

RINGKASAN

Nanas madu merupakan buah yang banyak dikembangkan di daerah Pemalang. Memiliki nilai gizi yang tinggi seperti vitamin A, B, C, kalsium, fosfor, besi dan sebagai antioksidan. Nanas madu memiliki umur simpan yang pendek yakni hanya 4-6 hari. Salah satu alternatif penanganan untuk memperpanjang umur simpan nanas adalah dilakukan pelapisan lilin lebah yang didahului dengan pencucian menggunakan *disinfectant agent*. Penelitian ini bertujuan untuk 1) Mengetahui pengaruh kinerja jenis *disinfectant agent* terhadap atribut mutu nanas madu; 2) Mengetahui pengaruh variasi konsentrasi emulsi lilin lebah terhadap atribut mutu nanas madu; 3) Mengetahui interaksi antara jenis *disinfectant agent* dengan variasi konsentrasi emulsi lilin lebah dengan terhadap atribut mutu nanas madu; 4) Mengetahui kombinasi antara kinerja *disinfectant agent* dengan variasi konsentrasi emulsi lilin lebah terhadap atribut mutu nanas madu.

Rancangan percobaan yang digunakan adalah Rancangan Acak Kelompok (RAK). Faktor yang diteliti meliputi jenis *disinfectant agent* (L) terdiri dari air kran (L1) larutan klorin 1% (L2), dan larutan garam 15% (L3) , serta konsentrasi emulsi lilin lebah terdiri dari 6% (S1), 9% (S2), dan 12% (S3). Variabel yang diamati yaitu variabel fisikokimia (kekerasan, susut bobot, warna L*, warna a*, warna b*, kadar air, vitamin C) dan mikrobiologi (*Total Plate Count*). Analisis data menggunakan analisis ragam (ANOVA) dan uji lanjut DMRT pada taraf 5%, serta perlakuan terbaik menggunakan uji indeks efektivitas.

Hasil penelitian menunjukkan bahwa *disinfectant agent* berpengaruh nyata terhadap tekstur, susut bobot, warna L*, warna b*, dan total mikroba, sedangkan konsentrasi emulsi lilin lebah berpengaruh nyata terhadap susut bobot, kadar air, dan vitamin C. Interaksi antara keduanya tidak berpengaruh nyata. Kombinasi perlakuan terbaik yaitu L3S2 perlakuan jenis *disinfectant agent* larutan garam dan konsentrasi emulsi lilin lebah 9% dengan nilai kekerasan 0,64kg/cm², susut bobot 13,6%, warna L* 16,6, warna a* 11,6, warna b* 8,2, kadar air 84,92%, vitamin C 52,91 mg/100g, dan TPC 24,1x10³cfu/mL.

SUMMARY

Honey pineapple is widely planted fruit in Pemalang. It has high nutritional value such as vitamins A, B, C, calcium, phosphorus, iron and as an antioxidant. Pineapple has a short shelf life that is only 4-6 days. One of the handling alternative to extend pineapple's shelf life is by coating of beeswax which preceded by washing using disinfectants agent. This research aims to 1) Find out the impact of disinfectant agent performance on honey pineapple quality attributes; 2) Know the impact of variations in the concentration of beeswax emulsions on honey pineapple quality attributes; 3) Know the interaction between the types of disinfectant agent with variations in the concentration of beeswax emulsions on honey pineapple quality attributes 4) Discover the combination between performance of the disinfectant agent with variations in the concentration of beeswax emulsions toward quality attributes of honey pineapple.

The experimental design used is Randomized Block Design (RBD). The investigated factors involve disinfectant agent (L) which consist of faucet water (L1), 1% chlorine solution (L2), and 15% salt solution (L3), also concentrations of beeswax emulsions which consists of 6% (S1), 9% (S2), and 12% (S3). The observed variables are physicochemistry (hardness, weight loss, L color, a* color, b* color, water content, vitamin C) and microbiology (TPC). Data analyzed using analysis of variance (ANOVA) and DMRT at the 5% level, as well as best use treatment effectiveness.*

*The results showed that disinfectant agent significantly affected texture, weight loss, L * color, b * color, and total microbes, while the concentration of beeswax emulsion significantly affected weight loss, vitamin C, and water content. Interactions between the two have no real effect. The best treatment combination is L3S2, type of disinfectant agent using salt solution and concentration of beeswax emulsions 9% with hardness value 0.64 kg/cm², weight loss 13.6%, L* color 16.6, a* color 11.6, b* color 8.2, water content 84.92%, vitamin C 52.91 mg/100g, and TPC 24X10³ cfu/mL.*