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**A NEW SPECIES OF AKODON FROM URUGUAY
AND SOUTHERN BRAZIL
(MAMMALIA: RODENTIA: SIGMODONTINAE)**

ENRIQUE M. GONZÁLEZ,* ALFREDO LANGGUTH** & LUIZ F. DE OLIVEIRA***

ABSTRACT: *A new species of Akodon from Uruguay and southern Brazil (Mammalia: Rodentia: Sigmodontinae).*— A new species of *Akodon* Meyen, 1833, from the temperate forests of Uruguay and Southern Brazil is described. The skull shows a comparatively large molar series and a narrow interorbital region. The hair, longer than in related species, is of a grayish dorsal color and a grayish creamy ventral color. The karyotype has a diploid number of $2n = 44$.

RESUMEN: *Una nueva especie de Akodon de Uruguay y el Sur de Brasil (Mammalia: Rodentia: Sigmodontinae).*— Se describe una nueva especie de *Akodon* Meyen, 1833, de los bosques templados de Uruguay y el Sur de Brasil. El cráneo presenta series molares comparativamente grandes y la región interorbital estrecha. El pelaje es más largo que en las especies cercanas, de color gris en el dorso y gris crema en el vientre. El cariotipo presenta un número diploide de $2n = 44$.

Key words: Rodentia - *Akodon* n. sp. - Taxonomy - Uruguay - Southern Brazil.

Palabras clave: Rodentia - *Akodon* n. sp. - Taxonomía - Uruguay - Sur del Brasil.

Introduction

This animal was first discovered in Uruguay by XIMENEZ & LANGGUTH (1970) but at the time not recognized as a new species, and identified as *Akodon*

* Museo Nacional de Historia Natural, Casilla de Correo 399, 11.000 Montevideo, Uruguay.
E-mail: vida-silvestre@geocities.com

**Depto. Sistemática e Ecologia CCEN, Campus Universitário, UFPb. 58059-900 João Pessoa, PB, Brasil.
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***Seção de Mamíferos, Depto. Vertebrados, Museu Nacional. Quinta da Boa Vista 20.942-940 Rio de Janeiro, RJ, Brasil. (Supported by CNPq).

cursor montensis THOMAS, 1913. Later L. F. B. OLIVEIRA collected specimens in the Ecological Reserve of Taim (Rio Grande do Sul, Brazil), and in 1992 E. M. GONZÁLEZ collected additional material in Departamento de Lavalleja, eastern Uruguay.

The type specimens are deposited in the mammal collections of the Museo Nacional de Historia Natural (MNHN) and Departamento Zoología de Vertebrados, Facultad de Ciencias (ZVC), both in Montevideo, Uruguay.

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***Akodon reigi* n. sp.**
(Figure 1)

Akodon cursor montensis: XIMENEZ & LANGGUTH, 1970:1, non THOMAS, 1913.

Holotype: MNHN 3649, skin and skull of an adult male. Collector: ENRIQUE M. GONZÁLEZ, 13 November 1992.

Paratypes: MNHN 3325, MNHN 3572, MNHN 3573, MNHN 3574, MNHN 3575, MNHN 3650, ZVC 1774, all males, collected between 13 and 15 April 1992 in Paso Averías, Departamento de Lavalleja, Uruguay, and MNHN 1402, and 1403, male and female, respectively, from near Paso de las Piedras, Departamento de Durazno, Uruguay.

Type locality: Paso Averías, Departamento de Lavalleja, Uruguay (Lat. 33° 60' S; Long. 54° 40' W).

Referred specimens: Several specimens from Taim, Rio Grande do Sul, Brazil, deposited in the mammal collection of the Museu Nacional (Rio de Janeiro, Brazil), but not yet catalogued.

Etymology: Named after the late Argentinian mammalogist OSVALDO A. REIG, for his remarkable contributions to the understanding of mammalian evolution in the Neotropics.

Diagnosis: External characters: medium to big sized species of *Akodon*. Its fur is long, particularly in the rump, with yellow tipped hairs, except the guard hairs that have a black tip. The overall appearance of the dorsum is gray olivaceous, finely tipped with creamy. The tail is bicolor, covered with short hairs, brown above, grayish below and becoming creamy near the basis. The ventral fur presents a grayish slightly creamy general color with the hairs plumbeous at the basis and creamy tips. The feet are covered with white hair grayish at their basis.

