

Comparison of nutrient composition of ripe and unripe fruits of *Nypa fruticans*

ABSTRACT

Introduction. *Nypa fruticans* is one of the mangrove plants in Malaysia. Leaves of the plant are traditionally used for thatching, while the sap is useful for producing an alcoholic drink, sugar and syrup, as well as vinegar. At present, *N. fruticans* fruit is considered as an underutilized fruit. Its flesh (endocarp) is considered nutritionally inferior. Hence, our study aimed to determine the proximate composition and total phenolic content of ripe and unripe flesh of *N. fruticans* to explore its food uses as a source of nutrients. **Materials and methods.** Determination of proximate content followed the AOAC methods, while total phenolic content was determined using the Folin-Ciocalteu reagent assay. **Results and discussion.** The results showed significant differences for all the proximate values (moisture content, ash, carbohydrate, crude protein, crude fat, and insoluble and soluble fiber) between the ripe and unripe flesh of the fruit. The flesh of ripe fruit also had higher ($P < 0.05$) total phenolic content than its unripe counterpart. **Conclusion.** The ripe and unripe flesh of *Nypa fruticans* could potentially be used as functional food ingredients in the future.

Keyword: Peninsular Malaysia; *Nypa fruticans*; Fruits; Developmental stages; Maturity; Proximate composition; Phenolic compounds