EVALUATION OF NUTRIENT ABUNDANCE IN PEAT-MUCK SOILS
OF THE TYŚMIENICA RIVER BASIN

Key words: drainage basin of the Tyśmienica River, macroelements, peat-muck soils

Summary

The main factor affecting the value and usefulness of soil is its richness in nutrients. Nutrient abundance is assessed from the content of available phosphorus, potassium and magnesium in the soil, taking into account the soil acidity. Chemical analyses of peat soils were carried out in 2012 in Lublin. Four soil samples were taken from each of the six soil excavations made in drained peatlands in the Tyśmienica River catchment area, Zakleslość Sosnowicka region. The analysed muck-peat soil samples had very acidic and acidic pH < 5.5. In majority of soil profiles the content of phosphorus, potassium and iron in the 5–10 cm soil layer was two times higher than in the deeper layers. Smallest amounts of these elements were found in the layer 35–40 cm. The analysed samples of organic soils had low or medium total nitrogen content ranging from 2 to 3%. Ash content was 15–17% in peat layer, above 25% in muck layer and over 40% in alluvial horizons.