the protoloph has two backward-directed spurs and the metaloph one, whereas in another specimen there is one spur in each crest. In MAB0A the anteroloph and the posteroloph are shorter. In MAB3, the anteroloph is short and in one individual it is divided in two, and in another one the metaloph and the posteroloph are joined by a medial crest. In MAB11 the anteroloph is short and the anterolabial cusp is independent, the protoloph has an anterior spur and the metaloph a posterior spur. In CBR0B the anteroloph is short; in one specimen the protoloph and the metaloph form a V-shaped connection and the posteroloph is short.

M2 (MAB5)

The tooth is hypsodont and subquadrangular in shape, but narrower than the M1. The anteroloph is long and it may be isolated

lingually and labially (4 out of 6), or with a low connection on the labial side (2 out of 6). The protoloph and the metaloph form the typical Y, joining near the lingual side. No centrolophs are present. The posteroloph may be short and isolated (2 out of 6) or connected on both sides (4 out of 6). The specimens found in MCX3, BC1, FS1, MAB0A and MAB11 are similar to those described here. In a specimen from MAB3 the posteroloph is connected on both sides. In the specimen from CBR0B there is a protoloph-anteteroloph connection in the middle of the tooth.

M3 (MAB5)

The outline is subquadrangular. The anteroloph is long and it may be isolated (3 out of 8), connected to the protoloph only on the labial side (4 out of 8), or on both sides (1 out of 8). There are no centrolophs. The protoloph and metaloph may be connected forming a Y-shape near the lingual side (7 out of 8) or have only a low connection on the lingual side (1 out of 8). The metaloph and the posteroloph may be disconnected (4 out of 7), be connected only on the lingual side (2 out of 7), or on both sides (1 out of 7). In one specimen the posteroloph contacts the protocone and the metaloph is isolated. The posteroloph is short. The specimens found in FS1, MAB0A, MAB0C and CBR0B fit in this description. In MAB3, the anteroloph forms an ellipse with the protoloph, while the protoloph and the metaloph form an X. In one tooth from MAB11 the posterior part is less reduced, in another one the protoloph and the metaloph do not contact and the metaloph is short; in the material from this site the posteroloph may be longer.

REMARKS

Simplomys julii has only been found in the Early-Middle Miocene (MN3 to MN5) from France and Spain (Agustí 1990; Aguilar *et al.* 1999; Morales *et al.* 1999; Aguilar & Lazzari 2006; Van der Meulen *et al.* 2012). This species occurs scarcely, in the Iberian Peninsula it has only been found in the Calatayud-Montalbán Basin, Córcoles and Els Casots sites (Morales *et al.* 1999, García-Paredes *et al.* 2009, Casanovas-Vilar *et al.* 2022). This is the first time it is reported in the Ribesalbes-Alcora Basin.

Simplomys julii is the smallest species of the genus. Apart from its size it is easily distinguishable from the rest of species in having a smaller concavity and less-developed centrolophids (García-Paredes *et al.* 2009). Morphologically and biometrically, the material from the Ribesalbes-Alcora Basin is similar to the one described by Daams (1989) and García-Paredes *et al.* (2009). Although not a very abundant taxon in the Calatayud-Montalbán Basin (García-Paredes *et al.* 2009), it is one of the most abundant dormice in the Ribesalbes-Alcora sites.

Simplomys meulenorum García-Paredes, Peláez-Campomanes & Álvarez-Sierra, 2009
(Fig. 10A-L)

LOCALITIES. — BC1, MAB3, MAB4, and MAB5.

MATERIAL. — BC1: 1 M1, 1 M2; MAB3: 1 p4, 1 m2, 3 P4, 6 M1, 3 M2; MAB4: 1 P4; MAB5: 1 m3, 1 M1, 1 M2; MAB11: 1 p4.

MEASUREMENTS. — Appendix 13

DESCRIPTION

p4 (MAB3)

Tooth subtriangular in outline and hypsodont. The anterolophid is absent. The metalophid and the anteroconid are transverse. The mesolophid is long and independent, with a well-developed posterolophid. In MAB11, the pattern of the crestids is more chaotic in the anterior zone.

m2 (MAB3)

A very hypsodont tooth with a rectangular outline. The anterolophid is long. The metaconid is connected to the anteroconid. The metalophid is curved and long. The centrolophid is absent. The endolophid is short. The mesolophid and the posterolophid are long and connected. The mesolophid is divided in two. The labial cuspids are more developed than the lingual ones. The posterior valley is narrow. There are no extra crestids.

m3 (MAB5)

The tooth is greatly reduced and shows a more or less elongated D-shape in occlusal view. The anterolophid is long and isolated. The metalophid is long and curved. The endolophid is short and the centrolophid is absent. There is no mesolophid. The posterolophid has two posterior spurs. The posterior valley is strongly developed, as is the posterolophid.

P4 (MAB3)

The outline is sub-rounded. The anteroloph may be long (2 out of 3) or short (1 out of 3), in one specimen it is divided and the parts are separated. The anteroloph is isolated from the protoloph. The protoloph and the metaloph are well developed and connected, forming a typical Y-shape. In one tooth the metaloph is divided. The posteroloph is long and isolated. In MAB4 the protoloph and the metaloph are short and only the protoloph contacts the protocone.

M1 (MAB3)

The tooth is hypsodont and has a subquadrangular outline. A crest may be present in front of the anteroloph (5 out of 6) or it may be reduced to only a depression (1 out of 6). The anteroloph may be short (3 out of 5), medium-sized (1 out of 5) or long (2 out of 5); it may be isolated lingually and labially and it may be not connected to the protocone (1 out of 5), or both the anteroloph and the protocone may end together (4 out of 5). The protocone may be connected to the protoloph (1 out of 6), or have a spur towards it (5 out of 6). The protoloph and the metaloph form the typical Y, joining near the lingual face. The postcentroloph may reach up to the middle of the tooth (4 out of 5) or be slightly shorter (1 out of 6). The posteroloph may be of medium size (3 out of 5) or long (2 out of 4) and it is isolated at both of its ends. In BC1 there are no centrolophs and there is no anterior crest in front of the anteroloph, which is characterized by a constriction. In MAB5 the metacone has a posterior spur.

M2 (MAB3)

The tooth is hypsodont and of subquadrangular outline. There is a small crest in front of the anteroloph. The anteroloph is

long and isolated lingually and labially. The protoloph and the metaloph form the typical Y, joining near the lingual side. The centrolophs may be absent (2 out of 3), or there may be a postcentroloph reaching up to the middle of the tooth and divided in two (1 out of 3). The posteroloph may be isolated (2 out of 3) or connected on the lingual side (1 out of 3) and short. The specimens found in MAB5 follow this description. In BC1 there is no anterior crest of the anteroloph, it is a platform, the anteroloph has a constriction and no centrolophs are present.

REMARKS

This species was described by García-Paredes *et al.* (2009), and until now it had only been recorded in the Calatayud-Montalbán and Loranca basins in Spain and the site of St Catherine 9 in France. The fossil record of *S. meulenorum* ranges from MN3, local biozone A to MN4, local biozone C, in the Early Miocene (García-Paredes *et al.* 2009).

It is characterised by its medium to large size. When it occurs together with *S. simplicidens* it is larger, with lower molars without centrolophids (as in *S. julii*, but larger) and with the posterior crestids of the m3 completely fused (García-Paredes *et al.* 2009). Some of the characteristics that best differentiate this species are the appearance, on occasions, of an interruption in the anteroloph, which sometimes contacts the protoloph medially, the reduction of the centrolophids, and the fusion of the mesolophid and the posterolophid in the m3 (García-Paredes *et al.* 2009). This pattern has been observed in Ribesalbes-Alcora and all the splitting stages have been noted, from an anteroloph with a small constriction to the fusion with the protoloph. A similar species comparable in size is *Simplomys hugi* Prieto, Lu, Maridet, Becker, Pirken-seer, Rauber & Peláez-Campomanes, 2019 but in this Central European species, the centroloph is lacking and the anteroloph is never divided (Prieto *et al.* 2019). An additional characteristic in our material is the presence of a small pre-antero-loph crest, which gives the tooth greater robustness.

Genus *Armantomys* De Bruijn, 1966

Armantomys aragonensis De Bruijn, 1966
(Fig. 10M-N)

LOCALITY. — CBR0B.

MATERIAL. — CBR0B: 1 m1, 1 m2.

MEASUREMENTS. — Appendix 14

DESCRIPTION

m1 (CBR0B)

An extremely hypsodont broken tooth. The centrolophids are absent. The mesolophid and the posterolophid are long and low-connected on the lingual side. The labial cuspids are more developed than the lingual ones.

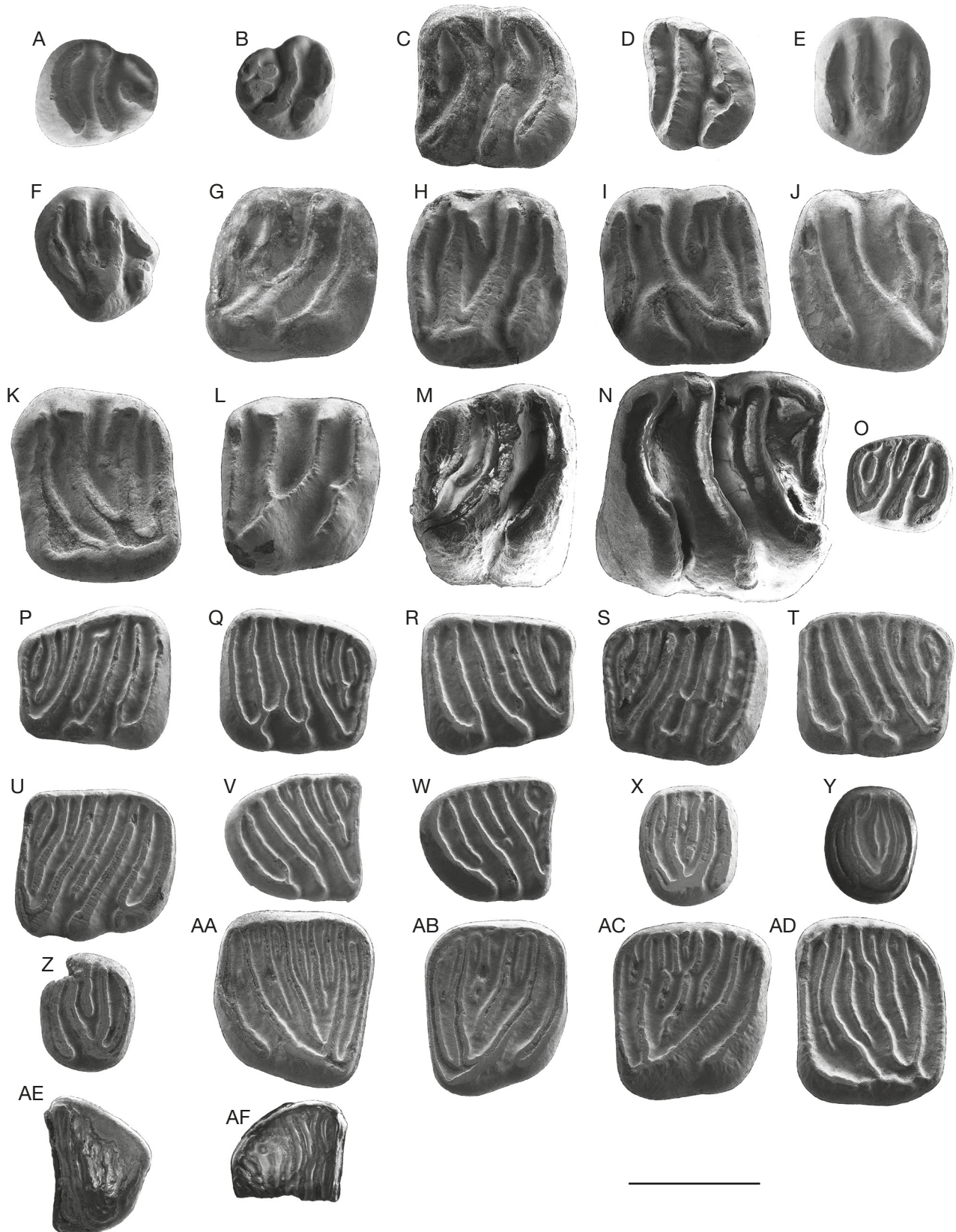


FIG. 10. — Gliridae from the Ribesalbes-Alcora Basin. *Simplomys meulenorum*: **A**, right p4 (MAB3-389); **B**, left p4 (MAB11-10); **C**, left m2 (MAB3-450); **D**, left m3 (MAB5-860); **E**, left p4 (MAB3-269); **F**, right p4 (MAB3-270); **G**, right M1 (MAB3-298); **H**, right M1 (MAB3-299); **I**, left M1 (MAB3-300); **J**, left M2 (MAB3-302); **K**, left M2 (MAB3-287); **L**, left M2 (BC1-97). *Armantomys aragonensis*: **M**, left m1 (CBR0B-36); **N**, right m2 (CBR0B-37). *Glirudinus undosus*: **O**, left p4 (BC1-115); **P**, left m1 (MAB3-397); **Q**, right m1 (MAB3-400); **R**, right m1 (MAB3-403); **S**, left m1 (MAB5-20); **T**, right m2 (MAB3-395); **U**, left m2 (MAB3-396); **V**, right m3 (MAB3-482); **W**, right M3 (MAB3-484); **X**, right P4 (MAB3-262); **Y**, left P4 (MAB3-236); **Z**, left P4 (MAB5-128); **AA**, left M1 (MAB3-272); **AB**, right M1 (MAB3-292); **AC**, right M1 (MAB5-109); **AD**, left M2 (MAB3-274); **AE**, left M3 (MAB3-366); **AF**, right M3 (MAB3-368). Scale bar: 1 mm.

m2 (CBR0B)

The tooth is subquadrangular in outline and extremely hypsodont. The anterolophid is short and connected to the endolophid. The metalophid is long and curved, with a low contact with the anteroconid. The centrolophids are absent. The mesolophid and the posterolophid are long and low-connected on the lingual side. The labial cuspids are more developed than the lingual cuspids.

REMARKS

The genus *Armantomys* was considered endemic to the Iberian Peninsula, but has also been found in the French locality of Liet (Daams 1990, Duranthon & Cahuzac 1997). This genus is recorded from the Oligocene (MP29) at the Parrales site (Loranca Basin) to the Middle Miocene (MN7/8) in the localities of Escobosa de Calatañazor, Soria and Alcocer 2 (Calatayud-Montalbán Basin) (López-Martínez *et al.* 1977; Daams 1990; Álvarez-Sierra *et al.* 1999). *Armantomys* is characterised by its high degree of hypsodony. The absence of centrolophids distinguishes this genus from its ancestor *Praearmantomys* (Daams 1990).

The remains of this species in the Ribesalbes-Alcora Basin are very scarce, with only two teeth found in CBR0B. These teeth are smaller than in *Armantomys tricristatus* López-Martínez, Benito & García, 1977, but larger than in the smaller-sized species *Armantomys jasperi* Daams, 1990, *Armantomys par-sani* Daams, 1990, *Armantomys daamsi* de Visser, 1991, and *Armantomys bijmai* (Lacomba & Martínez-Salanova, 1988). On the other hand, they are similar to those of *A. aragonensis*. Morphologically, the material from this basin is also like that of *A. aragonensis* from the MN4 of the Calatayud-Montalbán Basin and from Montalvos 2 from the Teruel Basin (Daams 1990; Hordijk *et al.* 2015). The presence of a mesolophid and a lower or middle posterolophid connected to the entoconid are characteristic of this species, which allows us to classify it as *A. aragonensis*.

Subfamily GLIRINAE Muirhead, 1819

Genus *Glirudinus* De Bruijn, 1966

Glirudinus undosus Mayr, 1979

(Fig. 10O-AF)

LOCALITIES. — MTR2, BC1, FS1, MAB3, MAB5, and MAB11.

MATERIAL. — MTR2: 1 p4; BC1: 1 p4; FS1: 1 m3; MAB3: 7 m1, 4 m2, 3 m3, 6 P4, 6 M1, 2 M2, 4 M3; MAB5: 2 m1, 2 m2, 2 P4, 2 M1, 2 M2.

MEASUREMENTS. — Appendix 15

DESCRIPTION

p4 (BC1)

Tooth subrectangular in outline. The anterolophid is short. The endolophid is complete. There is an anterotropid. The metalophid is connected to the endolophid and to the anterolophid by the protoconid in the labial side. The centrolophid

is long and it is joined to the endolophid. The mesolophid and the posterolophid are long and interconnected. The posterotropid is well developed and it is isolated. The labial cuspids are better developed than the lingual ones. This tooth has 2 extra crestids, making a total of 7 crestids. In the tooth from MTR2 the centrolophid is not connected to the endolophid.

m1 (MAB3)

The tooth is subrectangular in occlusal view, with narrow crestids and valleys. The anterolophid is short and narrow. The endolophid may be divided in two parts in front of the metalophid (1 out of 5) or complete (4 out of 5). There are three anterotropids, two of which connected to the endolophid. The metalophid is complete and it may be joined in both sides (3 out of 5) or separated from the anterolophid in the lingual side and joined to the labial one (2 out of 5). The centrolophid is long, almost covering the entire tooth, and it may be isolated (1 out of 6), in contact with the lingual side (4 out of 6), or joined in both sides, connecting the mesolophid with the mesoconid (1 out of 6). The centrotropids may be absent (4 out of 5) but one may be present (1 out of 5). The mesolophid and the posterolophid are long and connected. It may have one (4 out of 6) or two (2 out of 6) posterotropids. The most developed central crestids connect with the posterotropid forming an ellipse. The labial cuspids are more developed than the lingual ones. There may be four extra crestids making nine in total (3 out of 5), five extra crestids with a total of ten (1 out of 5), or six extra crestids thus totaling eleven (1 out of 5). In the material from MAB5 the centrolophid may be isolated, and there are two posterotropids.

m2 (MAB3)

The tooth is subrectangular in occlusal view with narrow crestids and valleys. The anterolophid is long and straight. The endolophid is divided in several parts, almost all the crestids show a free ending in the lingual side. There are three anterotropids, but only the anterior one connects with the anterolophid, the other two may be connected (1 out of 3), disconnected (1 out of 3) or show a low connection with the endolophid (1 out of 3). The metalophid is complete and it may be separated from the anterolophid in the lingual side (2 out of 3) or connected to it (1 out of 3). The centrolophid is long, almost covering the entire tooth, and it may be in contact with the mesoconid (1 out of 3), or not (2 out of 3). There may be two centrotropids (1 out of 3), one (1 out of 3), or none (1 out of 3). The mesolophid and the posterolophid are long and connected to each other. The posterotropid may be connected with the posterolophid forming an ellipse (2 out of 4), or disconnected (2 out of 4). The labial cuspids are more developed than the lingual ones. The tooth may have four extra crestids totaling nine (1 out of 3), five extra crestids totaling ten (1 out of 3), or six extra crestids with eleven in total (1 out of 3). The material from MAB5 fits in this description.

m3 (MAB3)

The tooth is elongated and D-shaped. The endolophid may be undivided (1 out of 3) or be divided in two (1 out of 3) or three

(1 out of 3) parts. There are three anterotropids, the medial one is the longest, and the two posterior crestids may be connected to the endolophid (2 out of 3), or the three may be connected to the endolohid (1 out of 3). The metalophid is long and connected in both sides. The centrolophid may be continuous, narrow and independent (2 out of 3) or connected to the endolophid and divided in two (1 out of 3). There may be a centrotropid (1 out of 3), or not (2 out of 3). The mesolophid and the posterolophid are long and connected linguallly. The posterotropid may be connected to both sides of the posteroloph, forming an ellipse (2 out of 3) or isolated from the posterolophid (1 out of 3). The labial cuspids are more developed than the lingual ones. The tooth may show five extra crestids, totaling ten (1 out of 3) or four extra crestids, with nine in total (2 out of 3). The m3 from FS1 has an extra crestid before the centrolophid.

P4 (MAB3)

The outline of the tooth is subelliptical. The anterolophid may be long (4 out of 5) or short (1 out of 5), and it is isolated. The protoloph is long and connected to the endoloph. There may be one (2 out of 6) or two (1 out of 6) low extra crests in the central valley in each side of the centroloph, or they may be absent (3 out of 6). A long centrolophid may be isolated (4 out of 5), or in contact with the protoloph (1 out of 5). The metaloph is long and connected to the protoloph, in a Y-shape. A posterotrope may be present (2 out of 5) or not (3 out of 5). The posteroloph may be long, isolated and divided in two (1 out of 5), or long and connected to the endoloph (4 out of 5). The tooth may have three extra crests, thus totaling eight (1 out of 5), only one extra crest with a total of six (3 out of 5), or no extra crests, with five in total (1 out of 5). In the material from MAB5, the anteroloph may be connected to the protoloph in the labial side, the centroloph is connected to the labial side, and there is a metaloph that in some specimens is connected to both sides of the tooth.

