

Research Article

Studies on Morphological Characteristics, Yield Parameters and Nutritional Composition of *Pleurotus pulmonarius* Strains

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Abstract

Morphological characteristics and nutritional composition variability among six strains (PP-22-101, PP-22-102, PP-22-103, PP-22-104, PP-22-105 & PP-22-106) of *Pleurotus pulmonarius* (PP) were studied and evaluated by growing on wheat straw substrate in winter season 2022-2023 at the laboratory and cropping room of ICAR-AICRP on Mushroom, MPUAT, Udaipur, Rajasthan conditions. Spawn run, pin head initiation, fruit body weight, pileus size, colour, pileus surface, shape of fruiting body, margin, size of stipe and per cent biological efficiency of six strains were recorded. Moisture, ash, protein and carbohydrate content in all six strains were analyzed. *P. pulmonarius* strains pileus size was ranged from 5.5 -10.0 cm; stipe length and diameter ranged from 1.2 -3.3 x 1.0-1.7 cm. The maximum size of pileus 10.0 cm and stipe length 3.3 cm was recorded in PP-22-101 while, diameter of stipe was maximum (1.7 cm) in PP-22-103. Number of days for spawn run varied from 11-24 days, pin head initiation (16-30 days). The number of fruit bodies and weight of strains were varied from 189-350 and 6.51 to 10.0g. The fresh yield of *P. pulmonarius* strains was ranged from 1749 to 2279 g/ 5kg wet wheat straw with the biological efficiency of 117-152 per cent.

Key words: Morphological characteristics, nutritional composition, oyster mushroom, *Pleurotus pulmonarius*, strains

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