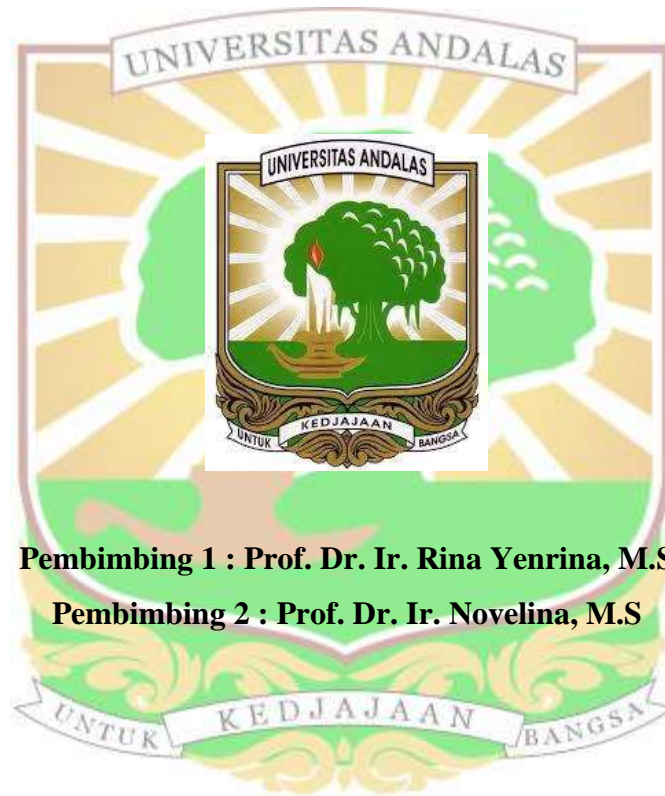


PENGARUH PENAMBAHAN SARI BELIMBING WULUH (*Averrhoa bilimbi* L) TERHADAP KARAKTERISTIK SIRUP BUNGA TELANG (*Clitoria ternatea*)

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1811122020**



Pembimbing 1 : Prof. Dr. Ir. Rina Yenrina, M.S

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Skripsi

*Sebagai Salah Satu Syarat Untuk Memperoleh
Gelar Sarjana Teknologi Pertanian*

**FAKULTAS TEKNOLOGI PERTANIAN
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Pengaruh Penambahan Sari Belimbing Wuluh (*Averrhoa bilimbi* L) terhadap Karakteristik Sirup Bunga Telang (*Clitoria ternatea*)

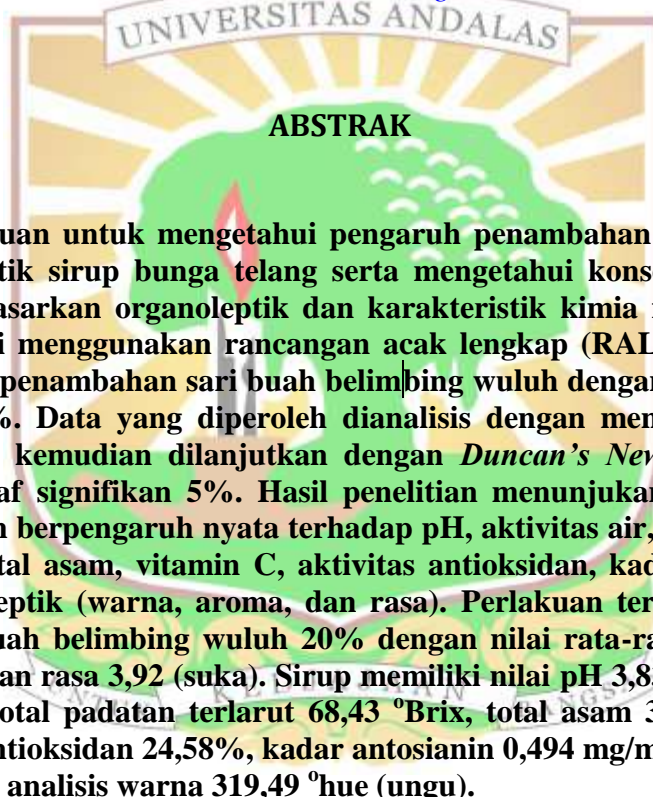
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Penelitian ini bertujuan untuk mengetahui pengaruh penambahan sari belimbing wuluh terhadap karakteristik sirup bunga telang serta mengetahui konsentrasi sari belimbing wuluh terbaik berdasarkan organoleptik dan karakteristik kimia fisik dari sirup bunga telang. Penelitian ini menggunakan rancangan acak lengkap (RAL) dengan 5 perlakuan dan 3 ulangan yaitu penambahan sari buah belimbing wuluh dengan konsentrasi 0%, 5%, 10%, 15% dan 20%. Data yang diperoleh dianalisis dengan menggunakan *Analysis of Variance* (ANOVA), kemudian dilanjutkan dengan *Duncan's New Multiple Range Test* (DNMRT) pada taraf signifikan 5%. Hasil penelitian menunjukkan bahwa penambahan sari belimbing wuluh berpengaruh nyata terhadap pH, aktivitas air, kadar gula total, total padatan terlarut, total asam, vitamin C, aktivitas antioksidan, kadar antosianin, analisa warna, dan organoleptik (warna, aroma, dan rasa). Perlakuan terbaik pada sirup yaitu penambahan sari buah belimbing wuluh 20% dengan nilai rata-rata warna 4,08 (suka), aroma 3,84 (suka), dan rasa 3,92 (suka). Sirup memiliki nilai pH 3,83, nilai a_w 0,821, kadar gula total 65,58%, total padatan terlarut 68,43 °Brix, total asam 3,78%, vitamin C 7,62 mg/100g, aktivitas antioksidan 24,58%, kadar antosianin 0,494 mg/ml, angka lempeng total $2,63 \times 10^2$ CFU/g, dan analisis warna 319,49 °hue (ungu).

