

Influence of supplements on productivity, proximate principles, vitamin C and tryptophan content of syster mushroom

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SUMMARY

Protein malnutrition is wide spread in developing countries and stresses a profound need to search alternate or non-conventional sources of protein. The mushroom is one such promising source as it produces a significant amount of protein of higher biological value. The spawn of *Pleurotus sajor-caju* and *Pleurotus florida* was obtained from All India Co-ordinated Mushroom Improvement Project, College of Agriculture, Pune-5 (M.S.). The paddy straw and supplements viz., wheat bran, rice bran, gram flour, neem cake, urea, cellulose powder and potassium dihydrogen phosphate (KH_2PO_4) were purchased locally. The maximum fresh yield of mushroom obtained was 841 g per kg dry substrate with maximum biological efficiency of 84.10 per cent. The oven dried mushroom contained maximum of 29.53 per cent protein, 8.70 per cent crude fibre, 1.70 per cent fat, 8.32 per cent ash, 63.14 per cent carbohydrate and 347.63 Kcal of energy per 100 g of mushroom. The gram flour treatment (T_4) was superior in respect of iron content (13.9 mg/100g). The comparison of treatments revealed that the fertilizer treatment (T_0) was adjudged as superior in respect of yield and biological efficiency, ash content on dry weight basis and content of phosphorus, potassium and calcium.

Key Words : Mineral element, Paddy straw, Proximate principle, Supplements tryptophan, Vitamin C, Yield, Biological efficiency

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