

GILANG MAHARDIKA NPM 16.03.3.1.1.00065 Kajian Sifat Fisik, Kimia, dan Antibakteri Pasta Belimbing Wuluh (*Averrhoa bilimbi* L.)

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ABSTRAK

Penelitian ini bertujuan untuk mengetahui pengaruh perbandingan buah : air dan lama pemanasan terhadap sifat fisik, kimia, dan antibakteri pasta belimbing wuluh serta harga pokok penjualan dan break even point. Penelitian ini dimulai dengan membuat pasta belimbing wuluh dengan perbandingan buah : air pada saat proses blending yakni 1 : 1, 1 : 2, dan 1 : 3, kemudian saat proses pemanasan pasta dengan perbedaan lama pemanasan 10 dan 15 menit. Pengujian yang dilakukan meliputi uji kadar air metode gravimetri (oven), uji total padatan terlarut menggunakan refraktometer genggam, uji viskositas menggunakan viskometer Rion VT-04, dan uji aktivitas antibakteri menggunakan metode difusi agar dengan suspensi bakteri Escherichia coli media pertumbuhan bakteri nutrient broth dan nutrient agar serta perhitungan harga pokok penjualan (HPP) dan break even point (BEP). Hasil penelitian menunjukkan bahwa perbandingan buah : air memberikan pengaruh nyata terhadap nilai kadar air, total padatan terlarut, viskositas, dan antibakteri pasta belimbing wuluh. Kemudian lama pemanasan memberikan pengaruh nyata terhadap nilai kadar air, total padatan terlarut, viskositas, dan antibakteri pasta belimbing wuluh. Harga pokok penjualan pasta belimbing wuluh kemasan plastik PET 150 gr sebesar Rp. 4.800. Harga jual pasta belimbing wuluh dengan persentase keuntungan 10% sebesar Rp. 5.300. BEP rupiah sebesar Rp. 26.525.508 dan BEP unit sebesar 4.974 botol.

Kata Kunci : Antibakteri, BEP dan HPP, Fisik dan Kimia, Pasta Belimbing Wuluh

GILANG MAHARDIKA NPM 16.03.3.1.1.00065 *Study of Physical, Chemical, and Antibacterial Properties of Cucumber Tree Paste (Averrhoa bilimbi L.)*

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ABSTRACT

The aims of this study is to determine the effect of fruit : water ratio and heating time on the physical, chemical, and antibacterial properties of cucumber tree paste and cost of goods sold and break even point. This research was started by making cucumber tree paste with fruit : water ratio during blending, namely 1 : 1, 1 : 2, and 1 : 3, then during heating process of paste with difference in heating time of 10 and 15 minutes. The tests carried out included water content test by the gravimetric method (oven), total dissolved solids test by using a handled refractometer, viscosity test using Rion – VT04 Viscometer, and antibacterial activity test using agar diffusion method with E. coli suspension, nutrient broth and nutrient agar. Order calculation the cost of goods sold and break even point. The results showed that the fruit : water ratio and the heating time had a significant effect on the value of water content, total dissolved solids, viscosity, and antibacterial properties of cucumber tree paste. The cost of goods sold of cucumber tree paste with 150 gr PET plastic packaging is IDR 4.800. The selling price of cucumber tree paste with profit percentage of 10% is IDR 5.300. BEP (Rupiah) is IDR 26.525.508 an BEP (unit) is 4.974 bottles.

Kata Kunci : Antibacterial, BEP and CGS, Physical and Chemical, Cucumber Tree paste