

BIOSTRATIGRAPHY OF UPPER CENOMANIAN–LOWER TURONIAN (CRETACEOUS) INOCERAMID BIVALVES OF THE SERGIPE BASIN, NORTHEASTERN BRAZIL

SEELING, JENS & BENGTON, PETER, Geologisch-Paläontologisches Institut der Universität, Im Neuenheimer Feld 234, D-69120 Heidelberg, Germany.

Inoceramids and ammonites are the stratigraphically most useful macrofossils in the upper Cretaceous. In many regions inoceramids provide an important tool for correlation of the Cenomanian–Turonian boundary. Despite this, little work has so far been done on the taxonomy and the stratigraphic ranges of upper Cenomanian–lower Turonian inoceramids of the Sergipe Basin, the most extensively exposed of the Brazilian South Atlantic basins. In the upper Cenomanian of the basin inoceramids are rare and the group is represented by scarce specimens of the *Inoceramus crippsi* and *Inoceramus pictus* lineages. In contrast, the lower Turonian is characterized by the appearance of species of the genus *Mytiloides*, which in some beds form flood-like occurrences. The Sergipe inoceramids, in particular the lower Turonian *Mytiloides*, are cosmopolitan or at least widely spread taxa. Three uppermost Cenomanian–lowest Turonian inoceramid zones have been defined in the basin. These zones are correlated with inoceramid zonations from other parts of the world, such as the U.S. Western Interior, western Europe and Colombia. The Sergipe inoceramid zonation corresponds well with that of the proposed Global boundary Stratotype Section near Pueblo, Colorado, USA. This is a contribution to IGCP-Project 381 'South Atlantic Mesozoic Correlations'.