

## Analysis of Total Protein and Non Protein nitrogen in Pakkat (*Calamus caesius* Blume.) as a Traditional Food of Mandailing Natal by using Kjeldahl Method

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**Abstract :** Pakkat is a traditional food in Mandailing Natal taken from the inside of the young rattan and the most commonly consumed by people is grilled pakkat. Pakkat can be used as vegetables and believed to cure many diseases that need to be researched content of nutrients in it and is expected to take it become one of the functional food.

The aim of this study was to determine the concentration of total protein and non protein nitrogen (NPN) in pakkat and their changes in fresh, grilled and boiled pakkat. The samples used in this study is young rattan from the forest of Lumban Pasir village, Mandailing Natal, North Sumatera. Total protein and NPN determination is done by using Kjeldahl method which is a simple method for total nitrogen determination in protein and other nitrogenous compounds.

The results show that the total protein contents in fresh, grilled and boiled pakkat are 6.00 g/100g, 4.84 g/100g, and 3.07 g/100g respectively. NPN contents in fresh, grilled and boiled pakkat are 0.600 g/100g, 0.488 g/100g and 0.315 g/100g respectively. Pure protein contents in fresh, grilled, and boiled are 2.25 g/100g, 1.79 g/100g and 1.10 g/100g respectively. The results show that total protein and NPN contents in fresh pakkat is higher than in grilled and boiled pakkat.

**Keywords:** fresh pakkat, grilled pakkat, boiled pakkat, protein, non protein nitrogen, kjeldahl.

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