

Redescription, shell variability and geographic distribution of *Plagiodontes dentatus* (Wood, 1828) (Gastropoda: Orthalicidae: Odonostominae) from Uruguay and Argentina

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Abstract

Plagiodontes dentatus (Wood, 1828) is the type species of a South American genus including eight named species that show a high degree of local endemism. Due to some misidentifications with *P. multiplicatus* (Doering, 1874) and *P. daedaleus* (Deshayes, 1851), *P. dentatus* has been cited as inhabiting two disjunct areas with quite different ecological conditions. In this paper the identity of this morphospecies is clarified through a study of shell sculpture and apertural teeth data, and a comparison with the smaller adult specimens (<25 mm long) of its closest species, *P. patagonicus* (d'Orbigny, 1835) and *P. multiplicatus*, i.e., the only shells to which *P. dentatus* could have been confounded. A statistical analysis of shell variability revealed that, beyond the qualitative diagnostic characters, there are significantly different shell proportions that also define *P. dentatus*. The distribution of *P. dentatus* over two disjunct areas is not supported, its confirmed geographic range being restricted to the Oriental Republic of Uruguay and the Argentine provinces of Entre Ríos and northeastern Buenos Aires. An intraspecific multivariate analysis upholds the opinion that any sub-specific discrimination is unwarranted.

Key words: *Plagiodontes patagonicus*; *Plagiodontes multiplicatus*; shell morphology; classification functions; South America

Introduction

Plagiodontes Doering, 1876 is an endemic genus in southern South America. It includes eight named species (Breure 1974, Cazzaniga & Fernández-Canigia 1985, Richardson 1993). Its distribution area covers three disjunct regions in Argentina and Uruguay on and around three mountain systems (Fig. 1) separated from each other by extensive flat grasslands (*pampas*) where these snails are mostly absent (Parodiz 1942). Only *P. dentatus* and *P. patagonicus* (d'Orbigny, 1835) are known to spread over the grasslands >100 km far from the mountains.