M1 (MAB3)

The tooth is subrectangular in outline. The anteroloph is long and connected to the protoloph in the labial side. An anterotrope may be present (3 out of 6) or not (3 out of 6). The protoloph is long and developed until the posterior side of the tooth. There may be only a prototrope (5 out of 6) or three of them (1 out of 6), connected in the labial side; in the specimen with three prototropes, the medial one is the largest one. The precentroloph is long, and it may be connected with the postcentroloph in a Y-shape (3 out of 6), or isolated (3 out of 6). A centrotrope and a postcentroloph are present. There may be three (2 out of 6), two (1 out of 6) or only one metatrope (3 out of 6); when three metatropes are present, the medial one is the most developed, when there is only one metatrope, it is not the medial one. The metaloph is long and it is connected to the endoloph and to the ectoloph. The metatrope may be absent (1 out of 6) or present (5 out of 6). The posteroloph is short. The lingual ornamentation is poorly developed. The tooth may have four extra crests, ten in total (2 out of 6), five extra crests, eleven in total (1 out of 6), six extra crests, twelve in total (1 out of 6), or seven extra crests with a total of thirteen (2 out of

6). In the material from MAB5 the anteroloph is shorter, and in one specimen the precentroloph is divided.

M2 (MAB3)

The tooth is sub-quadrangular in outline. The anteroloph and the protoloph are long and isolated labially. The endoloph is complete. There is an isolated anterotrope. There are two prototropes, the anterior one is more developed than the posterior one. The precentroloph is long and they are connected to the metaloph and labially isolated. There is a centrotrope connected to the ectoloph. The postcentroloph is long, but shorter than the precentroloph, and connected to the ectoloph. The metatrope is divided in two parts. The metaloph and the posteroloph are long and connected in the lingual and labial sides. There is a small metatrope. The lingual ornamentation is poorly developed. The tooth has six extra crests making a total of twelve. In the material from MAB5 the endoloph is divided in two, the protoloph is connected to the endoloph, and there is only one prototrope.

M3 (MAB3)

The tooth is broken. The anteroloph is long and it is connected to a long protoloph. The anterotrope is connected to the ectoloph. A prototrope is present. The precentroloph and the postcentroloph are long. There are three metatropes, and the medial one is the largest. The metaloph and the posteroloph are short. The tooth has six extra crests with a total of thirteen.

REMARKS

The genus *Glirudinus* is very common in the fossil record of Europe. It ranges from the upper Oligocene (MP28) until the Middle Miocene (MN7+8) from Europe and Turkey (e.g. Engesser 1972; Daams & De Bruijn 1995; Ünay *et al.* 2003; Azanza *et al.* 2004). This genus differs from other glirids in its high number of extra crests, its flat occlusal surface and its narrow and straight crests and valleys.

Particularly, the species *Glirudinus undosus* has a wide stratigraphic range that spans from the upper Ramblian of Hintereisenbruch and Goldinger Tobel (Switzerland, MN3) to the upper Aragonian of Barranc de Can Vila 1 (Spain, MN7+8) (Kálin 1997; Casanovas-Vilar *et al.* 2010). It is the largest species of this genus described in the Ribesalbes-Alcora Basin and is clearly distinct from the other occurring species *Glirudinus modestus*. Many of the remains of this species described in the literature were initially attributed to *Glirudinus gracilis* Dehm, 1950, as in the locality of Buñol (Adrover *et al.* 1987) but were later ascribed to *G. undosus* by Mayr (1979). *Glirudinus gracilis* is characterized by more complex and wider crests than *G. undosus* (Mayr, 1979). The latter differs from *Glirudinus euryodon* Van der Meulen and De Bruijn, 1982 from Aliveri (Greece) in the absence of a complete endoloph in the M1 characteristic of the greek specimens (Van der Meulen & De Bruijn 1982). The species *Glirudinus magnus* Aguilar & Lazzari, 2006, differs from *G. undosus* in its simpler dental pattern (Aguilar & Lazzari 2006). Both the morphology and the biometrical data of the material from the Ribesalbes-Alcora Basin allows us to assign it to the species *G. undosus*.

Glirudinus modestus (Dehm, 1950)
(Fig. 11A-Z)

LOCALITIES. — MAB3, MAB5, MAB11, MAB11B, CBR0B and CBR0E.

MATERIAL. — MAB3: 1 d4, 1 p4, 3 m1, 4 m2, 4 m3, 1 P4, 5 M1, 3 M2, 3 M3; MAB5: 4 p4, 8 m1, 7 m2, 3 m3, 4 P4, 8 M1, 4 M2, 4 M3; MAB11: 2 m2, 1 m3, 1 M2; MAB11B: 1 p4, 1 m1, CBR0B: 1 M2; CBR0E: 1 M1.

MEASUREMENTS. — Appendix 16

DESCRIPTION

d4 (MAB3)

The tooth is subtriangular in occlusal view. The anterolophid is short. The endolophid is divided in two parts connected by a low connection. There is an anterotropid. The metalophid is connected to the endolophid and the anterolophid. The centrolophid is short, low and isolated. The mesolophid and the posterolophid are long and connected. The posterotropid is well developed and isolated. The labial cuspids are more developed than the lingual ones. The tooth has two extra crestids, making a total of seven.

p4 (MAB5)

The tooth is of subrectangular shape in occlusal view. The anterolophid is short. The endolophid may be divided in two (2 out of 3) or four (1 out of 4) parts. There may be one (3 out of 4) or two (1 out of 4) anterotropids, one of which is connected to the anterolophid in both sides. The metalophid may be connected to the endolophid (3 out of 4) or in both sides (1 out of 4). The centrolophid may be long and it is connected to the endolophid (2 out of 4) or short and isolated (2 out of 4). The mesolophid and the posterolophid may be long and connected (3 out of 4), or isolated (1 out of 4). The posterotropid is well developed and it may be connected to the hypoconid (1 out of 4), or isolated (3 out of 4). The labial cuspids are more developed than the lingual ones. The tooth may have three extra crestids, totaling eight (1 out of 4), or two extra crestids, with a total of seven (3 out of 4). In the material from MAB3 and MAB11B the centrolophid is long and isolated; in the material from MAB11B the endolophid is complete.

m1 (MAB5)

The tooth has a subrectangular outline, with narrow crestids and valleys. The anterolophid is short and straight. The endolophid may be complete (3 out of 6) or divided in two (3 out of 6). There may be two (1 out of 6), three (4 out of 6) or four (1 out of 6) anterotropids, and the central one may be connected either to the endolophid (5 out of 6) or to the posterior one (1 out of 6). The metalophid is complete and it may be either disconnected (2 out of 7) or connected to the anterolophid in the labial side (5 out of 7). The centrolophid is long, isolated, and almost completely developed until the labial side. Two small centrotropids may be present (2 out of 6), but they may also be absent (4 out of 6). The mesolophid and the posterolophid are

long and connected. There may be one (3 out of 8), two (4 out of 8), or three (1 out of 8) posterotropids, in which case the middle one is more developed. The labial cuspids are more developed than the lingual ones. The tooth may show three extra crestids, with eight in total (1 out of 6), four extra crestids, with nine in total (1 out of 6), five extra crestids, with a total of ten (1 out of 6) or up to seven extra crestids, thus making a total of twelve (3 out of 6). In the material from MAB3 the centrolophid is not isolated, in one specimen there is a spur behind the posterolophid, and in another specimen there are six extra crestids, with eleven in total. In the material from MAB11B the centrolophid is connected to the mesolophid.

m2 (MAB5)

The tooth shows a subrectangular outline and narrow crestids and valleys. The anterolophid is long and straight. The endolophid is divided in two parts. There may be three (5 out of 6) or four (1 out of 6) anterotropids, and the central one may be connected to the endolophid (4 out of 6) or to the two posterior anterotropids (2 out of 6). The metalophid is complete and isolated from the anterolophid in the labial side. The centrolophid is long and almost reaches the labial side; it may be isolated (2 out of 5) or perpendicularly connected to the endolophid (3 out of 5). The centrotropid is absent (4 out of 5) or, if present, it is small (1 out of 5). The mesolophid and the posterolophid are long and connected. There may be three posterotropids, with the central one more developed (2 out of 5), or two of them connected with the posterolophid and forming an ellipse (3 out of 5), although in one specimen the ellipse is not fully closed. The labial cuspids are more developed than the lingual ones. The tooth may show five (3 out of 5) or seven (2 out of 5) extra crestids thus making ten or twelve in total. In the material from MAB3, in one specimen the anterotropid is connected with the anterolophid, the metalophid may be connected in both sides; in another specimen there are two centrotropids, and in other two individuals there are eight extra crestids, thus making thirteen in total. In one specimen from MAB11 the three anterotropids are connected with the endolophid and only one posterotropid is developed.

m3 (MAB3)

The tooth is elongated and D-shaped in occlusal view. The anterolophid is long and straight. The endolophid may be divided in two (1 out of 2) or be undivided (1 out of 2). There are three anterotropids; either the central one is the most developed and connected to the endolophid (2 out of 4), or the two posterior ones are connected to the endolophid (1 out of 4), or the posterior one is the most developed, but the central one is connected to the endolophid (1 out of 4). The metalophid is long and it may be connected labially and isolated lingually (2 out of 4), connected to the endolophid and isolated from the anterolophid (1 out of 4), or connected in both sides (1 out of 4). The centrolophid is long and narrow. The mesolophid

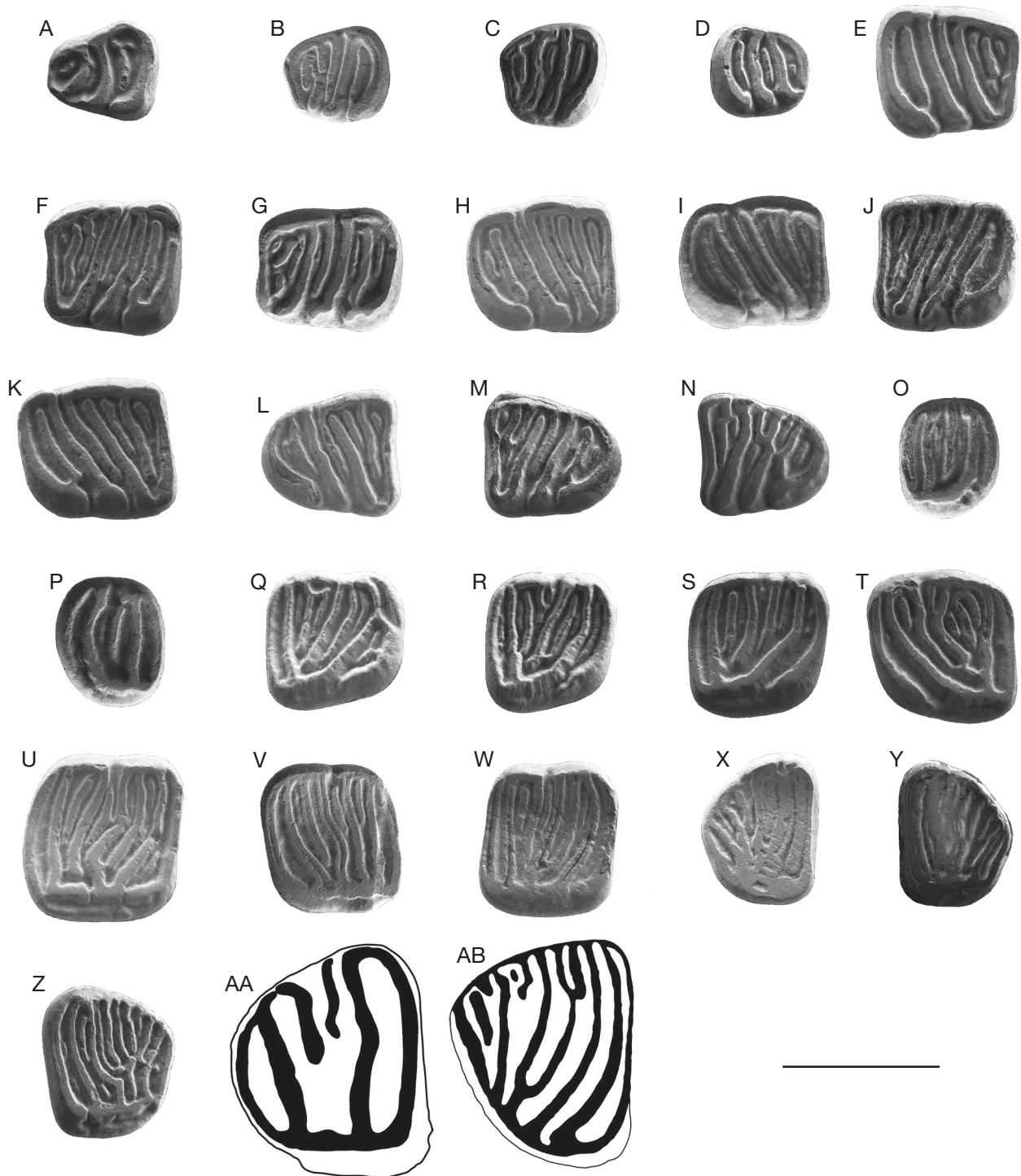


FIG. 11. — Gliridae from the Ribesalbes-Alcora Basin. *Glirudinus modestus*: A, left d4 (MAB3-385); B, left p4 (MAB5-625); C, left p4 (MAB5-842); D, left p4 (MAB11B-3); E, right m1 (MAB5-850); F, left m1 (MAB5-260); G, left m1 (MAB3-443); H, right m2 (MAB5-845); I, right m2 (MAB5-851); J, left m2 (MAB3-409); K, left m2 (MAB11-84); L, right m3 (MAB3-475); M, left m3 (MAB3-476); N, right m3 (MAB5-852); O, right P4 (MAB5-587); P, left P4 (MAB5-815); Q, right M1 (MAB5-821); R, right M1 (MAB5-820); S, right M1 (MAB5-562); T, left M1 (MAB3-280); U, right M2 (MAB3-278); V, left M2 (MAB5-112); W, right M2 (MAB11-64); X, right M3 (MAB5-589); Y, left M3 (MAB5-588); Z, left M3 (MAB3-365). *Myoglis cf. antecedens*: AA, right P4 (MAB3-474); AB, right M3 (MAB3-367). Scale bar: 1 mm.

and the posterolophid are long and lingually connected. There may be two posterotropids, with the anterior one connected to the endolophid (1 out of 4), or three of them, with the middle one connected to the hypoconid (3 out of 4). The labial cuspids are better developed than

the lingual ones. The tooth may show five (1 out of 4) or six extra crestids (3 out of 4), thus totaling ten or eleven crestids. The material from MAB11 follows this description. In the material from MAB5, some specimens have two posterotropids.

P4 (MAB5)

The outline of the tooth is subelliptical. The anterolophid is long and it is connected to the protoloph in the labial side, and in the lingual side it may show a low connection (2 out of 3) or be isolated and connected to the protoloph in the middle of the tooth (1 out of 3). The protoloph is long and connected to the endoloph. There may be a low prototrope, posteriorly a long isolated centroloph, and another low centroloph (2 out of 3), or there may be only a centroloph (1 out of 3). The metaloph is long and connected in both sides to a long posteroloph. The tooth may have one (1 out of 3) or two (2 out of 3) extra crests, thus totaling six or seven in total. The material from MAB3 fits in this description.

M1 (MAB5)

Tooth subrectangular in outline. The anteroloph is short and connected to the protoloph in the labial side. In one specimen the anteroloph is divided and it is connected to the protoloph in the middle of the tooth. An anterotrope may be present (4 out of 8) or not (4 out of 8). The protoloph is long and developed until the posterior side of the molar. There may be one long prototrope (5 out of 8) or two of them (3 out of 8). The precentroloph is long and connected to the endoloph. One (6 out of 8) or two (2 out of 8) centrotropes may be present. The postcentroloph is long, but shorter than the precentroloph, in one specimen it is isolated. The metatrope may be unique and small (7 out of 8), or double (1 out of 8). The metaloph is long and connected labially to the postcentroloph and the protoloph, while lingually the metaloph is connected only to the protoloph. A posterotrope may be present (2 out of 8) or not (6 out of 8). The posteroloph is long and connected in both sides to the anterior crests. The lingual ornamentation is poorly developed. The tooth may show three (4 out of 8), five (2 out of 8), or seven (2 out of 8) extra crests, making in total nine, eleven or thirteen crests. The material from MAB3 may show one, two or three prototropes; in one specimen the precentroloph is connected to the posterior one and to the metaloph; in another specimen there are three centrotropes; all of the specimens have six extra crests, with twelve in total. In the material from CBR0E, there are two centrotropes, which first start from the ectoloph as a single one that later becomes split in two.

M2 (MAB5)

The tooth is subcuadrangular in outline. The anteroloph is short, and it is connected to the endoloph and the ectoloph. The ectoloph is divided in two and the endoloph is complete. There is an anterotrope. The protoloph is long. There may be two prototropes, in which case the posterior one is longer (2 out of 3), or three of them (1 out of 3). The precentroloph is long and it is connected to both the ectoloph and the endoloph. The postcentroloph may be long, similar to the precentroloph (1 out of 3), or shorter (2 out of 3). The centrotrope is well developed and connected to the ectoloph. The metaloph is long and it is connected in both sides. The posteroloph is short and connected in both sides with the anterior crests. The lingual ornamentation is developed. The

tooth has five extra crests thus making a total of eleven crests. The material from CBR0B is similar to the one described here. In MAB3, the anterotrope may be divided; in one specimen the prototrope is connected to the precentroloph; in another one the centrotrope is isolated, and there may be six extra crests, with twelve in total. In MAB11, the anteroloph is not connected to the endoloph, which is divided in two, the postcentroloph is shorter and there may be six extra crests making a total of twelve.

M3 (MAB5)

The tooth is subtrapezoidal in outline. The endoloph is complete and the lingual ornamentation is well developed. The anteroloph is long and connected to a long protoloph. A prototrope may be present (2 out of 3) or not (1 out of 3). The precentroloph is long and connected to the labial side, and it almost reaches the lingual side. There may be a centrotrope (2 out of 3) or not (1 out of 3). The postcentroloph may be long and connected in both sides (2 out of 3) or of medium size (1 out of 3). There are three metotropes, connected to the labial side (1 out of 3), or only two (2 out of 3), in which case the middle one is the longest. The metaloph and the posteroloph are short and they are connected forming an ellipse. The tooth has four extra crests, which makes ten crests in total. In the material from MAB3 the anterotrope and the prototrope may be divided, the precentroloph is connected to the endoloph and to the ectoloph, afterwards there are six crests that gradually fuse together towards the lingual side and become a single crest, the postcentroloph, in one specimen there are eight extra crests, thus totaling fourteen, in another only two extra crests are present, making a total of eight.

REMARKS

Glirudinus modestus has a long stratigraphic range that extends from the lower Ramblian (MN2) until the middle Aragonian (MN5) (Daams 1999a). This taxon clearly differs from *G. undosus* in its smaller size and the higher complexity of their crests pattern. Daams (1985) classified the molars of this species according to their complexity. The lower molars described here could be included in the most complex morphotype (the third one), like the specimens from the site of Buñol. On the other hand, due to their more complex ectoloph, the upper molars in our material do not fit in any previously described category. However, these categories were erected with few specimens. Although, according to Daams (1985), the endoloph is complete in the oldest sites (Ramblar 1 and 7, Bañon 5), as it is the case in our material, the site of Bouzigues, with more abundant specimens, includes all the morphotypes present in the Calatayud-Montalbán Basin. This species is present in the Vallès-Penedès Basin (Jovells-Vaqué *et al.* 2018; Casanovas-Vilar *et al.* 2022).

