Title Proximate composition, mineral contents, hydrogen cyanide and phytic acid of 5 cassava genotypes

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Abstract

Five cassava genotypes Rayong 5, Kaesetsart 50 (KU50), Rayong 2, Hanatee and KMUL 36-YOO2 (YOO2), were used in this study. Investigations showed that cassava contained 9.2–12.3% moisture, 1.2–1.8% crude protein, 0.1–0.8% crude lipid, 1.5–3.5% crude fibre, 1.3–2.8% ash, 80.1–86.3% carbohydrate, 1406–1465 kJ 100 g⁻¹ DM and 95–135 mg g⁻¹ of phytic acid. Mineral contents were 10.9–39.9, 15.2–32.3 and 9.3–54.1 mg g⁻¹ for Ca, Mg and P, respectively, and 221–328, 4.7–25.8, 1.41–4.25, 0.29–1.73 and 1.2–4.44 mg g⁻¹ for K, Na, Zn, Mn, Cu, and Fe, respectively. HCN content ranged from 8.33 to 28.8 mg HCN/kg dry weight basis. A linear relationship between Ca and P and carbohydrate and energy existed with correlation coefficients of 0.99 and 0.82, respectively. Phytate: total *p* ranged from 77% to 88% and a linear relationship existed between phytate and total *p* with a correlation coefficient of 0.975.