

REFORESTATION AT THE BURNED AREAS LARCH CENOSES

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The forest is a renewable resource of nature and forest phytocenoses, being in a state of natural balance is able to maintain its appearance for a long time. However, the natural reforestation of the areas of the deceased stands not always successfully.

Today's realities show that not all forest conditions the process of restoration of vegetation communities has positively orientation. Often after the collapse of the stand succession acquires negatively dynamics, deforested areas there is a change in vegetation type and return an indigenous association is possible only through the dozens, or even hundreds of years. Forest land become non-producing, lost not only the raw material resources, but, equally important, the environmental significance of the landscape.

To give the process occupation forest area of positive dynamics requires external intervention. It is about the reforestation carried out through the establishment of forest plantations.

Artificial reforestation is sowing or planting. The choice of method depends on a number of factors, among which - biological properties of breeds, a natural conditions, the transport accessibility of the area, availability of seeds and planting material, possibility of use of technical means and other. General trend in the modern world forestry to increase the volume of landings. This is true for Russia.

The purpose of our research was to determine the role of the pyrogenic factor in the preparation of the comfortable environment for artificial restoration of forest phytocenosis. Work carried out in the North-Western part of Eastern Sayan (Mansko-Kansky forest growing district), the next year after the fire.

The object of study was forest culture area, which is a burned area the size of more than 80 hectares, on which you created the culture of Siberian larch. As a result of crown forest fire died, and natural regeneration of tree species was only possible near the forest. The fire destroyed the living ground cover, eliminating the competition a new generation of larch by herbaceous vegetation that is essential to the communities with developed herbage. This fact fire-site differs from the other categories of areas of silvicultural fund, where the preserved lower tier of the plant community blocks the emergence and growth of natural regeneration of the main breed.

Landing biennial seedlings carried out biogroup, evenly placing them on the square. The number of biogroups per hectare is only 300 pieces. The seedlings biogroup placed in two rows with distance between them of one meter, plant spacing 0,7 meters. Density - 4200 pieces/hectare. Main biometric indicators of planted trees: height – $11,6\pm0,21$ cm, thickness (diameter) stem – $2,0\pm0,04$ mm. Every autumn carried out accounting of forest cultures. Determined the height, diameter and survival (preservation) plants (table).

Table - Condition of cultures larch on burned area

Indicators of plants	Year accounting				
	1	2	3	4	5
Height, cm	18,4±0,28	25,2±0,37	37,5±0,83	58,7±1,04	83,8±2,23
Diameter, mm	2,5±0,03	4,3±0,05	5,9±0,07	7,5±0,12	9,2±0,26
Survival (preservation), %	93	89	86	84	81

The received materials illustrate the high regeneration capacity of fire-site ecotop. Appeared on the square willow has no negative impact on the growth and development of larch [2]. No negative impact willow herb, the emergence and the growth of tree species indicate and literary sources [1]. Other types of herb (sedges, grains) no longer dangerous for forest cultures that came from the influence of ground cover. Rare undergrowth of pre-fire species is not an obstacle for the development of forest-forming breeds.

Cultures 4-5 years of age have good biometrics. The increase for the last 2 years testifies to the comfort of the living environment for the growth and development of the young generation larch. The emerging trend of increase in height increment is a reliable criterion of the viability of the plant.

Given the uniform distribution of bio groups by area, it can be argued that in the case of scenario development larch forest forming process and keep its position.

In summary, it should be noted that at the initial stage occupation burned area missing phytocoenotic mechanisms of regulation of plant growth and development due to the competitive environment, but due to the combustion of organics is enriched soil minerals. The seedlings of Siberian larch landed on fire-site next year after the fire, have a high survival (preservation) in crops grow well, and, consequently, faster come out from under the influence of the grass cover. The latter is particularly important in the creation of forest cultures in forest types with a predominance of high grassy vegetation.

References

1. Dekatov N.E. Measures to renew the forest during mechanized harvesting. - M: Goslesbumizdat, 1961. - 229 p.
2. Matveeva T.A., Matveev A.M. The forest renewal burning in coniferous forests. Krasnoyarsk: Dharma, 2010. - 225 p.