The systematics of the small-sized *Glirudinus* is still to be resolved, since two species have been described (*Glirudinus gracilis* Dehm, 1950 and *G. modestus*) in the site of Wintershof West, and a third one in Petersbuch 2 (*G. minutus*), which overlap in size and morphology (Mayr 1979; Wu 1993; De Bruijn 1998). De Bruijn (1998) categorized this genus in two

groups: a first one, with a simple dental pattern, which comprises those species from Greece, Turkey and other European sites (*Glirudinus engesseri* Ünay, 1994, *Glirudinus eggingensis* Werner, 1994, *Glirudinus euryodon*, *Glirudinus glirulus* Dehm, 1935, *Glirudinus haramiensis* Ünay, 1994 and *G. modestus*), and a second one that includes the species from Central and Soutwestern Europe, which have in common a more complex dental pattern, and only differ in their size (*G. gracilis*, *Glirudinus minutus* Wu, 1993 and *G. undosus*). We have ascribed our material to the species *G. modestus*, the smallest species present in the Ribesalbes-Alcora Basin, due to its complex dental pattern, which is similar to the one described by Daams (1985) for *G. modestus* in the Calatayud-Montalbán Basin. We therefore consider the classification of De Bruijn (1998) as inadequate, since this author groups *G. modestus* with the species characterized by a simple dental pattern, whereas its morphology clearly belongs to the group with a more complex pattern. In addition, the remains from Ribesalbes-Alcora are, in general, smaller than those from Blanquatère 1, ascribed to *Glirudinus intermedius* Aguilar & Lazzari, 2006 (Aguilar & Lazzari 2006).

Genus *Myoglis* Baudelot, 1965

Myoglis cf. *antecedens* Mayr, 1979 (Fig. 10AA, AB)

LOCALITY. — MAB3.

MATERIAL. — MAB3: 1 P4, 1 M3.

MEASUREMENTS. — Appendix 17.

DESCRIPTION

P4 (MAB3)

Tooth with subtriangular shape in occlusal view, with a flat surface and with right and wide crests and narrow valleys. The anteroloph is long and connected to the protoloph in both of its sides. The endoloph is complete. The protoloph is long. The precentroloph is of short-medium size. The postcentroloph is long. The metaloph is straight and short. The posteroloph is semicircular and it is connected to both sides of the metaloph. The cusps are not clearly distinguished.

M3 (MAB3)

Broken tooth with a subtrapezoidal outline and with wide crests and narrow valleys; the crests are curved backwards in the lingual side. The endoloph and the ectoloph are not visible. The anteroloph is long. There is an anterotrope that extends throughout the whole width of the tooth. The protoloph is long. The posterior precentroloph ends near the lingual side. The postcentroloph is slightly shorter than the precentroloph. The metaloph is long and there is a small posterotrope.

REMARKS

The remains of this taxon are very scarce and poorly preserved in the Ribesalbes-Alcora Basin. This genus is characterized

by a wide crest with a narrow valley and in the upper molars the crests are curved backwards in their lingual part (Daxner-Höck 2005). The record of *Myoglis* spans from the MN2b in the site of Lespignan (France), to the MN10, in the sites of Richardhof Wald and Schernham (Germany; Daams 1999a; Daxner-Höck 2005). In the Iberian Peninsula, its record extends between the MN4, in the site of Rubielos de Mora (Daams 1985), and the MN9 in the site of Can Llobateres (Agustí 1982).

The only species of this genus whose presence is clearly confirmed in the MN4 of Europe is *M. antecedens*, although its fossil record surpasses the MN4 (Nemetschek & Mörs 2003; Daxner-Höck 2005). This species has a wide distribution and has been found in the MN4 of Central Europe (Fejfar 1989; Daams 1999a; Kowalski & Rzebik-Kowalska 2002), Portugal and Spain, more specifically in the site of Rubielos de Mora (De Bruijn & Moltzer 1974; Mayr 1979, Antunes 1984; Nemetschek & Mörs 2003). Furthermore, remains of an undetermined species of *Myoglis* have been found in the site of San Roque 1 (MN4; Calatayud-Montalbán Basin (Van der Meulen *et al.* 2012), and this genus is present in the Vallès-Penedès Basin (Casanovas-Vilar *et al.* 2016).

The material from MAB3 is similar in size to the oldest populations of *Myoglis*, and particularly *M. antecedens*, whereas it is clearly smaller and with a simpler dental pattern than that of the younger species *Myoglis meini* De Bruijn, 1966 (De Bruijn 1966), also occurring in the Iberian Peninsula (Daams & De Bruijn 1995; Daams 1999a). Therefore, and because of the scarcity of the material, we have decided to leave it in open nomenclature as *Myoglis* cf. *antecedens*.

PALAEOCOLOGICAL INFERENCES BASED ON THE GLIRID FAUNAS FROM THE RIBESALBES-ALCORA BASIN

The palaeoecology of fossil dormice is a complex subject. The dental morphological variety of living dormice is limited, which hinders our knowledge of the ecological affinities of their fossil representatives. Van der Meulen & De Bruijn (1982) and Daams & Van der Meulen (1984) concluded that the species with fewer crests were less vegetarian than the species with more crests. These authors also determined that *Microdyromys* lived in warm (and wet) environments, while *Peridyromys* preferred cold (and dry) conditions (Hordijk *et al.* 2015). This might be correlated with an increase in temperature and humidity during the second part of the local biozone C in the interior of the Iberian Peninsula. Other authors, however, consider that *Peridyromys* was a dweller of warm environments (Aguilar *et al.* 1999).

The migration of *M. legidensis* in the second local biozone in the Ribesalbes-Alcora Basin (after Crespo *et al.* 2019a, 2021b) could be an indicator of hot and humid environments, although, according to the preliminary isotopic study carried out by Ríos (2013), it is probably more related to humidity than to temperature. In addition, the species *M. koenigswaldi* could be related to drier environments, or

harder diets, since the crests of its teeth are more abundant and developed than in the other occurring species, and this increases their hypsodony. On the other hand, the ecological preferences of *M. monspeliensis* are difficult to infer due to its wider distribution. However, its few and more delicate extra crests would be more consistent with a less vegetarian diet for this species.

It has been traditionally considered (Mayr 1979; Aguilar *et al.* 1999) that *Prodryomys* dwelled in wooded areas. *Bransatoglis* is interpreted as a vegetarian genus with woodland or bush habitat preferences. This fact is corroborated by its presence in Belchatów C, which has been characterized as a subtropical swamp forest (Van der Meulen & Bruijn 1982; Daams & Van der Meulen 1984; Kowalski & Rzebik-Kowalska 2002).

The abundance of *Peridyromys murinus*, together with the presence of *Pseudodryomys ibericus* and *Simplomys* have been inferred as indicating warm (Aguilar *et al.* 1999) and dry (Daams *et al.* 1988) environments. In some sites, such as MTR2, they are dominant, which is somewhat anomalous for sites of this age (Daams *et al.* 1988) and could indicate an arid environment. Nevertheless, those taxa show a wide distribution throughout Europe, and they do not occur only in deposits formed in dry environments, so they could be linked to other factors, although a dry habitat might favour their presence. Traditionally, it has been considered that the great hypsodony of *Armantomys aragonensis* indicates its preference for hard foods (seeds, etc.) (Daams 1990), but Oliver *et al.* (2014), studying the microwear of this species conclude that they had a poorly specialized diet (e.g. herbs, fruits, insects), and probably without seasonal variations.

Aguilar *et al.* (1999) and Daams *et al.* (1996) relate the abundance of *Glirudinus* and *Myoglis* to an increased tree-coverage, and Daams *et al.* (1988), inferred for them an ecological preference for wet environments.

Thus, the mixture of species of the dormice association found in the Ribesalbes-Alcora Basin, with some species preferring more closed environments, and others more related to open areas, shows the variety of environments that probably surrounded the ancient lake present in this basin, as explained above. This confirms the results of previous works based on fossil snails, which indicate that the sections of MTR, BC and CBR have a more aquatic influence, while the section of MAB has less aquatic influence. For example, the presence and abundance of some species of snails in MTR2, suggests a closer proximity to the lake than in the case of BC1, and it may even suggest a location at the very shore of the lake. Moreover, the information provided by other mammals, as for example the presence of the soricid genus *Paenelimnoecus*, is compatible with a more open environment in BC1. Also there is a high abundance of pikas of the genus *Lagopsis* in both sites indicating the existence of dry and, consequently, more open environments. Furthermore, the presence of the mole *Desmanella* in MTR2, being a mole more independent of water than other members of its family, may indicate a further distance from water. Other example is brought by the presence of the heterosoricid, *Heterosorex*, which is

considered to inhabit more closed environments, while the dimyloid *Plesiodimylus* inhabits more humid areas, and it is very common in MAB5. In addition, the great abundance of molossid bats indicates the presence of forests, but not very closed forests since they are very fast fliers. Regarding the other rodents studied, there are sites with a greater abundance of ground squirrels, which have a greater affinity for open spaces, while the eomyiids indicate the presence of wooded and humid areas nearby, a fact confirmed by the presence of the Konservat-Lagerstätten of Foieta la Sarra A. (see more details in Crespo *et al.* 2019a, b, c, 2020a, b, 2021a, b, 2022; Álvarez-Parra *et al.* 2021; Albesa *et al.* 2022).

BIOSTRATIGRAPHIC SIGNIFICANCE OF THE GLIRID FAUNAS FROM THE RIBESALBES-ALCORA BASIN

According to Van der Meulen *et al.* (2012), dormice are dominant in the local area B of the Calatayud-Montalbán Basin but decrease in relative abundance in the rodent faunas towards the MN5.

Microdryomys is common in the Calatayud-Montalbán Basin, with up to three distinct species recorded during the Early Miocene. In the local area Ca (MN4) the *M. legidensis-koenigswaldi* complex becomes rarer, but in the local area Cb *M. koenigswaldi* is a common species again (Van der Meulen *et al.* 2012). This is reflected in our material, where representatives of this complex, initially poorly represented, increase in abundance from MAB3 onwards. A similar trend can be observed with *M. aff. monspeliensis*, first recorded in the local zone Cb, particularly in the Buñol site (Daams 1981, Vianey-Liaud 2003), which makes its finding in the Ribesalbes-Alcora Basin one of the oldest known records of this taxon. The range of this species extends up to the local zone H. Freudenthal & Martín-Suárez (2019) consider *M. legidensis* and *M. koenigswaldi* respectively as ancestor and descendant. Nevertheless, our results (Fig. 12) are not in agreement with this hypothesis, since FS1 is the youngest site where *M. koenigswaldi* is represented but *M. legidensis* occurs in younger sites (MAB and CBR sections); it should be the other way round according to Freudenthal & Martín-Suárez, 2019. More probably these were two briefly co-occurring species with different ecological affinities.

Prodryomys satus is a typical taxon from the Middle Miocene of Europe (Daxner-Höck 2003), whose fossil record extends from the final part of the MN4 (Aguilar & Lazzari 2006). In the Iberian Peninsula it has been recorded in the site of Vargas 2A, in the MN4 but close to the boundary with the MN5 (Van der Meulen *et al.* 2012). The finding of *P. satus* in the sites MAB3 and MAB5 (both in the local area Cb) represents one of the oldest records of this species in the Iberian Peninsula. On the other hand, the species *P. remmertii* occurs only at the locality where this species was described, Blanquatière 1, at the end of the MN4 (Aguilar & Lazzari 2006), which constitutes the first record of this species in the Iberian Peninsula.

The genus *Bransatoglis* has a discontinuous record in the Iberian Peninsula: it is represented in the early Ramblian but it is not recorded again until Zone C (MN4) in the Vallès-Penedès Basin with the species *B. astaracensis* (Agustí 1990, Sesé 2006). The material found in the Ribesalbes-Alcora Basin is ascribed to *B. cf. infralactorensis*, a form that has been reported in the MN4 of different European localities (Kowalski & Rzebik-Kowalska 2002).

As in the Vallès Penedès Basin, *Peridyromys murinus* disappears from the Calatayud-Montalbán Basin at the end of MN4, with the single exception represented by the Middle Miocene locality of Casetón 1A in local area Dd (MN5). In the rest of Europe, the species persists until the Middle Miocene (Daams & Freudenthal 1981; Agustí 1990; Van der Meulen *et al.* 2012). In the Ribesalbes-Alcora Basin *P. murinus* shows two peaks of maximum abundance: a first one in MTR2, where the species is dominant, and a second less important one in MAB11. This is the first time that *P. darocensis* is found in the MN4; this species had only been found in the San Roque 4A site, which belongs to the MN3. As previously discussed, the presence of *P. sondaari* or the transitional populations between *P. sondaari* and *P. darocensis*, which occurred at this time in the Calatayud Basin, has been ruled out (Van der Meulen *et al.* 2012).

Pseudodryomys ibericus is found throughout the Early-Middle Miocene in the Iberian basins, and is a dominant taxon in the faunas of some sites in other basins (e.g. Calatayud-Montalbán or Vallés-Penedés; Sesé 2006; Van der Meulen *et al.* 2012; Casanovas-Vilar *et al.* 2016). In contrast, it is never the prevailing species in Ribesalbes-Alcora.

The fossil record of *Simplomys simplicidens* ranges from the Early Miocene (MN2) to the Middle Miocene (MN5), with a tendency to increase in size over time. The values recorded in the Ribesalbes-Alcora Basin correspond to those found in zone C (MN4) (Daams 1974; Daams *et al.* 1987; García-Paredes *et al.* 2009). *Simplomys julii* occurs from the Early Miocene (MN3, local biozone A) to the Middle Miocene (MN5, local biozone Db) (García-Paredes *et al.* 2009); the species is scarcely represented in the fossil associations of the interior of the Iberian Peninsula, but it is very common in the sites under study. *Simplomys meulenorum* has only been found in the Early Miocene (MN3-4, in local biozones A to C). In general, the genus *Simplomys* is very common in the Iberian Peninsula, and more abundant than in the rest of Europe, which is reflected in its diversity and abundance (García-Paredes *et al.* 2009; Casanovas-Vilar *et al.* 2016; Prieto *et al.* 2018, 2019). This is also the case in Ribesalbes-Alcora, as it is the dominant genus in three different sites (MCX3, MAB0A, and CBR0B). *Armantomys aragonensis* occurs from the Ramblian (local area Z) to the middle Aragonian (local area D); it becomes rare, both in terms of remains and sites, during the MN4 (Daams 1990), which is corroborated by its scarce occurrence in the site of CBR0B.

The stratigraphic range of *Glirudinus undosus* extends between the upper Ramblian (MN3) and the upper Aragonian (MN7+8) (Kálin 1997; Casanovas-Vilar *et al.* 2010). In

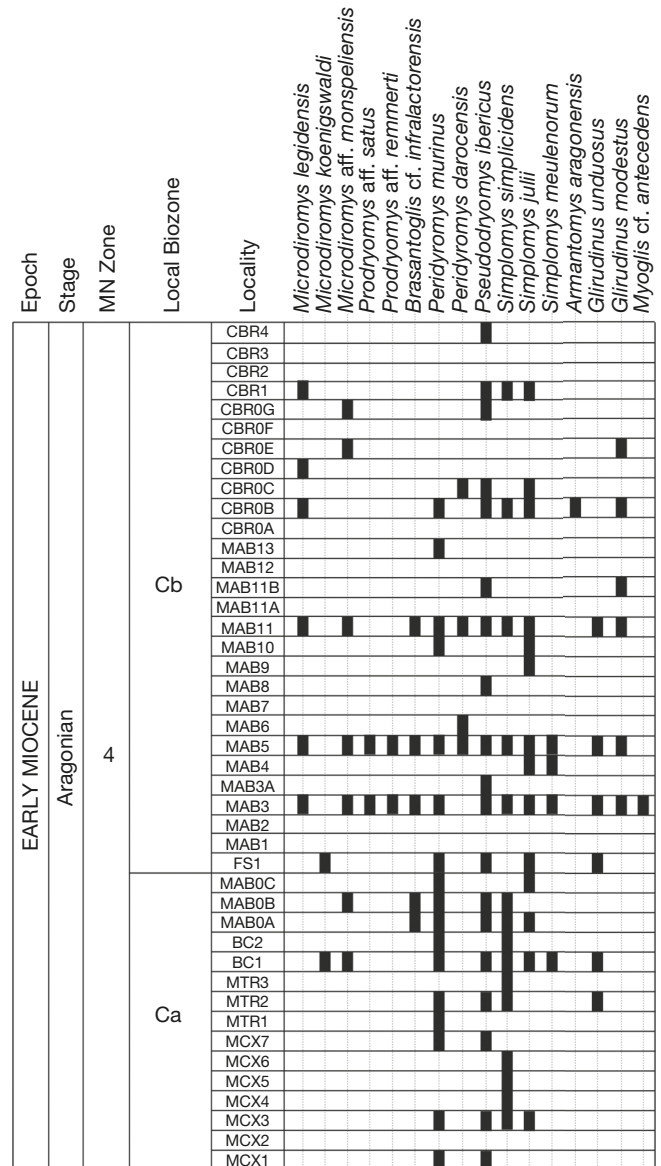


Fig. 12. — Distribution chart of the glirids listed in this paper, appears the sites well sampled and less sampled (not sufficiently sampled for the number of specimens to be statistically significant enough to accept or reject the presence of a taxon, see details in Crespo *et al.* 2019a). The thick line represents the change of local biozone. Abbreviations: **MCX**, Mas dels Coixos; **MTR**, Mas de Torner; **BC**, Barranc de Campisano; **FS**, Foietla la Sarra; **MAB**, Mas d'Antolino B; **CBR**, Corral de Brisca.

the Calatayud-Montalbán Basin, it is only recorded at the San Roque 3 locality (local biozone Ca) (Van der Meulen *et al.* 2012). *Glirudinus modestus* has been sparsely recorded between the local areas B and Cb in the Calatayud-Montalbán Basin (Van der Meulen *et al.* 2012). In the sites under study *G. undosus* is widely represented in many sites but is less abundant than *G. modestus*. On the other hand, *G. modestus* has been found in fewer sites, and always in localities of the local Cb zone, with a peak of abundance in its lower part. *Myoglis antecessus* occurs throughout the MN3 and MN4 in Europe and the Iberian Peninsula, although it is always scarce (Nemetschek & Mörs 2003).

CONCLUSIONS

The Ribesalbes-Alcora Basin, with continental sequences similar in age to those of the Calatayud-Montalbán area (local biozones Ca and Cb, MN4, Early Miocene), has yielded a highly diverse fauna of dormice. Sixteen taxa belonging to nine different genera have been found (Figure 12). Three species of *Microdryomys*: *M. legidensis*, *M. koenigswaldi*, and *M. aff. monspeliensis*, are recorded for the first time in this basin, and the stratigraphic range of *M. aff. monspeliensis* is extended. Two taxa of the genus *Prodryomys* have been found: *P. aff. satus*, which increases its known stratigraphic distribution and *P. aff. remmertii*, reported for the first time in the Iberian Peninsula and the MN4. This constitutes the first record of *Bransatoglis cf. infralactorensis* in the Iberian Peninsula. Two species of *Peridyromys* have been reported in the basin: *P. murinus*, which is the most common dormouse in the basin, and *P. darocensis*, whose finding constitutes the youngest record of this species. *Pseudodryomys ibericus* is more scarcely distributed in Ribesalbes-Alcora than in other similar sites. Up to three species of the genus *Simplomys* have been identified: *S. simplicidens*, the most abundant one; *S. julii*, more abundant than expected for the Iberian Peninsula; and *S. meulenorum*, the least frequent of the three. *Armantomys aragonensis* is scarcer than in other Iberian basins. Two species of the genus *Glirudinus* have been found: *G. undosus* is the largest and rarest one and *G. modestus* is smaller and more common, but in Ribesalbes-Alcora it occurs only in the second local area Cb. Finally, *Myoglis cf. antecedens* is reported for the first time in this basin. On the other hand, the dormice association described here is in line with the variety of habitats inferred for the Ribesalbes-Alcora Basin.

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APPENDIX 1. — List of the fossil material studied in this article and currently deposited at the Natural History Museum of the University of Valencia (MUVHN), with the label MGUV. Abbreviation: **Elmt**, Element.

