

Hidayatur Rohma. Nim 180331100001. Karakteristik Pasta *Gluten Free* dari Tepung Jagung Sebagai Efek Formulasi dan Perlakuan Pengukusan-Penekanan. Di bawah bimbingan **Prof. Ir. Umi Purwandari, M.App.Sc., Ph.D.** dan **Banun Diyah Probowati, S.TP., M.Si.**

ABSTRAK

Pasta jagung merupakan pasta *gluten free* yang memanfaatkan bahan campuran antara tepung jagung dan tepung beras dengan perlakuan pengukusan-penekanan pada proses pembuatan. Pasta berbasis *gluten free* memiliki protein yang dapat dikonsumsi oleh semua kalangan dibandingkan dengan pasta komersial yang terbuat dari tepung semolina gandum durum yang terkenal memiliki protein yang disebut dengan protein gluten. Desain penelitian ini menggunakan metode Rancangan Acak Lengkap. Tujuan dari penelitian ini adalah mengetahui pengaruh proporsi komposit tepung (jagung dan beras) dengan perlakuan pengukusan-penekanan pada tingkat perubahan warna, kadar air, *cooking quality*, sifat tekstural, dan sifat sensoris pasta jagung. Hasil dari penelitian ini adalah kadar warna pasta jagung dengan nilai L (34,275-35,575), nilai a (6,575-10,175) dan nilai b (36,825-42,875) meningkat seiring penambahan proporsi tepung jagung yang ditambahkan. Kadar air pasta jagung antara 2,983%-5,135%. *Cooking time* antara 6,4-9,8 menit. *cooking loss* antara 9,047%-16,015% bergantung kepada perbandingan proporsi dan air serta pengukusan-penekanan yang ditambahkan. Tekstur yang dihasilkan pada pasta jagung yaitu *hardness* memiliki nilai sekitar 402 hingga 496 g, *adhesiveness* sekitar -26,6 hingga -5,012 g-sec, *springiness* 0,7350 hingga 0,7897, *cohesiveness* 0,7263, *gumminess* 177,1967, *chewiness* 176,9267, dan *resilience* 177,1967. Hasil sensoris terbaik terpilih pada sampel dengan proporsi 80%:20% jumlah air 120 mL dan pengukusan-penekanan 2 kali.

Kata Kunci: *Gluten free, Pasta, Pengukusan-penekanan, Tepung Jagung*

Hidayatur Rohma. Nim 180331100001. *Characteristics of Gluten Free Paste of Corn Flour as a Formulation Effect and Steaming-Pressure Treatment. Under the guidance Prof. Ir. Umi Purwandari, M.App.Sc., Ph.D. and Banun Diyah Probowati, S.TP., M.Si.*

ABSTRACT

Corn pasta is a gluten free pasta that utilizes a mixture of corn flour and rice flour by steaming-emphasis treatment in the manufacturing process. Gluten-free pasta has protein that can be consumed by all people compared to commercial pasta made from durum wheat semolina flour which is known to have a protein called gluten protein. The design of this study used a Completely Randomized Design method. The purpose of this study was to determine the effect of the proportion of flour composites (corn and rice) by steaming-pressure treatment on the level of color change, moisture content, cooking quality, textural properties, and sensory properties of corn paste. The results of this study were the color content of corn paste with a value of L (34.275-35.575), a value (6.575-10.175) and a value of b (36.825-42.875) increased with the addition of the proportion of corn flour added. The moisture content of corn paste is between 2.983%-5.135%. Cooking time between 6.4-9.8 minutes. cooking loss between 9.047%-16.015% depending on the ratio of proportions and water and steaming-pressure added. The resulting texture on corn paste, namely hardness has a value of about 402 to 496 g, adhesiveness is around -26.6 to -5.012 g-sec, springiness is 0.7350 to 0.7897, cohesiveness is 0.7263, gumminess is 177.1967, chewiness is 176.9267, and resilience 177.1967. The best sensory results were selected in the sample with a proportion of 80%: 20%, 120 mL of water and 2 times of pressure-steaming.

Keywords: *Gluten free, Pasta, Steaming-pressurization, Corn Flour*