The ears are large and covered with short hairs on both sides.

Cranial characters: the skull of *A. reigi* is similar to that of members of the *A. cursor* (WINGE, 1887) group (as defined by RIEGER *et al.*, 1995), but with a narrower interorbital region and longer tooth rows. The anterior border of the zygomatic plate is straight or slightly concave. Measurements (see Table 1).

Comparisons: The fur of *Akodon reigi* is similar to that of *A. cursor* and *A. montensis*, but without the ochraceous wash usually present in the last two species and with a longer fur, a character that easily differentiates *A. reigi* from the others. *A. serrensis* THOMAS, 1902, may be distinguished from *A. reigi* by the more orange or sometimes rufous wash of upper and under parts and the dark unicolored tail. Compared with *A. reigi*, the skull of *A. serrensis* has a relatively larger braincase and also a larger interorbital region, with larger nasal bones. *A. reigi* differs from members of the *A. varius* THOMAS, 1902, group (as defined by MYERS, 1989) by rounded supraorbital region, larger rostrum and absence of the pale colored area surrounding the eyes. *A. reigi* may be distinguished from *A. molinae* CONTRERAS, 1968, and *A. toba* THOMAS, 1921, species with similar karyotype, by longer hair, comparatively narrow skull and longer rostrum.

The karyotype of *A. reigi* is constituted by 44 acrocentric chromosomes, including the sexual chromosomes XX-XY (BRUM-ZORRILLA *et al.*, 1994). This is similar to that reported by SBALQUEIRO *et al.* (1986) for specimens from Paraná (Brazil) and by LIASCOVICH & REIG (1989) for specimens from Misiones (Argentina), a material originally identified in both cases as *A. serrensis*. The identification of the voucher specimens of this karyotypes should be confirmed.

Geographic distribution: The species is known from the type locality and gallery forests of Central and Eastern Uruguay and Southern Brazil. It probably extends northwards over the southern part of the Atlantic Forest.

Habitat and habits: At Paso de las Piedras on the Negro River, Dept. of Durazno, the species was trapped on forest ground covered with dense litter (XIMENEZ & LANGGUTH, 1970). At Paso Averías on the Cebollatí River, Dept. of Lavalleja, where a larger number of specimens has been obtained, the species lives in dense subtropical gallery forest. Captures occurred short after sunset and during the night with traps baited with "mortadella." In April 1992 a trapping effort of 250 trap/night produced 17 specimens and in July 1993, 300 trap/night in the same place produced only two animals. These mice were trapped in dense undergrowth with scattered grass patches crossed by runways and dense litter within the forest. At the same trapline two specimens of *Oligoryzomys delticola* (THOMAS, 1917) and one of *Akodon azarae* (FISCHER, 1829) were collected.

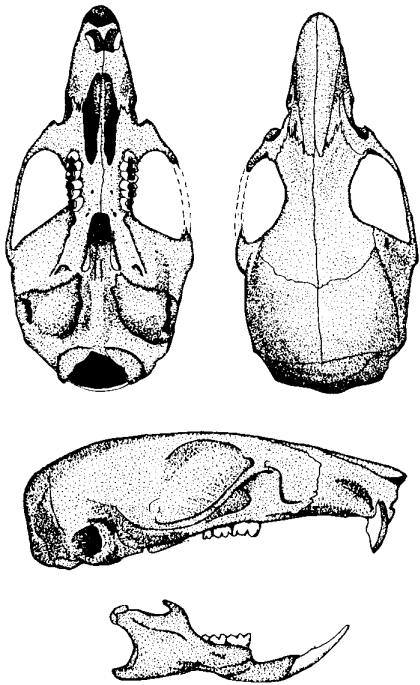


Fig. 1. Ventral, dorsal and lateral view of the skull of *Akodon reigi* (holotype, MNHN 3649). Scale: 10 mm.

Collecting efforts in nearby grasslands and wetlands did not provide specimens of *A. reigi*.

In Taim, Rio Grande do Sul, Brazil, where detailed ecological observations were made, the species was especially common in the swamp forest habitats, where it was always abundant. The grasslands were used with restrictions. The species appears to breed from spring to autumn. Inside the sand forest, the increase of captures in the autumn was largely due to juvenil dispersers, and probably weanlings. This fact, associated with the adult movements in the last summer, was the main cause for the high density in this area. *A. reigi* showed a strong selection of wooded areas. The species most similar to *A. reigi* in habitat selection was *Oligoryzomys delticola*.

