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CONTROL ID: 1490012

TITLE: CO2 fluxes at wetland ecosystems in European Russia

ABSTRACT BODY: Peatlands are one of the main element of natural landscapes of Russia (about 10% of territory). Chamber measurements of CO2 fluxes from soil with vegetation were conducted during green seasons 2011, 2012 years in European part of Russia (Central Forest Reserve, Tver region). Two main subjects were selected for field researches: ombrotrophic bog and wet spruce forest. Our previous eddy covariance investigations in the ecosystems have allowed to determine that in common wet forest is source of CO2 for atmosphere but ombrotrophic bog is sink for CO2. Chamber measurements have evaluated net ecosystems exchange, soil respiration, photosynthesis of grass cover and their depending on environmental factors. Photosynthesis of vegetation cover on the bog is significantly more than at the forest. Variation in water level dynamics alone could significantly affect the C balance as at the bog as at the wet forest mainly through altering the decomposition rate of the organic matter accumulated in the soil profile.

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