Karakteristik Fisik, Kimia, dan Tingkat Kesukaan Mi Basah Dengan Penambahan *Carboxymethyl Cellulose* dan Ekstrak Bunga Telang (*Clitoria ternatea*. L)

INTISARI

Ekstrak bunga telang dapat digunakan sebagai pewarna makanan karena memiliki kandungan senyawa bioaktif yang berperan sebagai antioksidan. Pemanfaatan ekstrak bunga telang dalam mi basah dapat menjadi alternatif sebagai pewarna alami. Penambahan CMC diharapkan dapat meningkatkan tekstur dari mi basah yang dihasilkan. Tujuan penelitian ini adalah menghasilkan mi basah dengan penambahan CMC dan ekstrak bunga telang untuk mengetahui pengaruh penambahan CMC dan ekstrak bunga telang terhadap sifat fisik, kimia dan tingkat kesukaan mi basah yang dihasilkan.

Mi basah dibuat dari tepung terigu, CMC, ekstrak telang, garam dan air yang dicampur dan diuleni hingga kalis, kemudian adonan didiamkan, dipipihkan, dipotong menjadi untaian mi dan direbus. Analisis yang dilakukan meliputi pengujian fisik warna, *tensile strength*, rehidrasi dan rendemen, kadar air, kadar abu, aktivitas antioksidan serta uji kesukaan. Metode penelitian yang dilakukan menggunakan Rancangan Acak Lengkap (RAL) faktorial dengan 2 faktor, faktor pertama konsentrasi penambahan ekstrak bunga telang dan faktor kedua konsentrasi penambahan CMC. Penambahan ekstrak bunga telang sebesar 3%, 6% dan 9%, dan penambahan CMC sebesar 0,5%, 0,75% dan 1%. Data yang diperoleh kemudian dianalisa statistik menggunakan *Univariate Analysis of Variance* dan apabila terdapat beda nyata dilanjutkan *Duncan Multiple Range Test* (DMRT)

Hasil penelitian menunjukkan bahwa perlakuan terpilih yaitu mi basah dengan penambahan CMC 0,75% dan ekstrak bunga telang 9% dengan karakteristik fisik L* 50,93, a* 0,90, b* 3,81, *tensile strength* 0,012Mpa, rehidrasi 0,85 g/ml, rendemen 97,30%. Sifat kimia meliputi kadar air 29,15 b/b, kadar abu 0,85 b/b dan aktivitas antioksidan 1,49 %RSA. Mi basah yang disukai panelis adalah mi basah dengan penambahan ekstrak bunga telang 9% dan CMC 0,75%.

Kata kunci: Aktivitas antioksidan, CMC, ekstrak bunga telang, mi basah

Physical, Chemical Characteristics, and Preference Level of Wet Noodles With Carboxymethyl Cellulose and Butterfly Pea (*Clitoria ternatea.* L) Extract Addition

ABSTRACT

Butterfly Pea flower extract can be alternative as food coloring because it contains components of bioactive compounds that act as natural antioxidants. Utilization of butterfly pea flower (*Clitoria ternatea* L.) that have purplish blue color could be used as a source of natural food colorant as well as to enhance the appearance of the noodle produced. The addition of CMC is expected to improve the texture of the resulting wet noodles. The purpose of this study was to produce wet noodles with the addition of CMC and butterfly pea flower extract to determine the effect of adding CMC and butterfly pea flower extract to the physical, chemical properties and the level of preference of the wet noodles produced.

Wet noodles are made from wheat flour, CMC, butterfly Pea flower extract, salt and water which are mixed and kneaded until smooth, the dough is allowed to stand, flattened, cut into noodle strands and boiled. The analysis carried out included physical testing of color, *tensile strength*, rehydration and yield, moisture content, ash content, antioxidant activity and preference test. The research method was carried out using a factorial Completely Randomized Design (CRD) with 2 factors, the first factor was the concentration of the addition of butterfly Pea flower flower extract and the second factor was the concentration of the addition of CMC. The addition of telang flower extract was 3%, 6% and 9%, and the addition of CMC was 0.5%, 0.75% and 1%. The data obtained were then statistically analyzed using *Univariate Analysis of Variance* and if there was a significant difference, *Duncan Multiple Range Test* (DMRT).

The results showed that the selected treatment was wet noodles with the addition of 0.75% CMC and 9% butterfly pea flower extract with physical characteristics L* 50.93, a* 0.90, b* 3.81, tensile strength 0.012Mpa, rehydration 0.85 g/ml, yield 97.30%. Chemical properties include water content 29.15 w/w, ash content 0.85 w/w and antioxidant activity 1.49 %RSA The most preferred wet noodles by panelists were wet noodles with the addition of 9% butterfly pea flower extract and 0.75% CMC.

Keywords: antioxidant activity, CMC, Butterfly pea flower extract, wet noodles