ABSTRACT

Kiriala (Cocoyam – *Colocasia esculenta* and *Xanthosoma* spp.) is a perennial and seasonal tuber crop It may have a big potential at the present market; if presented in a competitive manner Despite the promising food value, its high perishability leads to a great loss of the produce Therefore development of preservation method and introduction of easy preparation practice for raw tubers can remedy the above drawbacks.

A study was carried out to develop two preservation methods and easy peeling method
Kiriala samples were dehydrated in two different ways; Oven drying coupled with either a chemical treatment with SMS or without the treatment during blanching prior to dehydration. The dried samples were analyzed for ash , moisture , crude fiber , total solid , oxalate , and starch In addition , percentage weight reduction , rehydration ratio and cooking time were assessed The dried samples were cooked using a recipe similar to a usual recipe practice in normal domestic conditions frequently. A sensory evaluation was conducted to detect the consumer acceptability Data were analyzed by Friedman's test and Rank method.

The percentage weight reduction , rehydration ratio and cooking time were similar in both samples irrespective to the dehydration method
The sensory evaluation revealed that the samples blanched with SMS and oven dried had the highest consumer acceptance The attempt to develop a preservation method by using dehydration technique can be concluded successful.

Kiriala tubers were bottled using different brine concentrations; 1 0%, 1 5%, 2 0%, 2 5% and 3 0% The bottled samples were cooked using the same recipe referred to the above A sensory test was conducted to detect the consumers acceptability Data were analyzed by Analysis of Variance and Turkey's test he sensory evaluation showed that the sample bottled with a 2 0% brine concentration had the highest consumer acceptance

Kiriala tubers were peeled by using the various hot lye concentrations with different dipping times , 30 , 60 and 90 seconds The result of peeling procedure showed that the tubers peeled with a 4 0% lye concentration and 60 second has the optimum concentration and time