

ILMANIA SYAVITRI NPM 18.03.3.1.1.0095. Formulasi Mi Lidi Bebas Gluten dari Komposit Tepung Singkong Terfermentasi, Tepung Beras dan Tepung Alur (*Suaeda maritima*). Pembimbing **Prof. Ir. Umi Purwandari, M.App.Sc., Ph.D.** dan **Dr. Supriyanto, S. TP., M.P.**

ABSTRAK

Mi lidi bebas gluten merupakan sejenis mi kering yang memiliki bentuk lurus dan panjang. Mi lidi bebas gluten terbuat dari komposit tepung singkong terfermentasi, tepung beras dan tepung alur (*suaeda maritima*). Penggunaan tepung singkong terfermentasi dan tepung beras bertujuan untuk mengembangkan produk *gluten free*. Sifat fungsional mi lidi bebas gluten juga ditingkatkan melalui penambahan tepung alur yang memiliki senyawa antioksidan. Tujuan penelitian ini untuk mengetahui pengaruh komposit tepung singkong terfermentasi dan tepung beras serta konsentrasi alur (*Suaeda maritima*) terhadap karakteristik tekstural, *cooking quality*, kadar air, sensoris dan aktivitas antioksidan mi lidi bebas gluten. Desain penelitian menggunakan Rancangan Acak Lengkap (RAL) dengan dua faktor yaitu perbandingan tepung singkong terfermentasi dan tepung beras (9:1; 8:2; dan 7:3) dan konsentrasi alur (10% dan 20%). Parameter pengujian meliputi uji tekstur, uji *cooking quality*, uji kadar air, uji aktivitas antioksidan dan uji sensoris. Hasil penelitian menunjukkan bahwa formulasi tepung singkong terfermentasi dan tepung beras dengan penambahan konsentrasi alur yang berbeda memberikan perbedaan nyata terhadap nilai *cooking time*, *cooking loss*, sensoris (rasa, tekstur, dan warna) serta aktivitas antioksidan mi lidi bebas gluten. Analisis kadar air mi lidi menunjukkan tidak ada perbedaan nyata. Nilai IC₅₀ pada formulasi A1B1 bernilai 27235,5 ppm dan pada formulasi A1B2 bernilai 27233,72 ppm. Analisis tekstural mi memiliki nilai *hardness* 580,2610 gf, *springiness* 0,6628 gs, dan *adhesiveness* -1517,233 g.sec.

Kata Kunci: Tepung Alur, Tepung Beras, Tepung Singkong Terfermentasi, Mi Lidi

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ABSTRACT

*Gluten-free stick noodles are a type of dry noodle that has a straight and long shape. Gluten-free stick noodles are made from a composite of fermented cassava flour, rice flour and seablite flour (*Suaeda Maritimea*). The use of fermented cassava flour and rice flour aims to develop gluten free products. The functional properties of gluten-free noodles were also improved through the addition of seablite flour which has antioxidant compounds. The purpose of this study was to determine the effect of the composite of fermented cassava flour and rice flour and the concentration of seablite (*Suaeda maritimea*) on the textural characteristics, cooking quality, moisture content, sensory and antioxidant activity of gluten-free stick noodles. The research design used a completely randomized design with two factors, namely the ratio of fermented cassava flour and rice flour (9:1; 8:2; and 7:3) and seablite concentration (10% and 20%). The test parameters include texture test, cooking quality test, water content test, antioxidant activity test and sensory test. The results showed that the formulation of fermented cassava flour and rice flour with the addition of different seablite concentrations gave significant differences in the value of cooking time, cooking loss, sensory (taste, texture, and color) and antioxidant activity of gluten-free stick noodles. Analysis of the water content of the sticks showed no significant difference. The IC_{50} value in the A1B1 formulation is 27235.5 ppm and the A1B2 formulation is 27233.72 ppm. Texture analysis of noodles has a hardness value of 580.2610 gf, springiness 0.6628 gs, and adhesiveness -1517.233 g.sec.*

Keywords: *Seablite Flour, Rice Flour, Fermented Cassava Flour, Stick Noodles*