

# AURIS INORNATA, A NEW BULIMULIDAE FROM ESPÍRITO SANTO, BRAZIL (GASTROPODA, PULMONATA)

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*Abstract* *Auris inornata* is described based on samples from Guriri, São Mateus, Espírito Santo, Brazil. The new species is compared to its congeners, being mainly characterized by its small size and less sculptured shell. A brief discussion about all the species of the genus is also performed. urn:lsid:zoobank.org:pub:F26B9D94-B39C-4098-85D7-CBCF3246113A

*Key words* new species, Bulimulidae, Restinga bioma, Pulmonata

## INTRODUCTION

The genus *Auris* Spix in Wagner, 1827, has as type species *Auris melastoma* Spix in Wagner, 1827 (monotypy) (= *Bulimus melanostomus* Wagner, 1827; presently *Auris melanostoma*) (Cowie *et al.*, 2004). The genus is endemic from NE and SE Brazil, with a single, dubious species reported to Peru's Amazonia (see discussion) and comprises 10 valid species. As all of them were reported by Simone (2006), the detection of new species became relatively easy.

An undescribed species was collected in São Mateus region, northern of Espírito Santo, Brazil, remarkable by its relatively small size and shell sculpture simplicity. It is formally described herein.

## SYSTEMATICS

*Auris inornata* new species  
(Figs 1–8)

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*Holotype* MZSP 152258.

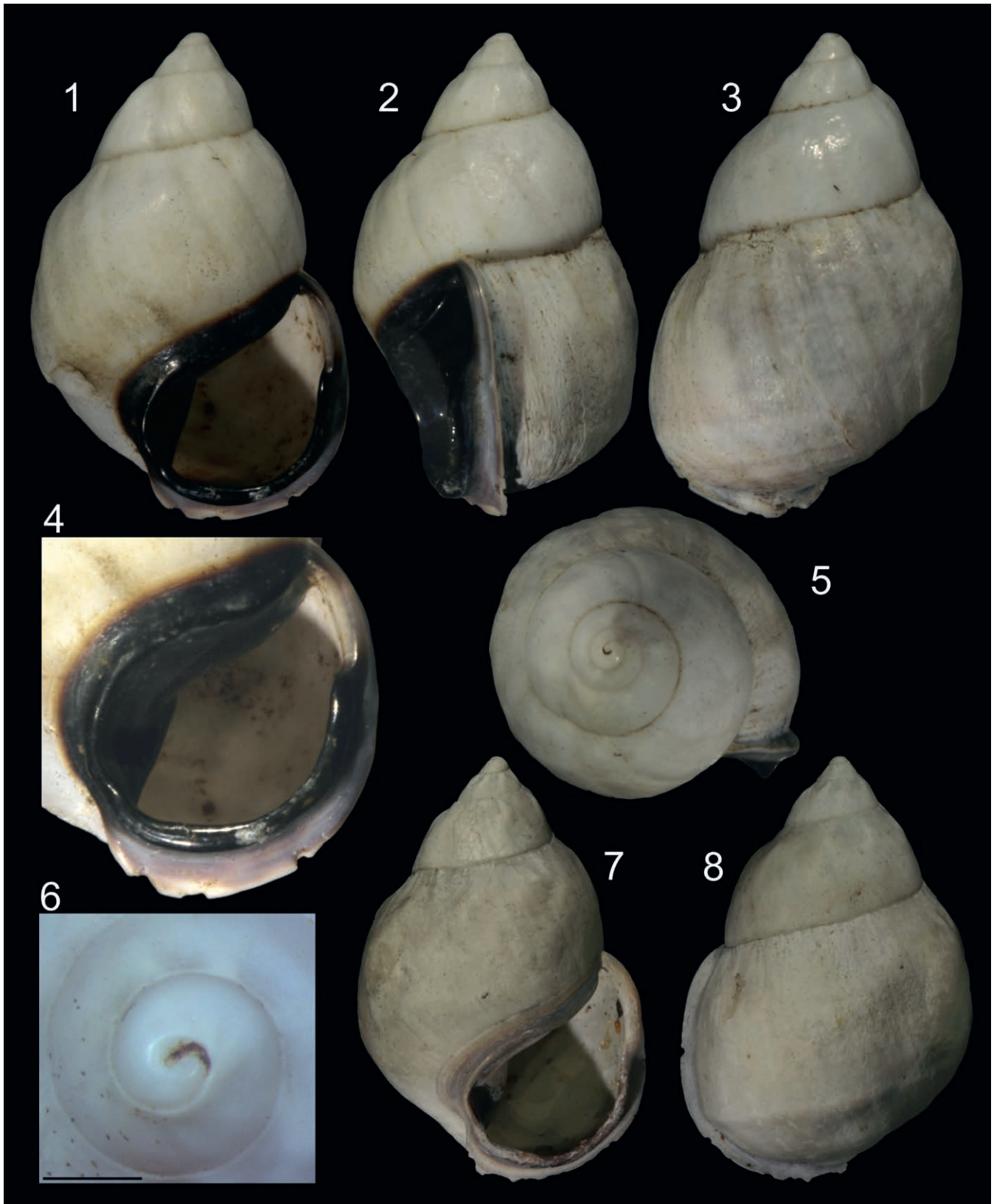
*Paratypes* MZSP 131290, 6 shells (2 broken) from type locality.

*Type locality* BRAZIL. **Espírito Santo**; São Mateus, Guriri, 18°37'50"S 39°44'10"W, Restinga bioma (Amaral & Santos col., 4.viii.2016).

*Etymology* the specific epithet is from Latin, meaning unadorned, an allusion to the shell sculpture simplicity.

