PENGARUH PENAMBAHAN IKAN TUNA DAN RASIO PATI KIMPUL TERMODIFIKASI-TEPUNG SAGU TERHADAP TEKSTUR DAN TINGKAT KESUKAAN BAKSO IKAN

Intisari

Saat ini pembuatan bakso menggunakan pengenyal boraks ataupun bahan tambahan pangan berupa *Sodium Tri Poli Phospat* (STPP) di kalangan pedagang bakso sering digunakan. Adanya pengenyal alami dari pati kimpul termodifikasi secara *Heat Moisture Treatment* (HMT) dapat mengurangi penggunaan STPP pada pembuatan bakso ikan tuna. Tujuan dari penelitian ini yaitu mengetahui pengaruh konsentrasi ikan tuna dan rasio pati kimpul termodifikasi-tepung sagu terhadap tekstur dan tingkat kesukaan bakso ikan.

Penelitian dilakukan dalam tiga tahap yaitu pembuatan pati kimpul, pati kimpul termodifikasi (PKT) dan bakso ikan tuna. Rancangan percobaan yang digunakan yaitu rancangan acak kelompok faktorial dengan 3 variasi ikan tuna (70%, 80% dan 90%) dan rasio pati kimpul termodifikasi dengan tepung sagu (15% : 85% ; 20% : 80% dan 25% : 75%). Analisis yang dilakukan yaitu kadar air, tekstur berupa *springiness*, *hardness*, *adhesiveness*, *cohesiveness*, *chewiness*, *gumminess* dan tingkat kesukaan untuk menentukan perlakuan terbaik. Perlakuan bakso ikan tuna terbaik dilakukan analisis kadar air, abu, dan protein.

Berdasarkan hasil penelitian, bakso dengan penambahan ikan tuna dan rasio PKT dengan tepung sagu disukai panelis. Semakin besar penambahan ikan tuna dan rasio PKT-tepung sagu, semakin besar pula nilai yang dihasilkan pada *springiness*, *cohesiveness*, *gumminess*, *chewiness.* Nilai *hardness* menurun dengan besarnya penambahan ikan tuna dan meningkat dengan besarnya rasio PKT-tepung sagu. Penambahan ikan tuna 70%, dan rasio pati kimpul termodifikasi 15% dengan tepung sagu 85% merupakan bakso ikan tuna perlakuan terbaik dengan *springiness* sebesar 2,65 mm, *hardness* 5,26 N, *cohesiveness* 0,19, *chewiness* 3,75 mJ, dan *gumminess* 1,14 N, kadar air sebesar 64,22 % bb, kadar abu 1,84 % bb, dan kadar protein 16,3 % bb yang sesuai dengan SNI 7266:2014 tentang syarat mutu bakso ikan.

Kata kunci : ikan tuna, pati kimpul termodifikasi, *Heat Moisture Treatment* (HMT), bakso ikan

EFFECT OF TUNA FISH ADDITIONS AND RATIO OF MODIFIED COCOYAM STARCH-SAGO FLOUR ON THE TEXTURE AND PREFERENCE LEVEL OF FISH MEATBALLS

ABSTRACT

Currently making meatballs using borax or food additives such as Sodium Tri Poly Phosphate (STPP) among meatballs seller is often used. Modified cocoyam starch with technique Heat Moisture Treatment (HMT) is an altrenative to reduce the use of STPP in making tuna meatballs. The purpose of this research is to know effect of tuna fish additions and ratio of modified cocoyam starch-sago flour on the texture and preference level of fish meatballs.

The research was conducted in three stages, which are the manufacture of cocoyam starch, modified cocoyam starch and tuna meatballs. The experimental design used factorial randomized group design with three levels of tuna fish (70%, 80% and 90%) and ratio of modified cocoyam starch with sago flour (15% : 85%; 20% : 80% and 25% : 75%). The analysis carried out is that water content, the texture such as springiness, hardness, adhesiveness, cohesiveness, chewiness, gumminess and preference level to determine the best treatment. The best treatment of tuna meatballs was analyzed for water content, ash and protein.

Based on the results of the study showed that meatballs added by tuna fish and ratio of modified cocoyam starch-sago flour were favored by panelists. The higher additions of tuna fish and ratio of modified cocoyam starch-sago flour, also getting higher the value of springiness, cohesiveness, gumminess, chewiness. Hardness value decreased with the additions of tuna fish and increased the ratio of modified cocoyam starch-sago flour. The additions of 70% tuna fish and ratio modified cocoyam starch 15% with 85% sago flour is the best treated tuna meatballs with the level of springiness 2.65 mm, hardness 5.26 N, cohesiveness 0.19, chewiness 3.75 mJ and gumminess 1.14 N, water content 64.2% wb, ash 1.84 % wb and protein 16.3 % wb which is in accordance with SNI 7266: 2014 concerning the quality requirements of fish meatball.

Keywords : tuna fish, modified cocoyam starch, Heat Moisture Treatment (HMT), fish meatballs