

Original article

EDN PTCHOW

DOI 10.24419/LHI.2304-3083.2024.1.07

## The Effect of Root Formation Stimulants on the Rooting of Green Cuttings of *Thuja occidentalis* L. in the Arkhangelsk region

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**Abstract.** *Thuja occidentalis* L. is successfully used in urban landscaping in many regions of Russia, but is poorly introduced into plantings in the conditions of Arkhangelsk and the Arkhangelsk region. It is necessary to increase the rate of production of planting material of evergreen and winter-hardy plants to green settlements in Northern regions with a short growing season in conditions of import substitution. The results of studies on the influence of 5 types of root formation stimulants (Kornevin, Heteroauxin, Ribav-Extra, Zircon, Radigrin) on the rooting of green cuttings of *Th. occidentalis* of two cultivar forms ('Brabant', 'Woodwardii') in the natural and climatic conditions of the Arkhangelsk region. The research was carried out on the territory of the Dendrological Garden named after I.M. Stratonovich (Arkhangelsk). Maximum rooting rates of *Th. occidentalis* are obtained by dusting the basal ends of green cuttings with the preparation Kornevin (76–90 %), which exceeded the indicators in the control variant (soaking the cuttings in water) by 1.3 times (for the cultivar 'Brabant') and 1.3 times (for the cultivar 'Woodwardii'). The highest rates of rooting of green cuttings (54–90 %) and the total number of formed roots of the first, second and third orders (136–739 pieces) are observed in *Th. occidentalis* of cultivar 'Woodwardii'. A comparative analysis of experiments to study the rooting ability of varietal forms of *Th. occidentalis* within one species using growth-promoting drugs in other regions.

**Key words:** coniferous plants, cuttings, *Thuja occidentalis*, planting material, root formation stimulators, rooting.

**For citation:** Antonov A., Makarov S., Lyutikova A., Sorokin E., Chudetsky A. The Effect of Root Formation Stimulants on the Rooting of Green Cuttings of *Thuja occidentalis* L. in the Arkhangelsk region. – Text : electronic // Forestry Information. 2024. № 1. С. 91–98. DOI 10.24419/LHI.2304-3083.2024.1.07. <https://elibrary.ru/ptchow>.

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