Abstract

INTRODUCTION: Dark green vegetables are excellent sources of nutrients including phytochemicals and can be used to combat malnutrition. *Mucuna urens* and *Mucuna pruriens* are lesser known green leafy vegetables with an anti-anaemic property and other health benefits. The thrust of this work was to evaluate the nutrients, phytochemical and antinutrient composition of *Mucuna* leaves processed through shade drying.

METHODOLOGY: The leaves were sorted, washed, divided into two portions, one shade dried and milled, the other blended in the fresh state. The nutrients, phytochemical and antinutrients of each sample was analyzed using standard methods.

RESULTS AND DISCUSSION: The results indicated that protein, ash, fibre and carbohydrate contents of shade dried *Mucuna pruriens* and *Mucuna urens* were higher compared to the fresh samples. However, *M. pruriens* values were higher than that of *M. urens*. The phytochemicals (beta-carotene, flavonoid, polyphenol, saponin and alkaloid of shade dried samples were high except glucosides which has values of 0.5-0.61mg/100g. *M. pruriens* and *M. urens* contain antinutrients including phytate- 2.49-2.50mg/100g (fresh samples) and 17.35-20.00mg/100g (shade dried sample), Shade drying increase the level of iodine and folate, thiamin and ascorbic acid but the increase were higher in *M.pruriens* than *M. Ureus*.

CONCLUSION: *Mucuna pruriens* and *Mucuna urens* leaves have satisfactory amount of nutrient contents and are both comparable in most of the nutrient. The phytochemical of the leaves makes them worthy of further investigation. However, shade drying increased the nutrients and antinutrient contents of the leaves although not to a toxic level except for phytate.