



<http://dx.doi.org/10.11646/zootaxa.3887.1.6>

<http://zoobank.org/urn:lsid:zoobank.org:pub:CE1B3537-AFDC-4FC9-B642-2AA078D0C3B9>

The correct name of the endemic *Dasypus* (Cingulata: Dasypodidae) from northwestern Argentina

ANDERSON FEIJÓ^{1,2,3} & PEDRO CORDEIRO-ESTRELA^{1,2}

¹Programa de Pós-Graduação em Ciências Biológicas, Centro de Ciências Exatas e da Natureza, Universidade Federal da Paraíba, João Pessoa, Paraíba, Brazil. CEP 58059-900

²Laboratório de Mamíferos, Departamento de Sistemática e Ecologia, Centro de Ciências Exatas e da Natureza, Universidade Federal da Paraíba, João Pessoa, Paraíba, Brazil. CEP 58059-900

³Corresponding author. E-mail: andekson@gmail.com

Abstract

We show that *Dasypus mazzai* Yepes 1933 is a senior synonym of *Dasypus yepesi* Vizcaino 1995. We present morphological evidence that the holotype of *D. mazzai* is not a juvenile of *Dasypus novemcinctus* or any other species of this genus, but a distinct endemic species from northwestern Argentina undistinguishable from *D. yepesi*. Therefore, the correct name for the long-nosed armadillo of intermediate size occurring in the Argentinean provinces of Jujuy and Salta is *Dasypus mazzai* Yepes 1933.

Key words: *Dasypus mazzai*, *Dasypus yepesi*, senior synonym, Yepes

Introduction

The genus *Dasypus* Linnaeus 1758 is the most diverse and widely distributed among living Xenarthra, encompassing a large area from the center of Argentina to the United States (Wetzel *et al.* 2007). Currently, there are seven recognized species: *Dasypus novemcinctus* Linnaeus 1758, *Dasypus septemcinctus* Linnaeus 1758, *Dasypus hybridus* (Desmarest 1804), *Dasypus pilosus* (Fitzinger 1856), *Dasypus kappleri* Krauss 1862, *Dasypus sabanicola* Mondolfi 1967 and *Dasypus yepesi* Vizcaino 1995. The last one is endemic to northwestern Argentina with confirmed records restricted to the provinces of Salta and Jujuy (Yepes 1933; Vizcaino 1995; Diaz *et al.* 2000).

The description of *D. yepesi* was done amidst a controversial taxonomic history. Originally, Yepes (1933) described a new species of the genus *Dasypus*, which he named *Dasypus mazzai*, based on two specimens collected in “Tabacal, departamento Orán, Provincia de Salta” in northwestern Argentina. The holotype (MACN 31.273) designated by Yepes (1933: 226) consists of a complete carapace with cephalic shield and tail, a skull and the postcranial skeleton, while the paratype, from the same locality is a mounted specimen (MACN 13.222, number given posteriorly to the description). The controversy begins when Hamlett (1939) reexamined the type material, and attributed, without any justification, the holotype of *D. mazzai* to a specimen of *D. novemcinctus*. Conversely, he acknowledged the paratype of *D. mazzai* an undescribed species and highlighted the following diagnostic character states: (1) the rounded upper edge of the cephalic shield, with absolutely no indication of a separate occipital lobe, and (2) the hexagonal scale-pattern in the central, dorsal third of both scapular and pelvic shields. Besides these, Hamlett (1939) provided a unique combination of character states exclusive to the paratype of *D. mazzai*: seven movable bands, long ears, the dental formula and scale counts similar to *D. novemcinctus* and *D. kappleri*, and the same body proportions of *D. hybridus* (Hamlett 1939: 336).

The latest revision of *Dasypus* (Wetzel & Mondolfi 1979) sheds more controversy in the taxonomic history of *D. mazzai*. Firstly, they agree with Hamlett (1939) in that the holotype of *D. mazzai* is actually a specimen of *D. novemcinctus*. Second, complementing Hamlett (1939), they justify this identification based on the original

