ТЕЗИ ДОПОВІДЕЙ

учасників міжнародної
науково-практичної конференції

«ПЕРСПЕКТИВИ РОЗВИТКУ ЕКОСИСТЕМНОГО МЕНЕДЖМЕНТУ У ЛІСОВОМУ КОМПЛЕКСІ ТА САДОВО-ПАРКОВОМУ ГОСПОДАРСТВІ»

КИЇВ, 18-19 КВІТНЯ 2019 РОКУ

UDC630*232(477-25)

STATE AND PROGRESS OF NATURAL REGENERATION IN FRESH SITES OF KYIV POLISSIA

I. Kimeichuk, *graduate student*[*]
(i_kimeichuk@nubip.edu.ua,vanorimi@gmail.com)
National University of Life and Environmental Sciences of Ukraine

Significant deterioration in the sanitary state of trees of artificial origin has led to a reorientation of reproduction of forest cenozes to such methods that take into account, as much as possible, the natural genesis of forest regeneration and the development of forest ecosystems. One of these ways is to increase the volume of natural renewal.

The underestimation of forestry potential of plots and the natural ability of forests to self-healing is not only unreasonable in the current conditions of forest ecologization, but also economically in effective. In this context, studies of the state and success of the natural regeneration of pine forest and the evaluation of its use for reforestation under the conditions of the Kyiv Polissia are particularly relevant in the region of research [1].

We examined the state of the natural regeneration at 15 counters, which were located 30 meters from each other. The condition of tree growth was characterized by the following indicators: healthy, satisfactory and unsatisfactory. The following categories were distinguished in quality: healthy (well developed without signs of oppression, disease, mechanical damage); satisfactory (depressed trees with signs of drying above-ground parts with mechanical damage, etc., but still capable of further life); unsatisfactory (dry or dead trees (see Fig.).

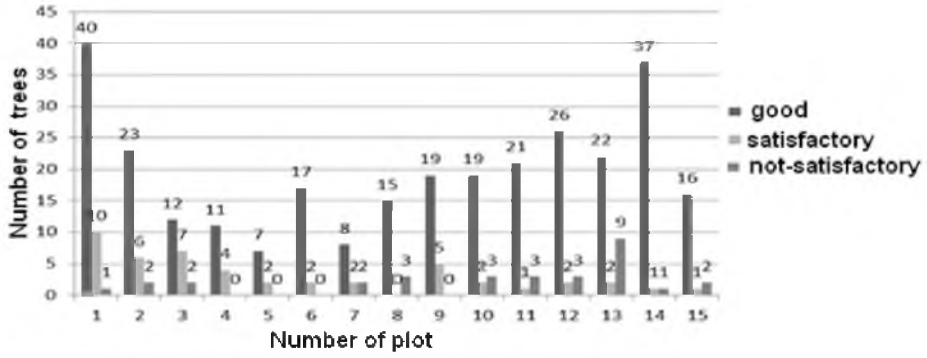

Fig. The state of pine tree sat the counting plots

[*]Scientificsupervisor – Doctor of Agricultural Sciences V. Yukhnovskyi

The state of the natural regeneration is basically presented as a good and satisfactory state, although at the counting sites of 8, 10-13 and 15 unsatisfactory trees were presented more inconnection with the disease of the tops of trees with the fungi *Lophodermium pinastri* (brown snow mold of coniferous trees).

Our research show sthatitisin appropriate to plant forest crop sinthez one off a vorable natura lregeneration, but it is necessary to focus on natural regeneration, as was done in the quarter of 275 Plesetsk forestry, where in the two years after then arrow felling fell in the winter, there were 43.4 thousand 1-3-years old young pinetrees (see Table).

The dynamics of the natural regeneration of Scotch pine at fresh cutting area (275 block, pl. 26 Plesetsk Forestry)

Year, seasonofaccounting	Number of natural regeneration, thousand pc.·ha^{-1}		
	1-year old	2-year old	3-year-old and older
2011, spring	36.9	5.7	0.8
2011, fall	20.4	16.1	3.5
2012, fall	4.9	17.4	4.9
2013, fall	2.9	14.1	3.2
2014, fall	1.9	11.3	4.1
2015, fall	4.2	4.9	3.7
2016, fall	1.3	5.7	3.3
2017, fall	0.9	6.3	2.4
2018, fall	0.6	2.8	5.2

Despite the significant decrease in self-seeding, especially 1-year old, during the first years, at the time of research on the area is increasing by 8.6 thousand trees of one-year self-seeding pines, of which 5.2 thousand trees are three years old and older. This amount of natural regeneration is quite sufficient for the formation of the indigenous stands of the Boyarka forest research station.

Forest sites, forestry potential of areas of the forest fund of the Boyarka research station, state and progress of natural regeneration evidence of expediency and opportunity increment of natural regeneration in total volumes of pine forests reproduction in the region. At leaving fresh clear cuts under natural regeneration should be taken into account abundance of sowing parent and adjacent of forest plantations, forestry potential of forested areas, aboveground living cover, its density and abundance as well as the hydrological conditions of the territory.

References

1. Maurer V.M., Kaydyk O.Yu. Eco-adaptive recreation of forests: a manual for students of higher educational institutions specializingin Forestry. K. NULES ofUkraine, 2016. 220 p.