

Late Miocene/Pliocene Ostracod Biostratigraphy from South Carpathian Foredeep, Romania (Badislava-Topolog Area)

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The Paratethys epicontinental sea has been an essential paleogeographic feature defining the Eurasian interior since Oligocene. By the end of the Miocene, ongoing tectonic activity in the region determined severe restrictions of the connection of the large former Paratethys sea resulting in the formation of several smaller subbasins: the Pannonian basin, the Dacian basin, the Black Sea and the Caspian Sea. In the western part of the Dacian Basin, the thick and continuous Mio-Pliocene sedimentary successions of the Getic Depression of Romania provide an exceptional opportunity to study the paleoecological changes in the Eastern Paratethys during the time when the Mediterranean and Black Sea experienced important sea level changes related to the Messinian Salinity Crisis. These sedimentary successions were the basis of high-resolution magnetobiostratigraphic studies that allow a detailed correlation to the Geological Time Scale. Here, we present the main characteristics of the ostracod assemblages of the Late Miocene/Pliocene sedimentary succession from Badislava-Topolog section covering the Eastern Paratethys regional Maeotian and Pontian, stages that are, at moment, under ongoing formal stratigraphic definition process. The Mio-Pliocene is exposed in the central part of the Getic Depression, especially Topolog-Arges area, where it reaches up to 500 m in thickness being incorporated into a large monocline structure with 15°-20° plunging to the south. The Upper Maeotian deposits from the area have developed mainly in fluvial-deltaic facies with frequent continental intercalations. The ostracod assemblage is represented by rare fresh water ostracods of *Candona*, *Pseudocandona* and *Ilyocypris* genera, capable to populate unstable environments like flood-plains, lakes and rivers with temporary existence. The scarce Maeotian ostracod fauna from this marginal section differs essentially from the more diversified one of the same age recorded in areas that evolved in basinal conditions. The top of the Maeotian sequence is marked by an erosional surface. The overlying Pontian has a transgressive character being represented only by the Late Pontian (Bosphorian) fining-upward sedimentary sequence that starts with coarse to medium-grained pebbles and sands in the lower part, passing to predominant pelitic deposits to the upper part. These Bosphorian, fine-grained sedimentary rocks provided a rich ostracods fauna represented mainly by species of *Pontoniella*, *Camptocypris*, *Caspiocypris*, *Cypria*, *Amplocypris*, *Bakunella*, *Tyrrhneocythere*, *Amnicythere*, *Loxoconcha* and *Amnicythere*. There are no indications for the presence of the Lower and Middle Pontian (Odessian and Portaferrian) substages in the investigated area, the Upper Pontian deposits discordantly overlying the Upper Maeotian sediments. The transition to the Dacian stage (Lower Pliocene) is more gradual, some of Pontian species passing to the Lower Dacian (Getian) where they are in association with typical Dacian ostracods.