

**PENGARUH PERBEDAAN PERLAKUAN PADA NIRA TEBU
(*Saccharum officinarum*, Linn) TERHADAP MUTU GULA
SEMUT YANG DIHASILKAN DAN ANALISIS NILAI
TAMBAH**



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Pengaruh Perbedaan Perlakuan pada Nira Tebu (*Saccharum officinarum*, Linn) terhadap Mutu Gula Semut yang dihasilkan dan Analisis Nilai Tambah

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ABSTRAK

Penelitian ini bertujuan untuk mendapatkan pengaruh perbedaan perlakuan pada nira tebu terhadap mutu gula semut, mendapatkan mutu gula semut dengan perlakuan terbaik dan menghitung nilai tambah. Penelitian ini menerapkan metode *trial and error* dengan 5 perlakuan sebanyak 3 kali ulangan. Data dianalisis dengan uji T, yaitu *Independent Sample T Test*. Perlakuan pengendapan selama 1 jam meningkatkan rendemen dan °Hue warna serta menurunkan bagian tidak larut dalam air, gula pereduksi, kadar abu dan kadar air. Penyaringan 150 *mesh* meningkatkan rendemen dan °Hue warna serta menurunkan bagian tidak larut dalam air, gula pereduksi, kadar abu dan kadar air. Pemanasan dengan *microwave* selama 3 menit dan *filtrasi* meningkatkan °Hue warna serta menurunkan rendemen, bagian tidak larut dalam air, gula pereduksi, kadar abu dan kadar air. Penambahan kapur hingga pH 7 meningkatkan °Hue warna, bagian tidak larut dalam air dan kadar abu serta menurunkan rendemen, gula pereduksi dan kadar air. Perlakuan terbaik yaitu penyaringan 150 *mesh* dengan nilai rendemen 17,56 %, warna 88,33 °Hue, bagian tidak larut dalam air 0,81%, gula pereduksi 2,79%, kadar air 2,46% dan kadar abu 2,28%. Nilai tambah gula semut berdasarkan metode hayami adalah sebesar Rp3.019,06/kg nira atau sebesar 22,92%.

Kata kunci : Gula Semut, Nira Tebu, Mutu Gula Semut, Nilai Tambah.

The Effect of Different Treatments on Sugar Cane (*Saccharum Officinarum*, Linn) on the Quality of Ant Sugar Produced and Added Value Analysis

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ABSTRACT

This research aims to determine the effect of different treatments on sugar cane sap on the quality of ant sugar, obtain the quality of ant sugar with the best treatment and calculate the added value. This research applied the trial and error method with 5 treatments with 3 repetitions. Data were analyzed using the T test, namely the Independent Sample T Test. Deposition treatment for 1 hour increases the yield and color hue and reduces the insoluble part in water, reducing sugars, ash content and water content. 150 mesh filtration increases the yield and color hue and reduces water insoluble parts, reducing sugars, ash content and water content. Heating with a microwave for 3 minutes and filtration increases the color hue and reduces the yield, water insoluble parts, reducing sugars, ash content and water content. The addition of lime to pH 7 increases the color hue, water insoluble part and ash content and reduces the yield, reducing sugar and water content. The best treatment is 150 mesh filtration with a yield value of 17.56%, color 88.33 °Hue, water insoluble part 0.81%, reducing sugar 2.79%, water content 2.46% and ash content 2.28 %. The added value of brown sugar based on the hayami method is IDR 3,019.06/kg of sap or 22.92%.

Keywords: Brown Sugar, Sugar Cane Juice, Quality of Ant Sugar, Added Value.