

**QUALITY OF SEEDS OF A *PICEA OBOVATA* (PINACEAE)
ON THE NORTHERN BORDER OF THE RANGE
(YAMALO-NENETS AUTONOMOUS OKRUG)**

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SUMMARY

The great attention was always paid to the study of seeds of woody plants. This is especially important for the northern regions of the range, where the reproduction of woody plants is significantly reduced. Siberian spruce is sufficiently widespread woody species in the Yamal-Nenets Autonomous Okrug, but the rates of sprouting and germinating capacity were almost unknown. However, this information is important to clarify the biological characteristics of the species in general, for natural and artificial reproduction of spruce forests. The aim of this work was the study of dynamics of sprouting and germinating capacity of the spruce seeds in the north of Western Siberia.

The cones with empty *Picea obovata* Ledeb. seeds were formed in most of the trees even in a year of abundant harvest in the open boreal woodland in Yamal-Nenets Autonomous Okrug. Weight of 1000 full seeds on the average was 3.3–3.8 g, the majority of them germinated between 5–6 to 13–15 days, but their absolute germination capacity was relatively low (54, 67 %), germination energy was 42–45 %, the average duration of germination period was 9.00 and 9.60 days. The average number of cotyledons was 6.32–6.53. Most of the seedlings (80 %) had 6 and 7 cotyledons. A significant number (up to 20 %) of the germs were in inverted position. Results of the study were obtained for the first time, they complete information on the biological characteristics of *P. obovata* and may be useful for the reproduction of the spruce forests on the northern border of the species range.

Key words: *Picea obovata*, sprouting and germinating capacity, the north of Western Siberia, the Yamal-Nenets Autonomous Okrug.