## The genus Pictetia Uhlig from the Albian of Patagonia and Antarctica

## Francisco A. Medina and Alberto C. Riccardi

With 4 figures

**Abstract:** *Pictetia* representatives from southern Patagonia and James Ross Island, Antarctica, are described. They are represented by *Pictetia astieriana* (D'Orbigny) and *Pictetia ovalis* Collignon, the first coming from the *Pictetia* Zone of Antarctica (≈ Tardefurcata Zone) and the second from the *Aioloceras rollerii* Zone of Patagonia (≈ Mammillatum Standard Superzone) and from an unknown level of Antarctica.

Key words: Ammonoidea, Pictetia, Albian, Patagonia, Antarctica.

## 1. Introduction

Pictetia is a genus known from the Lower to Middle Albian of France, England, Switzerland, Austria, Kazakhstan, Madagascar, South Africa, Tunisia, California, and Japan. It is represented by few species based on isolated and/or fragmentary specimens with incompletely known body chamber. Intraspecific morphological variation, sexual dimorphism, and taxonomic significance of most shell features are therefore poorly known. This was also the case in Patagonia and Antarctica, from where only a few specimens have been found and mentioned (RICCARDI & MEDINA 2002, 2008; MEDINA & RICCARDI 2005, 2006), although marine facies of this age are exposed in a large area of the Austral Basin of southern Patagonia and in James Ross island of Antarctica.

We have now studied those specimens to clarify the systematics and stratigraphy of *Pictetia* in Patagonia and Antarctica. Here is our stratigraphic summary of the area, with description of the sections from which the fauna was collected, as well as the systematics.

## 2. Fossil localities and stratigraphy

**Patagonia.** – The Magallanes or Austral Basin is located on the eastern border of the Patagonian Cordillera, south of 45° S (Fig. 1). The older units recognized in this area include Paleozoic sedimentary and metamorphic rocks and Jurassic volcanics. The basin was filled with chiefly marine, Upper Jurassic to Tertiary sediments (see RICCARDI & ROLLERI 1980). The geology and paleontology of Lago Cardiel, in west-central Santa Cruz Province (Fig. 1) were first investigated by PIATNITZKY (1938) and a summary given by FER-UGLIO (1949). The next major geologic synthesis was by Ramos (1982). Hauterivian-Albian ammonites were described by Leanza (1970), Aguirre Urreta (1985), RICCARDI et al. (1987), RICCARDI & MEDINA (2002), and MEDINA & RICCARDI (2005). The oldest unit represented in the studied area is the Río Mayer Formation, consisting of Aptian dark grey shales with some interbeded sandstones, and is overlain by the Albian shallow marine to continental sandstones and conglomerates of the Piedra Clavada Formation, and Late Cretaceous continental and pyroclastic rocks.