



## A new species of Peltephilidae (Mammalia: Xenarthra: Cingulata) from the late Miocene (Chasicooan SALMA) of Argentina

LAUREANO R. GONZÁLEZ-RUIZ<sup>1,3</sup>, GUSTAVO J. SCILLATO-YANÉ<sup>2,3</sup>,  
CECILIA M. KRMPOTIC<sup>2,3</sup> & ALFREDO A. CARLINI<sup>2,3</sup>

<sup>1</sup>Laboratorio de Investigaciones en Evolución y Biodiversidad (LIEB), Universidad Nacional de la Patagonia “San Juan Bosco” sede Esquel (UNPSJB), Ruta Nacional 259, km 16.5, 9200, Esquel, Chubut, Argentina. E-mail: gonzalezlaureano@yahoo.com.ar

<sup>2</sup>División de Paleontología Vertebrados, Facultad de Ciencias Naturales y Museo de La Plata, Paseo del Bosque s/n, 1900 La Plata, Argentina. E-mail: scillato@fcnym.unlp.edu.ar, ckmpotic\_pv@museo.fcnym.unlp.edu.ar, acarlini@fcnym.unlp.edu.ar

<sup>3</sup>CONICET

### Abstract

A new species of Peltephilidae (Mammalia, Xenarthra, Cingulata) (early Eocene–late Miocene) is described here. The new taxon is based on three specimens collected from the margins of Arroyo Chasicó, Buenos Aires Province, (Argentina), which correspond to the Arroyo Chasicó Formation (late Miocene, Chasicooan SALMA). The new species is characterized by osteoderms with a very rough exposed surface showing high longitudinal and well developed crests (two lateral and one central) with deep and ample valleys among them. The new taxon is the only “relictual” xenarthran cingulate of the Santacrucian Age (late early Miocene) to be registered for the last time in the Chasicooan SALMA (late Miocene), and represents the youngest record of the family Peltephilidae.

**Key words:** Xenarthra, Peltephilidae, Miocene, Chasicooan SALMA, Argentina

### Introduction

The Peltephilidae (Xenarthra, Cingulata) are a peculiar group of fossil mammals known since the late XIX century (Ameghino 1887) and characterized by a short and broad rostrum, high skull, short jaw, completely fused and expanded mandibular symphysis, teeth with chisel-like occlusal surfaces forming a complete series without diastema, U-shaped dental arcade, dental formula 7/7, and the presence of a pair of osteoderms on the nasals and maxillaries forming recurved “horns” (Ameghino, 1891, 1894; Scott, 1903). Like all cingulates, they have a dorsal carapace of osteoderms regionalized in a cephalic shield, a dorsal shield, and a caudal sheath (Engelmann, 1985).

Peltephilines were traditionally regarded as specialized carnivores (Hoffstetter, 1958), but recent analyses (Vizcaíno & Fariña, 1994, 1997; Vizcaíno, 2009) proposed an alternative view for peltephilines as having fed on moderately tough items, although animalivory cannot be excluded as a dietary habit, which might have included plant material of underground origin in addition to carrion.

The Peltephilidae are registered exclusively in South America and are recorded from the Paleogene (early Eocene, Riochican SALMA; Scillato-Yané, 1986; Carlini *et al.*, 2005, 2010) to the Neogene (late Miocene, Chasicooan SALMA; Pascual, 1965). The last detailed systematic revision of the group dates from the 1930s (Bordas, 1936, 1938). According to the catalogue of Mones (1986), there are five genera (*Peltephilus* Ameghino, *Peltecoelus* Ameghino, *Anantiosodon* Ameghino, *Epipeltephilus* Ameghino, and *Parapeltecoelus* Bordas) and 17 species of Peltephilidae formally nominated, of which 12 were considered valid by Scillato-Yané (1980). In addition, two undescribed species are referred in the literature (Barrio *et al.*, 1984; Croft *et al.*, 2009).

The presence of Chasicooan Peltephilidae is known since Cabrera and Kraglievich (1931) mentioned materials of *Peltephilus* or an allied genus from Arroyo Chasicó, Buenos Aires Province (Figure 1). Later on, those specimens, as well as newly collected material, were assigned to *Epipeltephilus* by Kraglievich (1934), Pascual (1965), and Cattoi (1966), sometimes with a doubtful specific identification.