THE INFLUENCE OF CULTURE TECHNOLOGY ON PRODUCTION AND CHEMICAL CONTENT IN *AGARICUS BLAZEI* MURRILL MUSHROOMS

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Abstract

Until 40-50 years ago, the medicinal properties of this fungus were known only to inhabitants of villages around the Amazonian forest in Brazil, but after scientific recognition of this mushroom, *Agaricus blazei* Murrill has become one of the most important immunomodulatory and mushrooms defense against tumors.

Attempts to cultivate *Agaricus blazei* Murrill, using biotechnologies have not been satisfactorily until around 2000s. The tropical native environment of *Agaricus blazei* Murrill mushrooms is very difficult to reproduce in the locations of culture. A few years ago, when demand for *Agaricus blazei* Murrill greatly increased, and the price has increased almost exponentially mushrooms in Piedade region in Brazil, mushrooms have disappeared almost completely.

All these considerations have led us to approach this work in biotech crop research on the species *Agaricus blazei* Murrill.

The study was conducted on four types of compost (classical, synthetic, mixed and original) with two different protein supplements, applying semi-intensive and semi-mechanized technology of culture. For each experimental variant were made the following chemical determinations: dry matter; total protein; total fat; ash; carbohydrates; energy value; β-glucan 1-3 D and lovastatin. The results were interpreted in terms of statistics.

Key words: *Agaricus blazei* Murrill, β 1-3 D-glucan, lovastatin