PENGARUH PENAMBAHAN MAGGOT KERING DAN LAMA PENGERINGAN TERHADAP KARAKTERISTIK MI KERING GROWOL

INTISARI

Mi kering merupakan hasil produk pangan kering yang dibuat dari tepung terigu yang memiliki umur simpan 6-12 bulan. Dikarenakan mi merupakan sumber karbohidrat dengan indeks glikemik yang tinggi maka perlu diganti dengan sumber karbohidrat yang memiliki kandungan indeks glikemik yang rendah yaitu singkong. Pada penelitian ini, digunakan produk turunan dari singkong yaitu growol sebagai bahan pengganti terigu dan penambahan maggot(b/b) sebagai sumber alternatif protein. Tujuan penelitian adalah untuk menghasilkan mi kering growol dengan penambahan maggot kering dan lama pengeringan yang memenuhi standar SNI dan mengetahui pengaruh penambahan maggot kering dan lama pengeringan terhadap karakteristik mi kering growol meliputi sifat fisik dan kimia.

Rancangan percobaan penelitian ini menggunakan Rancangan Acak Lengkap (RAL) dua faktor yaitu penambahan maggot (5%,10% dan 15%) dan lama pengeringan (3 jam, 4 jam, dan 5 jam). Analisa kimia mi growol meliputi kadar air, kadar abu, lemak, protein, karbohidrat, antioksidan, flavonoid, dan total fenol. Analisa fisik meliputi warna dan tekstur (*hardness*). Data yang diperoleh dilakukan analisa statistik dengan tingkat kepercayaan 95% yang menggunakan uji univariate yang akan dilanjutkan dengan metode *One Way Anova.*

Dari hasil penelitian didapatkan mi kering growol dengan penambahan maggot kering 15% dan lama pengeringan 5 jam sebagai mi terbaik. Dengan nilai *L*(lightness)* 63.14, *a* (redness)*3.86, *b*(yellowness)* 20.62, *hardness* 255.75 g, kadar air 10.11%, kadar abu 7.18%, kadar protein 8.29%, kadar lemak 5.64%, karbohidrat 68.82%, antioksidan 19.34%, flavonoid 0.05 mg QE/g dan total fenol 0.53 mg QAE/g.

Kata kunci : Mi Kering, Growol, Lama Pengeringan, Maggot Kering.

THE EFFECT OF DRIED MAGGOT ADDITION AND DRYING TIME ON THE CHARACTERISTICS OF GROWOL DRIED NOODLES

ABSTRACT

Dry noodles are a dry food product made from wheat flour that has a shelf life of 6-12 months. Because noodles are a source of carbohydrates with a high glycemic index, it needs to be replaced with a carbohydrate source that has a low glycemic index content, namely cassava. In this study, a cassava derivative product, namely growol, was used as a substitute for flour and the addition of maggot (w/b) as an alternative source of protein. The objectives of the study were to produce growol dry noodles with the addition of ground dry maggot and drying time that meet SNI standards and to determine the effect of the addition of ground dry maggot and drying time on the characteristics of growol dry noodles including physical and chemical properties.

The experimental design of this study used a two-factor Completely Randomized Design (CRD), namely the addition of dried maggot (5%, 10% and 15%) and drying time (3 hours, 4 hours, and 5 hours). Chemical analysis of growol noodles included moisture content, ash content, fat, protein, carbohydrates, antioxidants, flavonoids, and total phenols. Physical analysis included color and texture (hardness). The data obtained were statistically analyzed with a 95% confidence level using the univariate test which will be followed by the One Way Anova method.

From the results of the study, it was found that growol dried noodles with 15% maggot addition and 5 hours drying time were the best noodles. With L (lightness) 63.14, a* (redness) 3.86, b* (yellowness) 20.62, hardness 255.75 g, moisture content 10.11%, ash content 7.18%, protein content 8.29%, fat content 5.64%, carbohydrate 68.82%, antioxidant 19.34%, flavonoid 0.05 mg QE/g and total phenol 0.53 mg QAE/g.*

Keywords: *Dried Noodle, Growol, Drying Time, Dried Maggot.*