

The evolution of the Sarmatian palaeoclimate in North-Eastern Romania: A palaeobotanical approach

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Abstract

In the present paper, 24 palaeobotanical assemblages were analysed and, by applying the Coexistence Approach method, the MAT (Mean Annual Temperature), MAP (Mean Annual Precipitations), CMT (Coldest Month Mean Temperature) and WMT (Warmest Month Mean Temperature) were calculated for the Sarmatian deposits from the north-east of Romania. The values calculated for the climatic parameters were used to obtain palaeoclimatic maps with their distribution in the studied area. During the Sarmatian period, the climate was warm-temperate, with mean annual temperatures between 12.1–18.8°C, average precipitation of 958–1234 mm, and mean temperatures of the hot season between 23.1–26.9°C. The present study also includes a comparison between the Sarmatian palaeoclimate and the modern climate from the same area.

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