Ringkasan

Indana Zulfa Rahmawati. 2023. Aplikasi Metode Osmosis pada Manisan Kering Belimbing Wuluh *(Averrhoa billimbi Linn)* Tinjauan Konsentrasi Gula dan Lama Pengeringan . dibawah Bimbingan Dr. Hapsari Titi Palupi, STP., MP.

Manisan belimbing wuluh merupakan pengawetan makanan menggunakan konsentrasi gula yang ditentukan. Tujuan dari penambahan gula untuk menambahkan rasa dan mencegah pertumbuhan mikroorganisme dalam produk (Faizah *et al*., 2022). Penelitian ini bertujuan untuk mengetahui pengaruh konsentrasi gula dan lama pengeringan terhadap karakteristik kimia dan organoleptik manisan kering belimbing wuluh (*Averrhoa billimbi Linn*). Pembuatan manisan kering belimbing wuluh dan analisa kimia dilaksanakan di Labolatorium Hasil Pengolahan Pangan dan Labolatorium Biokimia, Fakultas Pertanian, Universitas Yudharta Pasuruan, mulai Bulan Juni sampai Juli 2023.

Penelitian ini menggunakan Rancangan Acak Kelompok (RAK) yang disusun secara faktorial dengan dua perlakuan dan tiga kali ulangan yaitu perlakuan konsentrasi gula dan perlakuan lama pengeringan. Konsentrasi gula dan lama pengerin 5 jam 40% (A1B1), 50% (A2B1), 60% (A3B1) konsentrasi gula dan lama pengeringa 7 jam 40% (A1B2), 50% (A2B2), 60% (A3B2). Parameter yang diamati meliputi kadar air, kadar gula, total asam, pH. Perlakuan yang berpengaruh nyata akan dianalisa dengan uji beda nyata terkecil (BNT) menggunakan software Minitab, dan uji kesukaan akan dianalisa dengan uji friedman dengan skala hedonik.

Hasil penelitian menunjukkan bahwa perlakuan konsentrasi gula dan lama pengringan manisan kering belimbing wuluh berpengaruh nyata pada uji kimia kadar air, kadar gula, total asam, pH. Hasil uji organoleptik menunjukkan bahwa perlakuan A3B2 (konsentrasi gula 60%: lama pengeringan 7 jam) lebih disukai panelis dari segi warna, aroma, tekstur, dan rasa.

Kata Kunci: Belimbing Wuluh, Manisan, Konsentrasi gula, Perendaman, lama pengeringan.

Summary

Indana Zulfa Rahmawati. 2023. Application of the Osmosis Method to Dried Candied Starfruit (*Averrhoa billimbi Linn*) Review of Sugar Concentration and Drying Time. under the Guidance of Dr. Hapsari Titi Palupi, STP., MP.

Candied starfruit is a food preservation using a specified sugar concentration. The purpose of adding sugar is to add flavor and prevent the growth of microorganisms in the product (Faizah *et al*., 2022). Dried candied starfruit and chemical analysis are carried out at the Food Processing Results Laboratory and Biochemistry Laboratory, Faculty of Agriculture, Yudharta University, Pasuruan, from June to July 2023.

This study used a Randomized Block Design (RBD) which was arranged factorially with two treatments and three replications, namely the sugar concentration treatment and the drying time treatment. Sugar concentration and drying time 5 hours 40% (A1B1), 50% (A2B1), 60% (A3B1) sugar concentration and drying time 7 hours 40% (A1B2), 50% (A2B2), 60% (A3B2). Parameters observed included water content, sugar content, total acid, pH. Treatments that have a significant effect will be analyzed with the Least Significant Difference (LSD) test using Minitab software, and the preference test will be analyzed with the Friedman test with a hedonic scale.

The results showed that the treatment of sugar concentration and drying time of dry candied starfruit had a significant effect on chemical tests for water content, sugar content, total acid, Potential hydrogen. The organoleptic test results showed that the A3B2 treatment (60% sugar concentration: 7 hours drying time) was preferred by the panelists in terms of color, aroma, texture and taste.

Keywords: Candied starfruit, Sweets, Concentration of sugar, Soaking, Drying time.