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TABLE 1. External and cranial measurements, in mm, of holotype and paratypes of *Akodon reigi*. Measurements taken as follows: (1) according to VOSS (1991), (2) according to HOOPER (1952), (3) from condyle to anterior border of diastema, (4) from condyle to anterior border of M1, (5) as upper row.

Specimen N°	MNHN	MNHN	MNHN	MNHN	MNHN	MNHN	MNHN	MNHN	ZVC
	3649	3325	3572	3573	3574	3575	3650	1774	
Sex	♂	♂	♂	♂	♂	♂	♂	♂	♂
Total length	220	195	190	171	240	202	183	190	
Tail	97	88	95	79	90	93	81	91	
Ear	18.3	17.7	17.1	-	16	18.3	18.5	19	
Hind foot with claw/without claw	24.6/22.7	24.6/22.7	24.8/22.8	27.6/25.6	23.3/20.4	26.5/24.0	24.1/22.7	23.0/21.0	
Condyllo-incisive length(1)	25.7	-	27.0	-	26.8	-	25.0	26.5	
Length of diastema(1)	8.0	7.8	7.7	-	7.7	-	7.3	7.3	
Length of upper molar row(1)	4.6	4.5	4.7	-	.7	-	4.6	4.8	
Length of incisive foramen(1)	7.1	6.8	6.7	-	7.1	-	6.1	6.8	
Breadth of rostrum(1)	4.8	4.3	4.7	-	4.6	-	4.4	4.4	
Breadth of palatal bridge(1)	2.8	3.0	2.4	-	2.9	-	2.5	2.5	
Interorbital breadth (1)	5.0	5.1	4.8	-	5.1	-	4.8	5.1	
Breadth of braincase (1)	12.8	13.2	12.7	-	12.5	-	12.7	13.4	
Breadth of zygomatic plate (1)	2.1	2.1	2.0	-	2.2	-	1.9	2.1	
Zygomatic breadth(2)	14.4	14.5	15.0	-	-	-	13.8	14.4	
Length of orbital fossa (1)	7.4	8.2	8.0	-	8.0	-	7.6	8.2	
Total length of mandible(3)	15.2	14.6	14.6	-	14.9	-	-	-	
Condyllo-molar length of mandible(4)	11.2	10.9	10.9	-	11.2	-	-	-	
Length of lower molar row(5)	4.5	4.6	4.7	-	4.8	-	-	-	

TABLE 2. Selected skull measurements (in mm) of *A. reigi* and related species. Mean, standard deviation, and range (in parenthesis).

	Condylar-incisive length	Length of upper molars	Least interorbital breadth	Breadth of braincase
<i>Akodon reigi</i> (1)	26.8;1.17 (25.0-28.8)	4.6;0.11 (4.5-4.8)	4.9;0.16 (4.6-5.1)	12.7;0.32 (12.2-13.4)
<i>Akodon molinae</i> (2)	25.7;5.1 (23.9-27.8)	4.6;4.37 (4.2-5.0)	4.8;3.7 (4.4-5.2)	12.0;2.6 (11.4-12.7)
<i>Akodon</i> aff. <i>cursor</i> (3)	-----	4.3;0.09 (4.2-4.6)	5.1;0.16 (4.8-5.4)	12.2;0.39 (11.3-12.8)
<i>Akodon montensis</i> (4)	26.0;0.88 (24.0-27.7)	4.2;0.14 (4.0-4.4)	4.9;0.17 (4.7-5.3)	12.5;0.78 (12.1-13.1)
<i>Akodon serrensis</i> (5)	-----	4.5;0.17 (4.4-4.9)	5.28;0.22 (5.0-5.7)	12.7;0.40 (12.1-13.6)

(1) N= 12, both sexes.

(2) N= 18, from CONTRERAS & ROSI (1980)

(3) N= 29, both sexes, specimens in Museu Nacional (Rio de Janeiro)

(4) N= 20, males only, from MASSOIA & FORNES (1962)

(5) N= 14, both sexes, specimens in Museu Nacional (Rio de Janeiro)

MUSEO NACIONAL DE HISTORIA NATURAL
BUENOS AIRES 652
CASILLA DE CORREO 399
11.000 MONTEVIDEO, URUGUAY
FAX: (005982) 917-0213

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