Museum number	Field number	Elmt	Taxon	Museum number	Field number	Elmt	Taxon
MGUV-25321	BC1-6	m2	<i>Simplomys simplicidens</i>	MGUV-26218	BC1-138	m3	<i>Pseudodryomys ibericus</i>
MGUV-25322	BC1-7	m1	<i>Simplomys simplicidens</i>	MGUV-26219	BC1-139	m3	<i>Simplomys simplicidens</i>
MGUV-25323	BC1-8	m1	<i>Peridyromys murinus</i>	MGUV-26220	BC1-140	m3	<i>Peridyromys murinus</i>
MGUV-25324	BC1-9	m3	<i>Simplomys julii</i>	MGUV-26221	BC1-141	M3	<i>Simplomys simplicidens</i>
MGUV-25325	BC1-10	M3	<i>Microdryomys koenigswaldi</i>	MGUV-26222	BC1-142	m3	<i>Simplomys simplicidens</i>
MGUV-25326	BC1-11	m2	<i>Microdryomys</i> aff. <i>monspeliensis</i>	MGUV-26223	BC1-143	p4	<i>Pseudodryomys ibericus</i>
				MGUV-26224	BC1-144	m3	<i>Simplomys simplicidens</i>
MGUV-25327	BC1-12	m1	<i>Peridyromys murinus</i>	MGUV-26225	BC1-145	m3	<i>Peridyromys murinus</i>
MGUV-25328	BC1-13	m1	<i>Simplomys simplicidens</i>	MGUV-26226	BC1-146	m3	<i>Peridyromys murinus</i>
MGUV-25329	BC1-14	P4	<i>Peridyromys murinus</i>	MGUV-26227	BC1-147	M3	<i>Simplomys simplicidens</i>
MGUV-25330	BC1-15	p4	<i>Peridyromys murinus</i>	MGUV-26246	BC1-166	P4	<i>Simplomys simplicidens</i>
MGUV-25331	BC1-16	P4	<i>Peridyromys murinus</i>	MGUV-26247	BC1-167	P4	<i>Peridyromys murinus</i>
MGUV-25332	BC1-17	m	<i>Simplomys simplicidens</i>				
MGUV-26163	BC1-83	P4	<i>Peridyromys murinus</i>	MGUV-36650	BC2-2	m2	<i>Simplomys simplicidens</i>
MGUV-26164	BC1-84	P4	<i>Pseudodryomys ibericus</i>	MGUV-36651	BC2-3	m2	<i>Peridyromys murinus</i>
MGUV-26165	BC1-85	P4	<i>Simplomys julii</i>	MGUV-36652	BC2-4	M3	<i>Peridyromys murinus</i>
MGUV-26166	BC1-86	D4	<i>Pseudodryomys ibericus</i>				
MGUV-26167	BC1-87	P4	<i>Simplomys julii</i>	MGUV-36664	CBR0B-4	D4	<i>Pseudodryomys ibericus</i>
MGUV-26168	BC1-88	P4	<i>Simplomys julii</i>	MGUV-36665	CBR0B-5	M3	<i>Simplomys julii</i>
MGUV-26169	BC1-89	P4	<i>Peridyromys murinus</i>	MGUV-36677	CBR0B-17	m1	<i>Simplomys julii</i>
MGUV-26170	BC1-90	M2	<i>Simplomys simplicidens</i>	MGUV-36678	CBR0B-18	m1	<i>Simplomys julii</i>
MGUV-26171	BC1-91	M2	<i>Simplomys julii</i>	MGUV-36679	CBR0B-19	M2	<i>Simplomys simplicidens</i>
MGUV-26172	BC1-92	M2	<i>Simplomys julii</i>	MGUV-36680	CBR0B-20	M1	<i>Simplomys julii</i>
MGUV-26173	BC1-93	M2	<i>Simplomys julii</i>	MGUV-36681	CBR0B-21	m2	<i>Simplomys simplicidens</i>
MGUV-26174	BC1-94	M1	<i>Peridyromys murinus</i>	MGUV-36682	CBR0B-22	M1	<i>Simplomys julii</i>
MGUV-26175	BC1-95	M1	<i>Simplomys meulenorum</i>	MGUV-36683	CBR0B-23	M1	<i>Simplomys julii</i>
MGUV-26176	BC1-96	M1,2	<i>Peridyromys murinus</i>	MGUV-36684	CBR0B-24	m2	<i>Simplomys julii</i>
MGUV-26177	BC1-97	M2	<i>Simplomys meulenorum</i>	MGUV-36685	CBR0B-25	M3	<i>Simplomys simplicidens</i>
MGUV-26178	BC1-98	M2	<i>Simplomys simplicidens</i>	MGUV-36686	CBR0B-26	M3	<i>Simplomys julii</i>
MGUV-26179	BC1-99	M1	<i>Peridyromys murinus</i>	MGUV-36687	CBR0B-27	M1,2	<i>Peridyromys murinus</i>
MGUV-26180	BC1-100	M1	<i>Peridyromys murinus</i>	MGUV-36688	CBR0B-28	M2	<i>Simplomys julii</i>
MGUV-26181	BC1-101	M2	<i>Simplomys julii</i>	MGUV-36689	CBR0B-29	M2	<i>Microdryomys legidensis</i>
MGUV-26182	BC1-102	M2	<i>Simplomys simplicidens</i>	MGUV-36690	CBR0B-30	m1	<i>Pseudodryomys ibericus</i>
MGUV-26183	BC1-103	M1	<i>Simplomys simplicidens</i>	MGUV-36691	CBR0B-31	p4	<i>Pseudodryomys ibericus</i>
MGUV-26184	BC1-104	M2	<i>Simplomys simplicidens</i>	MGUV-36692	CBR0B-32	M1,2	<i>Simplomys</i>
MGUV-26185	BC1-105	M1	<i>Simplomys julii</i>	MGUV-36695	CBR0B-35	m2	<i>Armantomys aragonensis</i>
MGUV-26186	BC1-106	M2	<i>Simplomys simplicidens</i>	MGUV-36696	CBR0B-36	m1	<i>Armantomys aragonensis</i>
MGUV-26187	BC1-107	M1	<i>Simplomys julii</i>	MGUV-36697	CBR0B-37	M2	<i>Glirudinus modestus</i>
MGUV-26188	BC1-108	M1	<i>Simplomys simplicidens</i>	MGUV-36711	CBR0B-51	m1	<i>Pseudodryomys ibericus</i>
MGUV-26189	BC1-109	M1	<i>Peridyromys murinus</i>				
MGUV-26190	BC1-110	M1	<i>Simplomys simplicidens</i>	MGUV-36728	CBR0C-3	D4	<i>Peridyromys murinus</i>
MGUV-26191	BC1-111	M3	<i>Pseudodryomys ibericus</i>	MGUV-36729	CBR0C-2	D4	<i>Pseudodryomys ibericus</i>
MGUV-26192	BC1-112	M3	<i>Simplomys simplicidens</i>	MGUV-36730	CBR0C-4	M2	<i>Simplomys julii</i>
MGUV-26193	BC1-113	p4	<i>Peridyromys murinus</i>				
MGUV-26194	BC1-114	p4	<i>Peridyromys murinus</i>	MGUV-36733	CBR0D-3	P4	<i>Microdryomys legidensis</i>
MGUV-26195	BC1-115	p4	<i>Glirudinus undosus</i>				
MGUV-26196	BC1-116	P4	<i>Pseudodryomys ibericus</i>	MGUV-36743	CBR0E-2	M1	<i>Glirudinus modestus</i>
MGUV-26197	BC1-117	p4	<i>Simplomys simplicidens</i>	MGUV-36744	CBR0E-3	m2	<i>Microdryomys</i> aff. <i>Monspeliensis</i>
MGUV-26198	BC1-118	p4	<i>Peridyromys murinus</i>				
MGUV-26199	BC1-119	d4	<i>Simplomys julii</i>	MGUV-36745	CBR0E-4	M2	<i>Microdryomys</i> aff. <i>Monspeliensis</i>
MGUV-26200	BC1-120	m2	<i>Peridyromys murinus</i>				
MGUV-26201	BC1-121	m1	<i>Simplomys simplicidens</i>	MGUV-36753	CBR0G-1	m3	<i>Prodryomys</i> aff. <i>satus</i>
MGUV-26202	BC1-122	m1	<i>Simplomys simplicidens</i>	MGUV-36754	CBR0G-2	D4	<i>Pseudodryomys ibericus</i>
MGUV-26203	BC1-123	m1	<i>Peridyromys murinus</i>				
MGUV-26204	BC1-124	m1	<i>Simplomys simplicidens</i>	MGUV-36761	CBR1-5	M1	<i>Simplomys simplicidens</i>
MGUV-26205	BC1-125	m1	<i>Peridyromys murinus</i>	MGUV-36762	CBR1-6	m2	<i>Simplomys simplicidens</i>
MGUV-26206	BC1-126	m2	<i>Microdryomys</i> aff. <i>monspeliensis</i>	MGUV-36781	CBR1-25	P4	<i>Pseudodryomys ibericus</i>
				MGUV-36782	CBR1-26	D4	<i>Pseudodryomys ibericus</i>
MGUV-26207	BC1-127	m2	<i>Simplomys simplicidens</i>	MGUV-36783	CBR1-27	P4	<i>Simplomys julii</i>
MGUV-26208	BC1-128	m2	<i>Simplomys simplicidens</i>	MGUV-36784	CBR1-28	M1	<i>Microdryomys legidensis</i>
MGUV-26209	BC1-129	m2	<i>Peridyromys murinus</i>	MGUV-36785	CBR1-29	M1	<i>Microdryomys legidensis</i>
MGUV-26210	BC1-130	M2	<i>Microdryomys koenigswaldi</i>	MGUV-36786	CBR1-30	M3	<i>Pseudodryomys ibericus</i>
MGUV-26211	BC1-131	M2	<i>Simplomys simplicidens</i>	MGUV-36787	CBR1-31	m2	<i>Simplomys julii</i>
MGUV-26212	BC1-132	m2	<i>Simplomys julii</i>	MGUV-36788	CBR1-32	m1	<i>Simplomys simplicidens</i>
MGUV-26213	BC1-133	m2	<i>Peridyromys murinus</i>	MGUV-36789	CBR1-33	m3	<i>Simplomys simplicidens</i>
MGUV-26214	BC1-134	m2	<i>Simplomys julii</i>	MGUV-36790	CBR1-34	m3	<i>Simplomys julii</i>
MGUV-26215	BC1-135	m2	<i>Simplomys simplicidens</i>	MGUV-36791	CBR1-35	m3	<i>Simplomys simplicidens</i>
MGUV-26216	BC1-136	m2	<i>Peridyromys murinus</i>				
MGUV-26217	BC1-137	m2	<i>Simplomys julii</i>	MGUV-36809	CBR4-2	m1	<i>Pseudodryomys ibericus</i>
				MGUV-36816	FS1-5	m1	<i>Pseudodryomys ibericus</i>
				MGUV-36843	FS1-32	P4	<i>Pseudodryomys ibericus</i>
				MGUV-36844	FS1-33	M1	<i>Simplomys julii</i>

Appendix 1. — Continuation.

Museum number	Field number	Elmt	Taxon	Museum number	Field number	Elmt	Taxon
MGUV-36845	FS1-34	M1	<i>Simplomys julii</i>	MGUV-25279	MAB3-23	m3	<i>Simplomys simplicidens</i>
MGUV-36846	FS1-35	M2	<i>Simplomys julii</i>	MGUV-25304	MAB3-48	m2	<i>Peridyromys murinus</i>
MGUV-36847	FS1-36	M1	<i>Simplomys julii</i>	MGUV-37255	MAB3-247	d4	<i>Simplomys julii</i>
MGUV-36848	FS1-37	M2	<i>Microdyromys koenigswaldi</i>	MGUV-37256	MAB3-248	P4	<i>Microdyromys aff.</i> <i>Monspeliense</i>
MGUV-36849	FS1-38	P4	<i>Pseudodyromys ibericus</i>	MGUV-37257	MAB3-249	P4	<i>Microdyromys aff.</i> <i>Monspeliense</i>
MGUV-36850	FS1-39	M3	<i>Microdyromys koenigswaldi</i>	MGUV-37258	MAB3-250	P4	<i>Simplomys julii</i>
MGUV-36851	FS1-40	M3	<i>Simplomys julii</i>	MGUV-37259	MAB3-251	P4	<i>Simplomys julii</i>
MGUV-36852	FS1-41	p4	<i>Microdyromys koenigswaldi</i>	MGUV-37260	MAB3-252	P4	<i>Peridyromys murinus</i>
MGUV-36853	FS1-42	m2	<i>Pseudodyromys ibericus</i>	MGUV-37261	MAB3-253	P4	<i>Simplomys simplicidens</i>
MGUV-36854	FS1-43	m2	<i>Simplomys meulenorum</i>	MGUV-37262	MAB3-254	P4	<i>Simplomys simplicidens</i>
MGUV-36855	FS1-44	m2	<i>Peridyromys murinus</i>	MGUV-37263	MAB3-255	P4	<i>Simplomys julii</i>
MGUV-36856	FS1-45	m2	<i>Peridyromys murinus</i>	MGUV-37264	MAB3-256	P4	<i>Microdyromys legidensis</i>
MGUV-36857	FS1-46	m1	<i>Microdyromys koenigswaldi</i>	MGUV-37265	MAB3-257	P4	<i>Simplomys simplicidens</i>
MGUV-36858	FS1-47	m3	<i>Glirudinus modestus</i>	MGUV-37266	MAB3-258	P4	<i>Pseudodyromys ibericus</i>
MGUV-36891	MAB0A-4	m2	<i>Simplomys julii</i>	MGUV-37267	MAB3-259	D4	<i>Pseudodyromys ibericus</i>
MGUV-36892	MAB0A-5	m1	<i>Simplomys julii</i>	MGUV-37268	MAB3-260	P4	<i>Simplomys simplicidens</i>
MGUV-36893	MAB0A-6	M3	<i>Pseudodyromys ibericus</i>	MGUV-37269	MAB3-261	P4	<i>Simplomys simplicidens</i>
MGUV-36894	MAB0A-7	M1,2	<i>Peridyromys murinus</i>	MGUV-37270	MAB3-262	P4	<i>Glirudinus undosus</i>
MGUV-36895	MAB0A-8	m1	<i>Simplomys simplicidens</i>	MGUV-37271	MAB3-263	P4	<i>Glirudinus undosus</i>
MGUV-36896	MAB0A-9	P4	<i>Simplomys julii</i>	MGUV-37272	MAB3-264	P4	<i>Microdyromys legidensis</i>
MGUV-36897	MAB0A-10	D4	<i>Simplomys julii</i>	MGUV-37273	MAB3-265	P4	<i>Prodyromys aff. Satus</i>
MGUV-36903	MAB0A-16	P4	<i>Simplomys julii</i>	MGUV-37274	MAB3-266	P4	<i>Glirudinus undosus</i>
MGUV-36947	MAB0A-60	D4	<i>Pseudodyromys ibericus</i>	MGUV-37275	MAB3-267	d4	<i>Pseudodyromys ibericus</i>
MGUV-36948	MAB0A-61	D4	<i>Pseudodyromys ibericus</i>	MGUV-37276	MAB3-268	P4	<i>Glirudinus modestus</i>
MGUV-36949	MAB0A-62	P4	<i>Pseudodyromys ibericus</i>	MGUV-37277	MAB3-269	P4	<i>Simplomys meulenorum</i>
MGUV-36950	MAB0A-63	d4	<i>Simplomys julii</i>	MGUV-37278	MAB3-270	P4	<i>Simplomys meulenorum</i>
MGUV-36951	MAB0A-64	M1	<i>Simplomys julii</i>	MGUV-37279	MAB3-271	P4	<i>Simplomys meulenorum</i>
MGUV-36952	MAB0A-65	M2	<i>Simplomys julii</i>	MGUV-37280	MAB3-272	M1	<i>Glirudinus undosus</i>
MGUV-36953	MAB0A-66	M2	<i>Simplomys julii</i>	MGUV-37281	MAB3-273	M1	<i>Glirudinus undosus</i>
MGUV-36954	MAB0A-67	M2	<i>Simplomys julii</i>	MGUV-37282	MAB3-274	M2	<i>Glirudinus undosus</i>
MGUV-36955	MAB0A-68	M3	<i>Simplomys julii</i>	MGUV-37283	MAB3-275	M1	<i>Glirudinus undosus</i>
MGUV-36956	MAB0A-69	m1	<i>Simplomys julii</i>	MGUV-37284	MAB3-276	M1	<i>Glirudinus undosus</i>
MGUV-36957	MAB0A-70	m1	<i>Simplomys julii</i>	MGUV-37285	MAB3-277	M2	<i>Glirudinus undosus</i>
MGUV-36958	MAB0A-71	m1	<i>Simplomys simplicidens</i>	MGUV-37286	MAB3-278	M2	<i>Glirudinus modestus</i>
MGUV-36959	MAB0A-72	m1	<i>Simplomys simplicidens</i>	MGUV-37287	MAB3-279	M2	<i>Glirudinus modestus</i>
MGUV-36960	MAB0A-73	m2	<i>Simplomys julii</i>	MGUV-37288	MAB3-280	M1	<i>Glirudinus modestus</i>
MGUV-36961	MAB0A-74	m3	<i>Brasantoglis cf.</i> <i>infralactorensis</i>	MGUV-37289	MAB3-281	M1	<i>Glirudinus modestus</i>
MGUV-36962	MAB0A-75	m2	<i>Brasantoglis cf.</i> <i>infralactorensis</i>	MGUV-37290	MAB3-282	M2	<i>Glirudinus modestus</i>
MGUV-36963	MAB0A-76	m3	<i>Simplomys julii</i>	MGUV-37291	MAB3-283	M1	<i>Glirudinus modestus</i>
MGUV-36964	MAB0A-77	m2	<i>Brasantoglis cf.</i> <i>infralactorensis</i>	MGUV-37292	MAB3-284	M1	<i>Glirudinus modestus</i>
MGUV-36965	MAB0A-78	m2	<i>Simplomys simplicidens</i>	MGUV-37293	MAB3-285	M1	<i>Glirudinus modestus</i>
MGUV-36966	MAB0A-79	m2	<i>Simplomys simplicidens</i>	MGUV-37294	MAB3-286	M1	<i>Pseudodyromys ibericus</i>
MGUV-36967	MAB0A-80	m1	<i>Peridyromys murinus</i>	MGUV-37295	MAB3-287	M2	<i>Simplomys meulenorum</i>
MGUV-36968	MAB0A-81	M3	<i>Simplomys julii</i>	MGUV-37296	MAB3-288	M1,2	<i>Peridyromys murinus</i>
MGUV-36973	MAB0A-86	m1	<i>Simplomys julii</i>	MGUV-37297	MAB3-289	M2	<i>Pseudodyromys ibericus</i>
MGUV-36983	MAB0B-18	M1	<i>Pseudodyromys ibericus</i>	MGUV-37298	MAB3-290	M1	<i>Pseudodyromys ibericus</i>
MGUV-36984	MAB0B-19	M1,2	<i>Peridyromys murinus</i>	MGUV-37299	MAB3-291	M2	<i>Pseudodyromys ibericus</i>
MGUV-36985	MAB0B-20	M2	<i>Microdyromys aff.</i> <i>monspeliensis</i>	MGUV-37300	MAB3-292	M1	<i>Glirudinus undosus</i>
MGUV-36986	MAB0B-21	P4	<i>Pseudodyromys ibericus</i>	MGUV-37301	MAB3-293	M1,2	<i>Peridyromys murinus</i>
MGUV-36987	MAB0B-22	M3	<i>Simplomys simplicidens</i>	MGUV-37302	MAB3-294	M2	<i>Simplomys meulenorum</i>
MGUV-36988	MAB0B-23	p4	<i>Peridyromys murinus</i>	MGUV-37303	MAB3-295	M3	<i>Brasantoglis cf.</i> <i>infralactorensis</i>
MGUV-36989	MAB0B-24	d4	<i>Microdyromys aff.</i> <i>Monspeliensis</i>	MGUV-37304	MAB3-296	M1	<i>Simplomys meulenorum</i>
MGUV-36990	MAB0B-25	m1	<i>Simplomys simplicidens</i>	MGUV-37305	MAB3-297	M1	<i>Pseudodyromys ibericus</i>
MGUV-36991	MAB0B-26	m2	<i>Brasantoglis cf.</i> <i>infralactorensis</i>	MGUV-37306	MAB3-298	M2	<i>Simplomys meulenorum</i>
MGUV-36992	MAB0B-27	m2	<i>Simplomys simplicidens</i>	MGUV-37307	MAB3-299	M1	<i>Simplomys meulenorum</i>
MGUV-37044	MAB0C-1	d4	<i>Peridyromys murinus</i>	MGUV-37308	MAB3-300	M1	<i>Simplomys meulenorum</i>
MGUV-37045	MAB0C-2	M3	<i>Simplomys julii</i>	MGUV-37309	MAB3-301	M1	<i>Simplomys meulenorum</i>
MGUV-25276	MAB3-20	p4	<i>Microdyromys legidensis</i>	MGUV-37310	MAB3-302	M2	<i>Simplomys meulenorum</i>
MGUV-25277	MAB3-21	m1	<i>Microdyromys aff.</i> <i>monspeliense</i>	MGUV-37311	MAB3-303	M2	<i>Simplomys simplicidens</i>
MGUV-25278	MAB3-22	m1	<i>Simplomys simplicidens</i>	MGUV-37312	MAB3-304	M1,2	<i>Peridyromys murinus</i>
				MGUV-37313	MAB3-305	M1	<i>Microdyromys aff.</i> <i>monspeliense</i>
				MGUV-37314	MAB3-306	M1,2	<i>Peridyromys murinus</i>
				MGUV-37315	MAB3-307	M2	<i>Microdyromys legidensis</i>
				MGUV-37316	MAB3-308	M1	<i>Microdyromys legidensis</i>
				MGUV-37317	MAB3-309	M1	<i>Microdyromys legidensis</i>

Appendix 1. — Continuation.

