

## Genetic populations of planktic foraminifera in the Northwest Pacific

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Molecular phylogenetic analyses have revealed significantly high genetic diversity within planktic foraminifer morphospecies. Molecular studies of planktic foraminifera suggest these genotypes exhibit distinct ecological preferences. Moreover, the differences of their ecology and habitats among genotypes could affect their calcification and potentially affect the test morphology. The distribution patterns of genotypes show correlation to the water mass structure and the phylogeography of these planktic foraminifera genotypes could be affected by the paleoceanic and geographic events. In order to examine the correlation between the divergence and oceanographic /geographical factors, we investigated the genetic variability of planktic foraminifera in the Pacific based on partial small subunit ribosomal RNA gene.