

Research Article

Evaluation of Different Strains of Oyster Mushroom during Rainy and Winter Seasons for Higher Yield and Comparative Nutritive Value

Sarita¹, Roop Singh¹, SS Sharma², K Mahajani³, Moni Gupta⁴, Pokhar Rawal² and Karan Singh²

¹Krishi Vigyan Kendra, Kota, Agriculture University, Kota, ²Department of Plant Pathology, Rajasthan College of Agriculture, MPUAT, Udaipur, ³College of Community and Applied Science, MPUAT, Udaipur, ⁴Division of Biochemistry, SKUAST, Jammu (J&K); Email: saritabeniwal17@gmail.com

Abstract

The present study was aimed to evaluate different strains of oyster mushrooms during rainy and winter seasons for higher yield and comparative nutritive value. The strain PL-19-05 took minimum time (8.75 days) for spawn run in rainy season which was significantly faster than other strains in both the seasons. While the strain PL-19-04 took maximum time of 17.75 days in winter season. The strain PL-19-06 took minimum days (18 days) for pin head initiation followed by the strain PL-19-04 and PL-19-01 in rainy season. Higher fruiting body yield and biological efficiency (932.32 g kg⁻¹ of substrate dry weight and 93.23%) were achieved by the strain PL-19-06 in the winter season, followed by the strain PL-19-01 (910.66 g kg⁻¹ of substrate dry weight and 91.07%) in winter and PL-19-06 (901.00 g kg⁻¹ of substrate dry weight and 90.10%) in rainy season. The lowest yield and biological efficiency were observed in PL-19-02 (708.25 g kg⁻¹ of substrate dry weight and 70.83%) in rainy season. Nutritional analysis revealed the highest moisture content (90.51%) and carbohydrate (45.75%) in the strain PL-19-07, whereas the strain PL-19-03 had the highest protein content (8.43 mg 100 mg⁻¹). The results of this study revealed that winter season was found suitable for most of the strains but the strain PL-19-06 could be recommended for commercial cultivation in both seasons.

Key words: Biological efficiency, oyster mushroom

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