

Restoration and Protection of Soils Bitsa Forests

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The article deals with an important environmental problem – anthropogenic transformation of soils. According to expert estimates of soil scientists soil completely changed person on the globe is becoming less and less. A special place among the urban land occupied by protected areas. Bitsevski Park – is the second largest specially protected natural area in Moscow after the Losiny Ostrov National Park [«Moose Island»].

Bitsevski Park is one of the least disturbed areas of the city, although he feel the negative impact of its industrial and residential development. This park is located on the East-European platform crystalline basement which lies at a depth of about 2 km. The area of Bitsevski Park is located in the most elevated part of Teplostanskoy hill overlooking the surrounding area, and is a separate natural area formed in the pre-glacial outcrops, which is part of the Moskva-Oka plain.

The soils of the park is mainly medium provided with nutrients, which is quite favorable for the maintenance of normal growth and condition of the trees and other plants. The content in the humus horizon of humus soil in general average or slightly above average (mostly 4,2–5,1 %) and reaches a value of 5,5–5,7 %. Given that the analysis was made of mixed samples from the thick layer of 0–30 cm, is the humus content in the soil can be considered generally satisfactory. Provision of mobile soil mineral nitrogen compounds not sufficiently high. The content of N-NH₄ varies from 16,8–17,9 to 10,9–11,7 mg/kg. N-NO₃, which is usually contained in forest soils at low concentrations, there are quite a lot of (13,1–21,7 mg/kg, but in some samples of about 3–5 mg/kg). The total content of ammonium and nitrate nitrogen (N-NH₄ + N-NO₃), in most soil samples is 20–35 mg/kg; in some samples, it is reduced to 15–17 mg/kg.

Personnel of the Russian Research Institute for Silviculture and Mechanization of Forestry analysis of agrochemical properties of soils of natural and historical Bitsevski Park. The authors recommend systematically make mineral and organic fertilizers and microbial preparations that improve the survival and growth of forest plantations.