

ABSTRAK

Tujuan penelitian ini untuk mempelajari pengaruh konsentrasi serbuk ekstrak daun kelor dan tingkat kehalusan bahan pada minuman instan serbuk kacang hijau.

Penelitian ini menggunakan rancangan percobaan faktorial 3x3 dalam rancangan acak kelompok (RAK) dalam ulangan sebanyak 3 kali, dimana faktornya meliputi : pengaruh konsentrasi serbuk ekstrak daun kelor (K) yang terdiri dari tiga taraf, yaitu k1 (5%), k2 (10%), k3 (15%) serta tingkat kehalusan bahan (T) yang terdiri dari 3 taraf, yaitu t1 (60mesh), t2 (80mesh), t3 (100mesh).

Respon pada penelitian ini adalah respon kimia, yaitu kadar protein dan kadar air. Respon fisik yaitu total padatan terlarut (TSS). Respon organoleptik yang meliputi warna, aroma, rasa, dan konsistensi dan pengujian aktivitas antioksidan pada sampel terpilih.

Konsentrasi serbuk ekstrak daun kelor berpengaruh nyata terhadap kadar air minuman instan serbuk kacang hijau. Tingkat kehalusan bahan berpengaruh nyata terhadap total padatan terlarut minuman instan serbuk kacang hijau. Interaksi antara konsentrasi serbuk ekstrak daun kelor dan tingkat kehalusan bahan tidak berpengaruh terhadap uji organoleptik meliputi warna, rasa, aroma, konsistensi, maupun respon kimia meliputi kadar air, kadar protein dan respon fisika yaitu total padatan terlarut pada minuman instan serbuk kacang hijau.

Berdasarkan analisis kimia dan analisis fisika menunjukkan bahwa perlakuan terpilih pada minuman instan serbuk kacang hijau yaitu k3t3 konsentrasi serbuk ekstrak daun kelor (15%) dan tingkat kehalusan bahan (100mesh) dengan nilai total padatan terlarut 5,87°Brix, kadar air 8,18% , kadar protein 20,34% dan aktivitas antioksidan sebesar 186014 ppm.

Kata kunci : daun kelor, kacang hijau, minuman instan.

ABSTRACT

The purpose of this research to study the effect of the concentration of Moringa leaf powder extract and degree of fineness of materials on the instant beverage powder green beans.

This research uses experimental design factorial 3x3 in ranangan randomized (RAK) in a repeat 3 times, where the factors include: the effect of the concentration of pollen extract of leaves of Moringa (K), which consists of three levels, namely k1 (5%), k2 (10%), k3 (15%) and the degree of fineness of the material (T), which consists of three levels: t1 (60mesh), t2 (80mesh), t3 (100mesh).

The response in this study is a chemical response, ie protein content, moisture content. Physical response that total dissolved solids (TSS). Response organoleptic including color, aroma, taste, and consistency and test the antioxidant activity in the selected sample.

Moringa leaf powder extract concentration significantly affected the water content of the instant beverage powder green beans. Degree of fineness of materials significantly affect total soluble solid instant beverage powder green beans. The interaction between the concentration of Moringa leaf powder extract and degree of fineness of materials does not affect the organoleptic tests include color, flavor, aroma, consistency, and chemical responses include water content, protein content and physical response that total dissolved solids in the instant beverage powder green beans

Based on the chemical analysis and fisica analysis showed that the treatment was selected on the instant beverage powder green beans are k3t3 concentration of Moringa leaf powder extract (15%) and the degree of fineness of materials (100mesh) with a total value of 5.87°Brix dissolved solids, water content of 8.18%, protein content 20,34% and amounted to 186014 ppm antioxidant activity.

Keywords : Moringa leaves, green beans, instant drinks.