



Phytochemical and Nutritional Profile of Some Edible Plants in Nigeria

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Edible plants from Nigeria were analyzed for phytochemicals and nutrients. These plants are *Ocimum gratissimum* (scented leaf), *Vernonia amygdalina* (bitter leaf), *Annona muricata* (soursop), *Talinum triangulare* (water leaf), *Colocasia esculenta* (cocoyam), *Solanum macrocarpon* (garden egg), Microgreens, *Piper guineense* (uziza), *Gnongronema latifolium* (utazi) and *Telfairia occidentalis* (fluted gourd). Phytochemical and proximate composition was determined using titrimetric and spectrophotometric methods, while vitamins and minerals were determined by high-performance liquid chromatography (HPLC), emission flame photometry and atomic absorption spectrophotometry. The *C. esculenta* showed high concentrations of alkaloids and saponins, while microgreens and *P. guineense* recorded much tannins, flavonoids, folic acid (B9) and iron (Fe). *S. macrocarpon* revealed high protein, niacin (B3) and pyridoxine, while utazi is rich in fibre, vitamin E, zinc (Zn) and magnesium (Mg) with low moisture. *O. gratissimum* contained high thiamin (B1) and riboflavin (B2), while vitamins A and cobalamin (B12) were abundant in *T. occidentalis* and *T. triangulare*. The *V. amygdalina* showed high vitamin C and calcium (Ca) levels. Highly significant variations exist among the bioactive compounds and the nutrients ($p < 0.0001$). These vegetables contained an appreciable quantity of nutrients and bioactive compounds at variable concentrations that are useful in folklore medicine and health care



Friday Nwalo Nweke completed his PhD at the age of 39 years from Ebonyi State University, Abakaliki, Nigeria and postdoctoral studies from Seed Biotechnology Center, University of California, Davis. He was the Director of Information and Communication Technology (ICT) Services at Alex Ekwueme Federal University, Ndufu-Alike Ikwo (AEFUNAI), Ebonyi State, Nigeria. He is a Member of African Plant Breeders' Association (APBA); Biotechnology Society of Nigeria and Nigerian Society of Biochemistry and Molecular Biology. He has published more than 40 papers in reputed journals and has been serving as an editorial board member of repute.

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