

## Planktonic Foraminifera Record of the Mid Albian Sea Level Rise, Upper Magdalena Valley, Colombia

Lizette Leon-Rodriguez

Micropaleontological descriptions and analysis of three sections from a lower Cretaceous unit in southern Colombia named “Tetuán Limestone”, have allowed the comparison between the stratigraphic distribution (range) of planktic foraminifera and ammonites collected from the same samples. This appraisal presents for the first time the recognition and calibration with other fossil groups of two planktic foraminifera interval zones in Colombia: *Ticinella primula* and *Biticinella breggiensis*, with late mid Albian and early late Albian ages respectively.

The “Tetuán Limestone” belongs to a large sedimentary succession that extends along the Upper Magdalena Valley (Huila Department), and is described as intercalations of micritic limestones and micritic concretions of thin to medium thickness, tabular and cuneiform beds with interbedded dark gray, laminated, calcareous claystones with common imprints of ammonites, bivalves and fish.

Presence of marine planktic microfauna within the claystones of the “Tetuán Limestone” immediately above the mainly arenaceous Caballos Formation, which does not contain planktic microfauna, is understood as a marine transgression marker at the end of the mid- Albian.

Slow increase of planktic foraminifera like *Ticinella primula*, *T. aff. albiana*, *T. caronae*, *T. madecassiana*, *T. roberti*, *Biticinella breggiensis*, *Hedbergella delrioensis*, *H. gorbachikae*, *H. simplex*, *Favusella washitensis*, etc. is in contrast to decreasing benthic life through the studied interval, the former suggesting a constant sea level rise, at least up to the late Albian to early Cenomanian. At the same time, planktic foraminifera change from initial trochospiral forms of ticinellids and hedbergellids to predominant subconic, planispiral and robust trochospiral forms of heterohelicids, globigerinelloids and whiteinellids.

The water masses that occupied the accumulation enclosure were mostly warm; nevertheless, abundant and punctual presence of species like *Whiteinella baltica* indicates temporary incursions of cold currents.

Planktic foraminifera associations exhibit greater geographic affinities with those from Mexico and Texas than with the Tethys realm. On the other hand, benthonic foraminifera are very similar to those reported for the Albian in Trinidad.