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COMPARATIVE EVALUATION OF NUTRITIONAL VALUES OF SOME WILD

PLANTS LEAFY VEGETABLES IN SOUTH EASTERN NIGERIA

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ABSTRACT

In this study the nutritional values of three woody leafy vegetables commonly consumed in the south eastern Nigeria were investigated. Fresh edible leaves of *Heinsia crinata, Lasienthera africana* and *Pterocarpus mildbraedii* were collected from the wild stands. Proximate analyses were carried out to evaluate their nutritional values vis-à-vis moisture, ash, fibre, protein, lipid, carbohydrate and caloric value while physicochemical analyses were done to determine their sodium (Na), calcium (Ca), potassium (K), magnesium (Mg), zinc (Zn), phosphorus (P), copper (Cu) and iron (Fe) concentrations. Results revealed that *P. mildbraedii* had the highest moisture content 78.15%; ash, 19.72%; fibre, 13.14% and protein, 29.75% but lowest lipid, 3.13%; carbohydrate, 34.30% and lowest caloric value, 284.37kcal. *Lasienthera africana* had 77.67% moisture, 8.50% ash and15.40% protein but highest lipid, 7.06% and caloric value 380.82kcal. *H. crinata* had the lowest moisture content, 69.50%; ash, 7.68% and protein, 13.30%. Except for K and Cu, *L. africana* contained the highest amount of minerals while *P. mildbraedii* had the lowest of all the mineral elements except Cu. *Heinsia crinata* however had the highest K content. Our investigations have shown that *P. mildbraedii* with its high fibre and protein contents but low lipid, carbohydrate and caloric values can be an excellent vegetable for checking type 2 diabetes, obeisity and heart disease. These studies have shown that *P. mildbraedii* nutritionally compares favourably well with *Telfairia occidentalis* and *Talinun triangulare*, the two most commonly consumed vegetables of the southeastern Nigeria.

KEYWORDS: Wild, Woody Leafy Vegetables, Nutritional Values, South-East Nigeria