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BIOLOGICAL APPROACHES TO ASSESSMENT ECOTOXICOLOGICAL STATE OF AQUATIC ECOSYSTEM

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The review of the current state of the methodological basis of biological methods (bioindication, bioassay) to assess the toxicity of water, sediment and ecotoxicological approaches to assessing the status of aquatic ecosystems. Applied discussed aspect of the application of the bioassay, enshrined in the regulatory and procedural documents.

Keywords: *bioassay, bioindication, toxicity, aquatic ecosystems, surface water, sediment, techniques, regulatory and procedural documents.*

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RADILOV RAISED BOG: PRESENT SITUATION AND GEOECOLOGICAL PROBLEMS

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Radilov raised bog is located in the Hilov lowland of Shelon basin. This area is devoted to Ladoga-Ilmen-Zapadnodvina province of broadleaved and coniferous forests and hummock-ridge bogs. Geographical profiles are characterized by quick and sharp change of ecosystems. This is particularly evident for the key areas of eastern and marginal parts bog. Within the test plots were calculated resource cranberry indicators: reserve and coefficient of productivity of green mass. Analysis of plants trace elements was carried out by atomic absorption spectroscopy with a spectrometer brand NOVAA 300.

Keywords: *bog massive, key areas, cranberry, heavy metals, methane.*

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ASSESSMENT OF THE EXTENT OF MASS TRANSFER FLUIDS AND CHEMICAL ELEMENTS IN THE DEVELOPED GAS CONDENSATE DEPOSITS

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The deposit is represented interbedded reservoir and non-reservoir. Collectors contain recoverable reserves of gas. In the non-reservoir contains mainly water. All fluids contain chemical elements. On the example of gas-condensate field is considered the ratio of all breeds and their saturating fluids, which showed the presence of significant amounts of gas in reservoirs, and huge amounts of non-reservoir pore water. Calculate the volume of the mass transfer elements in phase transitions of water. Estimate the amount of non-reservoir pore space, from which it is possible emigration of fluids due to this pressure difference between the non-reservoir and gas saturated reservoirs.

Keywords: *reservoir, non-reservoir, gas, oil, residual water, chemical elements, mass transfer.*

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