

## Balance of the Brazilian molluscs “officially recognized” as threatened of extinction, with special emphasis in species occurring in the Southern Region

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**Abstract.** A critical review and evaluation of content of the recent “Official List of Brazilian Mollusc Species Threatened with Extinction” in force is presented, based on analysis of the information corresponding to eight of the 23 non-marine/continental and specific marine species included in it, who occurring in the Southern Region of the country within the geographical space of the States of Santa Catarina and Rio Grande do Sul.

**Keywords:** Native molluscs, Species threatened with extinction, Official Brazilian list, Southern Region, Critical evaluation.

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The most recent new Official List of Brazilian Fauna Threatened Extinction - Version 2014 (ICMBio, 2015), only includes a total of 23 species of molluscs, including six marine and 17 continental/non-marine forms (eight terrestrial and nine limnic).

Giving continuity to “critical analysis” of said material previously started (Agudo-Padrón, 2015b), we spent consider the following species with verified occurrence in the states of Santa Catarina and Rio Grande do Sul States: a total of only eight species (two marine and six non-marine/continental forms, one terrestrial and five freshwater) (Agudo-Padrón, 2015b).

Still, the “technical justifications” that led to the inclusion of such species in the official list are available in the specific

literature of the moment (Agudo-Padrón 2015b; Santos et al., 2015):

### 1. Marine species (one bivalve and one gastropod)

*Euvola ziczac* (Linnaeus, 1758)  
Without comments to be added.

*Olivancillaria contortuplicata*  
(Reeve, 1850)

According to information contained in the list, the species “it’s geographically restricted in Brazil, occurring ‘only’ on sandy beaches in Rio Grande do Sul”, when in fact is present along the coast of the neighbor state of Santa Catarina, between the “Enseada da Pinheira” and the “Laguna” Region, including the North sector of the “Farol de Santa Marta”, with

special emphasis on “Garopaba”, where even has been widely used in the development of handicrafts.

## 2. Terrestrial species (one gastropod - slug)

*Phyllocaulis renschi* Thomé, 1965  
Without comments to be added.

## 3. Freshwater species (two bivalves and three gastropod)

*Diplodon (Rhipidodonta) koseritzii* (Clessin, 1888)

According to information contained in the list, the species “is endemic in Brazil, ‘restricted’ to the State of Rio Grande do Sul, occurring punctually in ‘Lago Guaíba’ (Guaíba Lake) and the lower courses of the Rivers ‘Jacuí’ and ‘dos Sinos’”, when in fact is present in the Upper Uruguay River Basin region, on the neighbor state of Santa Catarina (Agudo-Padrón, 2012).

*Lymnaea rupestris* Paraense, 1982  
Without comments to be added.

*Mycetopoda legumen* (Martens, 1888)

According to information contained in the list, the species “occurs in the South Atlantic Basins in Rio Grande do Sul, especially in the ‘Laguna dos Patos’ (Patos Lagoon) (in your less saline portion) and the ‘Lago Guaíba’ (Guaíba lake), in the section average and Lower of the Uruguay River (Rio Grande do Sul) and in the Basin of the River ‘La Plata’”, when in fact is demonstrably present on the neighbor State of Santa Catarina, in the watershed of the Upper Uruguay River (western region) and in the Atlantic Slope, Municipality of “Timbé do Sul” (Agudo-Padrón, 2008, 2011, 2014).

*Physa marmorata* Guilding, 1828

A “cosmopolitan” species, which already leaves “questionable” the situation of its consideration and inclusion in the list (justified only by “regional punctual data”!). As recognized in the list “its type locality is the ‘Saint Vincent Island’ in the Caribbean, with multiple records in Central America and South America (in Brazil was

found in the States of Roraima, Tocantins, Maranhão, Rio Grande do Norte, Bahia, Mato Grosso, Goiás, Minas Gerais, Rio de Janeiro, São Paulo, Paraná and Santa Catarina)”, when in fact is demonstrably present on the neighbor State of Rio Grande do Sul, where comes to represent a potential “agricultural pest” in rice fields (Agudo-Padrón et al., 2009, 2010).

*Pomacea sordida* (Swainson, 1823)

According to information contained in the list, the species “is endemic of the Southeastern State of Rio de Janeiro, with records for 13 of your municipalities”, when in fact is demonstrably present on the Southern State of Santa Catarina, in the Upper “Mampituba” River Basin, in “Joinville” Municipal District (Cubatão River Basin) and the “Itajaí” River Basin Valley Region (Agudo-Padrón, 2008, 2010, 2011, 2014; Agudo-Padrón et al., 2014).

## Conclusions

Considering the “specific” information previously reviewed, and taking also into account previous regional assessments generated before the formal publication of the “Official List” (Agudo-Padrón, 2015a), it can be concluded that it should not be considered as a “representative tool” on the situation/reality of knowledge and conservation of mollusc fauna in Brazil. The informations contained in it have yet to be urgent, deep and carefully reassessed.

For now, that list should only be considered in practice as yet another clear demonstration of worrying and precarious situation that currently this representatives of the fauna are facing in the vast territory of Brazil.

## Conflict of interest statement

Authors declare that they have no conflict of interests.

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