Museum number	Field number	Elmt	Taxon	Museum number	Field number	Elmt	Taxon
MGUV-37318	MAB3-310	M1	<i>Microdyromys</i> aff. <i>monspeliense</i>	MGUV-37379	MAB3-371	M3	<i>Pseudodryomys ibericus</i>
MGUV-37319	MAB3-311	M1,2	<i>Peridyromys murinus</i>	MGUV-37380	MAB3-372	M3	<i>Pseudodryomys ibericus</i>
MGUV-37320	MAB3-312	M1	<i>Microdyromys</i> aff. <i>Monspeliense</i>	MGUV-37381	MAB3-373	M3	<i>Pseudodryomys ibericus</i>
MGUV-37321	MAB3-313	M2	<i>Microdyromys</i> aff. <i>Monspeliense</i>	MGUV-37382	MAB3-374	M3	<i>Simplomys simplicidens</i>
MGUV-37322	MAB3-314	M2	<i>Microdyromys legidensis</i>	MGUV-37383	MAB3-375	p4	<i>Simplomys simplicidens</i>
MGUV-37323	MAB3-315	M1	<i>Microdyromys legidensis</i>	MGUV-37384	MAB3-376	p4	<i>Simplomys simplicidens</i>
MGUV-37324	MAB3-316	M1	<i>Microdyromys</i> aff. <i>Monspeliense</i>	MGUV-37385	MAB3-377	p4	<i>Simplomys simplicidens</i>
MGUV-37325	MAB3-317	M1	<i>Microdyromys</i> aff. <i>Monspeliense</i>	MGUV-37386	MAB3-378	p4	<i>Simplomys simplicidens</i>
MGUV-37326	MAB3-318	M2	<i>Microdyromys legidensis</i>	MGUV-37387	MAB3-379	p4	<i>Simplomys simplicidens</i>
MGUV-37327	MAB3-319	M2	<i>Microdyromys legidensis</i>	MGUV-37388	MAB3-380	p4	<i>Peridyromys murinus</i>
MGUV-37328	MAB3-320	M2	<i>Microdyromys legidensis</i>	MGUV-37389	MAB3-381	p4	<i>Pseudodryomys ibericus</i>
MGUV-37329	MAB3-321	M1	<i>Microdyromys</i> aff. <i>Monspeliense</i>	MGUV-37390	MAB3-382	p4	<i>Brasantoglis</i> cf. <i>infracactorensis</i>
MGUV-37330	MAB3-322	M2	<i>Microdyromys legidensis</i>	MGUV-37391	MAB3-383	p4	<i>Simplomys julii</i>
MGUV-37331	MAB3-323	M1,2	<i>Peridyromys murinus</i>	MGUV-37392	MAB3-384	p4	<i>Peridyromys murinus</i>
MGUV-37332	MAB3-324	M2	<i>Microdyromys</i> aff. <i>Monspeliense</i>	MGUV-37393	MAB3-385	d4	<i>Glirudinus modestus</i>
MGUV-37333	MAB3-325	M1,2	<i>Peridyromys murinus</i>	MGUV-37394	MAB3-386	p4	<i>Microdyromys legidensis</i>
MGUV-37334	MAB3-326	M1,2	<i>Peridyromys murinus</i>	MGUV-37395	MAB3-387	p4	<i>Microdyromys legidensis</i>
MGUV-37335	MAB3-327	M1,2	<i>Peridyromys murinus</i>	MGUV-37396	MAB3-388	p4	<i>Microdyromys</i> aff. <i>Monspeliense</i>
MGUV-37336	MAB3-328	M1,2	<i>Peridyromys murinus</i>	MGUV-37397	MAB3-389	p4	<i>Simplomys meulenorum</i>
MGUV-37337	MAB3-329	M1,2	<i>Peridyromys murinus</i>	MGUV-37398	MAB3-390	P4	<i>Pseudodryomys ibericus</i>
MGUV-37338	MAB3-330	M1,2	<i>Peridyromys murinus</i>	MGUV-37399	MAB3-391	p4	<i>Microdyromys</i> aff. <i>Monspeliense</i>
MGUV-37339	MAB3-331	M1,2	<i>Peridyromys murinus</i>	MGUV-37400	MAB3-392	d4	<i>Microdyromys legidensis</i>
MGUV-37340	MAB3-332	M1	<i>Prodryomys</i> aff. <i>satus</i>	MGUV-37401	MAB3-393	p4	<i>Glirudinus modestus</i>
MGUV-37341	MAB3-333	M2	<i>Simplomys julii</i>	MGUV-37402	MAB3-394	P4	<i>Glirudinus undosus</i>
MGUV-37342	MAB3-334	M1	<i>Simplomys julii</i>	MGUV-37403	MAB3-395	m2	<i>Glirudinus undosus</i>
MGUV-37343	MAB3-335	M1	<i>Simplomys simplicidens</i>	MGUV-37404	MAB3-396	m2	<i>Glirudinus undosus</i>
MGUV-37344	MAB3-336	M1	<i>Simplomys julii</i>	MGUV-37405	MAB3-397	m1	<i>Glirudinus undosus</i>
MGUV-37345	MAB3-337	M2	<i>Simplomys simplicidens</i>	MGUV-37406	MAB3-398	m1	<i>Glirudinus undosus</i>
MGUV-37346	MAB3-338	M2	<i>Simplomys julii</i>	MGUV-37407	MAB3-399	m1	<i>Brasantoglis</i> cf. <i>infracactorensis</i>
MGUV-37347	MAB3-339	M2	<i>Simplomys julii</i>	MGUV-37408	MAB3-400	m1	<i>Glirudinus undosus</i>
MGUV-37348	MAB3-340	M2	<i>Simplomys julii</i>	MGUV-37409	MAB3-401	m2	<i>Glirudinus undosus</i>
MGUV-37349	MAB3-341	m2	<i>Pseudodryomys ibericus</i>	MGUV-37410	MAB3-402	m1	<i>Glirudinus undosus</i>
MGUV-37350	MAB3-342	M1	<i>Pseudodryomys ibericus</i>	MGUV-37411	MAB3-403	m1	<i>Glirudinus undosus</i>
MGUV-37351	MAB3-343	M2	<i>Simplomys julii</i>	MGUV-37412	MAB3-404	m2	<i>Glirudinus undosus</i>
MGUV-37352	MAB3-344	M1	<i>Simplomys julii</i>	MGUV-37413	MAB3-405	m1	<i>Glirudinus undosus</i>
MGUV-37353	MAB3-345	M1,2	<i>Peridyromys murinus</i>	MGUV-37414	MAB3-406	m2	<i>Glirudinus modestus</i>
MGUV-37354	MAB3-346	M2	<i>Simplomys julii</i>	MGUV-37415	MAB3-407	m1	<i>Glirudinus modestus</i>
MGUV-37355	MAB3-347	M1	<i>Simplomys meulenorum</i>	MGUV-37416	MAB3-408	m2	<i>Glirudinus modestus</i>
MGUV-37356	MAB3-348	M1	<i>Pseudodryomys ibericus</i>	MGUV-37417	MAB3-409	m2	<i>Glirudinus modestus</i>
MGUV-37357	MAB3-349	M2	<i>Prodryomys</i> aff. <i>remmertii</i>	MGUV-37418	MAB3-410	m2	<i>Glirudinus modestus</i>
MGUV-37358	MAB3-350	M1	<i>Glirudinus undosus</i>	MGUV-37419	MAB3-411	m1	<i>Glirudinus modestus</i>
MGUV-37359	MAB3-351	M1,2	<i>Peridyromys murinus</i>	MGUV-37420	MAB3-412	m2	<i>Microdyromys legidensis</i>
MGUV-37360	MAB3-352	M1	<i>Pseudodryomys ibericus</i>	MGUV-37421	MAB3-413	m1	<i>Microdyromys legidensis</i>
MGUV-37363	MAB3-355	M3	<i>Microdyromys legidensis</i>	MGUV-37422	MAB3-414	m2	<i>Microdyromys</i> aff. <i>Monspeliense</i>
MGUV-37364	MAB3-356	m3	<i>Peridyromys murinus</i>	MGUV-37423	MAB3-415	m1	<i>Microdyromys</i> aff. <i>Monspeliense</i>
MGUV-37365	MAB3-357	M3	<i>Microdyromys legidensis</i>	MGUV-37424	MAB3-416	m2	<i>Microdyromys legidensis</i>
MGUV-37366	MAB3-358	M3	<i>Peridyromys murinus</i>	MGUV-37425	MAB3-417	m1	<i>Microdyromys legidensis</i>
MGUV-37367	MAB3-359	P4	<i>Glirudinus undosus</i>	MGUV-37426	MAB3-418	m1	<i>Peridyromys murinus</i>
MGUV-37368	MAB3-360	M3	<i>Microdyromys legidensis</i>	MGUV-37427	MAB3-419	m2	<i>Microdyromys legidensis</i>
MGUV-37369	MAB3-361	M3	<i>Microdyromys</i> aff. <i>Monspeliense</i>	MGUV-37428	MAB3-420	m1	<i>Peridyromys murinus</i>
MGUV-37370	MAB3-362	M3	<i>Microdyromys</i> aff. <i>Monspeliense</i>	MGUV-37429	MAB3-421	m2	<i>Microdyromys legidensis</i>
MGUV-37371	MAB3-363	M3	<i>Glirudinus undosus</i>	MGUV-37430	MAB3-422	m1	<i>Microdyromys</i> aff. <i>Monspeliense</i>
MGUV-37372	MAB3-364	M3	<i>Simplomys julii</i>	MGUV-37431	MAB3-423	m2	<i>Microdyromys</i> aff. <i>Monspeliense</i>
MGUV-37373	MAB3-365	M3	<i>Glirudinus modestus</i>	MGUV-37432	MAB3-424	m1	<i>Microdyromys</i> aff. <i>Monspeliense</i>
MGUV-37374	MAB3-366	M3	<i>Glirudinus undosus</i>	MGUV-37433	MAB3-425	m1	<i>Microdyromys legidensis</i>
MGUV-37375	MAB3-367	M3	<i>Myoglis</i> cf. <i>antecedens</i>	MGUV-37434	MAB3-426	m2	<i>Microdyromys</i> aff. <i>Monspeliense</i>
MGUV-37376	MAB3-368	M3	<i>Glirudinus undosus</i>	MGUV-37435	MAB3-427	m1	<i>Microdyromys legidensis</i>
MGUV-37377	MAB3-369	M3	<i>Glirudinus modestus</i>	MGUV-37436	MAB3-428	m1	<i>Microdyromys legidensis</i>
MGUV-37378	MAB3-370	M3	<i>Glirudinus modestus</i>				

Appendix 1. — Continuation.

Museum number	Field number	Elmt	Taxon	Museum number	Field number	Elmt	Taxon
MGUV-37437	MAB3-429	m2	<i>Microdyromys legidensis</i>	MGUV-37879	MAB3A-2	m2	<i>Pseudodryomys ibericus</i>
MGUV-37438	MAB3-430	m1	<i>Microdyromys legidensis</i>	MGUV-37880	MAB3A-3	M1	<i>Pseudodryomys ibericus</i>
MGUV-37439	MAB3-431	m2	<i>Peridyromys murinus</i>	MGUV-37881	MAB3A-4	p4	<i>Pseudodryomys ibericus</i>
MGUV-37440	MAB3-432	m1	<i>Simplomys simplicidens</i>	MGUV-25310	MAB4-2	P4	<i>Simplomys meulenorum</i>
MGUV-37441	MAB3-433	M2	<i>Microdyromys aff.</i> <i>Monspeliense</i>	MGUV-25311	MAB4-3	m3	<i>Simplomys julii</i>
MGUV-37442	MAB3-434	m3	<i>Peridyromys murinus</i>	MGUV-23347	MAB5-10	m2	<i>Glirudinus modestus</i>
MGUV-37443	MAB3-435	m1	<i>Microdyromys legidensis</i>	MGUV-23348	MAB5-11	m2	<i>Glirudinus modestus</i>
MGUV-37444	MAB3-436	m1	<i>Peridyromys murinus</i>	MGUV-23349	MAB5-12	M3	<i>Microdyromys legidens</i>
MGUV-37445	MAB3-437	m1	<i>Simplomys julii</i>	MGUV-23351	MAB5-14	M2	<i>Prodryomys aff. Satus</i>
MGUV-37446	MAB3-438	m1	<i>Simplomys julii</i>	MGUV-23352	MAB5-15	m2	<i>Simplomys julii</i>
MGUV-37447	MAB3-439	m1	<i>Simplomys simplicidens</i>	MGUV-23353	MAB5-16	M2	<i>Simplomys julii</i>
MGUV-37448	MAB3-440	m1	<i>Simplomys simplicidens</i>	MGUV-23354	MAB5-17	M1	<i>Simplomys julii</i>
MGUV-37449	MAB3-441	m2	<i>Peridyromys murinus</i>	MGUV-23356	MAB5-19	m2	<i>Glirudinus modestus</i>
MGUV-37450	MAB3-442	m1	<i>Pseudodryomys ibericus</i>	MGUV-23357	MAB5-20	m2	<i>Glirudinus undosus</i>
MGUV-37451	MAB3-443	m1	<i>Glirudinus modestus</i>	MGUV-24899	MAB5-109	M2	<i>Glirudinus undosus</i>
MGUV-37452	MAB3-444	m2	<i>Simplomys simplicidens</i>	MGUV-24900	MAB5-110	M2	<i>Glirudinus modestus</i>
MGUV-37453	MAB3-445	m2	<i>Peridyromys murinus</i>	MGUV-24901	MAB5-111	m2	<i>Glirudinus modestus</i>
MGUV-37454	MAB3-446	m2	<i>Simplomys simplicidens</i>	MGUV-24902	MAB5-112	M2	<i>Glirudinus modestus</i>
MGUV-37455	MAB3-447	m1	<i>Peridyromys murinus</i>	MGUV-24903	MAB5-113	M1	<i>Glirudinus modestus</i>
MGUV-37456	MAB3-448	m1	<i>Simplomys simplicidens</i>	MGUV-24904	MAB5-114	M1	<i>Glirudinus modestus</i>
MGUV-37457	MAB3-449	m2	<i>Pseudodryomys ibericus</i>	MGUV-24905	MAB5-115	M3	<i>Glirudinus modestus</i>
MGUV-37458	MAB3-450	m2	<i>Simplomys meulenorum</i>	MGUV-24906	MAB5-116	m1	<i>Glirudinus modestus</i>
MGUV-37459	MAB3-451	m2	<i>Pseudodryomys ibericus</i>	MGUV-24907	MAB5-117	m2	<i>Glirudinus modestus</i>
MGUV-37460	MAB3-452	m2	<i>Pseudodryomys ibericus</i>	MGUV-24908	MAB5-118	M2	<i>Microdyromys aff.</i> <i>Monspeliensis</i>
MGUV-37461	MAB3-453	m2	<i>Brasantoglis cf.</i> <i>infralactorensis</i>	MGUV-24909	MAB5-119	M1	<i>Microdyromys legidensis</i>
MGUV-37462	MAB3-454	m1	<i>Simplomys simplicidens</i>	MGUV-24910	MAB5-120	M2	<i>Microdyromys aff.</i> <i>Monspeliensis</i>
MGUV-37463	MAB3-455	m2	<i>Brasantoglis cf.</i> <i>infralactorensis</i>	MGUV-24911	MAB5-121	M2	<i>Microdyromys legidensis</i>
MGUV-37464	MAB3-456	m1	<i>Pseudodryomys ibericus</i>	MGUV-24912	MAB5-122	m2	<i>Simplomys julii</i>
MGUV-37465	MAB3-457	m1	<i>Simplomys simplicidens</i>	MGUV-24913	MAB5-123	m1	<i>Microdyromys legidensis</i>
MGUV-37466	MAB3-458	m2	<i>Pseudodryomys ibericus</i>	MGUV-24914	MAB5-124	P4	<i>Pseudodryomys ibericus</i>
MGUV-37467	MAB3-459	m1	<i>Microdyromys aff.</i> <i>Monspeliense</i>	MGUV-24915	MAB5-125	M3	<i>Prodryomys aff. satus</i>
MGUV-37468	MAB3-460	m2	<i>Simplomys julii</i>	MGUV-24916	MAB5-126	P4	<i>Microdyromys legidensis</i>
MGUV-37469	MAB3-461	m2	<i>Simplomys julii</i>	MGUV-24917	MAB5-127	m3	<i>Simplomys julii</i>
MGUV-37470	MAB3-462	m1	<i>Glirudinus undosus</i>	MGUV-24918	MAB5-128	P4	<i>Glirudinus undosus</i>
MGUV-37471	MAB3-463	M3	<i>Glirudinus undosus</i>	MGUV-24919	MAB5-129	p4	<i>Glirudinus modestus</i>
MGUV-37472	MAB3-464	m2	<i>Microdyromys legidensis</i>	MGUV-24921	MAB5-131	p4	<i>Simplomys simplicidens</i>
MGUV-37473	MAB3-465	m1	<i>Simplomys julii</i>	MGUV-24922	MAB5-132	p4	<i>Simplomys julii</i>
MGUV-37474	MAB3-466	m1	<i>Microdyromys legidensis</i>	MGUV-24923	MAB5-133	p4	<i>Microdyromys legidensis</i>
MGUV-37475	MAB3-467	m3	<i>Simplomys meulenorum</i>	MGUV-24924	MAB5-134	p4	<i>Simplomys simplicidens</i>
MGUV-37476	MAB3-468	m3	<i>Pseudodryomys ibericus</i>	MGUV-24925	MAB5-135	M3	<i>Microdyromys legidensis</i>
MGUV-37477	MAB3-469	m3	<i>Simplomys meulenorum</i>	MGUV-24926	MAB5-136	p4	<i>Simplomys simplicidens</i>
MGUV-37478	MAB3-470	m3	<i>Simplomys meulenorum</i>	MGUV-25023	MAB5-233	M1	<i>Simplomys julii</i>
MGUV-37479	MAB3-471	m3	<i>Simplomys meulenorum</i>	MGUV-25024	MAB5-234	M1	<i>Simplomys julii</i>
MGUV-37480	MAB3-472	m3	<i>Pseudodryomys ibericus</i>	MGUV-25025	MAB5-235	M2	<i>Simplomys julii</i>
MGUV-37481	MAB3-473	m3	<i>Prodryomys aff. Satus</i>	MGUV-25026	MAB5-236	M2	<i>Simplomys julii</i>
MGUV-37482	MAB3-474	P4	<i>Myoglis cf. antecedens</i>	MGUV-25027	MAB5-237	M1	<i>Simplomys simplicidens</i>
MGUV-37483	MAB3-475	m3	<i>Glirudinus modestus</i>	MGUV-25028	MAB5-238	M1	<i>Simplomys simplicidens</i>
MGUV-37484	MAB3-476	m3	<i>Glirudinus modestus</i>	MGUV-25029	MAB5-239	m1	<i>Peridyromys murinus</i>
MGUV-37485	MAB3-477	m3	<i>Glirudinus modestus</i>	MGUV-25030	MAB5-240	m1	<i>Peridyromys darocensis</i>
MGUV-37486	MAB3-478	m3	<i>Glirudinus modestus</i>	MGUV-25031	MAB5-241	m2	<i>Peridyromys murinus</i>
MGUV-37487	MAB3-479	M3	<i>Glirudinus undosus</i>	MGUV-25032	MAB5-242	m2	<i>Peridyromys murinus</i>
MGUV-37488	MAB3-480	m3	<i>Peridyromys murinus</i>	MGUV-25033	MAB5-243	m1	<i>Pseudodryomys ibericus</i>
MGUV-37489	MAB3-481	m3	<i>Microdyromys legidensis</i>	MGUV-25034	MAB5-244	m1	<i>Simplomys simplicidens</i>
MGUV-37490	MAB3-482	m3	<i>Glirudinus undosus</i>	MGUV-25035	MAB5-245	m2	<i>Microdyromys legidensis</i>
MGUV-37491	MAB3-483	m3	<i>Glirudinus undosus</i>	MGUV-25036	MAB5-246	M1	<i>Simplomys simplicidens</i>
MGUV-37492	MAB3-484	m3	<i>Glirudinus undosus</i>	MGUV-25037	MAB5-247	m1	<i>Peridyromys murinus</i>
MGUV-37493	MAB3-485	m3	<i>Prodryomys aff. Satus</i>	MGUV-25038	MAB5-248	m2	<i>Simplomys julii</i>
MGUV-37494	MAB3-486	m3	<i>Microdyromys aff.</i> <i>Monspeliense</i>	MGUV-25039	MAB5-249	m1	<i>Simplomys julii</i>
MGUV-37495	MAB3-487	m3	<i>Simplomys julii</i>	MGUV-25040	MAB5-250	m1	<i>Simplomys julii</i>
MGUV-37496	MAB3-488	m3	<i>Simplomys julii</i>	MGUV-25041	MAB5-251	m1	<i>Peridyromys murinus</i>
MGUV-37497	MAB3-489	m3	<i>Simplomys julii</i>	MGUV-25042	MAB5-252	m1	<i>Simplomys julii</i>
MGUV-37498	MAB3-490	m3	<i>Simplomys julii</i>	MGUV-25043	MAB5-253	M2	<i>Simplomys julii</i>
MGUV-37499	MAB3-491	M3	<i>Simplomys julii</i>	MGUV-25044	MAB5-254	M1,2	<i>Peridyromys murinus</i>
				MGUV-25045	MAB5-255	M1,2	<i>Peridyromys murinus</i>
				MGUV-25046	MAB5-256	M1,2	<i>Peridyromys murinus</i>

Appendix 1. — Continuation.

