

Histopathological and haematological assessment of albino rats fed with Pleurotus ostreatus cultivated on five selected medicinal trees

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Abstract

Pleurotus is a genus of gilled mushrooms which includes the most widely eaten mushrooms. research was carried out to assess the effect of the medicinal tree on the mineral content and nutritional value of the mushroom using standard method. The result revealed that the mushroom grown on cashew tree substrate, had the highest increase in calcium, sodium, magnesium and iron content followed by mushroom cultivated on dongoyaro. The qualitative phytochemical analysis of the woods on which the mushrooms were grown showed the presence of alkaloid, anthraquinine, flavonoid, steroid, tannin, saponin and cardiac glycoside, while in addition to these, the mushroom had anthraquinone. The *in vivo* evaluation of the mushroom on albino rats showed that the mushroom from cashew had the highest effect on the PCV followed by the mushroom cultivated on dongoyaro with a PCV of 48.52 ± 1.05 percent and 47.40 ± 0.18 percent, while the white blood cell count and the erythrocyte sedimentation rate both decreased. The histopathology result of the various organs of albino rats analyzed showed no negative pathological changes in the liver, intestine, kidneys and lungs of all the rats fed with all the mushroom samples. Hence, it can be concluded that the mushrooms have no deleterious effect on the rats. And the findings in this study demonstrated that mushroom's efficacy can be enhanced by utilizing plant with medicinal property as mushroom substrate or growing medium.

2. Bankefa, Olufemi & Oladeji, Seye Julius & Ayilara-Akande, Simbiat & Lasisi, Modupe. (2020). Microbial redemption of “evil” days: a global appraisal to food security. *Journal of Food Science and Technology*. 10.1007/s13197-020-04725-7.



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Biography:

Ayilara-Akande Simbiat has completed her M.Tech from Federal University of Technology, Akure, Nigeria. She started her career in academics a year ago as an assistant lecturer in one of the Nigeria Universities, named, Federal University Oye-Ekiti. she has only published about 5 papers in reputed journal.

Speaker Publications:

1. Balogun, Olalekan & Ayilara-Akande, Simbiat. (2019). Impact of Ultraviolet Ray on Bacterial Isolates of Well Water (Studied from Ikeji -Arakeji Metropolis). 10-22.