SMS | Sphagnum MicroSpheres: The Fast Moor Renaturation

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In this project, due to the fact that cultivation in a cultivator consumed a lot of energy, it was proposed that natural growth in the form of moor renaturation would be more efficient. Conventional moor renaturation is a very costly procedure why we started thinking about different options. Various methods were considered to get the right nutrients to the peat mosses. Another difficulty was to keep the water content constant, as this is one of the most difficult parameters in moor renaturation. In addition, the photosynthetic function of the peat mosses had to be maintained. Since the object was ultimately to be spread in the wild, it also had to be biodegradable and non-toxic. After a series of research on viscosity and production capacity, alginate was selected as the suitable material, as it has all the necessary properties for moor renaturation. Laboratory tests on the growth rate were then carried out and a growth rate of almost seven times compared to pieces without the the coating was investigated. Field trials will also be implemented in the future.

Awards Won: