



***Bolboforma* - an overview**

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The genus *Bolboforma* contains a diverse group of marine, mostly single-chambered enigmatic microfossils (phytoplankton ?) that produced calcitic monocrystalline spheroidal tests and inner cysts with different ornamentation. Globally *Bolboforma* occurs from the late Early Eocene to the Late Pliocene mainly at mid and higher latitudes and have not been recorded in Quaternary to Recent sediments. They are globally represented, but the first and the last occurrence of the genus is spatially diachronous in both hemispheres. *Bolboforma* first occurred in the Southern Hemisphere at the Campbell Plateau (Southwest Pacific) in the Early Eocene at ca 53 Ma and survived there until the latest Miocene (5.6 Ma - Kerguelen Plateau, Southern Indian Ocean). The first occurrence of *Bolboforma* in the Northern Hemisphere is recorded in Upper Eocene sediments (ca 36.5 Ma) at the Labrador Sea (North Atlantic) and its youngest occurrence is observed at the Hatton-Rockall Basin (North Atlantic) in the Late Pliocene at 2.84 Ma. Nineteen *Bolboforma* zones/subzones are presently known. However, not all of them can be identified in both hemispheres. In the Southern Hemisphere the four Paleogene zones and only eight Neogene zones are present, in the Northern Hemisphere one of the Paleogene zones and 14 Neogene zones are identified.

Evolution of surface water masses and their boundaries are linked to the *Bolboforma* distribution, which appears to be broadly bipolar in temperate to cool regions at mid to higher latitudes.