END-PERMIAN EXTINCTION AND TRIASSIC RECOVERY OF RADIOLARIANS

KUWAHARA K. and YAO A.

Radiolarians were severely damaged at the Permian-Triassic boundary, as same as other biota. We have examined the faunal change of Permian-Triassic radiolarians from Japan and China. Radiolarians abundantly occur in the chert sequences in the Mino Terrane, Japan. The reconstructed stratigraphy is Upper Permian chert, P/T boundary black mudstone, Lower Triassic siliceous claystone, and Middle Triassic chert. They were formed under the pelagic and low latitude region of the Panthalassa. The Late Permian assemblages are composed of about 100 species in each horizon. The high diversity was maintained through Late Permian. It seems that radiolarians extinct suddenly at the latest Permian. Radiolarians hardly occur from P/T boundary mudstone and siliceous claystone. Radiolarians show a steady increase of diversity at late Early Triassic. The Permian and Triassic of shallow marine facies are distributed on the Yangzi Platform, China. These strata formed at low latitude area. Late Permian assemblages on the Yangzi Platform show low diversity (30-50 species). The Early Triassic assemblages show low diversity and the Middle Triassic one shows high diversity. The Permian and Triassic radiolarian bearing rocks are distributed in the Changning-Menglian Terrane of Yunnan, China. They are the deposits in the low latitude region of the Paleo-Tethys. Their radiolarian distribution through time is the same as Japan and the Yangzi Platform. The evidence mentioned above indicates the radiolarian extinction event is worldwide.