

**FERMENTASI NIRA LONTAR UNTUK PRODUK NATA
(The Fermentation of Lontar Sap for Nata product)**

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ABSTRACT

This experiment dealt with examining the yield and nutrition ingredients of nata which was produced through the fermentation of lontar sap, and the sap was tapped from flower parts of lontar (*Borassus flabellifer* Linn.) trees. Nata itself is a jelly-like substance resulting from the fermentation of particular tree sap as well as other sugar-containing liquids, and consumed as a light meal (dessert). In this fermentation, starter at 3 various ages was used (i.e. 4 days, 6 days, and 8 days), which was further mixed with lontar sap liquid in three proportions, i.e. the former : the latter being consecutively 200 ml : 800 ml, 400 ml : 600 ml, and 600 ml : 400 ml. Results of the experiment showed that the yield of nata from lontar sap ranged about 30.27 – 43.79% (34.31% in average). Starter ages as well as the mixing proportion between the starter volume and the lontar sap volume affected the nata yield significantly, but the interaction of those two factors did not reveal significant effect. The highest yield of nata (i.e. 43.79%) was achieved through the use of 600 ml of 8-day age starter mixed with 400 ml of lontar sap liquid. Nutrient ingredients (protein, vitamin, crude fiber, fat, ash, calcium, and phosphor) in nata with respect to both composition and content were not similar to those in nata de coco from coconut juice and in nata pinnata from sugar-palm (aren) sap.

Keywords : Lontar tree, sap, fermentation, nata, yield, and nutrient ingredient.

ABSTRAK

Penelitian ini bertujuan untuk mengamati rendemen dan kandungan nutrisi nata yang diproduksi melalui proses fermentasi nira lontar, dimana nira tersebut dapat disadap dari bagian tandan bunga pohon lontar (*Borassus flabellifer* Linn.). Nata adalah sejenis makanan ringan yang menyerupai jeli yang biasanya diproduksi melalui proses fermentasi nira dari pohon tertentu atau bahan cair lainnya yang mengandung gula. Di dalam fermentasi ini, starter dengan 3 variasi umur, yaitu umur 4 hari, 6 hari dan 8 hari, yang kemudian dicampur dengan 600 ml : 400 ml. Hasil penelitian menunjukkan bahwa rendemen nata dari nira lontar berkisar antara 30,27% sampai 43,79% atau rata-rata 34,31 %. Baik umur sarter maupun perbandingan volume starter dengan larutan nira berpengaruh nyata terhadap rendemen nata lontar, akan tetapi interaksi kedua faktor tersebut berpengaruh tidak nyata terhadap rendemen nata lontar. Penggunaan campuran starter berumur 8 hari sebanyak 600 ml dengan 400 ml larutan nira lontar menghasilkan rendemen nata tertinggi (rata-rata 43,79%). Komposisi dan kadar nutrisi (protein, vitamin, serat kasar, lemak, calsium dan pospor) pada nata dari nira lontar berbeda dengan nata de coco dari air kelapa dan nata pinnata dari nira aren.

Kata Kunci : Lontar, nira, fermentasi, nata ,rendemen, dan kandungan nutrisi.