

International Conference on
NUTRITION AND HEALTH CARE

February 10-11, 2022 | Paris, France

<https://www.nutrition.scientexconference.com/> nutrition@scientexconferences.com

+1 (346) 3481205

TITLE: Harnessing wild edible plant resources to diversity human diets in Uganda**Name:** Samuel Ojelel**Affiliation:** Assistant Lecturer at Makerere University, Uganda**Country:** Uganda**Email ID:** samojelel@gmail.com**ABSTRACT (upto 300 words)**

The world currently relies on a handful of food crops to feed its growing population. For that reason, this study sought to: (i) establish an inventory and document the Indigenous Knowledge (IK) of wild edible plants (WEPs) used to diversity human diets in north eastern Uganda, and (ii) examine the nutritional value of five WEPs. Data was collected using an open ended questions administered to 240 respondents, focus group discussions and guided field excursions. The samples of five WEPs (*Vigna kirkii*, *Maerua angolensis*, *Leptadenia hastata*, *Senna obtusifolia* and *Dioscorea* sp.) were analysed in triplicate at the Makerere University Food Science and Technology laboratory. Ethnobotanical data was analysed using descriptive statistics while the means of nutritional parameters were analyzed using one-way ANOVA. The study recorded 100 plant species in 47 families used in diversification of human diets. The fruit producing WEPs represent the most widely consumed plant species (63%), followed by leafy vegetables (29%), seeds (9%), tubers (5%) and gum (1%). The highest nutritional values were 80.74±0.34%/100g moisture content in *V. kirkii*, 3.95±0.23%/100g ash content in *M. angolensis*, 19.04±370.65Kcal gross energy in *M. angolensis*, 27.93±0.85%/100g dietary fibre in *L. hastata*, 3.40±0.13%/100g crude fat in *L. hastata*, 65.43±2.91g/100g carbohydrate in *Dioscorea* sp. and 36.37±0.42%/100g crude protein in *M. angolensis*. The highest Ascorbic acid

was 14.71±3.56mg/100g in *M. angolensis* while Beta-carotene was 1082.12±0.08µg/100g in *S. obtusifolia*. A wide array of WEPs are harnessed to diversity human diets in north eastern Uganda. The nutritional contribution of WEPs to the Recommended Daily Allowance and Adequate Intake is variable. There is need to create awareness on the nutritional value of WEPs and their role in diversification of human diets so as to encourage sustainable utilization and deliberate propagation. Further research is also needed to examine mineral element composition and anti-nutrient factors in the WEPs.

BIOGRAPHY (upto 200 words)

Samuel Ojelel has submitted his PhD (Botany) for examination at Makerere University. He is currently serving as Assistant Lecturer in the Department of Plant Sciences, Microbiology and Biotechnology, Makerere University, Uganda. He has nearly 10 publications in the Ethnobotany focusing on the use of wild edible plants, plant ecology and conservation. He is a member of different professional associations.



International Conference on
NUTRITION AND HEALTH CARE

February 10-11, 2022 | Paris, France

Presenter Name: Samuel Ojebel

Mode of Presentation: Oral

<https://www.nutrition.scientexconference.com/>

+1 (346) 3481205

Contact number: +256756188705



Upload your photo here.

