

**THE EFFECT OF CMC AND GLYCEROL CONCENTRATION
ADDITION IN EDIBLE COATING ALOE VERA (*Aloe vera* L.)
TOWARDS QUALITY OF PINEAPPLE (*Ananas comosus*)**

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ABSTRACT

Pineapple is a fruit that contains many nutrients so its is good for consumption. To consume pineapple, it takes a long time to peel the skin. This has prompted the emergence of innovation to sell fresh pineapples in the form of sliced fruit. The quality of a peeled pineapple will drop faster. This can be prevented with edible coating that made from aloe vera. This research was conducted to study the effect of aloe vera edible coating with the addition CMC and glycerol on moisture content, weight loss, and organoleptics (color, texture, aroma, taste) of fesh-cut pineapple fruit.

This research is a True Experimental with pretest-posttest control group design. Variations in concentration of CMC (1%;1,5%) and glycerol addition (0,5%;1%) and replicated 4 times so it's required 24 samples. Observation result data include moisture content, weight loss, and organoleptic (color, texture, aroma, taste) were analyzed using One Way ANOVA test.

Until the 9th day of storage, the smallest decrease in water content was found in the G2C2 treatment, which was 84.04%. The smallest increase in weight loss was also found in the G2C2 treatment, which was 11.11%. The highest average organoleptic score on the parameters of color, aroma, texture, and taste in the G2C2 treatment.

Edible coating aloe vera on pineapple has an effect on water content, weight loss and organoleptic including color, texture, aroma, and taste. The addition of CMC and glycerol concentrations affected the water content and weight loss, color, aroma, texture but did not affect the taste of pineapple during storage. To improve the results of this study, further research is needed to examine the effect of aloe vera edible coating and the addition of CMC and glycerol on total dissolved solids and pH.

Keywords : *edible coating, aloe vera, pineapple*

**PENGARUH PENAMBAHAN KONSENTRASI CMC DAN GLISEROL
PADA LARUTAN *EDIBLE COATING* GEL LIDAH BUAYA (*Aloe vera* L.)**

TERHADAP MUTU BUAH NANAS (*Ananas comosus*)

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ABSTRAK

Nanas merupakan buah yang mengandung banyak nutrisi sehingga baik dikonsumsi. Untuk mengonsumsi buah nanas, memerlukan waktu lama dalam pengupasan kulitnya sehingga mendorong inovasi untuk menjual nanas segar dalam bentuk nanas potong. Nanas yang dikupas lebih cepat mengalami penurunan mutu. Hal tersebut dapat dicegah dengan *edible coating* dari lidah buaya. Penelitian ini dilakukan untuk mengetahui pengaruh pemberian *edible coating* lidah buaya dengan penambahan CMC dan gliserol terhadap kadar air, susut bobot, dan organoleptik (warna, tekstur, aroma, rasa) nanas potong.

Penelitian ini berjenis eksperimen murni dengan *pretest-posttest control group design*. Variasi konsentrasi CMC (1%;1,5%) dan gliserol (0,5%;1%) dan dilakukan replikasi sebanyak 4 kali sehingga berjumlah 24 sampel. Data hasil pengamatan meliputi kadar air, susut bobot, dan organoleptik (warna, tekstur, aroma, rasa) dianalisis menggunakan uji *One Way ANOVA*.

Hingga penyimpanan hari ke 9, penurunan kadar air terkecil terdapat pada perlakuan G₂C₂ yaitu sebesar 84,04. Peningkatan susut bobot terkecil juga terdapat pada perlakuan G₂C₂ yaitu sebesar 11,11%. Rerata skor organoleptik tertinggi pada parameter warna, aroma, tekstur, dan rasa adalah perlakuan G₂C₂.

Pemberian *edible coating* lidah buaya pada buah nanas berpengaruh terhadap kadar air, susut bobot dan organoleptik meliputi warna, aroma, tekstur dan rasa. Penambahan konsentrasi CMC dan gliserol berpengaruh terhadap kadar air dan susut bobot, warna, aroma, tekstur namun tidak berpengaruh terhadap rasa buah nanas selama penyimpanan. Untuk menyempurnakan hasil penelitian ini, perlu dilakukan penelitian lanjutan dengan mengkaji pengaruh pemberian *edible coating* lidah buaya dengan penambahan CMC serta gliserol terhadap total padatan terlarut dan pH.

Kata Kunci : *edible coating*, lidah buaya, nanas