Museum number	Field number	Elmt	Taxon	Museum number	Field number	Elmt	Taxon
MGUV-25047	MAB5-257	M2	<i>Microdyromys legidensis</i>	MGUV-37999	MAB5-576	M2	<i>Glirudinus modestus</i>
MGUV-25048	MAB5-258	m2	<i>Brasantoglis cf. infralactorensis</i>	MGUV-38000	MAB5-577	M2	<i>Glirudinus modestus</i>
MGUV-25049	MAB5-259	m2	<i>Glirudinus undosus</i>	MGUV-38001	MAB5-578	M3	<i>Simplomys simplicidens</i>
MGUV-25050	MAB5-260	m1	<i>Glirudinus modestus</i>	MGUV-38002	MAB5-579	M3	<i>Simplomys julii</i>
MGUV-25051	MAB5-261	m2	<i>Glirudinus modestus</i>	MGUV-38003	MAB5-580	M3	<i>Simplomys julii</i>
MGUV-25052	MAB5-262	m3	<i>Simplomys simplicidens</i>	MGUV-38004	MAB5-581	M3	<i>Microdyromys legidensis</i>
MGUV-25053	MAB5-263	m3	<i>Pseudodyromys ibericus</i>	MGUV-38005	MAB5-582	M3	<i>Microdyromys legidensis</i>
MGUV-25054	MAB5-264	m3	<i>Simplomys simplicidens</i>	MGUV-38006	MAB5-583	M3	<i>Simplomys julii</i>
MGUV-25055	MAB5-265	m3	<i>Simplomys simplicidens</i>	MGUV-38007	MAB5-584	M3	<i>Microdyromys aff. Monspeliensis</i>
MGUV-25057	MAB5-267	p4	<i>Pseudodyromys ibericus</i>	MGUV-38008	MAB5-585	M3	<i>Microdyromys legidensis</i>
MGUV-25058	MAB5-268	P4	<i>Simplomys simplicidens</i>	MGUV-38009	MAB5-586	M3	<i>Simplomys julii</i>
MGUV-25059	MAB5-269	M2	<i>Simplomys simplicidens</i>	MGUV-38010	MAB5-587	P4	<i>Glirudinus modestus</i>
MGUV-25060	MAB5-270	M1	<i>Peridyromys darocensis</i>	MGUV-38011	MAB5-588	M3	<i>Glirudinus modestus</i>
MGUV-25061	MAB5-271	m2	<i>Peridyromys darocensis</i>	MGUV-38012	MAB5-589	M3	<i>Glirudinus modestus</i>
MGUV-25062	MAB5-272	M2	<i>Glirudinus undosus</i>	MGUV-38013	MAB5-590	M3	<i>Microdyromys legidensis</i>
MGUV-25063	MAB5-273	m1	<i>Microdyromys legidensis</i>	MGUV-38014	MAB5-591	P4	<i>Glirudinus modestus</i>
MGUV-25064	MAB5-274	M1	<i>Simplomys julii</i>	MGUV-38015	MAB5-592	P4	<i>Glirudinus modestus</i>
MGUV-25065	MAB5-275	M1	<i>Simplomys julii</i>	MGUV-38016	MAB5-593	p4	<i>Glirudinus modestus</i>
MGUV-25066	MAB5-276	M1	<i>Simplomys simplicidens</i>	MGUV-38017	MAB5-594	p4	<i>Microdyromys legidensis</i>
MGUV-25067	MAB5-277	M2	<i>Simplomys julii</i>	MGUV-38019	MAB5-596	p4	<i>Peridyromys murinus</i>
MGUV-25068	MAB5-278	M1	<i>Microdyromys legidensis</i>	MGUV-38020	MAB5-597	p4	<i>Peridyromys murinus</i>
MGUV-25069	MAB5-279	M2	<i>Microdyromys legidensis</i>	MGUV-38021	MAB5-598	m1	<i>Simplomys julii</i>
MGUV-25070	MAB5-280	M1	<i>Microdyromys legidensis</i>	MGUV-38022	MAB5-599	m1	<i>Simplomys simplicidens</i>
MGUV-25071	MAB5-281	M1	<i>Microdyromys aff. monspeliensis</i>	MGUV-38023	MAB5-600	m1	<i>Pseudodyromys ibericus</i>
MGUV-25072	MAB5-282	M1,2	<i>Peridyromys murinus</i>	MGUV-38024	MAB5-601	m1	<i>Simplomys julii</i>
MGUV-25073	MAB5-283	M1,2	<i>Peridyromys murinus</i>	MGUV-38025	MAB5-602	m1	<i>Microdyromys aff. Monspeliensis</i>
MGUV-25074	MAB5-284	M1	<i>Microdyromys legidensis</i>	MGUV-38026	MAB5-603	m1	<i>Glirudinus undosus</i>
MGUV-25075	MAB5-285	M1,2	<i>Prodryomys aff. Satus</i>	MGUV-38027	MAB5-604	M3	<i>Glirudinus modestus</i>
MGUV-25076	MAB5-286	m2	<i>Simplomys simplicidens</i>	MGUV-38028	MAB5-605	m2	<i>Microdyromys legidensis</i>
MGUV-25077	MAB5-287	P4	<i>Simplomys simplicidens</i>	MGUV-38029	MAB5-606	m2	<i>Simplomys simplicidens</i>
MGUV-25078	MAB5-288	P4	<i>Simplomys simplicidens</i>	MGUV-38030	MAB5-607	m2	<i>Simplomys simplicidens</i>
MGUV-25079	MAB5-289	M2	<i>Simplomys julii</i>	MGUV-38031	MAB5-608	m1	<i>Peridyromys murinus</i>
MGUV-37970	MAB5-547	P4	<i>Simplomys julii</i>	MGUV-38032	MAB5-609	m2	<i>Simplomys julii</i>
MGUV-37971	MAB5-548	P4	<i>Simplomys julii</i>	MGUV-38033	MAB5-610	m2	<i>Simplomys julii</i>
MGUV-37972	MAB5-549	P4	<i>Simplomys julii</i>	MGUV-38034	MAB5-611	m1	<i>Microdyromys aff. Monspeliensis</i>
MGUV-37973	MAB5-550	P4	<i>Simplomys julii</i>	MGUV-38035	MAB5-612	m2	<i>Simplomys julii</i>
MGUV-37974	MAB5-551	P4	<i>Simplomys simplicidens</i>	MGUV-38036	MAB5-613	m2	<i>Microdyromys aff. Monspeliensis</i>
MGUV-37975	MAB5-552	D4	<i>Simplomys julii</i>	MGUV-38037	MAB5-614	m1	<i>Microdyromys aff. Monspeliensis</i>
MGUV-37976	MAB5-553	D4	<i>Peridyromys murinus</i>	MGUV-38038	MAB5-615	m2	<i>Glirudinus undosus</i>
MGUV-37977	MAB5-554	P4	<i>Microdyromys legidensis</i>	MGUV-38039	MAB5-616	m3	<i>Pseudodyromys ibericus</i>
MGUV-37978	MAB5-555	P4	<i>Microdyromys aff. Monspeliensis</i>	MGUV-38040	MAB5-617	m3	<i>Simplomys simplicidens</i>
MGUV-37979	MAB5-556	P4	<i>Microdyromys legidensis</i>	MGUV-38041	MAB5-618	m3	<i>Microdyromys legidensis</i>
MGUV-37980	MAB5-557	M1	<i>Simplomys meulenorum</i>	MGUV-38042	MAB5-619	m3	<i>Simplomys julii</i>
MGUV-37981	MAB5-558	M1	<i>Peridyromys murinus</i>	MGUV-38043	MAB5-620	m3	<i>Simplomys julii</i>
MGUV-37982	MAB5-559	M1	<i>Simplomys julii</i>	MGUV-38044	MAB5-621	m3	<i>Simplomys julii</i>
MGUV-37983	MAB5-560	M1,2	<i>Peridyromys murinus</i>	MGUV-38045	MAB5-622	m3	<i>Peridyromys murinus</i>
MGUV-37984	MAB5-561	M1	<i>Microdyromys legidensis</i>	MGUV-38046	MAB5-623	M2	<i>Microdyromys legidensis</i>
MGUV-37985	MAB5-562	M1	<i>Glirudinus modestus</i>	MGUV-38047	MAB5-624	m3	<i>Glirudinus modestus</i>
MGUV-37986	MAB5-563	M1	<i>Microdyromys legidensis</i>	MGUV-38048	MAB5-625	p4	<i>Glirudinus modestus</i>
MGUV-37987	MAB5-564	M2	<i>Microdyromys aff. Monspeliensis</i>	MGUV-38233	MAB5-810	P4	<i>Microdyromys aff. Monspeliensis</i>
MGUV-37988	MAB5-565	M1,2	<i>Peridyromys murinus</i>	MGUV-38234	MAB5-811	P4	<i>Peridyromys murinus</i>
MGUV-37989	MAB5-566	M1	<i>Glirudinus modestus</i>	MGUV-38235	MAB5-812	P4	<i>Microdyromys legidensis</i>
MGUV-37990	MAB5-567	M1	<i>Simplomys simplicidens</i>	MGUV-38236	MAB5-813	P4	<i>Microdyromys legidensis</i>
MGUV-37991	MAB5-568	M2	<i>Simplomys meulenorum</i>	MGUV-38237	MAB5-814	P4	<i>Microdyromys legidensis</i>
MGUV-37992	MAB5-569	M2	<i>Simplomys simplicidens</i>	MGUV-38238	MAB5-815	P4	<i>Glirudinus modestus</i>
MGUV-37993	MAB5-570	M1	<i>Simplomys julii</i>	MGUV-38239	MAB5-816	P4	<i>Peridyromys murinus</i>
MGUV-37994	MAB5-571	M1	<i>Simplomys julii</i>	MGUV-38240	MAB5-817	P4	<i>Simplomys julii</i>
MGUV-37995	MAB5-572	M2	<i>Simplomys julii</i>	MGUV-38241	MAB5-818	P4	<i>Simplomys julii</i>
MGUV-37996	MAB5-573	M2	<i>Microdyromys aff. monspeliensis</i>	MGUV-38242	MAB5-819	d4	<i>Simplomys simplicidens</i>
MGUV-37997	MAB5-574	M2	<i>Microdyromys aff. monspeliensis</i>	MGUV-38243	MAB5-820	M1	<i>Glirudinus modestus</i>
MGUV-37998	MAB5-575	M1,2	<i>Peridyromys murinus</i>	MGUV-38244	MAB5-821	M1	<i>Glirudinus modestus</i>
				MGUV-38245	MAB5-822	M1	<i>Glirudinus modestus</i>

Appendix 1. — Continuation.

Museum number	Field number	Elmt	Taxon	Museum number	Field number	Elmt	Taxon
MGUV-38246	MAB5-823	M1	<i>Glirudinus undosus</i>	MGUV-38451	MAB11-64	M2	<i>Glirudinus modestus</i>
MGUV-38247	MAB5-824	M1	<i>Glirudinus modestus</i>	MGUV-38452	MAB11-65	M2	<i>Microdyromys aff.</i> <i>monspeliensis</i>
MGUV-38248	MAB5-825	M1	<i>Simplomys julii</i>	MGUV-38453	MAB11-66	M1	<i>Pseudodyromys ibericus</i>
MGUV-38249	MAB5-826	M2	<i>Simplomys simplicidens</i>	MGUV-38454	MAB11-67	M1	<i>Microdyromys aff.</i> <i>monspeliensis</i>
MGUV-38250	MAB5-827	M1	<i>Microdyromys aff.</i> <i>monspeliensis</i>	MGUV-38455	MAB11-68	M3	<i>Peridyromys darocensis</i>
MGUV-38251	MAB5-828	M3	<i>Simplomys julii</i>	MGUV-38456	MAB11-69	M3	<i>Simplomys julii</i>
MGUV-38252	MAB5-829	M3	<i>Microdyromys legidensis</i>	MGUV-38457	MAB11-70	M3	<i>Peridyromys murinus</i>
MGUV-38253	MAB5-830	M1	<i>Microdyromys legidensis</i>	MGUV-38458	MAB11-71	M3	<i>Simplomys julii</i>
MGUV-38254	MAB5-831	M3	<i>Microdyromys legidensis</i>	MGUV-38459	MAB11-72	M3	<i>Simplomys simplicidens</i>
MGUV-38255	MAB5-832	M3	<i>Prodyromys aff. satus</i>	MGUV-38460	MAB11-73	p4	<i>Peridyromys darocensis</i>
MGUV-38256	MAB5-833	M3	<i>Simplomys julii</i>	MGUV-38461	MAB11-74	m1	<i>Simplomys julii</i>
MGUV-38257	MAB5-834	M3	<i>Prodyromys aff. Satus</i>	MGUV-38462	MAB11-75	m1	<i>Pseudodyromys ibericus</i>
MGUV-38258	MAB5-835	M3	<i>Simplomys simplicidens</i>	MGUV-38463	MAB11-76	m1	<i>Peridyromys darocensis</i>
MGUV-38259	MAB5-836	p4	<i>Pseudodyromys ibericus</i>	MGUV-38464	MAB11-77	m2	<i>Peridyromys darocensis</i>
MGUV-38260	MAB5-837	p4	<i>Microdyromys legidensis</i>	MGUV-38465	MAB11-78	m1	<i>Brasantoglis cf.</i> <i>infralactorensis</i>
MGUV-38261	MAB5-838	p4	<i>Microdyromys legidensis</i>	MGUV-38466	MAB11-79	m2	<i>Peridyromys murinus</i>
MGUV-38262	MAB5-839	p4	<i>Pseudodyromys ibericus</i>	MGUV-38467	MAB11-80	m2	<i>Peridyromys darocensis</i>
MGUV-38263	MAB5-840	p4	<i>Simplomys simplicidens</i>	MGUV-38468	MAB11-81	m2	<i>Peridyromys darocensis</i>
MGUV-38264	MAB5-841	p4	<i>Simplomys julii</i>	MGUV-38469	MAB11-82	m3	<i>Peridyromys darocensis</i>
MGUV-38265	MAB5-842	p4	<i>Glirudinus modestus</i>	MGUV-38470	MAB11-83	m2	<i>Glirudinus modestus</i>
MGUV-38266	MAB5-843	m1	<i>Glirudinus modestus</i>	MGUV-38471	MAB11-84	m2	<i>Glirudinus modestus</i>
MGUV-38267	MAB5-844	m1	<i>Glirudinus modestus</i>	MGUV-38472	MAB11-85	m3	<i>Glirudinus modestus</i>
MGUV-38268	MAB5-845	m2	<i>Glirudinus modestus</i>	MGUV-38473	MAB11-86	m2	<i>Brasantoglis cf.</i> <i>infralactorensis</i>
MGUV-38269	MAB5-846	m1	<i>Glirudinus modestus</i>	MGUV-38474	MAB11-87	m3	<i>Simplomys julii</i>
MGUV-38270	MAB5-847	m1	<i>Microdyromys legidensis</i>	MGUV-38542	MAB11B-2	m1	<i>Glirudinus modestus</i>
MGUV-38271	MAB5-848	m1	<i>Microdyromys aff.</i> <i>Monspeliensis</i>	MGUV-38543	MAB11B-3	p4	<i>Glirudinus modestus</i>
MGUV-38272	MAB5-849	m2	<i>Glirudinus modestus</i>	MGUV-38544	MAB11B-4	D4	<i>Pseudodyromys ibericus</i>
MGUV-38273	MAB5-850	m1	<i>Glirudinus modestus</i>	MGUV-38562	MAB13-2	p4	<i>Peridyromys murinus</i>
MGUV-38274	MAB5-851	m2	<i>Glirudinus modestus</i>	MGUV-38571	MCX1-3	M1	<i>Peridyromys murinus</i>
MGUV-38275	MAB5-852	m3	<i>Glirudinus modestus</i>	MGUV-38572	MCX1-4	M2	<i>Pseudodyromys ibericus</i>
MGUV-38276	MAB5-853	m3	<i>Glirudinus modestus</i>	MGUV-38581	MCX3-1	M2	<i>Simplomys simplicidens</i>
MGUV-38277	MAB5-854	m3	<i>Peridyromys murinus</i>	MGUV-38582	MCX3-2	M2	<i>Simplomys julii</i>
MGUV-38278	MAB5-855	m3	<i>Microdyromys legidensis</i>	MGUV-38583	MCX3-3	M1	<i>Simplomys julii</i>
MGUV-38279	MAB5-856	m3	<i>Peridyromys murinus</i>	MGUV-38584	MCX3-4	M2	<i>Simplomys simplicidens</i>
MGUV-38280	MAB5-857	m3	<i>Microdyromys aff.</i> <i>Monspeliensis</i>	MGUV-38585	MCX3-5	m2	<i>Simplomys simplicidens</i>
MGUV-38281	MAB5-858	M3	<i>Simplomys julii</i>	MGUV-38586	MCX3-6	m1	<i>Simplomys simplicidens</i>
MGUV-38282	MAB5-859	m3	<i>Simplomys simplicidens</i>	MGUV-38587	MCX3-7	m2	<i>Pseudodyromys ibericus</i>
MGUV-38283	MAB5-860	m3	<i>Simplomys meulenorum</i>	MGUV-38588	MCX3-8	M3	<i>Simplomys simplicidens</i>
MGUV-38284	MAB5-861	M3	<i>Pseudodyromys ibericus</i>	MGUV-38589	MCX3-9	M3	<i>Simplomys simplicidens</i>
MGUV-38285	MAB5-862	P4	<i>Glirudinus modestus</i>	MGUV-38590	MCX3-10	p4	<i>Peridyromys murinus</i>
MGUV-38345	MAB6-2	m1	<i>Peridyromys darocensis</i>	MGUV-38591	MCX3-11	P4	<i>Peridyromys murinus</i>
MGUV-38367	MAB8-12	d4	<i>Pseudodyromys ibericus</i>	MGUV-38592	MCX3-12	D4	<i>Peridyromys murinus</i>
MGUV-38372	MAB9-1	m3	<i>Simplomys julii</i>	MGUV-38593	MCX3-13	M1	<i>Simplomys simplicidens</i>
MGUV-38383	MAB10-2	M2	<i>Peridyromys murinus</i>	MGUV-38594	MCX3-14	M1	<i>Simplomys simplicidens</i>
MGUV-38384	MAB10-3	m1	<i>Simplomys julii</i>	MGUV-38674	MCX3-94	P4	<i>Pseudodyromys ibericus</i>
MGUV-38385	MAB10-4	P4	<i>Simplomys julii</i>	MGUV-38675	MCX3-95	P4	<i>Peridyromys murinus</i>
MGUV-38391	MAB11-4	m1	<i>Simplomys julii</i>	MGUV-38676	MCX3-96	P4	<i>Pseudodyromys ibericus</i>
MGUV-38392	MAB11-5	m2	<i>Peridyromys murinus</i>	MGUV-38677	MCX3-97	M1	<i>Pseudodyromys ibericus</i>
MGUV-38393	MAB11-6	m2	<i>Peridyromys murinus</i>	MGUV-38678	MCX3-98	M1,2	<i>Peridyromys murinus</i>
MGUV-38394	MAB11-7	m1	<i>Peridyromys murinus</i>	MGUV-38679	MCX3-99	M2	<i>Simplomys julii</i>
MGUV-38395	MAB11-8	m3	<i>Peridyromys murinus</i>	MGUV-38680	MCX3-100	Maxilar+ M1+M2	<i>Peridyromys murinus</i>
MGUV-38396	MAB11-9	M1,2	<i>Peridyromys murinus</i>	MGUV-38681	MCX3-101	M1,2	<i>Peridyromys murinus</i>
MGUV-38397	MAB11-10	p4	<i>Simplomys simplicidens</i>	MGUV-38682	MCX3-102	M1,2	<i>Peridyromys murinus</i>
MGUV-38398	MAB11-11	p4	<i>Peridyromys murinus</i>	MGUV-38683	MCX3-103	M3	<i>Simplomys simplicidens</i>
MGUV-38399	MAB11-12	P4	<i>Peridyromys murinus</i>	MGUV-38684	MCX3-104	M3	<i>Simplomys simplicidens</i>
MGUV-38443	MAB11-56	D4	<i>Simplomys julii</i>	MGUV-38685	MCX3-105	p4	<i>Peridyromys murinus</i>
MGUV-38444	MAB11-57	P4	<i>Simplomys julii</i>	MGUV-38686	MCX3-106	m1	<i>Peridyromys murinus</i>
MGUV-38445	MAB11-58	M2	<i>Simplomys julii</i>	MGUV-38687	MCX3-107	m2	<i>Simplomys simplicidens</i>
MGUV-38446	MAB11-59	M2	<i>Simplomys simplicidens</i>	MGUV-38688	MCX3-108	m2	<i>Simplomys simplicidens</i>
MGUV-38447	MAB11-60	M1,2	<i>Peridyromys murinus</i>	MGUV-38689	MCX3-109	m3	<i>Simplomys simplicidens</i>
MGUV-38448	MAB11-61	M1	<i>Simplomys julii</i>	MGUV-38712	MCX4-1	M1	<i>Simplomys simplicidens</i>
MGUV-38449	MAB11-62	M1,2	<i>Peridyromys murinus</i>	MGUV-38713	MCX4-2	M2	<i>Simplomys simplicidens</i>
MGUV-38450	MAB11-63	M2	<i>Simplomys julii</i>				

Appendix 1. — Continuation.

