

Original article

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Study of the State of the Ploughed Horizon of the Forest Nursery Soil

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Annotation. The article is devoted to the study of the problem of deterioration of the soil condition of the forest farm of the Toropetsky branch of GBU "LPC – Tverles". The object of research is the arable horizons of agrogenic sod-podzolic illuvial-ferruginous sandy soil of the nursery farm. Soil samples were taken in producing fields occupied by 1-year-old and 2-year-old seedlings of European spruce and Scots pine, and in fields under complete fallow. The results of an agrochemical survey of the soil of a forest nursery are presented, on the basis of which a conclusion is made about the redundancy of normalized doses of lime, phosphorus fertilizers and some herbicides containing chlorine, sulfur or sulfates, peat material in their chemical composition. It leads to the accumulation of easily and medium-soluble forms of some chemical elements in the ploughed horizon. Qualitative determination showed that sulfates and chlorides accumulate in the ploughed horizon of some farm fields. An excessive amount of peat material contributes to the formation of a contrasting thermal and water regime of the root layer of seedlings. Recommendations are given to improve the condition of the tith top soil in the nursery farm.

Keywords: soil, forest nursery, agrochemical survey, fertilizer.

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