

THE INFLUENCE OF NUTRIENTS ON THE GROWTH OF CRANBERRIES SHOOTS ON THE PRODUCED PEATLANDS

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Large areas of produced peatlands unsuitable for growing crops and forests located in Ukraine. Cranberries are not demanding to soil fertility. It can grow on acidic soils. In the same time there is a great demand for cranberries.

Cranberries, produced peatlands, vegetative shoots, growth, mineral fertilizers, sanding, nitrogen, phosphorus, potassium, nutrients.

There are large number of publications devoted to issues of mineral supply in the literature on the biology and physiology of cranberries. These data are missing in terms of Polesie on produced peatlands in Ukraine. All this demonstrates the feasibility of remediation of these areas for creation of cranberry plantation.

Large number of publications devoted to the effect of different doses of fertilizers. Ratios of individual elements vary considerably depending on specific conditions. In literature there is no consensus about the need cranberry in separate elements and there is no universal advice about the use of fertilizers.

We have conducted a series of studies to determine optimal doses of fertilizers and the ratio of the nutrients. Also found factors that has the greatest impact on plant growth. The object of study is the cranberry varieti "Bergman" planted in the spring of 2013 at research sites on produced peatlands state enterprise "Volyntorf", which are near the Galuzia village, Manevychi district, Volyn region.

The experiment was conducted during the growing season 2013 and 2014 in 12 research areas 3x5m size, 8 of which were covered with a layer of sand (6 cm), 4 - no sand. On sanding and not sanding sites for two years we used such schemes fertilization (the active substance): $N_{30}P_{30}K_{30}$, $N_{60}P_{60}K_{60}$, $N_{90}P_{90}K_{90}$ and control (without fertilizer), and in 2014 another 4 schemes fertilization $N_{30}K_{30}$, $P_{30}K_{30}$, $N_{30}P_{30}$ and $N_{30}P_{60}K_{30}$ plant growth.

The article presents the results of a study of cranberry growth for two years, and influence of the main nutrients on plant growth. Synergistic effect relationship nutrients and sanding gains shoots cranberries is found.

On the basis of data obtained from research, formulated the following conclusions:

1. Sanding and fertilizer increases the growth rate of cranberry plants;
2. Fertilization has a significant impact on the growth of shoots than sanding;
3. Most important for growth and development of plants is phosphorus, in his absence and increase growth rate remains at the level of the control (no fertilizer), a stimulating effect of this element increases with the dose twice;
4. The best growth cranberry shows in making fertilizer scheme $N_{90}P_{90}K_{90}$.
5. Correlation nitrogen, phosphorus and potassium of 1: 2: 1 ($N_{30}P_{60}K_{30}$), better impact growth of shoots (parameters approach the values of the option scheme $N_{90}P_{90}K_{90}$) than 1: 1: 1, so this ratio is optimal and allows more efficient use of nutrients.

The research results can be used in practice for growing cranberries on produced peatlands of Western Polesie.

Plantations growing cranberries can be an additional source of income for enterprises engaged in production of peat and effective measure produced reclamation of peatlands.