

RINGKASAN

Pangan darurat merupakan produk pangan olahan yang dirancang khusus untuk dikonsumsi pada kondisi yang menyebabkan manusia tidak dapat hidup dengan normal. *Food bars* dapat dijadikan sebagai alternatif pangan darurat karena bentuknya yang tidak mudah rusak, mudah untuk dicerna, memiliki kandungan gizi yang baik, dan dapat dikonsumsi untuk segala kalangan. Pada penelitian ini digunakan tepung jewawut dan tepung labu kuning sebagai bahan substitusi tepung terigu.

Penelitian ini bertujuan untuk: 1) mengetahui pengaruh proporsi tepung jewawut dan tepung terigu serta penambahan tepung labu kuning dengan berbagai konsentrasi terhadap karakteristik sensori *food bars*, 2) menentukan proporsi tepung jewawut dan tepung terigu serta penambahan tepung labu kuning dengan berbagai konsentrasi yang menghasilkan *food bars* dengan karakteristik sensori terbaik, 3) menentukan satu formulasi *food bars* terbaik berdasarkan karakteristik kimia.

Penelitian ini dilakukan secara eksperimental menggunakan Rancangan Acak kelompok (RAK) dengan 9 kombinasi perlakuan dan 3 ulangan sehingga didapat 27 unit percobaan. Faktor yang diteliti yaitu (S1) tepung jewawut : tepung terigu (100 : 0%), (S2) tepung jewawut : tepung terigu (80 : 20%), (S3) tepung jewawut : tepung terigu (60 : 40%), (K1) tepung labu kuning (5%), (K2) tepung labu kuning (15%), (K3) tepung labu kuning (25%). Data sensori dianalisis menggunakan Uji *Friedman* dan jika terdapat pengaruh nyata dilanjutkan dengan uji banding ganda taraf 5%, diambil 3 kombinasi terbaik dengan menggunakan metode uji indeks efektivitas. Data kimia dianalisis menggunakan uji F pada taraf 5% dan jika terdapat pengaruh nyata dilanjutkan dengan uji beda nyata terkecil pada taraf 5%, diambil 1 perlakuan terbaik dengan menggunakan metode uji indeks efektivitas.

Hasil penelitian menunjukkan bahwa proporsi tepung jewawut dan tepung terigu serta penambahan tepung labu kuning berpengaruh terhadap atribut warna, aroma khas jewawut, tekstur, *flavor*, dan kesukaan. Tiga formulasi *food bars* terbaik berdasarkan sifat sensori yaitu : S3K3, S3K2, dan S2K2. Satu formulasi *food bars* terbaik berdasar sifat kimia yaitu S2K2 dengan proporsi tepung jewawut : tepung terigu (80% : 20%) dan tepung labu kuning (15%) menghasilkan kadar air 21,62%; kadar abu 2,15%; kadar lemak 18,73%; kadar serat 23,02%; kadar gula total 6,96%; kadar protein 10,83%; kadar karbohidrat 46,65%; dan energi 398,575 kkal.

Kata kunci : pangan darurat, *food bars*, tepung labu kuning, tepung jewawut, sensori, kimia.

SUMMARY

Emergency food product is a processed food product that is specifically designed to be consumed in conditions that cause people not be able to live normally. Food bars can be used as an alternative to emergency food because is not easily damaged, easy to digest, has a good nutritional content, and can be consumed for all peoples. So, in this study used jewawut flour and pumpkin flour as substitutes for wheat flour.

This study aims to: 1) know the influence of the proportion of jewawut flour and wheat flour as well as the addition of pumpkin flour with various concentrations to the sensory characteristics of food bars, 2) determine the proportion of jewawut flour and wheat flour and the addition of pumpkin flour with various concentrations that produce food bars with the best sensory characteristics, 3) determine one formulation of the best food bars based on chemical characteristics.

This study was conducted experimentally using Randomized Block Design (RBD) with 9 treatments and 3 replications in order to obtain 27 experimental units. The factors studied are (S1) jewawut flour: wheat flour (100: 0%), (S2) jewawut flour: wheat flour (80: 20%), (S3) jewawut flour: wheat flour (60: 40%), (K1) pumpkin flour (5%), (K2) pumpkin flour (15%), (K3) pumpkin flour (25%). Sensory data was analyzed using the Friedman Test and if there was a significant effect, it was continued with a multiple comparative test at the 5% confidence level, the best 3 combinations were taken using the effectiveness index test method. The chemical data was analyzed using F method at the 5% confidence level and if there was a significant effect, it was continued with Least Significance Different (LSD) at the 5% confidence level, taken 1 best treatment using the method of effectiveness index test.

The results showed that the proportion of barley flour and wheat flour and the addition of pumpkin flour had an effect on the attributes of color, distinctive aroma of barley, texture, flavor, and preferences. The three best food bar formulations based on sensory properties are: S3K3, S3K2, and S2K2. One of the best food bars formulations based on chemical properties, namely S2K2 with the proportion of barley flour: wheat flour (80%: 20%) and pumpkin flour (15%) produced 21.62% moisture content; ash content 2.15%; fat content 18.73%; fiber content 23.02%; total sugar content of 6.96%; protein content 10.83%; carbohydrate content of 46.65%; and energy 398.575 kcal.

Keywords: emergency food, food bars, jewawut flour, pumpkin flour, sensory, chemical.