RINGKASAN

Sosis merupakan jenis pangan yang banyak dikonsumsi dan memiliki kandungan lemak tinggi. Kandungan lemak pada sosis hewani akan berdampak pada munculnya masalah kesehatan seperti jantung koroner sehingga perlu adanya alternatif yang menyediakan sosis rendah lemak. Salah satu inovasi yang dapat dikembangkan yaitu dengan menggantikan daging menggunakan jamur tiram dan menambahkan tepung ubi jalar madu sebagai bahan pengisi yang diharapkan dapat meningkatkan kandungan gizi pada sosis. Penelitian bertujuan untuk mengetahui pengaruh proporsi tepung ubi jalar madu var. Bima Pasru dan tapioka dalam tepung komposit terhadap karakteristik fisikokimia sosis analog, mengetahui pengaruh proporsi jamur tiram dan tepung komposit terhadap karakteristik fisikokimia sosis analog, mengetahui adanya interaksi antara perlakuan proporsi tepung ubi jalar madu var. Bima Pasru-tapioka dalam tepung komposit dan proporsi jamur tiram-tepung komposit terhadap karakteristik fisikokimia sosis analog, mengetahui pengaruh kombinasi antara perlakuan proporsi tepung ubi jalar madu var. Bima Pasru-tapioka dalam tepung komposit terhadap karakteristik sensori sosis analog, serta menentukan kombinasi perlakuan terbaik antara perlakuan proporsi tepung ubi jalar madu var. Bima Pasru-tapioka dalam tepung komposit dan proporsi jamur tiram-tepung komposit didasarkan pada aspek karakteristik kimia dan sensori sosis analog.

Penelitian menggunakan metode eksperimental dengan Rancangan Acak Kelompok (RAK) yang terdiri atas 9 kombinasi perlakuan dan 3 kali ulangan sehingga diperoleh 27 unit percobaan. Faktor pertama yaitu proporsi tepung ubi jalar madu var.Bima Pasru dan tapioka dalam tepung komposit (K) 1:3, 1:1, 3:1, Faktor kedua yaitu proporsi jamur tiram dan tepung komposit (M) 30%:70%, 40%:60%, 50%:50%. Variabel yang diamati pada penelitian ini terdiri dari variabel kimia, fisik, dan sensori. Variabel kimia mencakup kadar air, abu, lemak, protein total, serat pangan, dan beta-karoten. Variabel fisik mencakup *hardness, cohesiveness, gumminess, chewiness,* dan *springiness,* sedangkan variabel sensori mencakup warna, aroma, rasa, tekstur, dan kesukaan keseluruhan. Data hasil

pengamatan variabel kimia dianalisis menggunakan *Analysis of Variance* (ANOVA) dengan taraf signifikansi 5% dan di uji lanjut DMRT *(Duncan Multiple Range Test)* atau uji *Games-howell*. Variabel fisik dianalisis menggunakan *Kruskal Wallis*, apabila data normal dan homogen dianalisis menggunakan *Analysis of Variance* (ANOVA) dan uji DMRT. Mutu sensori dianalisis menggunakan uji *friedman* dan di uji lanjut LSD apabila berpengaruh nyata. Penentuan kombinasi perlakuan terbaik dilakukan menggunakan uji indeks efektivitas De Garmo.

Hasil penelitian menunjukkan semakin banyak proporsi jamur tiram dapat menurunkan kadar air dan meningkatkan kadar abu, sedangkan semakin banyak proporsi tepung ubi jalar madu var. Bima Pasru dalam tepung komposit dapat meningkatkan kadar lemak, beta-karoten, dan menurunkan nilai *springiness*. Kombinasi kedua perlakuan memberikan pengaruh nyata terhadap warna, aroma, rasa, tekstur, dan kesukaan keseluruhan sehingga dapat diterima. Sosis analog dengan perlakuan proporsi tepung ubi jalar madu var.Bima Pasru (3)-tapioka (1) dan proporsi jamur tiram (50%)-tepung komposit (50%) (K3M3) adalah perlakuan terbaik dengan karakteristik seperti kadar air 53,69%, kadar abu 2,13%, lemak 3,66%, kadar protein 4,91%, kadar beta-karoten 38,43 µg/g, serat pangan 1,98%, skor warna 4 (cokelat kekuningan) dan 5,02 (sedikit suka), skor aroma 5,02 (sedikit kuat khas sosis) dan 5,02 (sedikit suka), skor rasa 4,83 (sedikit umami) dan 5,63 (suka), skor tekstur 4,6 (sedikit kenyal) dan 5,48 (sedikit suka), serta skor kesukaan keseluruhan 5,53 (suka).

