

Comparison Between the Antioxidant Properties of Slurry of the Coffee (*Coffea Arabica*) and Coffee Beverage

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ABSTRACT

Residues of coffee called slurry are totally discarded after preparing coffee beverages and they do not present any potential use. These represent about 15-20% of coffee production on weight basis and attention are giving in how explored them. Coffee residues and beverage were evaluated, after extraction with different solvents such as hexane, ethyl acetate, dichloromethane, ethanol and methanol. Antioxidant potential from extracts were evaluated then, for this purpose, was used in vitro models such as radical scavenging activity (1,1-diphenyl-2-picrylhydrazyl radical, DPPH.), reducing power activity and chelating capacity. The highest yields were obtained for dichloromethane (B), ethyl acetate (C) and methanol (I). B extract exhibits the maximum radical scavenging activity (91.8%) followed by C extract (85.6%) and then, I extract (57.4%) each one at 200 mg L⁻¹. For reducing power activity the extracts B, C, I, ethanol (H) and ethyl acetate (E) showed 85.4%, 71.6%, 36.2%, 19.3% and 12.4% of antioxidant activity, respectively, at 1000 mg L⁻¹. The chelating capacity for I, ethanol (F), C and B extracts was 14.8%, 14.7%, 9.9% and 4.3% when compared to etilendiamintetracetic acid (EDTA) chelating capacity. The high antioxidant potentials observed for the extracts of the slurry is due to the presence of phenolic compounds including chlorogenic acids which make them more suitable as a source of natural antioxidant.

KEYWORDS

Antioxidant Activity . *Coffea Arabica* Roasted coffee . Slurry of coffee

REFERENCES