FIRST OCCURRENCE IN EUROPE OF MYOCRICETODONTINAE (RODENTIA, GERBILLIDAE) DURING THE LOWER MIDDLE MIocene IN THE KARSTIC LOCALITY OF BLANQUATÈRE 1 (SOUTHERN FRANCE): IMPLICATIONS

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INTRODUCTION
The fissure filling of Blanquatère 1 near Tautavel, South of France, is a very rich fossil mammal bearing locality (Lazzari and Aguilar, 2007; Aguilar and Lazzari, 2006; Aguilar et al. in prep.). The fauna includes six cricets referred to the genera Mega-cricetodon and Democricetodon, two species of Megacricetodon being new (Lazzari and Aguilar, 2007). There are two species of Eumyarion, E. bifidus and an undetermined one of small size (E. sp.). Three comyids are recognized: Ligerimys florancei, L. sp (a small-sized species) and Keramidomys thaleri. There are 16 species of dormice among which 3 are new (Aguilar and Lazzari, 2006) and 4 species of squirrels. The evolutionary stage of the Megacricetodon “collongensis-gersii” population and its association with the Eumyarion “Eumyarion” and Keramidomys thaleri allow us to allocate this fauna close to the boundary between biozones MN 4 and MN 5, indicating an age ca. 16 Ma. This fauna is today the most diverse ever extracted from a fissure filling discovered in the Languedoc-Roussillon area (Aguilar et al., 1999). One single first lower molar (m1) appears to have a peculiar occlusal morphology unknown among the cricets collected in Blanquatère 1 (Megacricetodon, Democricetodon, Eumyarion) as well as among the numerous early and middle Miocene European Muroidea, with alternate cusps, a metaconid very near the anterocid and no longitudinal crest. The size of this tooth enters the range of variation of one Democricetodon species (D. nov. sp.) in the fauna; however it cannot be interpreted as a Democricetodon abnormal tooth as it does not exhibit any character of the genus. The similarity with Jalalpur’s tooth (Cheema et al., 2000) is also such that it rules out the hypothesis of an abnormal tooth. Irregularities of the enamel surface of the Blanquatère 1 tooth do not resemble the pits observed on digested teeth. Effect of transport on enamel surface is also rejected, as the entire tooth do not shows any worn area. These crenulations of the enamel would disappear with wear. This m1 is determined into the recently published calibrated molecular phylogeny of this family (Steppan et al., 2004). Dakkamys sp., as well as several others taxa of the Blanquatère 1 fauna, have no antecedent in Western Europe and testify to a migration.

SYSTEMATIC PALEONTOLOGY
Order RODENTIA Bowdich, 1821
Family GERBILLIDAE Gray, 1825
Subfamily MYOCRICETODONTINAE Lavocat, 1961
Genus Dakkamys Jaeger, 1977
Dakkamys sp.

A slightly worn first lower molar (BLQ 1 No. 1167: 1.53 × 1.06 mm) (Fig. 1A) is characterized by massive closely spaced cusps separated by extremely narrow valleys. The anterocid is as high as the other cusps and the two anterolophids are steep. The labial anterolophulid, which starts from the base of the anterocid, is not connected to the protoconid. The isolated metaconid is located at the level of the protoconid. There is no well-differentiated longitudinal crest. The well-developed posterior arm of the protoconid is high. A small mesoconid independent from the posterior arm of the protoconid and in a clearly lower position ends very close to the hypoconid. The sinusid is slightly directed backwards and is not obliterated by a cingular crest. The entoconid is isolated and the small mesoconid is located very close to it. The posterolophid comes down lingually very quickly but does not join the base of the entoconid. The mesosinusid and the posterosinusid are very narrow. Posterolophid and entoconid surfaces show some crenulations, the posterolophid being the only well developed lophid on which crenulations are present. The posterior arm of the protoconid, which could be interpreted as a lophid does not show crenulations.

DISCUSSION
Morphology and size of the Blanquatère 1 molar are very similar to that of Paradakkamys chinjiensis illustrated by Cheema and colleagues (2000: fig. 4D) from Jalalpur’s 101 in Pakistan (Fig. 1B, this study). The Blanquatère 1 tooth nevertheless differs by its metaconid being isolated from the anterocid, by the presence of a small mesoconid and by the lack of a cingular crest lining the sinusid. The tooth of Blanquatère 1 is also slightly larger than the m1 of Paradakkamys chinjiensis described by Lindsay (1988: pl. 8, fig. b, i) at locality YGSP 76 of the Potwar Plateau in Pakistan (Fig. 1C, this study) and its shape is different, being more massive, possessing a mesoconid, and having no ectostylid at the base of the sinusid. Differences in

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