

ABSTRACT

THE EFFECT OF PINEAPPLE JUICE (*Ananas comosus (L.) Merr*) AND SWEET ORANGE JUICE (*Citrus sinensis*) FORMULATIONS ON THE CHEMICAL AND SENSORY PROPERTIES OF POWDER DRINK

By

RIENDA MUTIARA JAYANTI

Pineapple juice and sweet orange juice can be used as raw materials for making powder drinks. This study aims to determine the effect of pineapple juice and sweet orange juice formulations on the chemical and sensory properties of powder drinks, as well as obtain pineapple juice and sweet orange juice formulations that produce pollen drinks with the best chemical and sensory properties. This study used a Completely Randomized Block Design (RCBD) with a single factor, and 4 repeats. The ratio of pineapple juice and orange juice was carried out with 6 levels, namely 100%:0% (P1), 80%:20% (P2), 60%:40% (P3), 40%:60% (P4), 20%:80% (P5), 0%:100% (P6). The data obtained were analyzed for homogeneity with the Bartlett test and the six-data material was tested with the Tukey test, then the data was analyzed for variance (ANARA) to determine the effect between treatments. If there is a significant effect, the data is further analyzed with the Least Significant Difference Test (LSD) at 5% level. The results showed that the formulation of pineapple juice and sweet orange juice had an effect on water content, ash content, pH, vitamin C, taste, color, aroma, and overall acceptance of powder drinks. The best powder drink with pineapple juice and sweet orange juice formulation is P5 treatment (20% pineapple juice: 80% orange juice) with criteria of moisture content (2.59%), ash content (0.46%), pH (3.25), vitamin C (26.98 mg/100mL), color test (L^* 91.26, a^* 19,02, b^* 1,287), taste 3.53 (liked), color 3.97 (liked), aroma 3.66 (liked), overall reception 3.67 (liked), sugar content (23.21%), and beta carotene (417,84 mg/kg).

Keywords: powder drink, pineapple juice, sweet orange juice

ABSTRAK

PENGARUH FORMULASI SARI BUAH NANAS (*Ananas comosus* (L.) Merr) DAN SARI BUAH JERUK MANIS (*Citrus sinensis*) TERHADAP SIFAT KIMIA DAN SIFAT SENSORI MINUMAN SERBUK

Oleh

RIENDA MUTIARA JAYANTI

Sari buah nanas dan sari buah jeruk manis dapat digunakan sebagai bahan baku pembuatan minuman serbuk. Penelitian ini bertujuan untuk mengetahui pengaruh formulasi sari buah nanas dan sari buah jeruk manis terhadap sifat kimia dan sensori minuman serbuk, serta mendapatkan formulasi sari buah nanas dan sari buah jeruk manis yang menghasilkan minuman serbuk dengan sifat kimia dan sifat sensori terbaik. Penelitian disusun dalam Rancangan Acak Kelompok Lengkap (RAKL) dengan faktor tunggal, dan 4 ulangan. Perbandingan sari buah nanas dan sari buah jeruk, terdiri dari 6 taraf yaitu 100%:0% (P1), 80%:20% (P2), 60%:40% (P3), 40%:60% (P4), 20%:80% (P5), 0%:100% (P6). Data yang diperoleh dianalisis kehomogenannya dengan uji Bartlett dan kemenambahan data diuji dengan uji Tuckey, selanjutnya data dianalisis sidik ragam (ANARA) untuk mengetahui pengaruh antar perlakuan. Apabila terdapat pengaruh yang nyata, data dianalisis lebih lanjut dengan Uji Beda Nyata Terkecil (BNT) pada taraf 5%. Hasil penelitian menunjukkan bahwa formulasi sari buah nanas dan sari buah jeruk manis berpengaruh terhadap kadar air, kadar abu, pH, vitamin C, rasa, warna, aroma, dan penerimaan keseluruhan minuman serbuk. Minuman serbuk dengan formulasi sari buah nanas dan sari buah jeruk manis terbaik adalah perlakuan P5 (20% sari buah nanas : 80% sari buah jeruk) dengan kriteria kadar air (2,59%), kadar abu (0,46%), pH (3,25), vitamin C (26,98 mg/100mL), uji warna ($L^* 91,26$, $a^* 19,02$, $b^* 1,287$), rasa 3,53 (suka), warna 3,97 (suka), aroma 3,66 (suka), penerimaan keseluruhan 3,67 (suka), kadar gula (23,21%), dan beta karoten (417,84 mg/kg).

Kata kunci : minuman serbuk, sari buah nanas, sari buah jeruk manis