

COMPARISON OF DIFFERENT SUBSTRATES FOR ORGANIC SEEDLING PRODUCTION

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Propagation from seedlings is generally accepted in the horticultural sector. Cultivation from seedlings has many advantages including earlier harvest; more efficient use of land, time, energy, and seeds; and healthy and homogenous production. In conventional large-scale horticulture, seedling cultivation has already become a separate sector. The basis of successful seedling production is the use of the right substrate. The physical and chemical quality of the growing medium is crucial. There can be significant differences among the growing media available on the domestic market. For own substrate farmers put together a mix of different peat, perlite and nutrients according to a unique recipe. According to the Regulation (EU) 2018/848 of 30 May 2018 on organic production and labelling of organic products only organic seed and seedling can be used during the plant production. Therefore, seeds, fertilizers, plant protection and disinfection substances are allowed to be applied if only they have been authorized for use in organic production by the regulations. Recently, there are only a few professional organic seedling producers in Hungary. Most of the organic farmers are producing their own seedlings. For this purpose, commercially available certified organic medium, or home mixed substrates are used. In our study two commercially available organic substrates are compared with two farmers' mixtures: peat - compost and peat – pelleted cattle manure. The physical and chemical properties of the substrates are investigated.