An Assessment of Minerals and Protein Contents in Selected South African Bottle Gourd Landraces

[Lageraria siceraria (Mol. Standl.)]

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ABSTRACT Bottle gourd (Lageraria siceraria) is an under-researched crop in South Africa, which has the potential to boost food security. However, the nutritional information on the crop is scant. This led to a need to determine the nutritional value of this crop and its potential to meet the Recommended Dietary Allowances (RDA) for various nutrients. The experiment was conducted at a controlled environmental facility with two landraces, which were compared with two commercial pumpkin cultivars. All varieties were found to be good sources of calcium, iron, magnesium and zinc, as well as nitrogen, manganese and copper. With response to the leaf harvesting at different times during crop growth, most varieties had higher nutrients during the early stages of development and before flowering. All varieties were shown to meet the RDA for all reported nutrients. These results suggest that bottle gourd has the potential to be used as a crop to achieve household food security.