

Original article

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## The Use of Long-Acting Mineral Fertilizers in the Cultivation of Seedlings of Western Thuja with a Closed Root System in the Conditions of the Middle Zone of the European part of Russia

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**Annotation.** The article presents the results of testing long-acting encapsulated fertilizers (UPD) of the Osmokot, Bazakot and Ruskot brands in comparison with a standard fertilizer system for a container crop of *Thuja occidentalis* L. The effectiveness of using UPD has been shown for both subsoil and surface application. The dynamics of the release of salts from various UPDs into an aqueous solution at 24 °C and 8 °C was studied. The effectiveness of use and the absence of phytotoxicity of the doses recommended by the manufacturers of UPD Osmokot exakt standard high K 6M 4 g/l and Ruskot coniferous 6M 4 g/l when planting western thuja (*Thuja occidentalis* L) seedlings in containers, including during autumn planting, have been shown. The duration of action of the UPD in the climatic conditions of the Tver region has been established, which is two growing seasons.

**Key words:** long-acting mineral fertilizers, container growing, conifers, electrical conductivity of the soil solution.

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