

# Effect of organic amendments on the nutritional value of oyster mushrooms (*Pleurotus* spp.)

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## ABSTRACT

Popularity of oyster mushroom is increasing because of its ease of cultivation, high yield potential as well as its unique nutritional value. Study with oyster mushrooms viz., *Pleurotus florida*, *P. sajorcaju*, *P. eous*, *P. tuber-regium* and *Hypsizygus ulmarius* revealed that the nutritional value of these mushrooms can be increased significantly when grown on paddy straw supplemented with organic amendments such as rice bran, neem cake, dry azolla, vermiwash and dry biogas slurry. In addition to increased yield, the organic supplements significantly increase the crude protein, total free amino acid, total carbohydrate and nutrients like N, P and K in oyster mushrooms. Nutrient content of the mushrooms varied with different concentrations of organic amendments used. In *P. florida*, *H. ulmarius* and *P. tuber-regium* paddy straw amended with dry azolla gave higher amount of crude protein content (35.4, 35.3 and 34.9, respectively). Paddy straw amended with dry azolla at 4 per cent, 6 per cent and 5 per cent, respectively recorded the maximum total free amino acid in *P. florida* (0.6%), *P. sajor-caju* (0.43%) and *H. ulmarius* (0.56%). The major nutrient elements like N, P and K content also increased with addition of organic amendments. Thus, it is concluded from the study that supplementation of rice straw with rice bran, *Neem* cake, dry azolla, vermiwash and dry biogas slurry has strong impact in improving the crude protein, total free amino acid, total carbohydrate and essential mineral nutrients such as N, P and K content of oyster mushrooms.

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