Reference

- Ciancio, M.R., Castro, M.C., Galliari, F.C., Carlini, A.A. & Asher, R.J. (2012) Evolutionary implications of dental eruption in *Dasypus* (Xenarthra). *Journal of Mammalian Evolution*, 19, 1–8.
<http://dx.doi.org/10.1007/s10914-011-9177-7>
- Desmarest, A.G. (1804) Tableau méthodique des mammifères. In Tableaux méthodiques d'histoire naturelle. In: *Nouveau dictionnaire d'histoire naturelle, appliquée aux arts, principalement à l'agriculture, à l'économie rurale et domestique: Par une société de naturalistes et d'agriculteurs: Avec des figures tirées des trois règnes de la nature*. Vol. 24. Deterville, Paris, pp. 5–38.
- Diaz, M.M., Braun, J.K., Mares, M.A. & Barquez, R.M. (2000) An update of the taxonomy, systematics, and distribution of the mammals of salta province, Argentina. *Occasional Papers, Sam Noble Oklahoma Museum of Natural History*, 10, 1–52.
- Feijó, A. & Langguth, A. (2013) Mamíferos de Médio e Grande Porte do Nordeste do Brasil: Distribuição e Taxonomia, com descrição de novas espécies. *Revista Nordestina de Biologia*, 22 (1/2), 3–227.
- Fitzinger, L.J. (1856) Versamml. Deutscher Naturfors. *Arzte, Wien, Tageblatt*, 32, 123.
- Hamlett, G.W.D. (1939) Identity of *Dasypus septemcinctus* Linnaeus with notes on some related species. *Journal of Mammalogy*, 20, 328–336.
<http://dx.doi.org/10.2307/1374259>
- Krauss, F. (1862) Ueber ein neues Gürtelthier aus Surinam. *Archiv für Naturgeschichte*, 28 (1), 19–34.
- Linnaeus, C. (1758) *Systema naturae per regna tria naturae, secundum classes, ordines, genera, species, cum characteribus, differentiis, synonymis, locis. Tomus I*. Editio decima, reformata, Holmiæ. (Salvius), 824 pp.
<http://dx.doi.org/10.5962/bhl.title.542>
- Mondolfi, E. (1967) Descripción de un nuevo armadillo del género *Dasypus* de Venezuela (Mammalia-Edentata). *Memoria de la Sociedad de Ciencias Naturales La Salle*, 27, 149–67.
- R Core Team (2014) R: A language and environment for statistical computing. R Foundation for Statistical Computing, Vienna, Austria. Available from: <http://www.R-project.org/> (accessed 28 september 2014)
- Stangl, F.B. Jr., Beauchamp, S.L. & Konermann, N.G. (1995) Cranial and dental variation in the nine-banded armadillo, *Dasypus novemcinctus*, from Texas and Oklahoma. *Texas Journal of Science*, 47, 89–100.
- Vaccaro, O.B. & Piantanida, M.J. (1998) Type specimens of recent mammals housed in national collections of Argentina. *Iheringia, Série Zoologia*, 85, 67–73.
- Vizcaíno, S.F. (1995) Identificación específica de las "mulitas", género *Dasypus* L. (Mammalia Dasypodidae), del noroeste argentino. *Mastozoología Neotropical*, 2 (1), 5–13.
- Wetzel, R.M. & Mondolfi, E. (1979) The subgenera and species of long-nosed armadillos, genus *Dasypus* L. In: Eisenberg, J.F. (Ed.), *Vertebrate Ecology in the Northern Neotropics*. Smithsonian Institution Press, Washington, pp. 43–63.
- Wetzel, R.M., Gardner, A.L., Redford, K.H. & Eisenberg, J.F. (2007) Order Cingulata. In: Gardner, A.L. (Ed.), *Mammals of South America. Vol. 1. Marsupials, Xenarthrans, Shrews and Bats*. University of Chicago Press, Chicago, pp. 128–156.
- Yepes, J. (1933) Una especie nueva de "mulita" (Dasipodinae) para el norte argentino. *Physis*, 11, 225–232.

APPENDIX 1. Specimens examined in the present study.

Dasypus septemcinctus: MACN 3323; MHNCI 3352; MN 10062; MN 10091; MN 2370; MN 23997; MN 24005; MN 24007; MN 24022; MN 24094; MN 51642; MN 51652; MN 55053; MN 63454; MNHNP 3365; UNB 1475.

Dasypus yepesi: CML 1809; CML 4549; MLP 10.II.99.6; MLP 30.III.90.2; MLP 30.III.90.3; MLP 30.III.90.4; MLP 30.III.90.5; MLP 30.III.90.7; MLP 30.III.90.8 (holotype); MLP 30.III.90.I.

Dasypus mazzai: MACN 13222 (paratype); MACN 31.273 (holotype).

Dasypus hybridus: MN 24095; MACN 13220; MACN 13900; MACN 17310; MACN 3017; MACN 3018; MACN 33176; MACN 36980; MACN 54156; MBUCV 2905; MCNU 2513; MLP 1.I.03.65; MLP 1.I.03.71; MLP 16. IX.35.48; MLP 16. IX.35.53; MLP 16. IX.35.54; MLP 16. IX.35.55; MLP 1979; MLP 2.III.00.15; MLP 4.VIII.98.10; MLP 5.IX.97.3; MLP 868; MN 24006; MNHN 2675; MNHN 2761; MNHN 3187; MNHN 3188; MNHN 4713; MNHN 688; ZVCM 1274; ZVCM 2010; ZVCM 5572; ZVCM 845.

Dasypus novemcinctus: CBF 1255; CBF 1462; CBF 1503; CBF 1505; CBF 1507; CBF 1521; CBF 1526; CBF 1538; CBF 1539; CBF 1540; CBF 1544; CBF 1545; CBF 1547; CBF 1548; CBF 1550; CBF 1551; CBF 1552; CBF 1553; CBF 1554; CBF 1555; CBF 1559; CBF 1564; CBF 1567; CBF 1568; CBF 1569; CBF 1570; CBF 1571; CBF 1572; CBF 1573; CBF 1575; CBF 1610; CBF 1922; CBF 1923; CBF 1924; CBF 1926; CBF 1927; CBF 1928; CBF 1929; CBF 1930; CBF 1931; CBF 1933; CBF 1934; CBF 1939; CBF 1941; CBF 1944; CBF 1945; CBF 1946; CBF 1947; CBF 1948; CBF 1950; CBF 1950; CBF 1951; CBF 1952; CBF 3847; CBF 3944; CBF 3945; CBF 3949; CBF 3961; CBF 3962; CBF 3963; CBF 3964; CBF 3965; CBF 3967; CBF 3969; CBF 3970; CBF 3971; CBF 3973; CBF 3976; CBF 3977; CBF 4080; CBF 4084; CBF 4089; CBF 4093; CBF 415; CBF 416; CBF 419; CBF 420; CBF 424; CML 315; CML 449; EBRG 1034; EBRG 1114; EBRG 1115; EBRG 1116; EBRG 15788; EBRG 17584; EBRG 20223; EBRG 2174; EBRG 28782; EBRG 29404; EBRG 29788; EBRG 782; EBRG 27567; FURB 12077; FURB 18225; FURB 20069; FURB 20079; FURB 6410; FURB 6966;