



New data on the distribution, natural history and morphology of *Kunsia tomentosus* (Lichtenstein, 1830) (Rodentia: Cricetidae: Sigmodontinae)

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Abstract

The distribution, natural history, and morphology of *Kunsia tomentosus* are updated from museum data, literature and personal communications. Thirty-seven specimens and fossil fragments are now known for the species. Two new localities are added to the previously known distributional range of the species. The very disperse records suggest that *K. tomentosus* presents a broad and yet fragmentary geographic distribution, and information gathered on habitat use hints that its presence is associated with open formations, mainly with the open grassland formations within Cerrado domain. The specimens analyzed here increased considerably the range of body size and craniodental measurements for species, but patterns of geographic variation of these features remain insufficiently known. Some longitudinal variation was observed in the shape of the posterior margin of the palate. We also describe for the first time the stomach morphology of *K. tomentosus*, which exhibits a derived unilocular-pouched pattern. The apparent restriction to some habitat types and its natural rarity, allied with the replacement of natural grasslands by agriculture fields in the Cerrado domain, denotes an increased risk for the known populations in Brazil.

Key words: Distribution, *Kunsia tomentosus*, morphology, natural history, Sigmodontinae

Introduction

The genus *Kunsia* Hershkovitz, 1966 comprises two species, *K. tomentosus* (Lichtenstein, 1830), the largest living sigmodontine commonly known as woolly giant rat, and *K. fronto* (Winge, 1887), the fossorial giant rat (Musser & Carleton, 2005). *Kunsia* inhabits open and forested habitats, and their geographic distribution ranges from eastern Cerrado, a savanna domain in the Central Brazil, to open grasslands and forests in the south of this country, northeastern Bolivia and Argentina (Hershkovitz, 1966; Emmons, 1999; Miranda *et al.*, 1999; Santos-Filho *et al.*, 2001; Rodrigues *et al.*, 2002; Musser & Carleton, 2005). *Kunsia* species are readily identified by a unique set of morphological characters such as the very long and stout claws, reduced size of the ears, short tail, large and powerful fore and hind-feet, and a harsh pelage (Hershkovitz, 1966).

The knowledge of distribution, morphology, and natural history for both species is poor (Hershkovitz, 1966), mainly due to the few *Kunsia* specimens that have been collected and deposited in scientific collections. The type locality of *Kunsia fronto* is the Pleistocene caves of Lagoa Santa, near to Rio das Velhas, in the