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## Survival Rate of Forest Crops Created by Standard and Enlarged Planting Material in Pine Forests and Forest Conditions of the Steppe Zone

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**Abstract.** The paper presents study findings of forest plantation survival established with standard and large-sized planting stock in steppe pine and oak wood zones. Main part covers scientific description of forest regeneration sample plots established under various technologies in Rostov region protection forests with various planting stock, gives these sites analytical assessment, as well as comparative evaluation of use of various planting stock types in its establishment.

It was found that by 2<sup>nd</sup> year end of forest plantation growth forest plantation survival established with both standard (plant mortality rate 4,0–16,0 %) and large-sized planting stock (plant mortality rate 2,6–16,0 %) is still rather high.

The authors concluded that in forest growing condition A<sub>0-2</sub> type 1 year old forest plantation survival of common oak, green ash, dwarf elm and Crimean pine established with large-sized planting stock is 7,0–15,5 % higher than in plantations established with standard-sized seedlings.

In fresh oak wood zone (C<sub>2</sub>) absolute survival indicator of 1 year old common oak, green ash, dwarf elm and Crimean pine and black locust plantations is much higher than in pine wood conditions and averages 75,2–99,4 %. Plantation survival indicator established with standard and large-sized seedlings in TLU C<sub>2</sub> becomes somewhat even with experience options and such deviations are insufficient (Treal. ≤ Ttheoretical.). High soil fertility factor in oak wood conditions sufficiently levels plantation survival indicator on experience options.

**Key words:** afforestation, enlarged planting material, standard planting material, survival rate.

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