

**COMPARATIVE STUDY OF PHYTOCHEMICAL,
PROXIMATE AND MINERAL COMPOSITION OF
DIFFERENT SELECTIONS OF DRIED GORAKA
(*Garcinia quaesita*) FRUIT RIND IN SRI LANKA**

A dissertation submitted to the
Faculty of Animal Science and Export Agriculture
Uva Wellassa University
In partial fulfillment of the requirements for the award of
Bachelor of Science in Export Agriculture

By
KANKANAMALAGE KALANI INDRACHAPA
JAYASUNDARA

Export Agriculture Degree Programme
Faculty of Animal Science and Export Agriculture
Uva Wellassa University of Sri Lanka

2015

ABSTRACT

Goraka (*Garcinia quaesita*) is multi- purpose, endemic tree species which has an edible fruit as the economically important part. Objective of this study was to investigate the comparative phytochemical, mineral and proximate content between four *G. quaesita* selections namely Ovilikanda I, Ovilikanda II, Gasnawa and Aranayaka I that cultivate under similar agro climatic condition in the nursery farm, Gasnawa, Department of Export Agriculture. Standard Analytical procedures were followed to analyze phytochemical, mineral and proximate composition. The phytochemical analysis suggested quantitatively higher percentage of Hydroxycitric acid content in Aranayaka I selection than other selections. Flavonoid content were observed significantly ($p < 0.05$) higher amounts in Ovilikanda I than other selections. The results of proximate analysis revealed that Ovilikanda I was richer in acid insoluble ash and dry matter while Gasnawa selection exhibiting greater amount of crude fat and crude protein. It was found that significantly ($p < 0.05$) higher amount of crude protein and Nitrogen contents in Aranayaka I selection while Ovilikanda II selection exhibiting highest total ash content. In mineral analysis, significantly higher amount of Magnesium was observed in Ovilikanda I, while Ovilikanda II contained highest amount of Phosphorous. Gasnawa selection contained significantly ($p < 0.05$) higher amount of Potassium and Aranayaka I contained higher amount of Sodium than the other selections.

Key words: *Garcinia quaesita*, Goraka fruit, Phytochemical analysis