ABSTRAK

PENGARUH *COATING MAGGOT OIL* PADA BUAH NANAS MD2 SELAMA PENYIMPANAN SUHU RUANG

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Nanas (*Ananas comosus*) merupakan salah satu komoditas hortikultura penting yang dikembangkan di provinsi Lampung. Umur simpan buah nanas segar antara 1 sampai 7 hari pada suhu penyimpanan ±21,11°C. *Edible coating* merupakan salah satu metode yang berpotensi dapat memperpanjang umur simpan serta mempertahankan mutu buah segar. Penelitian ini menganalisis pengaruh coating pada buah nanas MD2 menggunakan *coating maggot oil* dengan konsentrasi 12,5%, 15%, 17,5%, *palm stearin* 0,1%, dan OE (existing digunakan di PT Great Giant Pineapple) selama penyimpanan suhu ruang. Penelitian ini menggunakan rancangan acak lengkap (RAL) faktorial dengan faktor pelapis (*coating*) dan lama penyimpanan. Alat yang digunakan yaitu gelas ukur, stearer, hotplate, sedangkan bahan yang digunakan, *maggot oil*, *palm stearin*, gliserol, *emulsifier tween* 80, dan buah nanas MD2 dengan *size* 7 dan *shell color* (SC) 1. Hasil penelitian menunjukkan bahwa pada pelapis *maggot oil* 12,5% dan *maggot oil* 15% memiliki performa yang hampir sama atau tidak berpengaruh nyata dengan pelapis OE (existing digunakan di PT Great Giant Pineapple) tetapi lebih baik dibandingkan dengan *coating maggot oil* 17% dan *palm stearin* 0,1%. Pelapis *maggot oil* 12,5% dan 15% dapat digunakan sebagai pelapis alternatif untuk larutan yang sudah existing.

Kata kunci: Buah Nanas MD2; *Coating*; Pelapis; *Maggot Oil*; *Palm Stearin*; OE; Lama Penyimpanan

ABSTRACT

EFFECT OF MAGGOT OIL COATING ON MD2 PINEAPPLE DURING STORAGE AT AMBIENT TEMPERATURE

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Pineapple (*Ananas comosus*) is one of the important horticultural commodities cultivated in Lampung Province. The shelf life of fresh pineapple ranges between 1 to 7 days at a storage temperature of approximately ±21.11°C. Edible coating is a promising method to extend shelf life and to maintain the quality of fresh fruit. This study analyzed the effect of coating on MD2 pineapple using maggot oil-based coatings at concentrations of 12.5%, 15%, and 17.5%, compared with palm stearin (0.1%) and OE (existing coating applied by PT Great Giant Pineapple) during storage at ambient temperature. The experiment was arranged in a factorial completely randomized design (CRD) with two factors: coating treatment and storage duration. The equipments used included a measuring cylinder, stirrer, and hotplate, while the materials consisted of maggot oil, palm stearin, glycerol, emulsifier (Tween 80), and MD2 pineapples with size 7 and shell color (SC) 1. The results showed that coatings with maggot oil at 12.5% and 15% exhibited similar performance, with no significant difference compared to OE, but were more effective than coatings with maggot oil 17.5% and palm stearin 0.1%. Coating maggot oil 12,5% and 15% can be used as alternative coating in the future

Keywords: MD2 Pineapple; Coating; Edible Coating; Maggot Oil; Palm Stearin; OE; Storage Duration.