

Original article

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Creation of Common Pine Crops by Seedlings with Open and Closed Root System on the Mountain Range in the Forest-Steppe Zone

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Abstract. In 2014, an experimental plot of forest crops of scots pine with the use of seedlings with open (OKS) and closed (ZKS) root systems with various methods of tillage and planting was laid on a mountain range in a forest-steppe zone with sandy soils. Observations of the growth of these seedlings showed that there was no significant difference in growth rates and at the age of three, the survival rate of seedlings with ACS and ZCS stabilized at at least 71 % and the average height of seven-year-old pine crops differed slightly and amounted to 213.2–231.5 cm. As a result of the experiments carried out, it was found that for planting pine seedlings with ACS and ZKS, it is necessary to carry out tillage by preparing furrows with the formation of a landing place in the form of a loosened gap in its center. The destruction of the soil coma and shaking it off from the root system of pine seedlings with ZKS did not have a significant effect on their growth indicators. Planting pine seedlings from the ZKS with the help of a Kolesov sword or a Pottiputka planting tube does not affect their survival and growth rates.

Key words: goreniki, planting material with open and closed root systems, soil, seedlings, forest crops, growth, survival.

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