

ABSTARCT

Yasri Apriani. B.1710512. Physical Quality Characteristics of Starch Noodles Made from Heat-Moisture Treatment (HMT) Modified Canistel Starch (*Pouteria campechiana*) and Arrowroot Starch (*Maranta arundinacea* L.). Under the guidance of Noli Novidahlia and Sri Rejeki Retna Pertiwi.

Starch noodles are generally made from palm sago starch, in this study starch noodles were made from HMT (Heat-Moisture Treatment) modified canistel starch and arrowroot starch. This study aimed to investigate the effect of the comparison between canistel starch and arrowroot starch on the physical quality of starch noodles, and to determine the selected product of HMT-modified canistel starch and arrowroot starch. This study used one-factor of Completely Randomized Design (CRD) method, with consisted of five types of treatments which were a ratio of canistel starch and arrowroot starch 100:0%, 90:10%, 80:20%, 70:30%, and 60:40%. The product analysis are physical tests of hardness, gumminess, springiness (Texture Analyzer CT3 4500) and cooking loss, percent elongation, water absorption and swelling index. The results of the analysis showed that the addition of arrowroot starch generated the value of springiness, cooking loss, water absorption and swelling index which tended to decrease, but generated the value of hardness, gumminess, and percent elongation which tended to increase. Starch noodles chosen was canistel starch noodles modified by HMT and arrowroot starch with a ratio of 70:30%. It has physical characteristics of hardness of 3,600 N, gumminess of 1,391 N, springiness of 0,778 mm, percent elongation 275,938%, cooking loss 5,462%, water absorption capacity of 130,095%, and of swelling index 12,19%.

Keywords: Arrowroot starch, canistel starch, physical quality of noodles, starch noodles.

ABSTRAK

Yasri Apriani. B.1710512. Karakteristik Mutu Fisik Mi Glosor Berbahan Baku Pati Campolay (*Pouteria campechiana*) Termodifikasi *Heat-Moisture Treatment* (HMT) dan Penambahan Pati Umbi Garut (*Maranta arundinacea* L.). Skripsi. Dibawah bimbingan Noli Novidahlia dan Sri Rejeki Retna Pertiwi.

Mi glosor pada umumnya terbuat dari pati sagu, pada penelitian ini mi glosor yang dibuat dari bahan baku pati campolay termiodifikasi HMT (*Heat-Moisture Treatment*) dan pati umbi garut. Penelitian ini bertujuan untuk mempelajari pengaruh perbandingan pati campolay dan pati umbi garut terhadap mutu fisik mi glosor, dan menentukan produk terpilih mi glosor pati campolay termodifikasi HMT dan pati umbi garut. Rancangan penelitian yang digunakan adalah Rancangan Acak Lengkap (RAL) satu faktor, dengan 5 taraf perlakuan yaitu perbandingan pati campolay dan pati umbi garut masing-masing 100:0%, 90:10%, 80:20%, 70:30%, dan 60:40%. Analisis produk meliputi uji fisik kekerasan, *gumminess*, kekenyalan (*Texture Analyzer* CT3 4500) dan *cooking loss*, persen *elongasi*, daya serap air dan daya pengembangan. Hasil analisis menunjukkan penambahan pati umbi garut menghasilkan nilai kekenyalan, *cooking loss*, daya serap air dan daya pengembangan yang cenderung menurun, namun menghasilkan nilai kekerasan, *gumminess*, dan persen *elongasi* yang cenderung meningkat. Mi glosor terpilih yaitu mi glosor pati campolay termodifikasi HMT dan pati umbi garut dengan perbandingan 70:30%. Memiliki karakteristik fisik kekerasan sebesar 3,600 N, *Gumminess* 1,391 N, kekenyalan 0,778 mm, persen *elongasi* 275,938%, *cooking loss* 5,462%, daya serap air 130,095%, dan daya pengembangan 12,19%.

Kata kunci: Mi glosor, mutu fisik mi, pati campolay, pati umbi garut