*Diagnosis* Shell about 30mm, peristome double, black. Sculpture weak, except for scanty sub-sutural undulations fainting in last whorl. Weak inferior carina.

*Description* Shell (Figs 1–8). Shell about 30mm; bluntly conic; ~1.5 times longer than wide. Rounded dorso-ventral profile (Fig. 5). Spire angle ~60°; 4.5–5 whorls uniformly growing. Color whitish cream with black peristome inner edge. Protoconch smooth, of 1 whorl, 1.5mm wide; almost planispiral, border with teleoconch clear (Fig. 6); occupying ~15% of superior area (Fig. 5), 5% of shell length. Teleoconch of 4–4.5 whorls, surface uniformly micro-malleated, smooth (Figs 2–3, 7–8), with growth lines and axial irregular weak undulations. Two first whorls with well-spaced axial obsolete threads, being slightly more evident in subsutural region, ~8 per whorl; threads gradually disappearing along penultimate whorl. Last whorl mostly of rounded profile, possessing obsolete pair of equidistant spiral carinae (Figs 1–3, 7–8); inferior carina slightly more evident. Suture marked, angle ~150°. Peristome slightly expanded outwards, with double edges, outer edge white, lying perpendicular to shell surface, of relative uniform cutting edge; inner edge in same growth direction, black, relatively tall and thick, except for wide notch in superior quarter of outer lip,



**Figures 1–8** *Auris inornata* n. sp. type shells: 1–6) holotype MZSP 152258 (L 30.4mm); 1) frontal view; 2) right view; 3) dorsal view, 4) detail of aperture, frontal-slightly inferior view; 5) apical view; 6) detail of apex, scale=1mm; 7–8) paratype MZSP 131290 (L 32.5mm), frontal and dorsal views.

flanked by rounded flaps; notch with paler pigmentation (Figs 1, 4, 7). Outer lip rounded; inner lip strongly concave, inferior half straight, superior half slightly convex; black pigment extending along columellar surface. Peristome occupying ~1/2 shell length, ~60% shell width; inner lip on middle shell longitudinal axis. No umbilicus.

*Distribution* So far restricted to the type locality.

*Habitat* Restinga. The Restinga bioma of Guriri is covered by low tree vegetation, herbaceous vegetation and grasses (Teixeira & Giovaneli, 1999). The soil consists of alluvial sandy deposits. The region climate is hot and humid with a dry season in autumn-winter and a rainy season in spring-summer. The Restinga vegetation plays an important role in stabilizing the substrate in these environments, protecting it from the action of the wind, which constitutes an important modifying agent of the landscape and maintaining the natural drainage, as well as preserving the resident fauna and migratory.

*Measurements* (in mm). Holotype MZSP 152258: 30.4 by 19.4 (Figs 1–5); Paratype MZSP 131290: 32.5 by 21.8 (Figs 7–8).

*Material examined* Types.

## DISCUSSION

The species of the genus *Auris* can be clearly divided into two groups (subgenera?). One of them are the species in which the shell has no sculpture in the two last whorls, the profile is slightly more elongated, in peristome the callus tends to be darker than the lips, and the inferior region of outer lip tends to be anteriorly projected. In this first group the peristome does not have double edge. The following species belong to this group: *A. bernardi* (Pfeiffer, 1856); *A. brachyplax* Pilsbry, 1896; *A. chrysostoma* (Moricand, 1836); *A. egregia* (Jay, 1836); *A. illheocola* (Moricand, 1836); *A. melastoma* (Swainson, 1820) (Simone, 2006: 130–132).

The second *Auris* group the shell has strong axial or oblique threads in last whorls; the profile is slightly squared; the peristome has dark pigmentation in inner edge of the peristome as much as the callus; the peristome is not anteriorly projected, but has a wide notch in the superior region of the peristome. In this second group, the

peristome is double, bilabiate. The following species are in it: *Auris bilabiata* (Broderip & Sowerby, 1829); *A. melanostoma* (Wagner, 1827) (the type species); and *A. nigrilabris* Pilsbry, 1896.

*Auris inornata* clearly belongs to the second group, as it has all the distinctive characteristics, mainly the double peristome. It needs to be compared only to species of this group. The more similar species is *A. nigrilabris*, in such *A. inornata* differs in being smaller, in having an inferior carina less evident, a suture slightly deeper, in lacking axial sculpture in last whorl, and by having a more developed superior notch in outer lip (*A. nigrilabris* almost does not have this notch). *A. inornata* further differ from *A. bilabiata* and from *A. melanostoma* in being smaller, lacking so developed axial/oblique sculpture in the last two whorls, and in lacking so developed inferior carina in the last whorl.

An aberrant species attributed to *Auris* has been *A. icterostoma* (Martens, 1901) (Breure, 1979, Simone, 2006: 131), from Peru's Amazon region. The species has a micro-sculptured shell, no callus, simple lip mostly projected anteriorly. These characters are not found in any *Auris*, but are common features of *Drymaeus* Albers, 1850, a more widespread genus in South America. If that species was removed to *Drymaeus*, *Auris* becomes a genus endemic from central and coastal areas of Brazil.

The Restinga environment in Brazil, is denominated "Permanent Preservation Area (APP), throughout Brazilian coast, and the ecological relevance is noted for being exactly a transition area between the ecosystem present on the beach strip, which contains a pronounced microfauna and little or no vegetation formation. For this species, according to the IUCN criteria, the determination of the of species extinction risk is analyzed and combined, gathering information about population, geographic distribution, species characteristics that may interfere in response to environment changes, threats that may affect it and existing conservation measures. Thus, the importance of describing new species.

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