Pengaruh Penambahan Tepung Uwi Ungu (*Discorea alata* L*)* dan CMC Terhadap Sifat Kimia, Fisik, dan Tingkat Kesukaan Mi Kering

INTISARI

Uwi ungu *(Dioscorea alata* L.*)* merupakan jenis umbi-umbian yang berpotensi sebagai sumber karbohidrat, senyawa fenol, antosianin dan antioksidan yang tinggi. Masyarakat saat ini banyak mengkonsumsi mi sebagai pangan alternatif pengganti sumber karbohidrat pada nasi. Penelitian ini bertujun untuk mengetahui pengaruh faktor penambahan tepung uwi ungu dan *Carboxy Methyl Cellulose* (CMC) pada sifat fisik, sifat kimia, dan tingkat kesukaan produk mi kering.

Pada penelitian ini menggunakan tepung uwi ungu 20%, 30%, dan 40% dan menggunakan CMC dengan variasi konsentrasi 0,25%, 0,50%, 0,75%. Rancangan percobaan yang digunakan adalah Rancangan Acak Lengkap (RAL) dengan dua faktorial. Data dianalisis secara statistic menggunakan *Univariate Analysis of Variance* dan *Anova*, apabila terdapat beda nyata dilanjutkan dengan uji DMRT pada tingkat kepercayaan 5%. Parameter yang diuji yaitu warna, tekstur, *cooking loss*, kadar air, kadar abu, kadar protein, total fenol, aktivitas antioksidan, kadar antosianin dan tingkat kesukaan panelis terhadap mi kering uwi ungu.

Hasil dari penelitian ini menunjukan bahwa mi kering yang dibuat dengan variasi penambahan tepung uwi ungu sebanyak 30% dan penambahan konsentrasi CMC sebesar 0,50% paling disukai panelis dengan kadar air 10,24%, kadar protein 12,19%, total fenol 19,48 mg GAE/g, 2,92%RSA dan kadar antosianin 4,93 mg/100g . Penambahan proporsi tepung uwi ungu dan CMC dapat memperbaiki sifat fisik, sifat kimia, dan tingkat kesukaan mi kering uwi ungu.

Kata kunci: tepung uwi ungu, mi kering, CMC

The Effect of Purple Yam (*Discorea alata* L) Flour and CMC Addition on the Chemical, Physical Properties, and Preference Level of Dried Noodles

Abstract

Purple yam *(Dioscorea alata L.)* Is a kind of tuber potential as a source of carbohydrates, high phenolic compounds, anthocyanins and antioxidants. People today consume a lot of noodles as an alternative food to replace carbohydrates in rice. This study aims to determine the effect of the addition of purple yam flour and *Carboxy Methyl Cellulose* (CMC) on physical properties, chemical properties, and the level of preference for dry noodle products.

In this study, using 20%, 30%, and 40% purple yam flour and using CMC with various concentrations of 0,25%, 0,50%, 0,75%. The experimental design used was a completely randomized design (CRD) with two factorials. Data were analyzed statistically using *Univariate Analysis of Variance* and *Anova*, if there is a significant difference, continue with the DMRT test at the 5% confidence level. The parameters tested were color, texture, cooking loss, moisture content, ash content, protein content, total phenol, antioxidant activity, anthocyanin levels and panelist's favorability level of purple yam dry noodles.

The results of this study showed that dry noodles made with a variation of purple yam flour addition as much as 30% and the addition of CMC concentration by 0,50% most preferred panelists with water content of 10,24%, protein content of 12,19%, total phenol 19,48 mg GAE/g, 2,92%RSA and anthocyanin levels of 4,93 mg/100g . The addition of purple yam flour and CMC proportions can improve the physical properties, chemical properties, and favorability of purple yam dry noodles.

Key words: purple yam flour, dry noodles, CMC