# Foraminiferal taxonomy

**Group of experts:**
H. Bauch (GEOMAR, planktonic foraminifera)
E. Kandiano (GEOMAR, planktonic foraminifera)
J. Schönfeld (GEOMAR, benthic foraminifera)
A. Holbourn (IFG Kiel, benthic foraminifera)
W. Kuhnt (IFG Kiel, benthic foraminifera)
U. Pflaumann (IFG Kiel, planktonic 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.

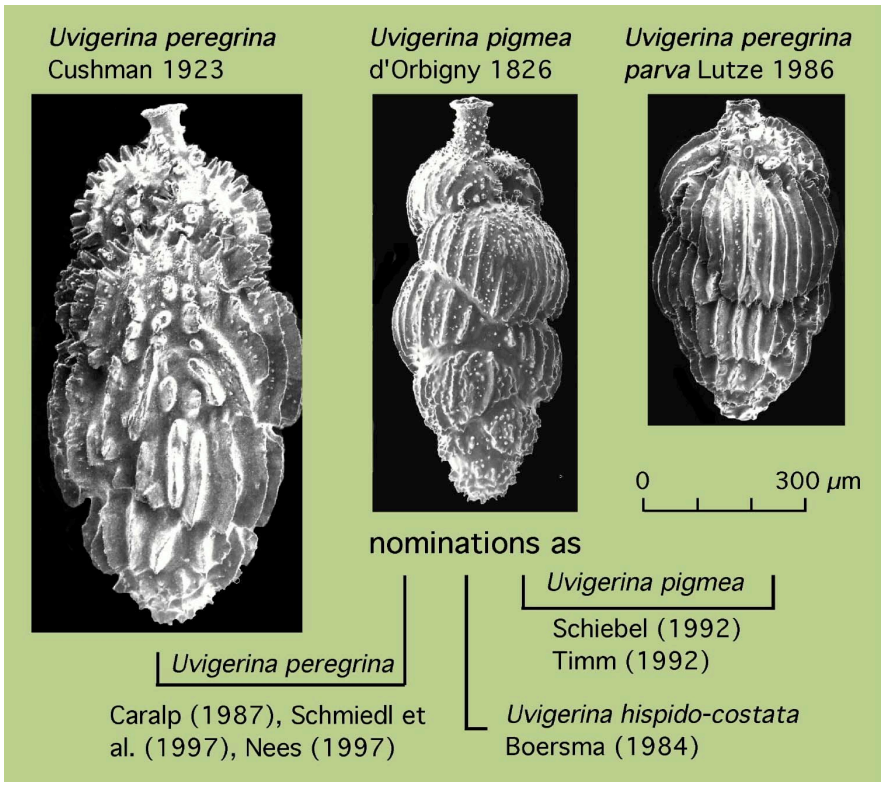


Fig. 1. ***Uvigerina*** species from the Atlantic were lumped, or nominated differently in the literature. Taxonomic studies revealed the density, dimensions and morphology of costae as discriminative features (Schönfeld, 2006, J Foram Res, 36, 355ff).

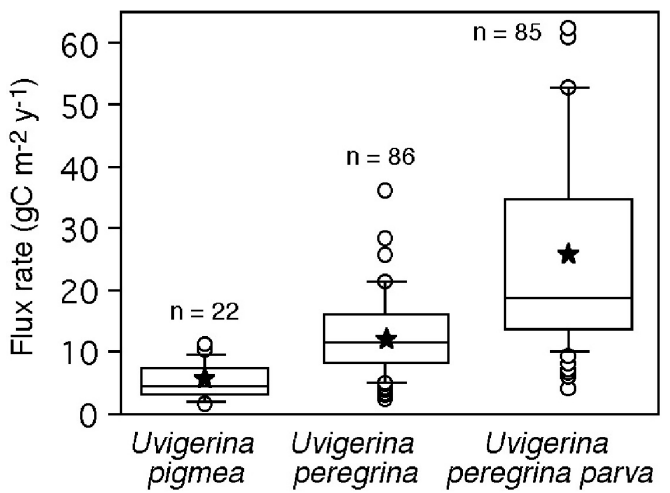


Fig. 2. Frequency distribution of organic **carbon flux rates** at sites where the species were recorded. They are adapted to a different levels of food supply, which can be applied to the fossil record (Schönfeld and Altenbach, 2005, Mar Micropal, 57, 1ff)