

Journal of Vertebrate Paleontology

A new acaremyid rodent (Caviomorpha, Octodontoidea) from Scarritt Pocket, Deseadan (late Oligocene) of Patagonia (Argentina)

MARÍA G. VUCETICH^{*,1} MARÍA E. PÉREZ,² MARTÍN R. CIANCIO,¹ ALFREDO A. CARLINI,¹ RICHARD, H. MADDEN,³ and MATTHEW J. KOHN⁴

¹CONICET, Facultad de Ciencias Naturales y Museo, Universidad Nacional de La Plata. Paseo del Bosque s/n, B1900FWA La Plata, Argentina, vucetich@fcnym.unlp.edu.ar;

²CONICET, Museo Paleontológico "Egidio Feruglio", Avenida Fontana 140, U9100GYO, Trelew, Chubut, Argentina;

³Department of Organismal Biology and Anatomy, University of Chicago, 1027 East 57th Street Chicago IL 60637-1508, U.S.A.;

⁴Department of Geosciences, Boise State University, Boise, ID 83725, U.S.A.

CHARACTER LIST S1. Morphological character list based on the dataset of Vucetich & Kramarz (2003). The following multistate characters are treated as ordered: 1, 6, 14 and 15.

- (1) Degree of hypsodonty: brachyodont (0); slightly hypsodont (1); mesodont (2); protohypsodont (3); euhypsodont (4).
- (2) Cusps differentiable from respective crests: yes (0); no (1).
- (3) Figure eight shaped lower cheek teeth: absent (0); present (1).
- (4) Crests obliquity in lower teeth: no (0); yes (1).
- (5) Deciduous premolar: normal replacement (0); retained (4).
- (6) Hypoflexus in the upper premolar: absent or incipient (0); poorly developed (1); well developed (2).
- (7) Number of crest of upper premolar: trilophodont (0); tetralophodont (1).
- (8) Quadrangular protocone area in M1-M2: no (0); yes (1).
- (9) Flexid on the anterior wall of the p4: present (0); absent (1).
- (10) Development of metalophulid II in the p4: short (0); long (1).
- (11) Lingual end of metalophulid II in p4: free (0); join to the metaconid (1); join to the metalophulid I.
- (12) Ectolophid length in p4: long (0); short (1).
- (13) Hypolophid in p4 in intermediate ontogenetic stage: absent or incipient (0); well developed (1).

- (14) Development of the metalophulid II in m1: reaching the lingual wall (0); not reaching the lingual wall (1); absent (2).
- (15) Development of the metalophulid II in m2: reaching the lingual wall (0); no reaching the lingual wall (1); absent (0).
- (16) Length of the posterolophid in m1-m2: short (0); long (1).
- (17) Orientation of nMpi: oblique AD-PV (0); horizontal (1); oblique AV-PD (2).
- (18) Anterodorsal limit of the mandibular masseteric fossa: absent (0); present (1).
- (19) Mental foramen: present (0); absent (1).
- (20) Figure eight shaped upper cheek teeth: absent (0); present (1).
- (21) AP-L of anterior lobe in m2 with respect to AP-L of posterior lobe: subequal (0); about 75% (1); less than 50% (2).
- (22) Origin of metalophulid II in m1: from protoconid (0); begin the protoconid (1).
- (23) Origin of metalophulid II in m2: from protoconid (0); begin the protoconid (1).
- (24) Discontinuity between the masseteric crest and the nMpi: absent (0); present (1).

MATRIX S1. Character-taxon matrix used for phylogenetic analysis. Characters between brackets represent polymorphic or uncertain scorings.

Taxon	10	20	24
<i>Phiomys andrewsi</i>	0000000010	2001010000	0110
<i>Deseadomys arambourgi</i>	1101000100	00011 [01] 0000	1110
<i>Platypittamys brachyodon</i>	0000000100	0000 [01] 00000	1110
<i>Migraveramus beatus</i>	11000???11	0110 [01] 1000?	0000
<i>Galileomys antelucanus</i>	101001 [01] 001	1001100101	1110
<i>Acaremys murinus</i>	101001 [01] 000	0000110101	1110
<i>Sciamys principalis</i>	2110021001	1000011101	1110
<i>Protacaremys prior</i>	10001???1??	???0011000	0110
<i>Chasichimys bonaerense</i>	31111???0??	???221101?	2???1
<i>Chasicomys octodontiforme</i>	31101???0??	???221?011	2???1
<i>Octomys mimax</i>	41111???0??	???2212011	0???1
<i>Massoiomys obliquus</i>	21111???0??	???2210010	2???0
<i>Eumysops laeviplicatus</i>	21001???0??	???2210010	2???0
<i>Stichomys regularis</i>	21011???1??	??? [12] [12] 10000	20?0
<i>Changquin woodi</i>	2110??????	???00101??	0110
<i>Draconomys verai</i>	01000??111	0111110100	0000
<i>Sallamys pascuali</i>	100000 [01] 100	0010010000	1000
<i>Prospaniomys priscus</i>	11011???0??	???1100000	0000
<i>Spaniomys riparius</i>	21011???0??	???0001000	0000
<i>Willidewu steparius</i>	1000000010	0111111000	2000