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# DEVELOPMENT OF GREEN COFFEE POWDER AND SPICE BLENDED GREEN COFFEE POWDER

## R.G.C.K. Abeyrathne[1], P.C Arampath[1]*, K.M.S. Wimalasiri[1] and I.V.A.D.C.S. Induruwa[2]

[1]*Department of Food Science and Technology, Faculty of Agriculture, University of Peradeniya, Sri Lanka*
[2]*Post Harvest Technology Research Division, Central Research Station, Department of Export Agriculture, Matale, Sri Lanka*
*\*pca@pdn.ac.lk*

Coffee is one of the most popular non alcoholic beverages globally, which is considered as a significant crop in Sri Lanka. Substantial health benefits on reduction of risk of cardiovascular diseases, type 2 diabetic, antibacterial activities, and inhibitory effect on fat accumulation in the body were reported. Green coffee (unroasted coffee) is rich in chlorogenic acid (5–12 g/100g). The research was conducted to develop green coffee powder and spice blended green coffee powder. Four types of coffee; arabica bulk, robusta bulk, S9 arabica and IMY robusta were harvested and subjected to wet processing to yield green coffee beans. Green coffee powder and spice (cinnamon, cardamom and ginger) powder were obtained by grinding and sieving (mesh No 30). The best coffee type and the best spice blended formula were selected based on the results. Sensory attributes, color, aroma, flavour, mouth feel and overall acceptability, were tested with 30 untrained panelists (Hedonic scale). The chemical composition of the finished product was determined. Total phenol content was analyzed by Folin- Ciocalteu method**.**

There was no significant difference for the preference for four types of coffee when tasting green coffee, which were prepared by brewing 10g of green coffee powder in 250ml of hot water. When the amount of green coffee powder was increased to 20g / 250ml, arabica bulk was preferred by the panelists (colour: 4.0, mouth feel: 3.0 and overall acceptability: 3.5) than robusta bulk and blend of arabica & robusta. Green coffee powder blended with 27% of cinnamon powder was the best preferred for the key sensory attributes (aroma: 4.0, flavour: 4.1, mouth feel: 3.8 and overall acceptability: 3.6). Incorporating spice can improve the organoleptic properties of the green coffee brew. The higher phenolic content (mg/g) was found in IMY robusta variety (64.17±0.97) and robusta bulk (55.44±0.56) than arabica bulk (47.89±0.68) and S-9 arabica (49.48±0.56). Green coffee brew obtained from arabica type blended with cinnamon powder is a potential value added product to be commercialized by the industry.