Museum number	Field number	Elmt	Taxon	Museum number	Field number	Elmt	Taxon
MGUV-38718	MCX5-1	M2	<i>Simplomys simplicidens</i>	MGUV-38859	MTR2-112	M1,2	<i>Peridyromys murinus</i>
MGUV-38724	MCX6-2	m1	<i>Simplomys simplicidens</i>	MGUV-38860	MTR2-113	M1,2	<i>Peridyromys murinus</i>
MGUV-38727	MCX7-1	M1,2	<i>Pseudodryomys ibericus</i>	MGUV-38861	MTR2-114	M1,2	<i>Peridyromys murinus</i>
MGUV-38728	MCX7-2	M1,2	<i>Peridyromys murinus</i>	MGUV-38862	MTR2-115	M1,2	<i>Peridyromys murinus</i>
MGUV-38729	MCX7-3	m1	<i>Peridyromys murinus</i>	MGUV-38863	MTR2-116	M1,2	<i>Peridyromys murinus</i>
MGUV-38730	MCX7-4	m2	<i>Peridyromys murinus</i>	MGUV-38864	MTR2-117	M1,2	<i>Peridyromys murinus</i>
MGUV-38731	MCX7-5	M1,2	<i>Peridyromys murinus</i>	MGUV-38865	MTR2-118	M1,2	<i>Peridyromys murinus</i>
MGUV-38732	MCX7-6	P4	<i>Peridyromys murinus</i>	MGUV-38866	MTR2-119	M1,2	<i>Peridyromys murinus</i>
MGUV-38733	MCX7-7	P4	<i>Pseudodryomys ibericus</i>	MGUV-38867	MTR2-120	M1,2	<i>Peridyromys murinus</i>
MGUV-38734	MCX7-8	p4	<i>Peridyromys murinus</i>	MGUV-38868	MTR2-121	M1,2	<i>Peridyromys murinus</i>
MGUV-38735	MCX7-9	M1	<i>Pseudodryomys ibericus</i>	MGUV-38869	MTR2-122	M1,2	<i>Peridyromys murinus</i>
MGUV-38736	MCX7-10	P4	<i>Peridyromys murinus</i>	MGUV-38870	MTR2-123	M1,2	<i>Peridyromys murinus</i>
MGUV-25583	MTR1-8	m1	<i>Peridyromys murinus</i>	MGUV-38871	MTR2-124	M1,2	<i>Peridyromys murinus</i>
MGUV-38755	MTR2-8	D4	<i>Peridyromys murinus</i>	MGUV-38872	MTR2-125	M1,2	<i>Peridyromys murinus</i>
MGUV-38756	MTR2-9	D4	<i>Peridyromys murinus</i>	MGUV-38873	MTR2-126	M1,2	<i>Peridyromys murinus</i>
MGUV-38757	MTR2-10	P4	<i>Peridyromys murinus</i>	MGUV-38874	MTR2-127	M1	<i>Pseudodryomys ibericus</i>
MGUV-38758	MTR2-11	P4	<i>Peridyromys murinus</i>	MGUV-38875	MTR2-128	M1	<i>Simplomys simplicidens</i>
MGUV-38759	MTR2-12	M1,2	<i>Peridyromys murinus</i>	MGUV-38876	MTR2-129	M2	<i>Simplomys simplicidens</i>
MGUV-38760	MTR2-13	M1,2	<i>Peridyromys murinus</i>	MGUV-38877	MTR2-130	p4	<i>Peridyromys murinus</i>
MGUV-38761	MTR2-14	M1,2	<i>Peridyromys murinus</i>	MGUV-38878	MTR2-131	m1	<i>Peridyromys murinus</i>
MGUV-38762	MTR2-15	m2	<i>Peridyromys murinus</i>	MGUV-38879	MTR2-132	m1	<i>Peridyromys murinus</i>
MGUV-38763	MTR2-16	m3	<i>Pseudodryomys ibericus</i>	MGUV-38880	MTR2-133	m1	<i>Peridyromys murinus</i>
MGUV-38764	MTR2-17	m3	<i>Peridyromys murinus</i>	MGUV-38881	MTR2-134	m1	<i>Peridyromys murinus</i>
MGUV-38790	MTR2-43	M2	<i>Simplomys simplicidens</i>	MGUV-38882	MTR2-135	m1	<i>Peridyromys murinus</i>
MGUV-38846	MTR2-99	P4	<i>Peridyromys murinus</i>	MGUV-38883	MTR2-136	m2	<i>Peridyromys murinus</i>
MGUV-38847	MTR2-100	P4	<i>Peridyromys murinus</i>	MGUV-38884	MTR2-137	m1	<i>Peridyromys murinus</i>
MGUV-38848	MTR2-101	P4	<i>Peridyromys murinus</i>	MGUV-38885	MTR2-138	m2	<i>Peridyromys murinus</i>
MGUV-38849	MTR2-102	P4	<i>Simplomys simplicidens</i>	MGUV-38886	MTR2-139	m2	<i>Peridyromys murinus</i>
MGUV-38850	MTR2-103	P4	<i>Peridyromys murinus</i>	MGUV-38887	MTR2-140	m2	<i>Peridyromys murinus</i>
MGUV-38851	MTR2-104	P4	<i>Peridyromys murinus</i>	MGUV-38888	MTR2-141	m2	<i>Peridyromys murinus</i>
MGUV-38852	MTR2-105	D4	<i>Peridyromys murinus</i>	MGUV-38889	MTR2-142	m2	<i>Simplomys simplicidens</i>
MGUV-38853	MTR2-106	P4	<i>Peridyromys murinus</i>	MGUV-38890	MTR2-143	p4	<i>Glirudinus undosus</i>
MGUV-38854	MTR2-107	D4	<i>Peridyromys murinus</i>	MGUV-38891	MTR2-144	m3	<i>Peridyromys murinus</i>
MGUV-38855	MTR2-108	D4	<i>Peridyromys murinus</i>	MGUV-38892	MTR2-145	m3	<i>Peridyromys murinus</i>
MGUV-38856	MTR2-109	M1,2	<i>Peridyromys murinus</i>	MGUV-38893	MTR2-146	m3	<i>Peridyromys murinus</i>
MGUV-38857	MTR2-110	M1,2	<i>Peridyromys murinus</i>	MGUV-38894	MTR2-147	m3	<i>Peridyromys murinus</i>
MGUV-38858	MTR2-111	M1,2	<i>Peridyromys murinus</i>	MGUV-38895	MTR2-148	m3	<i>Pseudodryomys ibericus</i>
				MGUV-38954	MTR3-3	M1,2	<i>Simplomys simplicidens</i>

APPENDIX 2. — Measurements of *Microdryomys legidensis* Daams, 1981 from the Ribesalbes-Alcora Basin (in mm). Abbreviations: **L**, length; **W**, width.

Element	Site	Measurement	n	Min.	Med.	Max.	Element	Site	Measurement	n	Min.	Med.	Max.
d4	MAB3	L	1	–	0.58	–	P4	MAB5	L	5	0.58	0.64	0.68
	–	W	1	–	0.49	–		–	W	5	0.72	0.80	0.85
p4	MAB3	L	3	0.59	0.65	0.73		CBR0D	L	1	–	0.63	–
	–	W	3	0.59	0.63	0.69		–	W	1	–	0.77	–
	MAB5	L	4	0.63	0.69	0.73	M1	MAB3	L	3	0.89	0.91	0.93
	–	W	4	0.64	0.67	0.70		–	W	3	1.01	1.01	1.03
m1	MAB3	L	4	0.98	1.00	1.02		MAB5	L	7	0.85	0.90	0.96
	–	W	4	0.87	0.91	0.93		–	W	6	0.97	1.01	1.06
	MAB5	L	3	0.92	0.96	0.73		CBR1	L	1	–	0.89	–
	–	W	3	0.88	0.91	0.94		–	W	1	–	1.04	–
m2	MAB3	L	4	0.93	0.98	1.04	M2	MAB3	L	6	0.83	0.88	0.93
	–	W	5	0.88	0.92	0.96		–	W	4	1.01	1.02	1.05
	MAB5	L	1	–	1.00	–		MAB5	L	2	0.90	–	0.94
	–	W	1	–	0.97	–		–	W	2	1.03	–	1.10
m3	MAB3	L	1	–	0.87	–		CBR0B	L	1	–	0.92	–
	–	W	1	–	0.83	–		–	W	1	–	0.90	–
	MAB5	L	2	0.86	–	0.89	M3	MAB3	L	2	0.73	–	0.80
	–	W	2	0.90	–	0.90		–	W	3	0.96	0.97	0.97
P4	MAB3	L	2	0.58	–	0.71		MAB5	L	7	0.69	0.78	0.88
	–	W	2	0.71	–	0.83		–	W	7	0.92	0.98	1.09

APPENDIX 3. — Measurements of *Microdyromys koenigswaldi* De Bruijn, 1966 from the Ribesalbes-Alcora Basin (in mm). Abbreviations: **L**, length; **W**, width.

Element	Site	Measurement	n	Min.	Max.
p4	FS1	L	1	–	0.70
m1	FS1	L	1	–	1.02
		W	1	–	0.79
M2	BC1	L	1	–	1.02
		W	1	–	1.06
	FS1	L	1	–	1.05
		W	1	–	1.05
M3	BC1	L	1	–	0.81
		W	1	–	1.00
	FS1	L	1	–	0.71
		W	1	–	0.90

APPENDIX 4. — Measurements of *Microdyromys aff. monspeliensis* Aguilar, 1977 from the Ribesalbes-Alcora Basin (in mm). Abbreviations: **L**, length; **W**, width.

Element	Site	Measurement	n	Min.	Med.	Max.
d4	MAB0B	L	1	–	0.69	–
		W	1	–	0.59	–
p4	MAB3	L	2	0.60	–	0.62
		W	2	0.59	–	0.63
m1	MAB3	L	4	0.90	0.93	0.99
		W	4	0.82	0.86	0.91
	MAB5	L	4	0.86	0.89	0.93
		W	4	0.80	0.86	0.92
m2	BC1	L	2	0.90	–	0.97
		W	1	–	0.84	–
	MAB3	L	3	0.94	0.98	1.00
		W	3	0.86	0.90	0.94
MAB5	L	1	–	0.82	–	
	W	1	–	0.85	–	
m3	MAB3	L	1	–	0.77	–
		W	1	–	0.73	–
MAB5	L	1	–	0.82	–	
	W	1	–	0.85	–	
P4	MAB3	L	2	0.50	–	0.51
		W	2	0.61	–	0.63
	MAB5	L	3	0.55	0.55	0.57
		W	2	0.73	–	0.75
M1	MAB0B	L	1	–	0.85	–
		W	1	–	0.98	–
	MAB3	L	6	0.83	0.86	0.89
		W	5	0.94	1.01	1.09
MAB5	L	2	0.85	–	0.86	
	W	1	–	1.01	–	
MAB11	L	1	–	0.85	–	
	W	1	–	1.04	–	
M2	MAB3	L	2	0.85	–	0.90
		W	2	0.89	–	0.94
	MAB5	L	4	0.85	0.86	0.88
		W	4	0.94	0.97	0.99
M3	MAB3	L	2	0.66	–	0.72
		W	2	0.78	–	0.85
	MAB5	L	1	–	0.71	–
		W	1	–	0.91	–
CBR0G	L	1	–	0.75	–	
	W	1	–	0.88	–	

APPENDIX 5. — Measurements of *Prodyromys aff. satus* Mayr, 1979 from the Ribesalbes-Alcora Basin (in mm). Abbreviations: **L**, length; **W**, width.

Element	Site	Measurement	n	Min.	Med.	Max.
m1	MAB5	L	1	–	1.27	–
		W	1	–	1.17	–
m2	MAB5	L	1	–	1.38	–
		W	1	–	1.29	–
M2	MAB5	L	1	–	1.30	–
		W	1	–	1.67	–
M3	MAB3	L	1	–	1.09	–
		W	1	–	1.38	–

APPENDIX 6. — Measurements of *Prodyromys aff. remmertii* Aguilar & Lazzari, 2006 from the Ribesalbes-Alcora Basin (in mm). Abbreviations: **L**, length; **W**, width.

Element	Site	Measurement	n	Min.	Med.	Max.
m3	MAB3	L	1	–	1.18	–
		W	1	–	1.16	–
P4	MAB3	L	1	–	1.10	–
		W	1	–	0.71	–
M1	MAB3	L	1	–	1.10	–
		W	1	–	1.18	–
	MAB5	L	1	–	1.13	–
		W	1	–	1.14	–
M3	MAB5	L	3	0.67	0.75	0.85
		W	3	0.88	1.00	1.06

APPENDIX 7. — Measurements of *Bransatoglis cf. infalactorensis* Baudelot & Collier, 1982 from the Ribesalbes-Alcora Basin (in mm). Abbreviations: **L**, length; **W**, width.

Element	Site	Measurement	n	Min.	Med.	Max.
p4	MAB3	L	1	–	0.77	–
		W	1	–	0.72	–
m1	MAB3	L	1	–	1.27	–
		W	1	–	1.09	–
	MAB11	W	1	–	1.39	–
m2	MAB0A	L	1	–	1.32	–
		W	1	–	1.21	–
	MAB0B	L	1	–	1.23	–
		W	1	–	1.00	–
	MAB3	L	2	1.23	–	1.38
		W	1	–	1.11	–
MAB5	L	1	–	1.41	–	
	W	1	–	1.35	–	
m3	MAB0A	L	1	–	1.25	–
		W	1	–	1.16	–
M3	MAB3	W	1	–	1.24	–

APPENDIX 8. — Measurements of *Peridymys murinus* (Pomel, 1853) from the Ribesalbes-Alcora Basin (in mm). Abbreviations: **L**, length; **W**, width.

Element	Site	Measurement	n	Min.	Med.	Max.
d4	MAB0C	L	1	–	0.71	–
		W	1	–	0.65	–
p4	MCX3	L	2	0.70	–	0.79
		W	2	0.65	–	0.68
	MCX7	L	1	–	0.77	–
		W	1	–	0.72	–
	MTR2	L	1	–	0.76	–
		W	1	–	0.68	–
	BC1	L	4	0.70	0.77	0.86
		W	4	0.62	0.66	0.73
	MAB0B	L	1	–	0.72	–
		W	1	–	0.74	–
	MAB3	L	2	0.65	–	0.76
		W	2	0.68	–	0.71
	MAB5	L	2	0.65	–	0.79
		W	2	0.67	–	0.73
MAB11	L	1	–	0.60	–	
	W	1	–	0.70	–	
MAB13	L	1	–	0.70	–	
	W	1	–	0.65	–	
m1	MCX3	L	1	–	1.10	–
		W	1	–	0.97	–
	MCX7	L	1	–	1.09	–
		W	1	–	1.04	–
	MTR1	L	1	–	1.03	–
		W	1	–	0.85	–
	MTR2	L	6	1.04	1.12	1.16
		W	6	0.96	1.01	1.06
	BC1	L	4	0.99	1.04	1.11
		W	2	0.94	–	1.03
	MAB3	L	3	1.04	1.09	1.13
		W	4	0.91	0.98	1.03
	MAB5	L	3	1.03	1.11	1.18
		W	2	1.02	–	1.13
m2	MCX7	L	1	–	1.14	–
		W	1	–	1.12	–
	MTR2	L	6	1.03	1.08	1.13
		W	5	0.97	1.01	1.04
	BC1	L	4	1.03	1.05	1.07
		W	3	1.00	1.00	1.01
	FS1	L	2	1.02	–	1.13
		W	1	–	1.04	–
	MAB3	L	4	1.01	1.09	1.13
		W	3	0.94	1.05	1.12
	MAB5	L	2	1.11	–	1.17
W		2	1.06	–	1.18	
MAB11	L	3	0.98	1.06	1.13	
	W	3	0.83	0.95	1.08	
m3	MTR2	L	6	0.81	0.95	1.04
		W	5	0.77	0.90	1.00
	BC1	L	3	0.95	1.00	1.02
		W	3	0.89	0.91	0.94
	MAB3	L	3	0.86	0.89	0.95
		W	2	0.81	–	1.06
MAB5	L	3	0.74	0.76	0.78	
	W	3	0.78	0.81	0.82	
D4	MCX3	L	1	–	0.78	–
		W	1	–	0.90	–
	MTR2	L	5	0.69	0.72	0.76
		W	5	0.73	0.76	0.81
	BC1	L	2	0.57	–	0.65
		W	2	0.63	–	0.72
	MAB5	L	1	–	0.70	–
		W	1	–	0.71	–

Element	Site	Measurement	n	Min.	Med.	Max.
P4	MCX3	L	2	0.72	–	0.75
		W	2	0.85	–	0.90
	MCX7	L	2	0.70	–	0.72
		W	2	0.89	–	0.89
	MTR2	L	8	0.74	0.79	0.88
		W	7	0.82	0.90	1.00
	BC1	L	3	0.62	0.69	0.73
		W	3	0.61	0.67	0.80
	MAB3	L	1	–	0.70	–
		W	1	–	0.77	–
	MAB5	L	2	0.69	–	0.76
W		2	0.85	–	0.98	
MAB11	L	1	–	0.71	–	
	W	1	–	0.80	–	
M1/M2	MCX1	L	1	–	0.87	–
		W	1	–	1.04	–
	MCX3	L	5	0.88	0.97	1.01
		W	4	0.90	1.05	1.15
	MCX7	L	2	0.97	–	1.01
		W	2	1.13	–	1.14
	MTR2	L	19	0.99	1.05	1.13
		W	20	1.10	1.19	1.27
	BC1	L	4	1.01	1.05	1.07
		W	3	1.07	1.16	1.26
	MAB0B	L	1	–	1.02	–
		W	12	0.89	1.07	1.19
	MAB3	L	11	1.00	1.19	1.27
		W	11	1.00	1.19	1.27
MAB5	L	8	0.94	1.06	1.17	
	W	7	1.12	1.18	1.24	
MAB10	L	1	–	0.98	–	
	W	1	–	1.23	–	
MAB11	L	2	1.00	–	1.06	
	W	2	1.21	–	1.23	
M3	BC2	L	1	–	0.79	–
		W	2	0.75	–	0.78
	MAB3	L	2	1.01	–	1.01
		W	2	1.01	–	1.01
	MAB11	L	1	–	0.99	–
W		1	–	1.01	–	

APPENDIX 9. — Measurements of *Peridymys darocensis* Daams, 1999 from the Ribesalbes-Alcora Basin (in mm). Abbreviations: **L**, length; **W**, width.

