Original article

DOI 10.24419/LHI.2304-3083.2022.3.08

Reproduction of Hybrid Forms of Lowbush Blueberry with Lignified Cuttings

Galina V. Tyak¹ Candidate of Biological Sciences Lyudmila E. Kurlovich² Candidate of Biological Sciences

Sergey S. Makarov³ Candidate of Agricultural Sciences

Abstract. The article presents the results of research on the propagation of blueberry (Vaccinium angustifolium Ait.) by lignified cuttings. For experiments on propagation by lignified cuttings, 2 forms of lowbush blueberries obtained from free pollination of the Putte variety were used -29-4 and 8-4. It was shown that the rooting rate of cuttings of the studied blueberry forms was quite high (from 67 to 100 %). No clear influence of growth regulators on this result was detected. Transplanted plants survival after autumnwinter period was high enough (80-100 %). The survival rate of those planted on the ridges of the Solonka farm (in May-June) after wintering outdoors one-year old seedlings of blueberry was 100 %.

Two-year old transplanted plants from lignified cuttings characterized with high rates of growth and development. The positive influence of growth stimulators (zircon, quercetin and kornewin) on these rates was demonstrated. The biggest effect was demonstrated by zircon on form 29-4 and quercetin and zircon on form 8-4.

Key words: lowbush blueberry, reproduction lignified cuttings, rootability, preservation, stimulants, growth and development

For citation: Tyak G.V., Kurlovich L.E., Makarov S.S. Reproduction of Hybrid Forms of Lowbush Blueberry with Lignified Cuttings. – Text : electronic // Forestry information. 2022. \mathbb{N}° 3. P. 95–104. DOI 10.24419/LHI.2304-3083.2022.3.08

¹ Central European Forestry Experimental Station, Branch of the Russian Research Institute of Silviculture and Mechanization of Forestry, Head of Non-wood Forest Products Group (Kostroma, Russian Federation), ce-los-np@mail.ru

² Russian Research Institute of Silviculture and Mechanization of Forestry, Head of the Non-wood Products group (Pushkino, Moscow region, Russian Federation), kurlovich@yandex.ru

³Central European Forestry Experimental Station, Branch of the Russian Research Institute of Silviculture and Mechanization of Forestry, Senior Researcher (Kostroma, Russian Federation), makarov_serg44@mail.ru