

Penelitian/ Research

STUDI KOMPARATIF SISTEM JAMINAN KEAMANAN PANGAN MODEL SERTIFIKAT PEYULUHAN (SP), SNI DAN FOODSAFE UNTUK INDUSTRI KECIL PANGAN DI INDONESIA

Comparative Study On Food Safety Assurance Systems In Terms Of SP, SNI And FoodSafe Model For Small Scale Food Industry In Industry

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ABSTRACT: Comparative study on food safety assurance systems in terms of SP, SNI foodsafe models and development implemetng of foodsafe model for small scale food industry in Indonesia was conducted to .increase the performance of small scale food safety assu rance .the methods used was based on descriptive analysis that had developed by Hair et al (1987) that are collecting information and data to identify food safety problems issue on small scale industry, problem identification food safety implementation on small scale industry, comparative descriptive analysis of the system s , and development implementing of food safe model for small scale food industry. The result showed that the food safety problem s in small scale food industry were still complex and need to be improved an empowered. The foodsafe model is appropriated as food safety assurance systems for small scale food industry in Indonesia. The food safety audit resulted that three small scale food industries have met foodsafe requirements.

Keywords : *small food industry, food safety assurance, SP, SNI, foodsafe, comparative study, development, implementation.*

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**PENGARUH SUHU, KELEMBABAN RELATIF DAN JENIS PENGEMAS TERHADAP
MUTU DAN UMUR MASA SIMPAN GULA SEMUT**

*The Effects of Temperature, Relative Humadity, Type of Packaging on the Quality and the Shelf
life Granulated Palm Sugar*

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ABSTRACT : A study on the effects of temperature, relative humidity and packaging type on the quality and storage life of the granulated palm sugar has been conducted. It was aimed at determining in the storage condition to improve the granulated palm sugar shelf life. The variables applied in the stdy were storage temperature, packaging material and humadity. The observation was based on sorption isotherm method using BET model and data was process by computer program designed in PASCAL. The correlation among moisture content, quality and shelf life were also discussed. The result showed that the stability mono layer BET of granulated palm sugar reached the moisture content level of 7.42% at 27°C and 11.62% at 37.8°C. the longest shelf life was 70 days at 27°C, relative humadity of 6% and using polypropylene (PP) packaging reached the shelf life of 360 days.

Keywords : *sorption isotherm, water activity, shelf life, palm sugar*

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DISAIN DAN UJI TEKNIS ALAT EKSTRAKTOR KITOSAN DARI KULIT UDANG

Technical Design and Testing of Chitosan Extractor from Shrimp Shells

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ABSTRACT : The study was aimed at designing and testing of chitosan (polymer) extractor by demineralization, deproteinization and deacetylation from shrimp shells. The equipment was generated with induction motor of 0.5 hp (horse power) and equipped with liquid heater and thermostat in order to maintain temperature level of process. The blade of propeller agitator was mounted in vertical shaft in order to generate longitudinal and rotational currents. The flow patterns in blade was a blade mounted off center. The demineralization process was conducted at 70-75°C with chloric acid of 1.25 N and 1.5 hours and 2 hours period of process treatment. Meanwhile deproteinization was employed at 80-85°C using sodium hydroxide 3% w/v in the same hours treatment as the demineralization process. Sodium hydroxide of 50% (w/v) was employed in deacetylation process which operated at 100-110°C in the same hours variation of treatment. The result showed that the best quality chitosan was obtained with demineralization, deproteinization and deacetylation process which were conducted for 2 hours and 2 runs of each process. These were indicated by viscosity resulted e.g 18000 cps (centipoises).

Keyword: *Technical design, extractor, green polymer, chitosan and shrimp shells*

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PENGOLAHAN MINUMAN SARI LIDAH BUAYA (*Aloe vera* Linn)

The Study of Production on Aloe vera Juice

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ABSTRACT: A study on aloe vera juice processing has been carried out. Stages of treatment include peeling, washing, extraction, filtration, formulation, bottling, pasteurization, sterilization and labeling. The treatment of the formulation were addition of water, cane sugar and none –nutritive sweetener. The equal volume comparison between aloe vera and water was the best treatment and preferred by panelist. The best formulation of this research was conducted at pH 3,74 with total solid of 18,02%, sugar content of 14,67% and benzoate of 521 mg/kg. after 12 weeks storage, the product showed microbiologically safe and met the Indonesian National Standard (SNI) of fruit juice.

Keywords: *Aloe vera processing, medicinal plant*

Penelitian/ Research

VACUUM FRYING FOR JACKFRUIT : PROCESSING, FINANCIAL AND SWOT ANALYSIS

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ABSTRACT: The study described about analysis of processing, financial, and SWOT (strength, weakness, opportunities and threats) for jackfruit vacuum frying processing. For vacuum frying of jackfruit, the frying condition (pressure and temperature, frying rate and organoleptic test) were investigated. The jackfruit are conducted under vacuum pressure of 70 cm Hg and temperature level of 75°C and 80°C. Such condition was done to minimize the heat used and therefore reduce changes in composition, color, taste and flavor of the jackfruit. The results showed that the product was 22% and the product has low moisture content of 3.58% (wet basis) with the taste, flavor, color and volume similar to the fresh jackfruit. This experiment was 2510 ml. Financial analysis was conducted to evaluate the financial viability of jackfruit processing. Financial analysis of the jackfruit production capacity of 30 kg per day showed that NPV (Net Present Value) was Rp 52,391,000 which was bigger than investment cost, IRR (Internal Rate Return) was 51% and PBP (Pay Back Period) was 1.95 years. It can be concluded that jackfruit processing was viable to be established.

Keywords: *Vacuum frying technology, vacuum frying of jackfruit processing, vacuum frying analysis, financial analysis and SWOT analysis, fruit processing.*