

Foraminiferal taxonomy

Group of experts:

H. Bauch (GEOMAR, planktonic foraminifera)
 J. Schönfeld (GEOMAR, benthic foraminifera)
 A. Holbourn (IFG Kiel, benthic foraminifera)
 W. Kuhnt (IFG Kiel, benthic foraminifera)

Paleoceanographic studies often apply a broad understanding of foraminiferal taxa. However, subtle morphological differences may display genotype variations with profound ecological differences. A sound knowledge of diagnostic features and their variability between different species is therefore essential to interpret their geochemical, paleoecological and paleoceanographic record.

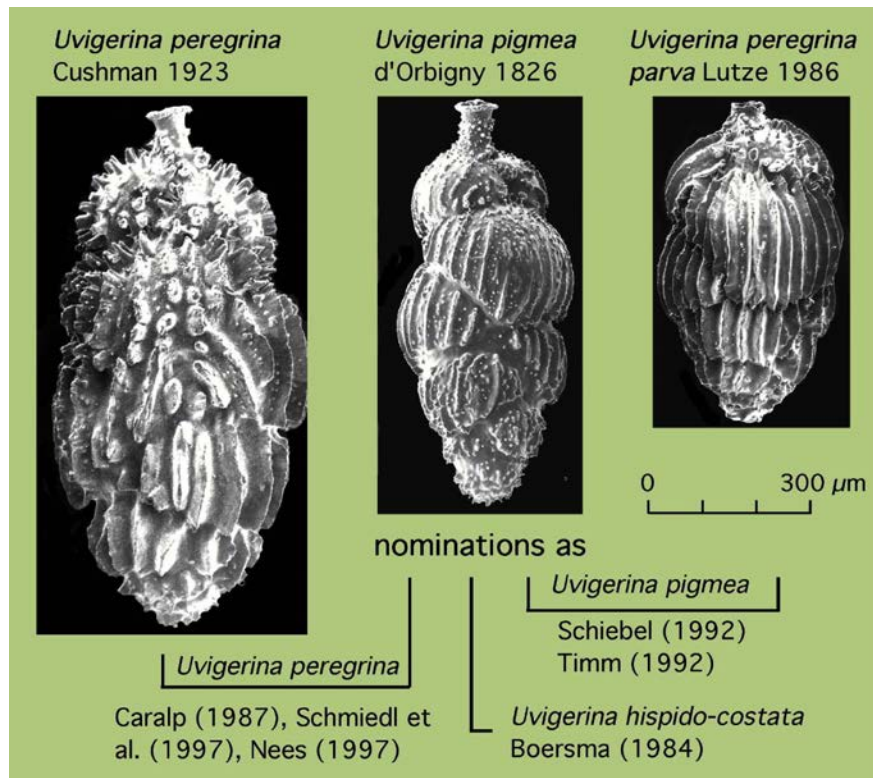


Fig. 1. *Uvigerina* species from the Atlantic were lumped, or nominated differently in the literature. Taxonomic studies revealed the density, dimensions and morphology of costae as discriminative features (Schönfeld, 2006, J Foram Res, 36, 355ff).

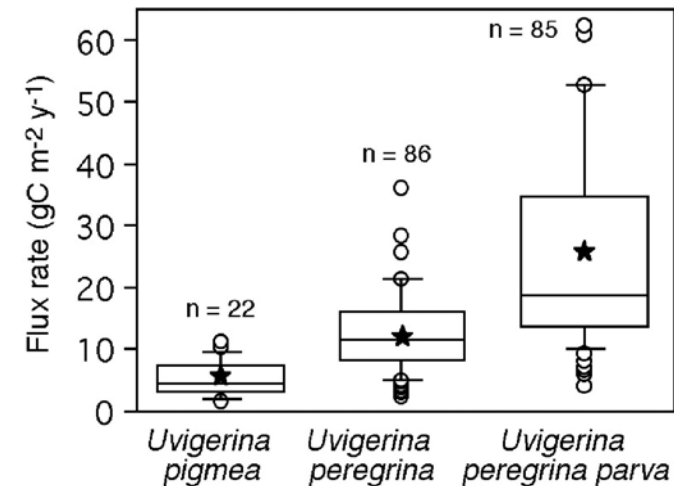


Fig. 2. Frequency distribution of organic carbon flux rates at sites where the species were recorded. They are adapted to a different levels of food supply, which can be applied to the fossil record (Schönfeld and Altenbach, 2005, Mar Micropal, 57, 1ff)