Pengaruh Penambahan Tepung Growol dan CMC (*Carboxymethyl Cellulose*) Terhadap Sifat Kimia, Sifat Fisik, dan Tingkat Kesukaan Mi Kering Growol

INTISARI

Pemanfaatan komoditas lokal terutama growol untuk pembuatan tepung growol dimaksudkan untuk menjadikan tepung growol sebagai bahan substitusi tepung terigu dalam pembuatan mie kering. Dalam pembuatan mie menggunakan tepung growol yang kandungan proteinnya rendah akan berdampak pada keelastisan adonan dan tekstur yang dihasilkan. Banyaknya kandungan gluten akan berdampak pada keelastisan dan daya tahan terhadap penarikan dalam proses pembuatan mie. Untuk mendapatkan tekstur adonan yang kenyal dan elastis digunakan bahan tambahan pangan yaitu tepung growol dan *Carboxymethyl Cellulose* yang aman dikonsumsi. Penelitian ini bertujuan untuk memperoleh pengaruh penambahan tepung growol dan *Carboxymethyl Cellulose* terhadap sifat fisik dan kimia terbaik serta disukai panelis.

Rancangan percobaan yang digunakan dalam penelitian ini adalah Rancangan Acak Lengkap (RAL) dengan dua faktor yaitu penambahan tepung growol (0%, 25%, 50% dan 75%) dan CMC (0%, 0,5% dan 1%). Percobaan diulang sebanyak 2 kali. Setiap data yang diperoleh dihitung dengan metode statistik menggunakan analisis *univariate* dan apabila terdapat perbedaan nyata antar perlakuan dilanjutkan dengan uji *Duncan's Multiple Range Test* (DMRT).

Hasil penelitian menunjukkan bahwa penggunaan perbedaan penambahan tepung growol dan CMC (*Carboxymethyl Cellulose)* berpengaruh terhadap nilai warna tetapi tidak berpengaruh terhadap tekstur mie kering growol. Mie kering terbaik berdasarkan uji kesukaan yaitu dengan konsentrasi Tepung Growol 75% dan CMC 0,5% memiliki kadar air 7,35% b/b, kadar abu 2,03% b/b, kadar protein 5,38% b/b, kadar lemak 0,005% dan kadar karbohidrat 85,24%.

Kata kunci: Tepung growol, CMC (*Carboxymethyl Cellulose*), mi kering.

Effect of addition of Growol Flour and CMC (Carboxymethyl Cellulose) on Chemical, Physical Properties and Preference Level of Dry Noodles

Abstract

The use of especially growol local commodities for making growol flour is intended to make growol flour as a substitute for wheat flour in the manufacture of dry noodles. In making noodles using growol flour, which has a low protein content, it will affect the elasticity of the dough and the texture produced. The amount of gluten content will have an impact on elasticity and resistance to withdrawal in the process of making noodles. To get the texture of the dough which is chewy and elastic, food additives are used, namely Growol Flour and *Carboxymethyl Cellulose* that safe for consumption. This study aimed to obtain the effect of the difference in the addition of Growol Flour and *Carboxymethyl Cellulose* to the best physical and chemical properties and preferred by panelists.

The experimental design used in this study was a completely randomized design (CRD) with two factors, namely Growol Flour concentration (0%, 25%, 50% and 75%) and CMC (0%, 0,5% and 1%). The experiment was repeated twice. Each data obtained was calculated by statistical methods using univariate analysis and if there were significant differences between treatments followed by the Duncan Multiple Range Test (DMRT).

The results showed that the use of different concentrations of Growol Flour and CMC (*Carboxymethyl Cellulose*) had an effect on color values but did not affect the texture of growol dried noodles. The best dry noodles are based on a preference test that is with a Growol Flour concentration of 75% and 0.5% CMC having a moisture content of 7.35% b/b, ash content of 2.03% b/b, protein content of 5,38% b/b, fat content of 0.005% and carbohydrate content of 85,24%.

Key words: Growol flour, CMC (*Carboxymethyl Cellulose)*, dry noodles.