

Influence of salts on soils and plant in city

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Intensive struggle against a glaze ice in Russia cities throughout 20 years of the end of 20 centuries has led to that in soils of Moscow salts began to arrive. City soils for some time (1-2 months) have been salinized. By the autumn all salts were washed away from a soil profile in parent rock or in the bottom horizons, and soils lost properties of saline soils and chemical solonetz. In 1997 after especially intensive entering of salts on city streets trees along road highways of Moscow were died. Causes of death could be a little: First, the increased steam of cars and, as consequence, allocation of heavy metals (Pb, Cd, Fe) with exhaust gases. Secondly, the salts brought on city sidewalks as means against a glaze ice in the winter. Thirdly, every possible mushroom, etc. disease. Researches have shown that the main reason – high salt content in soils that caused stress in plants and trees. One month was enough for oppression of their growth as this period had on awakening from winter immobility. The proof of such conclusion were the next years in which salts as means against ice were not applied or their doses were sharply reduced, was not observed also drying or died of trees. Though the steam of cars on highways only has increased and the quantity arriving in soil and atmosphere with exhaust gases of heavy metals has increased.

Thus, receipt of readily soluble salts in soils of Moscow and their accumulation for the winter period leads to death of trees (a poplar, a linden, an oak, a maple) in the spring. Possible method of struggle with winter high salt content in soils is early-spring washing of soils of roadside wood plantings.

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