Profil Protein Berbasis SDS-PAGE pada Ulat Sagu (*Rhynchophorus Ferruginesus*) Hasil Pengeringan dengan Garam dan Tanpa Garam

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ABSTRAK

Ulat sagu merupakan sumber protein hewani yang potensial karena mudah dicerna, namun memiliki suatu kelemahan yaitu mudah membusuk. Untuk menghindari pembusukan pada ulat sagu pengawetan dengan pengeringan dan penggaraman dapat dilakukan. Tujuan penelitian ini untuk menentukan profil protein ulat sagu hasil pengeringan dengan garam dan tanpa garam berdasarkan SDS-PAGE. Sampel penelitian yang digunakan ulat sagu, yang diberi perlakuan: 1) dikeringkan pada suhu 50 °C dengan garam dan 2) tanpa garam, serta 3) digarami tanpa pengeringan menggunakan oven selama 1 jam. Hasil penelitian menunjukkan sampel kontrol memiliki total 26 pita dengan 6 pita mayor serta 20 pita minor. Sampel yang dikeringkan pada suhu 50 °C menggunakan oven selama 1 jam tanpa penggaraman memiliki 21 pita dengan 4 pita mayor dan 17 pita minor. Sampel yang digarami dengan konsentrasi 10% (b/b) selama 1 jam memiliki 24 pita dengan 5 pita mayor serta 19 pita minor. Sedangkan sampel yang dikeringkan dan digarami konsentrasi 10% (b/b) pada suhu 50°C menggunakan oven selama 1 jam memiliki 19 pita dan terdapat 3 pita mayor serta 16 pita minor. Berdasarkan hasil penelitian ini, pengawetan ulat sagu dengan penggaraman 10% (b/b) lebih disarankan dibandingkan pemanasan dengan oven pada 50°C selama 1 jam. Hal ini karena tingkat denaturasi dalam pengawetan dengan penggaraman lebih rendah sebagaimana terlihat pada penurunan jumlah pita protein pada profil proteinnya yang lebih sedikit dibandingkan pengawetan dengan pemanasan oven.

Kata Kunci : Ulat Sagu, Pengeringan, Penggaraman, Profil Protein, SDS-PAGE.

SDS-PAGE Based Profile Protein of Sago Larvae (*Rhynchophorus ferruginesus*) Heated by Oven with and without Salt

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ABSTRACT

Sago larvae is a potential source of animal protein because it is easy to digest, but it has a weakness, which is easy to rot. To avoid decay can be preserved by drying and salting the sago larvae. The purpose of this study was to determine the protein profile of the sago larvae which was dried with salt and without salt based on SDS-PAGE. The research sample used sago larvae with treatment:, 1) heated in oven with salt and 2) without salt, and also 3) salted without drying at 50 °C using an oven for 1 hour. The results of the study were obtained in the control of 26 bands and there were 6 major bands and 20 minor bands. In samples dried at 50°C using an oven for 1 hour without salting has 21 bands and there are 4 major bands and 17 minor bands. In the salted sample concentration of 10% (b/b) for 1 hour it had 24 bands and there were 5 major bands and 19 minor bands. While the samples were dried and salted with a concentration of 10% (b/b) at a temperature of 50°C using an oven for 1 hour had 19 ribbons and there were 3 major bands and 16 minor bands. Based on the results of this study, the preservation of sago larvae by salting of 10% (b/b) is more recomended better than heating by oven for 1 hour at 50°C. In the salting preservation, number of protein bands of sago larvae based on its protein profile decreases less than that in heating preservation .

Keywords : Sago larvae, Drying, Salting, Protein Profile, SDS-PAGE.