FOOD FROM SORGHUM BICOLOR L. MOENCH AS SOURCES OF HEALTH BENEFICIAL BIOACTIVE COMPOUNDS

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ABSTRACT

Aqueous extract of Sorghum bicolor L. Moench (Omi ogi) have been implicated in the cure for malaria, celiac disease, hepatitis and sickle cell anemia, which may be due to the constituents’ bioactive compounds. The aqueous extract was screened for the presence of twenty bioactive compounds using High Performance Liquid Chromatography (HPLC). Nine of which were detected and quantified to be quercetin (5.683 ± 1.467mg/g dry wt.), caffeic acid (20.020 ± 0.044 mg/g dry wt.), p-coumaric acid (0.274 ± 0.050 mg/g dry wt.), resveratrol (0.347 ± 0.105 mg/g dry wt.), hesperidin (16.766 ± 0.470 mg/g dry wt.), rosmarinic acid (4.081 ± 0.160 mg/g dry wt.), rutin hydrate (0.133 ± 0.031 mg/g dry wt.), cinnamic acid (0.005 ± 0.000 mg/g dry wt.) and chlorogenic acid (1.748 ± 0.033 mg/g dry wt.). The presence of these bioactive compounds may be responsible for the excellent health benefits associated with the local consumption of processed product of the plant and the therapeutic applications of the extract.

Key words: Health benefits, Plant, Sorghum, Bioactive, HPLC