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, <u>vucetich@fcnym.unlp.edu.ar</u>; 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
Phiomys andrewsi	000000010	2001010000	0110
Deseadomys arambourgi	1101000100	00011[01]0000	1110
Platypittamys brachyodon	000000100	0000[01]00000	1110
Migraveramus beatus	11000???11	0110[01]1000?	0000
Galileomys antelucanus	101001[01]001	1001100101	1110
Acaremys murinus	101001[01]000	0000110101	1110
Sciamys principalis	2110021001	1000011101	1110
Protacaremys prior	10001??1??	???0011000	0110
Chasichimys bonaerense	31111??0??	???221101?	2??1
Chasicomys octodontiforme	31101??0??	???221?011	2??1
Octomys mimax	41111??0??	???2212011	0??1
Massoiamys obliquus	21111??0??	???2210010	2??0
Eumysops laeviplicatus	21001??0??	???2210010	2??0
Stichomys regularis	21011??1??	???[12][12]10000	20?0
Changquin woodi	2110??????	???00101??	0110
Draconomys verai	01000??111	0111110100	0000
Sallamys pascuali	100000[01]100	0010010000	1000
Prospaniomys priscus	11011??0??	???1100000	0000
Spaniomys riparius	21011??0??	???0001000	0000
Willidewu steparius	100000010	0111111000	2000