

KAJIAN MUTU FISIK, KIMIA DAN MIKROBIOLOGI GULA AREN BUMBUNG DESA KEKAIT – LOMBOK BARAT

[Study of Physical, Chemical and Microbiological Quality of Bumbung Aren Sugar Kekait Village - West Lombok]

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ABSTRACT

Bumbung palm sugar is sugar obtained through the processing of fresh palm sap which is formed in a bamboo container (bumbung). This research aims to see the quality of palm sugar in Kekait Village. The method used in this study was an experimental method implemented in laboratory and designed using a Randomized Block Design (RCBD) with one factor, which was the location of sugar bumbung producer (Kekait II village, Kekait Daye, Kekait Puncang, Thaebah and Batu Butir). The observational data were analyzed by analysis of variance (ANOVA) at 5% significance level using Co-Stat software. The significant data was further tested by HSD Test. The results showed that the production area of sugar bumbung has significant effect on texture, moisture content and sucrose content but has not significant on colors and pH. Kekait Puncang produced bumbung sugar with the highest yeast growth of $<1.0 \times 10^2$ - 7.95×10^7 CFU / g compared to other village but showed the same results for mold growth $<1.0 \times 10^2$ CFU / g and total microbes $<1.0 \times 10^4$ CFU / g. Batu Butir village produces sugar bumbung which meets the SNI quality requirements in terms of color (red), water content of 9.3% (maximum 10%) and sucrose content of 79.05% (minimum 77%) followed by sugar bumbung Kekait II village with color (yellow red), water content of 9.21% and sucrose content of 71.17% (close to 77%) and Thaebah village sugar bumbung with color (yellow red), water content of 10.01% (maximum 10%) and sucrose content of 75.44% (close to 77%).

Keywords: Chemistry, Microbiology, Palm Sugar, Physic, Quality

ABSTRAK

Gula aren bumbung adalah gula yang diperoleh melalui proses pengolahan nira aren segar yang dicetak dalam wadah bambu (bumbung). Penelitian ini bertujuan untuk mengetahui mutu gula aren Desa Kekait. Metode yang digunakan dalam penelitian ini adalah metode eksperimental yang dilaksanakan di laboratorium dan dirancang menggunakan Rancangan Acak Kelompok (RAK) dengan satu faktor, yaitu lokasi produsen gula bumbung (Dusun Kekait II, Kekait Daye, Kekait Puncang, Thaebah dan Batu Butir). Data hasil pengamatan dianalisis dengan analisis keragaman (ANOVA) pada taraf nyata 5% dengan menggunakan *software Co-Stat*. Data yang berbeda nyata diuji lanjut dengan BNJ. Hasil penelitian menunjukkan bahwa Dusun Kekait II, Kekait Daye, Kekait Puncang, Thaebah, dan Batu Butir menghasilkan gula bumbung dengan warna dan pH yang tidak berbeda nyata namun berbeda nyata dalam tekstur, kadar air, dan kadar sukrosa. Dusun Kekait Puncang menghasilkan gula bumbung dengan pertumbuhan khamir tertinggi sebesar $<1,0 \times 10^2 - 7,95 \times 10^7$ CFU/g dibandingkan dusun lainnya namun menunjukkan hasil yang sama untuk pertumbuhan kapang $<1,0 \times 10^2$ CFU/g dan total mikroba $<1,0 \times 10^4$ CFU/g. Dusun Batu Butir menghasilkan Gula bumbung yang memenuhi syarat mutu SNI dari segi warna (*red*), kadar air 9.3% (maksimal 10%) serta kadar sukrosa 79.05% (minimal 77%) diikuti oleh gula bumbung Dusun Kekait II dengan warna (*yellow red*), kadar air 9.21% serta kadar sukrosa 71.17% (mendekati 77%) dan gula bumbung Dusun Thaebah dengan warna (*yellow red*), kadar air 10.01% (maksimal 10%) serta kadar sukrosa 75.44% (mendekati 77%).

Kata Kunci: Fisik, Gula Aren, Kimia, Mikrobiologi, Mutu