DISSOLVED ORGANIC CARBON CONCENTRATION IN GROUNDWATER UNDER FOREST AND MEADOW ON PEAT SOIL

Key words: dissolved organic carbon (DOC), groundwater, peat-moorsh soils, physical features of soil

Summary

The studies concerned changes of dissolved organic carbon (DOC) in shallow groundwater in Kuwasy Bog, localized in the middle basin of the Biebrza River. Disadvantageous influence of birch forest on physical features of peat-moorsh soil and on the release of dissolved organic carbon is presented in this paper. DOC concentration was determined in groundwater from under forest and meadows. Considerable porosity of soil matter under forest and more intensive drying up of soil were observed. These factors favoured mineralization and the release of dissolved organic compounds. In groundwater under forest mean DOC concentrations exceeded 100 mg C·dm$^{-3}$ and were significantly higher than those in groundwater from under meadows.

Address: mgr inż. J. Jaszczyński, Zakład Doświadczalny Instytutu Melioracji i Użytków Zielonych w Biebrzy, 19-200 Grajewo, tel. +48 (86) 273-40-51, e-mail: zdmiuz_biebrza@zetobi.com.pl