Element	Site	Measurement	n	Min.	Med.	Max.
p4	MAB11	L	1	–	0.89	–
		W	1	–	0.79	–
m1	MAB6	L	1	–	1.07	–
		W	1	–	1.23	–
m1	MAB11	L	1	–	1.08	–
		W	1	–	1.08	–
m2	MAB5	L	1	–	1.38	–
		W	1	–	1.29	–
	MAB11	L	1	–	1.24	–
		W	1	–	1.19	–
CBR0C	L	1	–	1.05	–	
	W	1	–	1.05	–	
m3	MAB11	L	1	–	1.15	–
		W	1	–	1.02	–
M1/M2	MAB5	L	1	–	1.15	–
		W	1	–	1.37	–
M3	MAB11	L	1	–	0.88	–
		W	1	–	1.12	–

APPENDIX 10. — Measurements of *Pseudodryomys ibericus* De Bruijn, 1966 from the Ribesalbes-Alcora Basin (in mm). Abbreviations: **L**, length; **W**, width.

Element	Site	Measurement	n	Min.	Med.	Max.	
d4	MAB5	L	1	–	0.82	–	
		W	1	–	0.76	–	
	MAB8	L	1	–	0.64	–	
		W	1	–	0.58	–	
p4	BC1	L	1	–	0.87	–	
		W	2	0.75	–	0.89	
	MAB3	L	2	0.89	–	0.95	
		W	2	0.81	–	0.86	
	MAB3A	L	1	–	0.88	–	
		W	1	–	0.86	–	
	MAB5	L	2	0.80	–	0.95	
		W	2	0.69	–	0.92	
m1	FS1	L	1	–	1.29	–	
		W	1	–	1.05	–	
	MAB3	L	1	–	1.15	–	
		W	1	–	1.01	–	
	MAB5	L	1	–	1.28	–	
		W	2	1.13	–	1.18	
MAB11	W	1	–	1.16	–		
m2	MCX3	L	1	–	1.25	–	
	MAB3	L	4	1.26	1.30	1.39	
		W	4	1.22	1.26	1.28	
	MAB3A	L	1	–	1.34	–	
W		1	–	1.25	–		
m3	MTR2	L	1	–	1.18	–	
		W	1	–	1.10	–	
	BC1	L	1	–	1.16	–	
		W	1	–	1.18	–	
	MAB3	L	1	–	1.10	–	
		W	1	–	1.12	–	
	MAB5	L	1	–	1.05	–	
		W	1	–	1.12	–	
D4	MCX3	L	1	–	0.82	–	
		W	1	–	0.92	–	
	BC1	L	1	–	0.65	–	
		W	1	–	0.80	–	
	MAB0A	L	1	–	1.02	–	
		W	1	–	0.93	–	
	MAB3	L	2	0.70	–	0.72	
		W	2	0.88	–	0.92	
	MAB11B	L	1	–	0.75	–	
		W	1	–	0.89	–	
	CBR0B	L	1	–	0.80	–	
		W	1	–	0.84	–	
	CBR0C	L	1	–	0.75	–	
		W	1	–	0.84	–	
	CBR0G	L	1	–	0.73	–	
		W	1	–	0.73	–	
	CBR1	L	1	–	0.66	–	
		W	1	–	0.72	–	
	P4	MCX3	L	1	–	0.76	–
			W	1	–	0.77	–
MCX7		L	1	–	0.96	–	
		W	1	–	1.00	–	
BC1		W	1	–	1.00	–	
FS1		L	2	0.84	–	0.86	
		W	2	1.00	–	1.12	
MAB0A		L	1	–	0.87	–	
		W	1	–	0.97	–	
MAB0B		L	1	–	0.76	–	
		W	1	–	0.87	–	
MAB3		L	1	–	0.72	–	
		W	1	–	0.88	–	
MAB5		L	1	–	0.87	–	
		W	1	–	0.99	–	
CBR1		L	1	–	0.78	–	
M1		MCX3	L	1	–	1.24	–
			W	1	–	1.31	–
		MCX7	L	1	–	1.17	–
			W	1	–	1.22	–
	MTR2	L	1	–	1.27	–	
		W	1	–	1.32	–	
	MAB3	L	3	1.24	1.28	1.30	
		W	4	1.21	1.37	1.50	
	MAB3A	L	1	–	1.18	–	
		W	1	–	1.31	–	
M2	MCX1	L	1	–	1.16	–	
		W	1	–	1.42	–	
	MCX7	L	1	–	1.13	–	
		W	1	–	1.28	–	
	MAB0B	L	1	–	1.16	–	
		W	1	–	1.56	–	
MAB3	L	2	1.17	–	1.21		
	W	2	1.35	–	1.51		
M3	BC1	L	1	–	0.79	–	
		W	1	–	1.00	–	
	MAB0A	L	1	–	0.79	–	
		W	1	–	1.21	–	
	MAB3	L	2	0.92	–	0.93	
		W	2	1.14	–	1.21	
	MAB5	L	1	–	0.84	–	
		W	1	–	1.16	–	
CBR1	L	1	–	0.77	–		
	W	1	–	1.12	–		

APPENDIX 11. — Measurements of *Simplomyx simplicidens* (De Bruijn, 1966) from the Ribesalbes-Alcora Basin (in mm). Abbreviations: **L**, length; **W**, width.

Element	Site	Measurement	n	Min.	Med.	Max.	
d4	MAB3	L	1	–	0.62	–	
		W	1	–	0.66	–	
p4	MAB3	L	5	0.63	0.69	0.72	
		W	5	0.60	0.68	0.72	
	MAB5	L	4	0.64	0.67	0.68	
		W	4	0.65	0.69	0.74	
m1	MCX3	L	1	–	1.26	–	
		W	1	–	1.14	–	
	BC1	L	3	1.11	1.19	1.24	
		W	2	1.08	–	1.12	
	MAB0A	L	1	–	1.23	–	
		W	1	–	1.12	–	
	MAB0B	W	1	–	1.24	–	
	MAB3	L	5	1.05	1.24	1.31	
		W	5	0.98	1.13	1.23	
	MAB5	L	2	1.28	–	1.28	
		W	2	1.07	–	1.21	
	CBR1	L	1	–	1.30	–	
	m2	MCX3	L	2	1.15	–	1.31
			W	1	–	1.31	–
MTR2		L	1	–	1.31	–	
		W	1	–	1.34	–	
BC1		L	3	1.25	1.26	1.26	
		W	4	1.21	1.26	1.32	
MAB0B		W	1	–	1.04	–	
MAB3		L	1	–	1.12	–	
MAB5		L	3	1.19	1.27	1.34	
		W	3	1.19	1.28	1.34	
CBR0B		L	1	–	1.24	–	
		W	1	–	1.14	–	
m3		MCX3	L	1	–	0.94	–
			W	1	–	1.09	–
	BC1	L	3	0.83	0.93	0.99	
		W	3	1.07	1.09	1.10	
	MAB3	L	4	1.00	1.03	1.05	
		W	4	1.04	1.09	1.14	
	MAB5	L	4	0.97	1.01	1.04	
		W	4	1.04	1.09	1.14	
	CBR1	L	1	–	0.97	–	
		W	1	–	1.01	–	
D4	MAB11	L	1	–	0.73	–	
		W	1	–	0.68	–	
P4	MTR2	L	1	–	0.77	–	
		W	1	–	0.83	–	
	BC1	L	1	–	0.77	–	
		W	1	–	0.77	–	
	MAB3	L	5	0.66	0.73	0.76	
		W	4	0.80	0.84	0.88	
MAB5	L	3	0.70	0.73	0.79		
	W	3	0.86	0.91	0.95		
M1	MCX3	L	1	–	1.25	–	
		W	1	–	1.29	–	
	MCX4	L	1	–	1.29	–	
		W	1	–	1.36	–	
	MTR2	L	1	–	1.28	–	
		W	1	–	1.37	–	
	BC1	L	3	1.23	1.24	1.26	
		W	2	1.32	–	1.41	
	MAB3	L	2	1.14	–	1.15	
		W	1	–	1.24	–	
	MAB5	L	2	1.18	–	1.23	
		W	3	1.19	1.29	1.38	
	CBR1	L	1	–	1.17	–	

Element	Site	Measurement	n	Min.	Med.	Max.
M2	MCX3	L	2	1.07	–	1.08
		W	2	1.30	–	1.41
	MCX4	L	1	–	1.18	–
		W	1	–	1.50	–
	MTR2	L	2	1.13	–	1.18
		W	2	1.47	–	1.53
	BC1	L	6	1.07	1.14	1.18
		W	4	1.36	1.38	1.41
	MAB3	L	1	–	1.07	–
		W	1	–	1.23	–
	MAB5	L	2	1.16	–	1.17
		W	2	1.42	–	1.43
	MAB11	L	1	–	1.05	–
		W	1	–	1.32	–
CBR0B	L	1	–	1.07	–	
	W	1	–	1.39	–	
M3	MCX3	L	4	0.71	0.73	0.77
		W	3	1.08	1.10	1.16
	BC1	L	2	0.70	–	0.78
		W	1	–	0.98	–
	MAB0B	L	1	–	0.71	–
		W	1	–	1.04	–
	MAB3	L	1	–	0.75	–
		W	1	–	1.11	–
	MAB5	L	1	–	0.77	–
		W	2	1.15	–	1.27
	MAB11	L	1	–	0.75	–
		W	1	–	0.93	–
	CBR0B	L	1	–	0.89	–
		W	1	–	1.17	–

APPENDIX 12. — Measurements of *Simplomys julii* (Daams, 1989) from the Ribesalbes-Alcora Basin (in mm.). Abbreviations: **L**, length; **W**, width.

Element	Site	Measurement	n	Min.	Med.	Max.	
d4	BC1	L	1	–	0.51	–	
		W	1	–	0.48	–	
	MAB0A	L	1	–	0.63	–	
		W	1	–	0.54	–	
	MAB3	L	1	–	0.45	–	
		W	1	–	0.47	–	
p4	MAB5	L	3	0.58	0.60	0.62	
		W	3	0.54	0.58	0.60	
m1	MAB0A	L	3	1.02	1.05	1.07	
		W	3	0.92	0.95	0.97	
	MAB3	L	2	1.01	–	1.07	
		W	2	0.93	–	0.96	
	MAB5	L	4	1.05	1.09	1.17	
		W	5	0.89	0.95	1.01	
	MAB11	L	2	1.05	–	1.08	
		W	2	0.93	–	0.94	
	CBR0B	L	2	0.98	–	1.05	
		W	2	0.86	–	0.91	
	m2	BC1	L	3	0.98	1.05	1.12
			W	3	0.91	1.01	1.08
FS1		L	1	–	1.04	–	
		W	1	–	1.00	–	
MAB0A		L	1	–	1.18	–	
		W	2	1.11	–	1.12	
MAB3		W	1	–	1.07	–	
MAB5		L	5	1.04	1.07	1.09	
		W	4	1.01	1.05	1.06	
CBR0B		W	1	–	1.12	–	
CBR1		L	1	–	1.04	–	
		W	1	–	1.07	–	
m3	BC1	L	3	0.98	1.05	1.12	
		W	3	0.91	1.04	1.08	
	FS1	L	1	–	1.04	–	
		W	1	–	1.00	–	
	MAB0A	L	1	–	1.18	–	
		W	2	1.11	–	1.12	
	MAB3	W	1	–	1.07	–	
	MAB5	L	5	1.04	1.07	1.09	
		W	4	1.01	1.05	1.06	
	CBR0B	W	1	–	1.13	–	
	CBR1	L	1	–	1.04	–	
		W	1	–	1.07	–	
D4	MAB0A	L	1	–	0.57	–	
		W	1	–	0.60	–	
	MAB5	L	1	–	0.63	–	
		W	1	–	0.70	–	
P4	BC1	L	3	0.65	0.67	0.69	
		W	2	0.74	–	0.80	
	MAB0A	L	2	0.64	–	0.64	
		W	2	0.61	–	0.63	
	MAB3	L	2	0.66	–	0.74	
		W	2	0.71	–	0.72	
	MAB5	L	6	0.57	0.64	0.67	
		W	6	0.61	0.65	0.67	
	MAB10	L	1	–	0.55	–	
		W	1	–	0.68	–	
	M1	MCX3	L	1	–	1.15	–
			BC1	L	2	1.12	–
		W	1	–	1.24	–	
FS1		L	2	1.09	–	1.14	
		W	2	1.13	–	1.16	
MAB0A		L	1	–	1.10	–	
		W	1	–	1.12	–	
MAB3		L	2	1.00	–	1.03	
		W	1	–	1.06	–	
MAB5		L	8	1.04	1.08	1.11	
		W	8	1.01	1.12	1.19	
MAB11		L	1	–	1.05	–	
		W	1	–	1.11	–	
CBR0B		L	4	1.01	1.03	1.06	
		W	1	–	1.09	–	
M2		MCX3	W	1	–	0.97	–
			BC1	L	4	0.99	1.04
			W	3	1.19	1.23	1.27
	MAB0A	L	3	1.04	1.05	1.06	
		W	3	1.19	1.23	1.27	
	MAB3	L	5	0.89	1.01	1.06	
		W	2	1.19	–	1.24	
	MAB5	L	4	1.04	1.06	1.09	
		W	4	1.03	1.14	1.25	
	MAB11	L	1	–	1.04	–	
	M3	FS1	L	1	–	0.71	–
			W	1	–	0.94	–
MAB0A		L	2	0.79	–	0.82	
		W	2	0.89	–	1.03	
MAB0C		L	1	–	0.66	–	
		W	1	–	0.89	–	
MAB3		L	2	0.71	–	0.74	
		W	2	0.86	–	0.88	
MAB5		L	8	0.70	0.76	0.89	
		W	8	0.70	0.91	1.01	
MAB11		L	2	0.68	–	0.69	
		W	2	0.90	–	0.95	
CBR0B	L	2	0.70	–	0.70		
	W	2	0.89	–	0.91		

APPENDIX 13. — Measurements of *Simplomys meulenorum* García-Paredes, Peláez-Campomanes & Álvarez-Sierra, 2009 from the Ribesalbes-Alcora Basin (in mm). Abbreviations: **L**, length; **W**, width.

Element	Site	Measurement	n	Min.	Med.	Max.
p4	MAB3	L	1	–	0.93	–
		W	1	–	0.80	–
	MAB11	L	1	–	0.86	–
		W	1	–	0.85	–
m2	MAB3	L	1	–	1.25	–
		W	1	–	1.04	–
m3	MAB5	L	1	–	0.85	–
		W	1	–	1.04	–
P4	MAB3	L	4	0.90	0.95	1.02
		W	3	1.04	1.09	1.15
	MAB4	L	1	–	0.86	–
		W	1	–	0.97	–
M1	BC1	L	1	–	1.25	–
		W	1	–	1.37	–
	MAB3	L	6	1.17	1.29	1.36
		W	5	1.36	1.41	1.50
	MAB5	L	1	–	1.34	–
		W	1	–	1.38	–
M2	MAB3	L	3	1.11	1.18	1.24
		W	3	1.40	1.44	1.50
	MAB5	L	1	–	1.22	–
		W	1	–	1.50	–

APPENDIX 14. — Measurements of *Armantomys aragonensis* De Bruijn, 1966 from the Ribesalbes-Alcora Basin (in mm.). Abbreviations: **L**, length; **W**, width.

Element	Site	Measurement	n	Min.	Med.	Max.
m2	CBR0B	L	1	–	2.03	–
		W	1	–	1.95	–

APPENDIX 15. — Measurements of *Glirudinus undosus* Mayr, 1979 from the Ribesalbes-Alcora Basin (in mm.). Abbreviations: **L**, length; **W**, width.

Element	Site	Measurement	n	Min.	Med.	Max.
p4	MTR2	L	1	–	0.72	–
		W	1	–	0.76	–
	BC1	L	1	–	0.88	–
		W	1	–	0.78	–
m1	MAB3	L	5	1.06	1.17	1.21
		W	6	1.04	1.08	1.12
	MAB5	L	1	–	1.32	–
		W	1	–	1.22	–
m2	MAB3	L	3	1.21	1.23	1.28
		W	3	1.12	1.15	1.18
m3	MAB3	L	3	1.05	1.05	1.06
		W	3	0.96	0.98	1.02
P4	MAB3	L	5	0.71	0.74	0.94
		W	6	0.89	0.91	0.92
	MAB5	L	2	0.72	–	0.75
		W	2	0.90	–	0.93
M1	MAB3	L	5	1.12	1.17	1.22
		W	5	1.23	1.32	1.39
	MAB5	L	2	1.14	–	1.26
		W	2	1.26	–	1.35
M2	MAB3	L	1	–	1.19	–
		W	1	–	1.46	–
	MAB5	L	1	–	1.22	–
M3	MAB3	L	2	0.92	–	0.93
		W	1	–	1.19	–

APPENDIX 16. — Measurements of *Glirudinus modestus* (Dehm, 1950) from the Ribesalbes-Alcora Basin (in mm). 1979 from the Ribesalbes-Alcora Basin (in mm.). Abbreviations: **L**, length; **W**, width.

Element	Site	Measurement	n	Min.	Med.	Max.
d4	MAB3	L	1	–	0.70	–
		W	1	–	0.63	–
p4	MAB3	L	1	–	0.61	–
		W	1	–	0.59	–
	MAB5	L	4	0.65	0.68	0.69
		W	4	0.61	0.64	0.69
	MAB11B	L	1	–	0.63	–
		W	1	–	0.59	–
m1	MAB3	L	3	0.88	0.93	0.97
		W	3	0.81	0.83	0.84
	MAB5	L	6	0.93	0.94	0.97
		W	7	0.80	0.86	0.93
MAB11B	L	L	1	–	0.88	–
		W	1	–	0.88	–
	MAB3	L	4	0.91	0.94	0.99
		W	4	0.85	0.89	0.91
MAB5	L	L	6	0.98	1.00	1.02
		W	7	0.83	0.87	0.92
	MAB11	L	2	0.95	–	0.99
		W	2	0.90	–	0.91
m3	MAB3	L	4	0.89	0.89	0.91
		W	4	0.73	0.78	0.83
	MAB5	L	2	0.83	0.86	0.90
		W	3	0.72	0.77	0.81
	MAB11	L	1	–	0.93	–
		W	1	–	0.88	–
P4	MAB3	L	1	–	0.65	–
		W	1	–	0.67	–
	MAB5	L	4	0.59	0.63	0.67
		W	4	0.66	0.73	0.77
M1	MAB3	L	4	0.83	0.88	0.96
		W	3	0.91	0.95	1.00
	MAB5	L	8	0.87	0.93	0.99
		W	7	0.90	0.94	0.99
	CBR0E	L	1	–	0.85	–
		W	1	–	0.93	–
M2	MAB3	L	3	0.94	0.97	1.03
		W	3	1.01	1.04	1.08
	MAB5	L	3	0.94	0.97	1.03
		W	3	0.98	1.02	1.08
	MAB11	L	1	–	0.91	–
		W	1	–	1.01	–
	CBR0B	L	1	–	0.93	–
		W	1	–	1.01	–
M3	MAB3	L	3	0.70	0.80	0.85
		W	2	0.89	–	0.97
	MAB5	L	3	0.67	0.72	0.74
		W	3	0.88	0.95	0.99

APPENDIX 17. — Measurements of *Myoglis cf. antecedens* Mayr, 1979 from the Ribesalbes-Alcora Basin (in mm). Abbreviations: **L**, length; **W**, width.

Element	Site	Measurement	n	Min.	Med.	Max.
P4	MAB3	L	1	–	1.00	–
		W	1	–	1.17	–
M3	MAB3	L	1	–	0.93	–
		W	1	–	1.14	–