SUMMARY

Sausage is a type of food that is widely consumed and has a high fat content. The fat content in animal sausages will have an impact on the emergence of health problems such as coronary heart disease, so there is a need for alternatives that provide low-fat sausages. One innovation that can be developed is by replacing meat with oyster mushrooms and adding honey sweet potato flour as a filling material that is expected to increase the nutritional content of the sausage. The research aims to determine the effect of the proportion of honey sweet potato flour var. Bima Pasru and tapioca in composite flour on the physicochemical characteristics of analog sausages, determine the effect of the proportion of oyster mushrooms and composite flour on the physicochemical characteristics of analog sausages, determine the interaction between the treatment of the proportion of honey sweet potato flour var. Bima Pasru-tapioca in composite flour and the proportion of oyster mushroom-composite flour on the physicochemical characteristics of analog sausage, determine the effect of the combination between the treatment of the proportion of sweet potato flour var. Bima Pasru-tapioca in composite flour on the sensory characteristics of analog sausage, and determine the best treatment combination between the treatment of the proportion of sweet potato flour var. Bima Pasru-tapioca in composite flour and the proportion of oyster mushroom-composite flour based on the aspects of chemical and sensory characteristics of analog sausage.

The research used an experimental method with a Randomized Group Design (RAK) consisting of 9 treatment combinations and 3 replications, resulting in 27 experimental units. The first factor is the proportion of honey sweet potato flour var.Bima Pasru and tapioca in composite flour (K) 1:3, 1:1, 3:1, The second factor was the proportion of oyster mushroom and composite flour (M) 30%:70%, 40%:60%, 50%:50%. The variables observed in this study consisted of chemical, physical, and sensory variables. Chemical variables included moisture content, ash, fat, total protein, dietary fiber, and beta-carotene. Physical variables included hardness, cohesiveness, gumminess, chewiness, and springiness, while sensory

variables included color, aroma, taste, texture, and overall liking. Data from observations of chemical variables were analyzed using Analysis of Variance (ANOVA) with a significance level of 5% and further tested by DMRT (Duncan Multiple Range Test) or Games-howell test. Physical variables were analyzed using Kruskal Wallis, if normal and homogeneous data were analyzed using Analysis of Variance (ANOVA) and DMRT test. Sensory quality was analyzed using Friedman test and LSD further test if significant. Determination of the best treatment combination was done using the De Garmo effectiveness index test.

The results showed that the higher proportion of oyster mushroom can reduce moisture content and increase ash content, while the higher proportion of honey sweet potato flour var. Bima Pasru in composite flour can increase fat content, beta-carotene, and decrease springiness value. The combination of the two treatments had a significant effect on color, aroma, taste, texture, and overall acceptability. Analog sausage with the treatment of proportion of honey sweet potato flour var.Bima Pasru (3)-tapioca (1) and proportion of oyster mushroom (50%)-composite flour (50%) (K3M3) was the best treatment with characteristics such as moisture content of 53,69%, ash content of 2,13%, fat 3,66%, protein content of 4,91%, beta-carotene content of 38, 43 µg/g, dietary fiber 1,98%, color score 4 (yellowish brown) and 5,02 (slightly liked), aroma score 5,02 (slightly strong typical of sausage) and 5,02 (slightly liked), taste score 4,83 (slightly umami) and 5,63 (liked), texture score 4,6 (slightly chewy) and 5,48 (slightly liked), and overall liking score 5,53 (liked).