Identification of apigenin-7-glucoside and luteolin-7-glucoside in pleurotus porrigens and schizophyllum commune mushrooms by liquid chromatography– ion trap tandem mass spectrometry

Abstract

Pleurotus porrigens and Schizophyllum commune contain high amounts of dietary antioxidants such as flavonoids and phenolic acids. Identification of major antioxidative components of selected fractions of P. porrigens and S. commune was determined by high performance liquid chromatography - ion trap tandem mass spectrometry (HPLC-IT/MS). In addition, 2,2-diphenyl-1- picrylhydrazyl (DPPH) radical scavenging ability of the fractions was evaluated. The crude water extracts were subjected to fractionation by means of liquid-liquid partitioning. n-Butanol fraction (P. porrigens) and formic acid residue fraction (S. commune) showed high DPPH radical scavenging activity. Based on HPLC-IT/MS analysis, two flavones glucosides, namely luteolin-7-O- β -glucoside and apigenin-7-O-