

Influence of mineral fertilizers on the growth and fructification of cloudberry

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Cloudberry (*Rubus chamaemorus* L.) is one of the most promising crops for cultivation in peatlands. Cloudberry berries have a high nutritional value, are of great commercial value and are subject to industrial harvesting in the Russian Federation and other countries. The Nordic countries have accumulated considerable experience in operating of cloudberry resources and conduct of various forestry and agricultural activities aimed at increasing its productivity.

Experiments on cloudberry cultivation are carried out on peatlands developed in Norway, in the fields and greenhouses in Finland, in greenhouses in southern Sweden, in peatlands in Canada. Cloudberry is a relatively new kind of culture, so many questions about her growing insufficiently developed and, in particular, application of mineral fertilizers. A lot of experiments cloudberry fertilization in greenhouses, in natural bush and culture are conducted in Norway, Finland and Canada. But the results are somewhat different, and so far there are no uniform recommendations for the use of fertilizer in the planting of cloudberry.

In the Central European Forest Experimental Station cloudberry cultivation experiments were started since 2008. The collection of cloudberry classes (foreign selection) and forms is collected. Research on the vegetative and seed propagation, experiments using mulching materials and fertilizers are conducted.

The article examines the use of mineral fertilizers in the cultivation of seed plants of Arctic cloudberry. The optimal doses of fertilization while planting are found as a result of 4 years of research. The highest growth rates and fruiting plants are found in versions with fertilizer in doses of N₃₀P₃₀K₃₀ and N₆₀P₆₀K₆₀. The largest number of flowering plants is recorded in the form of N₆₀P₆₀K₆₀.