Ácidos grasos del hongo funcional pleurotus ostreatus cultivado en residuos sólidos agroindustriales [

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text (article)

Analítica

Introduction. Pleurotus ostreatus is an edible and medicinal mushroom susceptible of cultivation on lignocellulosic agroindustrial residues. The content of total lipids in this type of fungus can be found in the order of 2 % to 6 %, with major unsaturated fatty acids (omega), which together with bio-compounds may exhibit bioactivity on the decrease in the concentration of triglycerides and cholesterol in humans. Objective. Evaluate the composition of fatty acids in the fruiting bodies of P. ostreatus cultivated on different substrates of agricultural origin. Materials and methods. The waste employees were coffee pulp, fique bagasse, oil palm rachis and chaff of forage oats. Commercial mycelial P. ostreatus (CP-50) was used and the culture was grown under controlled conditions. Extractions of total lipids in the mushrooms are made with the method of Folch and analysis of methyl esters of fatty acids was performed by GC-FID. Results. The total lipid concentration was expressed as the mean " SD of three replicates. There was a higher concentration of total lipids (2.40 " 0.09 %) at the substrate used with oil palm rachis in 96 %. In the fraction of major fatty acids of all treatments there was presence of palmitic acid, oleic acid and linoleic acid (values close to 70%). Conclusion. The increased concentration of total lipids in P. ostreatus, was influenced by the characteristics of the substrate prepared with oil palm rachis whose composition had higher lipid content; and the high concentration of linoleic acid in mushrooms of all treatments

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