journal homepage: http://chimie-biologie.ubm.ro/carpathian\_journal/index.html

# ASSESSMENT OF BUTTON AND OYSTER MUSHROOM NUTRITIONAL QUALITY USING VARIOUS DRYING METHODS

Santhiya K.<sup>1⊠</sup>, Abinaya S.<sup>2</sup>, Aswini R.<sup>2</sup> and Nitheshlee M.<sup>2</sup>

 $\boxtimes$ santhiya.k@kahedu.edu.in

## https://doi.org/10.34302/crpjfst/2022.14.3.15

### **Article history:**

Received,

10 September 2021

Accepted,

10 August 2022

Published

September 2022

#### **Keywords:**

Agaricus bisporus;

HPLC;

Pleurotus ostreatus; Proximate analysis;

Vitamin-D.

#### **ABSTRACT**

Edible mushrooms are in high demand due to their flavor and nutritional benefits. Mushrooms are a rich source of carbohydrates, with high fibre content and modest protein content containing the majority of the amino acids, and vitamins. This study was conducted to evaluate the effects of different pretreatment drying methods on the nutritional quality of dried mushrooms (Button and Oyster mushroom) and also to estimate the Vitamin D2 content. The experiment was carried out based on the three pretreatment techniques: SD, HD and UV + HD. Significant differences in proximate composition were observed between the fresh and dried mushroom samples. The average mean value of crude protein, crude fat, crude fiber, ash, and carbohydrates of dried mushroom samples were 33.9, 19, 5.7, 10.8 and 98.1% respectively and found to be statistically significant too. Sundried oyster mushrooms had their vitamin D<sub>2</sub> level increased by two folds in comparison with sundried button mushrooms. Finally, the intake of these mushrooms should be encouraged as a complement to impoverished people's main foods. As a result, addressing nutritional issues in children, pregnant women, and immune-compromised individuals is a necessity.

<sup>&</sup>lt;sup>1</sup> Karpagam Academy of Higher Education, Department of Biotechnology, Faculty of Engineering, Coimbatore – 641021, Tamilnadu, India.

<sup>&</sup>lt;sup>2</sup> Karpagam Academy of Higher Education, Department of Biotechnology, Faculty of Engineering, Coimbatore – 641021, Tamilnadu, India.