Ostracoda from the holo-stratotype of the Badenian (Middle Miocene, Central Paratethys, Austria)

The sediments called "Badener Tegel" from the Middle Miocene of the Vienna Basin in Lower Austria have been investigated since the first half of the 19th century and are famous for their molluskan and Ostracodan faunas. BRIEGLEB (1856) described the first ostracod fauna from the surroundings of Baden. Subsequently, ostracod fauna from Baden and Baden-Ssoos (old Weinbergerbrücke), the latter holo-stratotype for the Badenian stage, have been repeatedly studied in detail (BRIEGLEB, 1944; KEMPF & NINK, 1993; JÄNE & VENNEMANN, 2003). Around 20 species are known in literature. The present study on a thin high section of the uppermost part of the holo-stratotype brought around 50 species to light. The section had been sampled in cooperation with the Institute of Paleontology and the Natural History Museum in Vienna in the year 1990 shortly before closing of the bridge.

Main elements of the ostracode fauna and paleoecology

The above shown assemblage indicates an environment at the outer shelf with water depths more than 200 m, which is also confirmed by the rare occurrence of Pseudoscyphora armata f. mediterraneana. Other families which are represented are especially the Hemicyprideidae, Lacophoridae, and Lascombainidae, as well as the genera Cytherideidae, Ostracinae, Paracytherideidae, Pseudoscyphoridae and Xestoleberis. Many of these are supposed to represent an allochthonous fauna which was transported from a shallower water.

Several ostracode species recorded from Baden-Ssoos in the Central Paratethys are stratigraphically restricted to the Badenian stage, such as Aulina anguaria, Isoceratina carinata, Cytherideidae lamellaiidae and Cytherideidae acuminata. Pararithea and catadiotype nannoplankton indicate the lower part of the Upper Laganigera Zone of the Lower Badenian and the lower part of Zone NN8 (Rogi et al., in press).

References


Biogeography


RARE OSTRACODS IN THE VIENNA BASIN

Basionym: Badener Tegel (Middle Miocene).

Holo-stratotype: "Badener Tegel" Layer, Lower Austria (Austria).