



## **PROXIMATE ANALYSIS AND DEVELOPMENT OF COOKIES FROM UNDERUTILIZED NIPA PALM KERNEL**

Rajapakshe K and Wijesekara I

*Department of Food Science & Technology, Faculty of Applied Sciences, University of Sri Jayewardenepura, Nugegoda, Sri Lanka*

isuruw@sci.sjp.ac.lk

Nipa palm (*Nypa fruticans*) is one of the underutilized mangrove plants in Sri Lanka. The key objective of this study was to investigate the proximate values and characteristics of *Nypa fruticans* kernel flour. In addition, cookies were developed by incorporating Nipa kernel flour (0, 10, 20, 30, 40, 50%, w/w) and to the best of our knowledge; this is the first report regarding the food use of Nipa kernel in Sri Lanka. Nipa palm fruits were plucked from mangrove site in Ambalangoda, Sri Lanka, washed, and kernel was separated from the outer pericarp. The kernel was oven dried, grinded, and sieved to yield kernel flour. The mature kernel samples were analyzed according to AOAC procedures and protein and fat contents of the kernel flour were  $7.57 \pm 0.28\%$  and  $2.95 \pm 0.07\%$ , respectively. The heavy metal analysis from atomic absorption spectroscopy revealed that, Cu and Zn were detected in Nipa kernel flour were  $0.34 \pm 0.01$  and  $1.38 \pm 0.08$  ppm, respectively. The highest protein content and lowest fat content were observed in 40% Nipa kernel flour added cookies. The appearance and baking conditions