

Analisis Profil Protein Daging Kerbau Dengan Variasi Konsentrasi Garam serta Pengasapan Berbasis SDS-PAGE

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ABSTRAK

Daging kerbau memiliki nilai gizi protein dan susunan asam amino lengkap. Kandungan air dan protein yang tinggi menyebabkan daging mudah busuk sehingga perlu dilakukan pengawetan penggaraman serta pengasapan. Protein daging kerbau dapat dipengaruhi oleh pengolahan bahan pangan, seperti kadar pemberian garam dan pengasapan. Tujuan penelitian untuk menganalisis profil protein daging kerbau dengan variasi konsentrasi garam (b/b) 10%, 20%, 30% dan 40% penggaraman 3 jam serta pengasapan 2 jam. Profil protein daging kerbau dapat dianalisis menggunakan metode SDS – PAGE 12%. Hasil penelitian dari profil protein daging (kontrol), penggaraman 3 jam konsentrasi garam 10%, 20%, 30% dan 40% berturut – turut 28 sub unit protein, 26 sub unit protein, 25 sub unit protein, 23 sub unit protein dan 21 sub unit protein, sedangkan daging yang diasapkan tanpa garam, daging penggaraman 3 jam serta pengasapan 2 jam konsentrasi garam 10%, 20%, 30% dan 40% berturut – turut 22 sub unit protein, 24 sub unit protein, 20 sub unit protein, 13 sub unit protein dan 12 sub unit protein. Semakin tinggi konsentrasi garam maka kandungan protein yang terdapat dalam daging kerbau akan rusak dan semakin sedikit hal ini menyebabkan denaturasi protein yang ditandai dengan berkurangnya sub unit protein. Namun protein daging kerbau lebih banyak rusak apabila diasapkan.

Kata Kunci : Daging Kerbau, Penggaraman, Pengasapan, Profil Protein, SDS-PAGE.

Analysis of Buffalo Meat Protein Profile with Salt Concentration and Fumigation Based on SDS-PAGE

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ABSTRACT

Buffalo meat has protein nutritional value and complete amino acid composition. The high water and protein content makes it easy for the meat to rot, so it is necessary to preserve salting and fumigation. Buffalo meat protein can be affected by the processing of food ingredients, such as levels of salt and fumigation. The purpose of the study was to analyze the protein profile of buffalo meat with a variation of salt concentration (b/b)10%, 20%, 30% and 40% for 3 hours salting and 2 hours fumigation. Protein profiles of buffalo meat can be analyzed using the SDS-PAGE 12% method. The results of the study of meat protein profile (control), salting 3 hours salt concentration of 10%, 20%, 30% and 40% respectively 28 sub-units of protein, 26 sub-units of protein, 25 sub-units of protein, 23 sub-units of protein, and 21 protein sub-units, while smoked meat without salt, 3-hour salting meat and 2-hour salt concentration 10%, 20%, 30% and 40% respectively 22 sub-units of protein, 24 sub-units of protein, 20 sub-units of protein, 13 sub-units of protein and 12 sub-units of protein. The higher concentration of salt, the protein content contained in buffalo meat will be damaged and the less it causes protein denaturation which is characterized by reduced protein subunits. But buffalo meat protein is more damaged when smoked.

Keywords: Buffalo Meat, Salting, Fumigating, Protein Profiles, SDS-PAGE.

