12. jarný limnologický seminár

Zborník abstraktov

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Early Holocene assemblages of pollen, chironomids and diatoms, and molecular biomarkers from Batizovské pleso (High Tatras, Slovakia)

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Lakes of glacial origin in the Tatra Mts have witnessed significant environmental changes in the past and these alterations, manifested as changes in biota, were recorded in their sediments. We analysed four biological proxies in the fine laminated siliciclastic deposits of Batizovské pleso that gradually transform to gyttja up-core. The cold stenothermic, ultraoligotrophic and extremely poor chironomid assemblages dominated the 14C-dated sequence between 12,500 to 9,375 cal y. BP. Above the horizon 9,375 cal y. BP, taxa richness increase up-core along with the appearance of thermally plastic taxa. Diatom assemblages remain relatively uniform over the whole period not showing considerable changes. The beginning of the pollen record is dominated by dwarf shrubs and herbs followed by an increase in the proportion of trees. Analysis of biomarkers confirmed the increase in aquatic productivity towards the upper sediment layers. The research was funded by APVV-15-0292 and VEGA 1/0341/1.