Effect of agricultural conversion industries wastes and food supplements on some specifications of edible mushroom

Pleurotus florida

M. Jafarpour1, N. Pour Saeed2, A.R. Jalali Zand3 and A.R. Golparvar4
1. Assistant Professor of Horticulture Science Dept., Islamic Azad University, Khorasgan Branch, Isfahan, Iran
2. Medicinal Edible Mushroom – Research Group Member – Pishgaman Sadaf Zayande Rood in Isfahan Research and Scientific Town, Isfahan, Iran
3. Assistant Professor of Plant Protection Dept., Islamic Azad University, Khorasgan Branch, Isfahan, Iran
4. Assistant Professor of Agronomy and Plant Breeding Dept., Islamic Azad University, Khorasgan Branch, Isfahan, Iran

Cultivation of edible mushrooms (Pleurotus spp.) is an appropriate solution for converting waste remainders of the agricultural processing and complementary industries to a valuable foodstuff. In this study, some materials such as wood chips, boll, sugar beet pulp and palm fiber were employed as substrate and some types of additives including wheat and rice bran, soybean cake powder, and carrot residue were used as food complement for cultivating edible P. florida. Obtained results revealed the shortest period of edible mushroom growth to be for those raised on palm substrate supplemented with food complement of soybean cake powder (27.33 days); the highest mean weight of the fruiting bodies on sugar beet pulp supplemented with a mixture of soybean cake powder and rice bran (34.5 gr); and also the highest crop yield and biological efficiency of the edible mushroom on sugar beet pulp substrate supplemented with rice bran (680.7 gr and 136.1% respectively).

Keywords: Post-harvest field crop residues, florida, edible mushroom growth, Fruiting body

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1 Corresponding author Email: mehr_jafarpour@yahoo.com