SHORT COMMUNICATION

RODENTS AND INSECTIVORES FROM THE HOMINOID-BEARING SITE OF CAN FEU (VALLÈS-PENEDÈS BASIN, CATALONIA, SPAIN)

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A partial skeleton of the fossil great ape Hispanopithecus laietanus (Primates: Hominidae) was found in 2001 during the construction of a building in the Industrial Park of Can Feu (Sant Quirze del Vallès, Catalonia, Spain) (Alba et al., 2011a). This new hominoid-bearing locality, termed Can Feu, is situated in the Valls sector of the Vallès-Penedès Basin (Fig. 1), only about 4 km east from the site of Can Llobateres (Sabadell), which has delivered the most complete available remains of Hispanopithecus (Alba et al., 2011b). Both localities are situated within distal channelized alluvial plain facies of the Castellar alluvial fan system and are dated to the Vallesian (Garcés et al., 1996; Agustí et al., 1997; Fig. 1). The sediments from Can Feu mainly consist of greenish to grayish lutites. The primate skeleton was recovered in a greenish lutite layer (Can Feu 1), which also delivered a few small mammal remains. Nevertheless, most of the micromammal fauna was recovered from a blackish lutite layer situated 1–2 m above it (Can Feu 2). A sample of the latter layer was screen-washed for microvertebrate sampling, leading to the recovery of a small mammal assemblage including rodents and insectivores, which are described in this paper.

MATERIALS AND METHODS

The described material comprises six isolated cheek teeth and a humerus from Can Feu as well as 29 isolated cheek teeth and a partial mandible from Can Feu 2, housed at the Institut Català de Paleontologia M. Crusafont (Sabadell, Catalonia). See Tables 1 and 2 for a list of the dental material and measurements. Dental terminology as well as length and breadth measurement methods follow Daams (1981) for the Gliridae; Daams and Freudenthal (1988), Freudenthal and Daams (1988), and Freudenthal et al. (1994) for the Cricetodontidae and Cricetidae; Reumer (1984) for the Soricidae and Heterosoricidae; and García-Alix et al. (2011) for the Talpidae; length and maximum width (W2) of the m2 of Lantanothereum have been taken according to Prieto and Rummel (2009). For a definition of the abbreviations used in the measurement of Soricidae teeth, see Reumer (1984). In the figures, all teeth are figured as if they were from the left side, indicating those cases in which the original image has been reversed. Scanning electron microscope (SEM) micrographs were taken at the Serveis Científico-Tècnics of the Universitat Autònoma de Barcelona. Systematics follows McKenna and Bell (1997) as modified in Casanovas-Vilar (2007) for rodents, and Hutterer (2005) for insectivores. Soricidae and Heterosoricidae are considered separated families following Reumer (1998).

SYSTEMATIC PALEONTOLOGY

Order ERINACEOMORPHA Gregory, 1910
Family ERINACEIDAE Fischer, 1814

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LANTANOTHERIUM cf. SANMIGUELII Villalta and Crusafont, 1944
(Fig. 2G)

Material and Measurements—Table 1.
Description and Discussion—The lower premolar is unicuspid with a rather elliptical occlusal outline and a fused double root. The m2 shows a high and anteriorly extended entoconid crest. The posterior cingulum runs from the top of the entoconid to the posterior base of the hypoconid. The basal labial cingulum is continuous from the base of the paraconid to the base of the hypoconid.

Order SORICOMORPHA Gregory, 1910
Family TALPIDAE Fischer, 1814

TALPA VALLESIENSIS Villalta and Crusafont, 1944
(Fig. 2H, 2N–O)

Material and Measurements—One humerus (IPS5757; diaphyseal diameter = 3.40). For dental material and measurements, see Table 1.

Description and Discussion—The M2 shows a curved parastyle and an undivided mesostyle. The metacone is the highest cusp, followed by the paracone and the protocone. The latter is the only lingual cusp that is clearly individualized, even though a small hypocone is also present. The humerus is missing part of its proximal epiphysis and is overall robust. The ectepicondyle has a rather concave elliptical surface. The fossa for the flexor digitorum muscle is smaller than the ectepicondyle. No significant muscular crest can be discerned in posterior view of the shaft.

Family HETEROSORICIDAЕ Fischer von Waldheim, 1814

DINOSOREX sp.
(Fig. 2J)

Material and Measurements—Table 1.
Description and Discussion—The trigon valley is closed by a thick posterior cingulum. The posterior crest of the paracone is smoothly S-shaped. The protocone is rather conical and connected to the anterior cingulum and to the hypocone. No pigmentation is preserved.

Family SORICIDAE Fischer von Waldheim, 1814

CRUSAFONTINA ENDEMICA Gibert, 1975
(Fig. 2K–M)

Material and Measurements—Table 2.
Description and Discussion—The apex of the I1 is not fissident and the talon is short. P4 and M1 show a pronounced posterior emargination. The M1 displays an elongated metacrest. The protocone is stout, with the metaloph directed towards the metacone. The enamel is faintly wrinkled. The M2 has an anterior margin much wider than the posterior one, and a hypoconal flange highly reduced. The m1 has an elongated paralophid, a stout entoconid, a thin basal labial cingulum, and faint traces of pigmentation on...