Palaeoclimatic indicators of the Holsteinian Interglacial in Eastern Europe in the light of research in the Polish-Belarusian cross border area

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The study on regional key horizons and Middle-Late Pleistocene climate in a southern part of the Polish-Belarusian cross border area was focused on paleoclimatic reconstruction of the Holsteinian Interglacial (Mazovian in Poland and Alexandrian in Belarus), based mostly on palynological data. Paleoclimatic indicators from the Mazovian Interglacial at Ossówka in Eastern Poland were compared with the ones from the Alexandrian Interglacial at Rechitsa in Western Belarus. Both sites are located at a distance of 80 km from each other. A large number of Taxus pollen acts as a significant paleoclimatic indicator in Eastern Poland. It is one of the most important criteria for assessing a biostratigraphy, indicating a beginning of a mezocratic stage and one of diagnostic features in the Mazovian pollen succession. A lack of Taxus in the initial phase of a mezocratic stage at Rechitsa site confirms a more continental climate than in Eastern Poland. Pollen succession at Rechitsa presents a much higher content of Pinus in the early climatic optimum if compared with Ossówka. Moreover, Pinus peak is less distinct and it is interpreted as a simultaneous cooling. The pollen succession from Rechitsa provides constant continental climatic conditions at that time. There were differences in mean temperatures of the warmest and the coldest month, with higher temperature in July and lower temperature in January in western Belarus than in eastern Poland.

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