

## EFFECTS OF DIFFERENT CASING ONTO THE YIELD OF BUTTON MUSHROOM

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In Europe just like in Hungary the most widely cultivated mushroom is the button mushroom (*Agaricus bisporus*). The market competition and the increasing costs of production needs the of optimalization cultivation conditions and upgrading the intensive production technologies. In button mushroom cultivation the casing of the growing substrate is a necessary technological step. Casing is important because of several reason: it helps to protect the substrate against some pathogens, also protects the compost from dramatic temperature changes. Button mushroom fruit bodies contain about 90% water, that is mainly provided by the casing soil. This substrate is also a reservoir for the microbiota, like *Pseudomonas putida* which has important role in pin heading stage. Casing soils origine from different places but the major component is usually some kind of peat, like Sphagnum peat or black peat and lime. But there is many contradiction about the effect of this casing soils onto the mushroom production under the cultivation. In this study, we collected 7 different casing soils (1 Dutch, 2 Polish, 2 Romanian and 2 Hungarian) and monitored the changing of electric conductivity (EC) and pH during a small-scale cultivation and examined this casings effects onto the yield. According to our experiment the pH had been decreasing and the electric conductivity had been increasing during cultivation. There was no significant difference between the casings in the total yield, but our results underlined, that quality of casing has a major importance onto the mushroom cultivation.