

Analysis of subfossil bog oaks found in the North Lithuania

Pukiene, R.

E-mail: rutile_pukiene@fc.vdu.lt

Vytautas Magnus University, laboratory of Dendrochronology, Kaunas, Lithuania

Remnants of sub-fossil oak timbers were discovered in peaty ground in Biržai Forest Enterprise, North Lithuania. Geographical co-ordinates of the site are 56°12'N 24°44'E. Several meters long and up to 0.5 m in diameter oak trunks were embedded in layers of peat deposits in the depth of 2 – 4 m. Radiocarbon dating in the Laboratory of Radioisotopes of Vytautas Magnus University has revealed that these oak trees grew in the first half of the Atlantic period, 7-6.5 millennia BP. Annual radial growth series of the trees were analysed using dendrochronological methods. Having synchronized the growth series of four timbers a 207 years long mean series of the Mid-Holocene oak annual radial growth was compiled. The existence of boggy oak forest type, atypical for the present day vegetation (Vaičys, Karazija 1997), in the territory of Lithuania in prehistoric times has been stated. Chronological coincidence of the period of the investigated sub-fossil bog oak growth with the formation of a well-represented oak horizon in Northwest Germany bogs (Leuschner, Delorme, 1988) hints to inter-regional parallelism in the Holocene vegetation history.

References

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