



Effect of Coffee Roasting Temperature on Nutritive and Sensory Profile of Traditionally Prepared Black Coffee Beverage

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The aim of this research was to determine the effect of coffee roasting temperature in industrial conditions on: (i) the nutritive quality of coffee (Arabica 1st class, Arabica 2nd class, Robusta); (ii) the sensory quality of traditionally prepared black coffee beverage; (iii) correlation between roasting temperature and beverages sensory quality. The basic chemical composition, titratable acidity, pH, content of caffeine, chlorogenic acid, and free fatty acids were determined for each of three coffee samples and four treatments: green coffee; light roasted (167°C); medium roasted (171°C); dark roasted (175°C). The sensory quality of black coffee beverage traditionally prepared from roasted coffee was determined and compared.

It was found that relatively small changes in coffee roasting temperature in industrial conditions affect numerous, mainly statistically significant changes in its nutritive and sensory quality. These changes are also related to the coffee type and class. Black coffee beverage traditionally prepared from medium roasted (171°C) Arabica 1st class coffee had the highest sensory quality of all analyzed samples, with markedly expressed pleasant coffee-like and roasted coffee aromas and moderately expressed pleasant bitterness, acidity, and body.

Keywords: coffee, roasting, nutritive quality, sensory analysis.