ABSTRAK

ZEN KARINA COROLINA. *Pengaruh Substitusi Tepung Sukun terhadap Tingkat Kesukaan Onde-onde.* Dibimbing oleh: Sri Mulyani, STP, M.Si.

Sukun (Artocarpus altilis) merupakan sumber karbohidrat lokal yang bebas gluten, tinggi serat, dan memiliki indeks glikemik rendah sehingga berpotensi sebagai bahan pangan alternatif yang sehat. Penelitian ini bertujuan untuk mengetahui pengaruh substitusi tepung sukun terhadap tingkat kesukaan onde-onde berdasarkan warna, aroma, rasa, dan tekstur. Penelitian menggunakan Rancangan Acak Lengkap (RAL) dengan empat perlakuan: P0 (0%), P1 (10%), P2 (20%), dan P3 (30%). Uji organoleptik dilakukan oleh 25 panelis agak terlatih menggunakan skala hedonik 1–5. Data dianalisis menggunakan ANOVA dan dilanjutkan dengan uji Duncan pada taraf 5% ($\alpha = 0,05$). Hasil penelitian menunjukkan bahwa substitusi tepung sukun berpengaruh nyata terhadap tingkat kesukaan warna dan aroma ($p < 0,05$), tetapi tidak berpengaruh signifikan terhadap rasa dan tekstur ($p > 0,05$). Warna P3 (30% substitusi) kurang disukai (64,0%) karena tampilan lebih gelap akibat reaksi Maillard, sedangkan P0 (91,2%) dan P2 (76,8%) lebih menarik bagi panelis. Aroma P3 (64,8%) dinilai kurang disukai karena terlalu kuat dan munculnya aroma langu khas sukun, sedangkan P0 (82,4%) dan P2 (77,6%) lebih disukai. Rasa pada P0 (84,8%) dan P2 (83,2%) memperoleh skor tinggi meskipun tidak berbeda nyata, karena rasa khas sukun pada P2 tidak mengganggu cita rasa onde-onde. Tekstur P1 (81,6%) dan P2 (80,0%) lebih disukai karena lembut dan kenyal, sedangkan P3 (substitusi 30%) cenderung lebih padat. Dengan demikian, substitusi tepung sukun sebesar 20% (P2) merupakan formulasi terbaik karena menghasilkan tingkat kesukaan yang tinggi dan seimbang pada seluruh parameter.

Kata Kunci: tepung sukun, onde-onde, uji hedonik, substitusi, tingkat kesukaan.

ABSTRACT

ZEN KARINA COROLINA. *The Effect of Breadfruit Flour Substitution on the Acceptability of Onde-onde.*Supervised by: Sri Mulyani, STP, M.Si.

Breadfruit (Artocarpus altilis) is a local carbohydrate source that is gluten-free, high in fiber, and has a low glycemic index, making it a potential healthy alternative food ingredient. This study aimed to determine the effect of breadfruit flour substitution on the acceptability of onde-onde in terms of color, aroma, taste, and texture. The research employed a Completely Randomized Design (CRD) with four treatments: P0 (0%), P1 (10%), P2 (20%), and P3 (30%). The organoleptic test was conducted with 25 semi-trained panelists using a 1–5 hedonic scale. Data were analyzed using ANOVA followed by Duncan's test at a 5% significance level ($\alpha = 0.05$). The results showed that breadfruit flour substitution significantly affected the acceptability of color and aroma ($p < 0.05$), but had no significant effect on taste and texture ($p > 0.05$). Color in P3 (30% substitution) was less preferred (64.0%) due to its darker appearance caused by the Maillard reaction, while P0 (91.2%) and P2 (76.8%) were considered more appealing. Aroma in P3 (64.8%) was less favored because it was too strong and exhibited a beany odor typical of breadfruit, whereas P0 (82.4%) and P2 (77.6%) were more preferred. Taste scores for P0 (84.8%) and P2 (83.2%) were high, although not significantly different, since the distinctive flavor of breadfruit in P2 did not interfere with the overall taste of onde-onde. Texture in P1 (81.6%) and P2 (80.0%) was preferred for being soft and chewy, while P3 tended to be denser. In conclusion, a 20% substitution of breadfruit flour (P2) was the best formulation, as it produced high and well-balanced acceptability across all sensory parameters.

Keywords: breadfruit flour, onde-onde, sensory evaluation, substitution, acceptability.