

# STUDI PERUBAHAN SIFAT FISIK RAMBUTAN (*Nephelium lappaceum* L.) SELAMA PENYIMPANAN

*Study of changes in the physical properties of hair (Nephelium lappaceum l.) During storage*

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## ABSTRAK

Tujuan dari penelitian ini adalah mengetahui pengaruh perbedaan suhu terhadap laju kadar air kulit buah dan daging, mengetahui pengaruh perbedaan pengemasan terhadap perubahan bobot, mengetahui pengaruh perbedaan penyimpanan terhadap total padatan terlarut pada buah rambutan. Metode penelitian yang digunakan yaitu metode eksperimental dengan percobaan di laboratorium Teknik Bioproses. Parameter yang diamati yaitu kadar air kulit buah dan daging buah, perubahan bobot dan total padatan terlarut. Hasil penelitian menunjukkan bahwa kadar air buah rambutan utuh kemasan terbuka pada kulit buah 44% dan daging buah 79%, kemasan *vacuum* kulit buah 69% dan daging buah 80%, pada tabung ventilasi kulit buah 61% dan daging buah 77%. Sedangkan pada suhu penyimpanan 15°C kadar air kulit buah 33% dan daging buah 77%, pada tabung *Vacuum* kulit buah 74% dan daging buah 78%, sedangkan pada ventilasi kulit buah 48% dan daging buah 78%. Rata-rata perubahan bobot pada suhu ruang pada kemasan terbuka 29%, kemasan *vacuum* 6% kemasan ventilasi 23%. Sedangkan pada suhu 15° pada kemasan terbuka perubahan bobot 28%, tabung *vacuum* yaitu 3% sedangkan tabung ventilasi sebesar 28%. Rata-rata total padatan terlarut kemasan *vacuum* 19,725%, kemasan ventilasi sebesar 22,575%, Total padatan terlarut pada suhu ruangan terbuka kemasan ventilasi 22,575% dan kemasan *vacuum* yaitu 19,725%. Sedangkan pada suhu 15°C total padatan terlarut kemasan terbuka 21,65%. kemasan ventilasi sebesar 21,65%, kemasan *vacuum* sebesar 21,55%,. Total padatan terlarut pada suhu 15°C kemasan ventilasi dan kemasan terbuka 21,65% dan kemasan *vacuum* 21,55%.

**Kata kunci:** kemasan, penyimpanan, rambutan, sifat fisik

## ABSTRACT

*The purpose of this study is to determine the effect of temperature differences on the moisture content rate of fruit skin and flesh, determine the effect of packaging differences on weight changes, determine the effect of storage differences on total dissolved solids in rambutan fruit. The research method used is an experimental method with experiments in the Bioprocess Engineering laboratory. The parameters observed were moisture content of fruit skin and fruit flesh, weight change and total dissolved solids. The results showed that the moisture content of whole rambutan fruit open packaging on fruit skin 44% and fruit flesh 79%, vacuum packaging fruit skin 69% and fruit flesh 80%, on fruit skin ventilation tube 61% and fruit flesh 77%. While at a storage temperature of 15°C the moisture content of fruit skin is 33% and fruit flesh is 77%, in the Vacuum tube the fruit skin is 74% and the fruit flesh is 78%, while at the fruit skin ventilation is 48% and*

*the fruit flesh is 78%. Average weight change at room temperature in open packaging 29%, vacuum packaging 6% ventilation packaging 23%. While at a temperature of 15 ° in open packaging the weight change is 28%, the vacuum tube is 3% while the ventilation tube is 28%. Average total dissolved solids vacuum packaging 19.725%, ventilation packaging by 22.575%, Total dissolved solids at open room temperature, ventilation packaging is 22.575%, and vacuum packaging is 19.725%. Meanwhile, at a temperature of 15°C, the total dissolved solids of open packaging are 21.65%. ventilation packaging by 21.65%, vacuum packaging by 21.55%,. Total dissolved solids at 15°C ventilation packaging and open packaging 21.65% and vacuum packaging 21.55%.*

**Keywords:** *packaging, physical properties, storage, rambutan*