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book of abstracts

ANTIOXIDANTS IN PORTUGUESE WILD MUSHROOMS: A PHENOLIC PROFILE

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The implication of oxidative and nitrosative stress in the etiology and progression of several acute and chronic clinical disorders such as cancer, cardiovascular and neurodegenerative diseases, has led to the suggestion that natural antioxidants can have health benefits as prophylactic agents (1). In this perspective, the presence of mushrooms in our diet which contain significant amounts of bioactive phytochemicals, may provide desirable health benefits, beyond basic nutrition. Many studies have concluded that mushrooms possess potent antioxidant properties related to phenolic compounds. In the present work, the analysis of phenolic compounds in Portuguese wild mushroom species was carried out by high-performance liquid chromatography coupled to photodiode array detector (HPLC-DAD). Four phenolic acids (protocatechuic, *p*-hydroxybenzoic, *p*-coumaric and cinnamic acids) were found and quantified. *Fistulina hepatica* showed the highest concentration in phenolic acids (111.72 mg/Kg, dry matter) due to the significant contribution of protocatechuic (67.62 mg/Kg) and *p*-hydroxybenzoic (41.92 mg/kg) acids. Results will be discussed highlighting the potential prophylactic capacity of these natural antioxidants.

(1) I.C.F.R. Ferreira, L. Barros, R.M.V. Abreu. *Curr Med Chem* 16 (2009) 1543-1560.