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Nutrient and mineral content of oyster mushroom (*Pleurotus florida*) grown on selected lignocellulosic agro-waste substrates

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This study was carried out to determine the proximate and mineral content of *Pleurotus florida* mushroom to assess its nutritional value; determine its yield and biological efficiency on agro-waste substrates. *Pleurotus florida* was cultivated on four lignocellulosic agro-waste substrates, sawdust, corn cobs, oil palm spadix and corn straw. A ramified spawn bottle of *Pleurotus florida* was multiplied and inoculated on pasteurized substrates at the Mycology Laboratory of the Department of Crop Production and Protection, Faculty of Agriculture, OAU, Ile-Ife, Osun State. The mature fruiting bodies were subjected to proximate and mineral analysis while the total yield and biological efficiency were also obtained. The result showed that *Pleurotus florida* contained 26.28-29.91% protein, 86.90-89.60% moisture, 0.48-0.91% fat, 19.64-22.82% fiber, 31.37-38.17% carbohydrate and 5.18-6.39% ash. The mineral contents ranged from 342-410 mg/100 g Calcium, 1009-1133 mg/100 g Phosphorus, 17-21 mg/100 g Iron, 277-359 mg/100 g Sodium and 2088-2281 mg/100 g Potassium. Also, the highest yield and biological efficiency were obtained on corn cobs substrate (110 g, 55%), followed by Oil palm spadix substrate (76.05 g, 38%) and least on corn straw substrate (63.12 g, 31.56%). Conclusively, *Pleurotus florida* has been found to be rich in protein, fiber, ash, carbohydrate, calcium, phosphorus, potassium, iron but low in fats and sodium. It is established from this study that all these nutrients should be added to our diet for qualitative balanced diet.

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First molecular characterization of *Candida africana* in Algeria

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Introduction: *Candida albicans* is the most isolated yeast biological samples and is associated with a wide clinical spectrum. It is now accepted that this organism is part of a complex with phenotypic and genotypic differences. We describe this work in the first optimization of PCR in Algeria for the characterization of complex *albicans* and the results found, at the Parasitology-Mycology Laboratory of the central army hospital in Algiers in 55 patients different services.

Material & Methods: *Candida dubliniensis* very close to *Candida albicans* (chlamydosporulation) is identified in 1995 by molecular biological techniques and associated with oropharyngeal candidiasis in patients infected with HIV. Atypical strains of *C. albicans* (without chlamydosporulation) different *Candida dubliniensis* is marked from 2001, as the cause of vaginitis in Italian patients, African, German and Spanish. These strains were later identified as the species *C. africana*. The first method for the specific molecular species discrimination of complex *C. albicans* using a single pair of primers targeting the Hwp 1 gene encoding a surface protein (wall), by PCR. The amplified DNA fragments show a specific band at 1000 bp for *C. albicans*, 700 bp for *C. africana* and 569 bp for *C. dubliniensis*. We develop molecular technique in our laboratory, in order to identify the complex *C. albicans*. The results obtained are compared to phenotyping.

Result: Twenty mouth swabs: 6 *C. dubliniensis* and *C. albicans*; 30 vaginal swabs, 20 *C. albicans* and *C. africana* 2; 4 *C. albicans* blood cultures. For a patient blood culture and CSF show the presence of *C. africana* mouth swab and urine combination *C. albicans* and *C. africana*.

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