Physicochemical properties of the pulp of African star apple

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Healthy samples of African star apple fruit *Chrysophyllum albidum* Lin. were purchased from a local market of Ekpoma, Southern Nigeria during the month of April. Standard biochemical protocols were adopted in the evaluation of the physicochemical properties of the pulp. From the results, ash, moisture, protein, fat, fiber and carbohydrate content were found to be 0.41, 85.38, 0.76, 4.32, 0.57 and 8.46%, respectively. It was also observed that the pulp contained 10.19 mg/100 g of calcium, 2.90 mg/100 iron, 102.85 mg/100 g sodium, 40.26 mg/100 g magnesium and 346.17 mg/100 g potassium. Polyphenolics such as tannin, total phenol, alkaloid and flavonoid were found to be 8.31 mg/100 g, 5.57 mg/100 g, 26.79 mg/100 g, and 16.10 mg/100 g, respectively while anti-nutrients such as phytate, oxalate, and saponins were found to be 0.08 g/100 g, 1.25 g/100 g, and 9.38 g/100 g, respectively. The pH, titratable acid, total dissolved solids, total solids, conductivity, sugar and energy content were found to be 2.42, 0.08%, 7.62 g/100 g, 23.33 g/100 g, 232.67 Nhoms/an, 18.27 g/100 g, and 206.18 MJ/100 g, respectively. The pulp was found to be very rich in vitamin A (246.33 mg/100 g) while the vitamin C content was 40.06 mg/100g. African star apple is therefore a very nutritious fruit.

Biography

Professor Ignatius Onimawo has done PhD in Human Nutrition from University of Ibadan. At present he is the current Vice-Chancellor of Ambrose Alli University, Ekpoma, Edo State Nigeria. Formerly Dean of College of Food Processing and Storage Technology and Foundation Head of Department of Human Nutrition and Dietetics of Michael Okpara University of Agriculture, Umudike. Formerly the Editor-in-Chief of the Nigerian Journal of Nutritional Sciences and formerly the Director of Academic Planning and Head of Biochemistry, Ambrose Alli University Ekpoma, Nigeria.

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