Kata kunci : bunga telang, belimbing wuluh, karakteristik, sirup

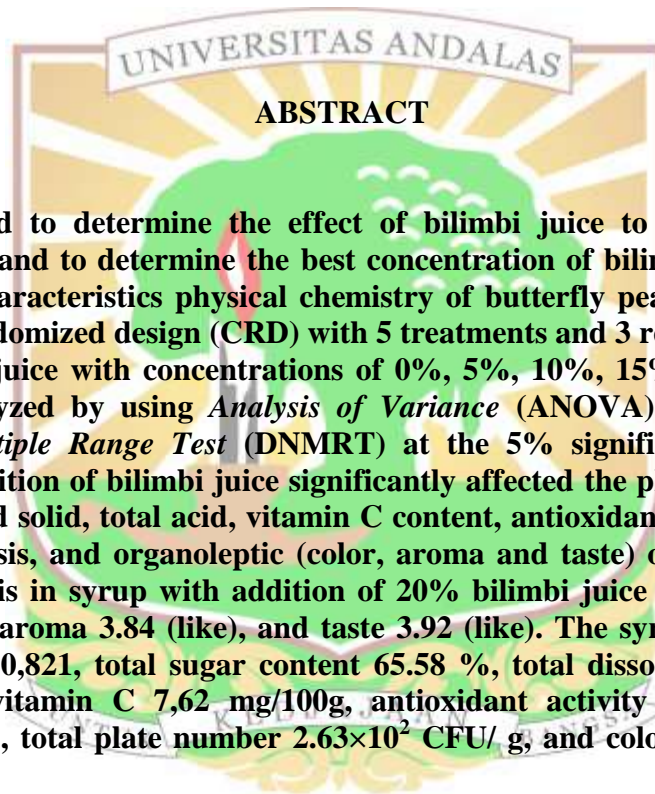
The Effect Of Bilimbi Juice (*Averrhoa bilimbi L*) Addition To The Characteristic Of Butterfly Pea (*Clitoria ternatea*) Syrup

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This research aimed to determine the effect of bilimbi juice to the characteristics of butterfly pea syrup and to determine the best concentration of bilimbi juice based on the organoleptic and characteristics physical chemistry of butterfly pea syrup. This research used a complete randomized design (CRD) with 5 treatments and 3 replications, namely the addition of bilimbi juice with concentrations of 0%, 5%, 10%, 15% and 20%. The data obtained were analyzed by using *Analysis of Variance* (ANOVA), then continued with *Duncan's New Multiple Range Test* (DNMRT) at the 5% significant level. The result showed that the addition of bilimbi juice significantly affected the pH, water activity, total sugar, total dissolved solid, total acid, vitamin C content, antioxidant activity, anthocyanin content, color analysis, and organoleptic (color, aroma and taste) of butterfly pea syrup. The best treatment is in syrup with addition of 20% bilimbi juice with an average color value of 4.08 (like), aroma 3.84 (like), and taste 3.92 (like). The syrup had a pH value of 3.83, water activity 0,821, total sugar content 65.58 %, total dissolved solids 68.43°Brix, total acid 3.78%, vitamin C 7,62 mg/100g, antioxidant activity 24,58%, anthocyanin content 0.494 mg/ml, total plate number 2.63×10^2 CFU/ g, and color analysis 319.49 °hue (purple).

Keyword : butterfly pea, bilimbi, characteristics, syrup