



Two new species of *Aclis* (Mollusca: Gastropoda: Aclididae) from the continental slope of northeast Brazil

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Abstract

Two new species of *Aclis* Lovén, 1846 are described from the continental slope of northeast Brazil. *Aclis macrostoma* n. sp. is recorded off the state of Rio Grande do Norte at depths ranging from 375 to 510 meters. *Aclis watsoni* n. sp. was dredged off the state of Sergipe at depths ranging from 365 to 510 meters. There are no similar species along the Brazilian coast. *Aclis watsoni* is similar to *Aclis angulata* Smith, 1890, *Aclis trilineata* Watson, 1897, *Aclis supranitida* (Wood, 1842) and *Aclis ascaris* (Turton, 1819) due to the presence of spiral keels and/or indication of a subsutural ramp. *Aclis macrostoma* is similar to *Discaclis canariensis* Moolenbeek & Warén, 1987, *Aclis attenuans* Jeffreys, 1883 and *Aclis gulsonae* (Clark, 1850) regarding its circular aperture and dilatation of the peristome, with a non-thickened outer lip. The latter two species are much more slender.

Key words: *Aclis sarissa*, Caenogastropoda, deep sea, Rio Grande do Norte, Sergipe, Brazil

Introduction

Aclididae Sars, 1878 is a small family of rare marine gastropods defined by the following combination of conchological characters: shell with small or microscopic dimensions, fragile, thin, translucent or white, usually with a high spire, slender, elongate-ovate to turreted and many post-nuclear whorls (Bartsch 1947; Fretter & Graham 1982; Diaz & Puyana 1994; Rios 1994; Bandel 2005), generally with rounded or angulated periphery separated by a well-impressed suture (Bartsch 1947). The protoconch is relatively wide, bulbous and flat on top. The aperture is commonly oval and the umbilicus is narrow (Abbott 1974; Rios 1994). Aclididae are distributed in diverse marine regions throughout the world (Abbott 1974; Bartsch 1947), with the greatest species richness living along the coast (Albanesi *et al.* 1969) and within a bathymetric range of 100 to 500 m (Verrill 1880, 1882; Bartsch 1911; Dall 1927). This family is represented by various heterogeneous groups (Bartsch 1947) that are not always confirmed as legitimate members (Moolenbeek & Warén 1987).

The dominant genus is *Aclis* Lovén 1846, which can be recognized by the slender or broader form, usually sculptured by a varied number of strong spiral keels and by the strong expansion of the peristome, especially of the outer lip, with the lower part of the aperture being drawn out towards the center of the shell (Bouchet & Warén 1986: 302–303). An evaluation of the number of acclidid genera for the Atlantic is difficult because supraspecific systematics are as yet not well understood. Some very similar genera are classified within the Aclididae, whereas others are regarded as Eulimidae (Faber 1990: 111). Furthermore, few materials are available for anatomical investigations (Bouchet & Warén 1986). At present, nineteen species of *Aclis* are currently reported for the Western Atlantic (Rosenberg 2005).