Pengaruh Penambahan CMC (*Carboxymethyl cellulose*) dan Uwi Ungu terhadap Sifat Fisik, Kimia dan Tingkat kesukaan Mi Kering

INTISARI

Uwi ungu (*Dioscorea alata* L) dapat digunakan sebagai pangan fungsional, karena banyak mengandung sumber antioksidan alami. Mi saat ini telah digunakan sebagai alternatif pengganti nasi. Penelitian ini bertujuan membuat mi kering dengan penambahan uwi ungu kukus dan CMC untuk mengetahui pengaruhnya terhadap, aktivitas antioksidan, antosianin, total fenol, sifat fisik, kimia dan kesukaan terhadap mi kering.

Penambahan uwi ungu kukus untuk pembuatan mi kering sebesar 20%, 30% dan 40% dan untuk penambahan CMC yang digunakan 0,25% 0,50% dan 0,75%. Penelitian ini dikerjakan dengan Rancangan Acak Lengkap (RAL) dengan dua faktorial. Analisis yang diuji yaitu warna, tekstur, kadar air, kadar abu, kadar protein, aktivitas antioksidan, antosianin, total fenol, *cooking loss* dan tingkat kesukaan panelis terhadap mi kering uwi ungu. Data dianalisis secara statistic menggunakan *Univariate Analysis of Variance* dan *Anova*, jika ada beda nyata dilanjutkan dengan uji DMRT.

Hasil penelitian menunjukkan bahwa mi kering yang dibuat dengan 40% penambahan uwi ungu kukus dan penambahan 0,25% CMC paling disukai panelis. Sedangkan untuk sifat kimia yang terpilih pada 40% penambahan uwi ungu kukus dan penambahan 0,50% CMC. Konsentrasi uwi ungu yang digunakan mempengaruhi sifat fisik, kimia dan tingkat kesukaan panelis sedangkan CMC tidak mempengaruhi sifat fisik, kimia tetapi mempengaruhi pada uji tingkat kesukaan dan *cooking loss*.

Kata kunci: uwi ungu, mi kering, CMC, aktivitas antioksidan.

The Effect of the Addition of CMC (*Carboxymethyl cellulose*) and Purple Yam on the Physical and Chemical Properties of Dry Noodles

ABSTRACT

Purple Yam (*Dioscorea alata* L) can be used as functional food, because it contains many natural sources of antioxidants. Noodles are currently being used as an alternative to rice. This study aims to make dry noodles with the addition of steamed purple yam and CMC to determine the effect on, antioxidant activity, anthocyanins, phenolic, physical, chemical and preference for dry noodles.

The addition of steamed purple yam for the manufacture of dry noodles was 20%, 30% and 40% and for the addition of CMC 0.25%, 0.50% and 0.75%. This research was conducted with a completely randomized design (RAL) with two factorials. The analyzes tested were color, texture, moisture content, ash content, protein content, antioxidant activity, anthocyanins, total phenolic, *cooking loss* and the level of preference for the panelists to dry purple yam noodles. Data were analyzed statistically using Univariate Analysis of Variance and Anova, if there is a significant difference, continue with the DMRT test.

The results showed that dry noodles made with 40% addition of steamed purple yam and 0.25% CMC were the most preferred by panelists. As for the chemical properties selected in 40% addition of steamed purple yam and addition of 0,50% CMC. The concentration of purple yam used affected the physical, chemical and preferred level of the panelists, while CMC did not affect the physical, chemical properties but did affect the preference level test and *cooking loss*.

Keywords: purple yam, dry noodles, CMC, antioxidant activity.