ABSTRAK

STUDI PEMBUATAN TELUR ASIN DARI TELUR AYAM BROILER BERBASIS AIR LAUT DAN PENGGUNAAN LARUTAN ASAM SEBAGAI PENGGANTI PENGAMPLASAN

Telur asin merupakan salah satu produk makanan yang sangat disukai oleh masyarakat. Air laut dapat digunakan sebagai media pembuatan telur asin karena memiliki kandungan garam sebesar 3,5% (b/b). Tujuan dari penelitian ini yaitu mengidentifikasi pengaruh perendaman telur menggunakan air laut terhadap sifat organoleptik, menganalisis kadar natrium dan klorida dalam telur asin, dan menentukan standar mutu telur asin menurut SNI 01-4277-1996. Adapun pengujian dilakukan pada sampel telur asin dan air laut. Sampel telur dilakukan variasi waktu perendaman dengan asam asetat dan asam sitrat selama 10-60 menit dengan kode sampel Taa:10-Taa:60 dan Tas:10-Tas:60, yang kemudian diuji sifat organoleptik. Sampel telur optimum yaitu Taa:40, Taa:50, dan Taa:60 dilakukan variasi waktu perendaman dengan air laut selama 9-24 hari dengan kode sampel Tag:40 (9,12, 15, 18, 21, dan 24), Tag:50 (9,12, 15, 18, 21, dan 24), dan Tag:60 (9,12, 15, 18, 21, dan 24). Kemudian diuji sifat organoleptik, sampel telur asin optimum yaitu Tag:50 (18), Tag:50 (21), dan Tag:60 (24). Selanjutnya telur asin dianalisis kadar natrium dengan instrumen AAS dan klorida dengan metode argentometri, hasil analisis menunjukkan kadar natrium pada telur mengalami penurunan yaitu 1.442 mg/Kg; 1.343 mg/Kg; dan 1.042 mg/Kg. Sedangkan kadar klorida mengalami kenalikan yaitu 2.580 mg/Kg; 3.200 mg/Kg; dan 3.680 mg/Kg. Sampel air laut sebelum perlakuan dianalisis kadar klorida dengan metode argentometri, serta natrium dan kalium dengan instrumen MP-AES, dan analisis klorida pada sampel setelah perlakuan. Pada sampel air laut sebelum perlakuan mengandung klorida, natrium, dan kalium sebanyak 17.340 mg/L, 10.080 mg/L, dan 136 mg/L. Sedangkan air laut setelah perlakuan mengalami kenaikan kadar klorida yaitu sekitar 935 mg/L, 688 mg/L, dan 1182 mg/L. Berdasarkan hasil penelitian dapat disimpulkan bahwa telur asin yang paling disukai oleh panelis dari segi rasa yaitu Tag:60 (24), aroma Tag:40 (12), warna Tag:50 (15), dan tekstur Tag:40 (18). Serta telur asin dari telur ayam broiler yang direndam dengan air laut tidak memenuhi standar mutu telur asin menurut SNI 01-4277-1996.

Kata kunci: air laut; asam asetat; asam sitrat; telur asin; dan telur ayam broiler.

ABSTRACT

STUDY OF MAKING SALTED EGGS FROM SEAWATER-BASED BROILER CHICKEN EGGS AND THE USE OF ACID SOLUTION INSTEAD OF SANDING

Salted eggs are one of the food products that are very liked by the public. Seawater can be used as a medium for producing salted eggs because it has a salt content of 3.5% (w/w). The purpose of this study is to identify the effect of soaking eggs using seawater on organoleptic properties, analyze sodium and chloride levels in salted eggs, and determine salted egg quality standards according to SNI 01-4277-1996. The test was performed on samples of salted eggs and seawater. In egg samples, variations in soaking time with acetic acid and citric acid were carried out for 10-60 minutes with sample codes Taa:10-Taa:60 and Tas:10-Tas:60, which were then tested for organoleptic properties. The optimum egg samples, namely Taa:40, Taa:50, and Taa:60, were subjected to varying soaking times in seawater for 9-24 days with sample codes Tag:40 (9.12, 15, 18, 21, and 24), Tag:50 (9.12, 15, 18, 21, and 24), and Tag:60 (9.12, 15, 18, 21, and 24). The organoleptic properties of the optimum salted egg samples were Tag:50 (18), Tag:50 (21), and Tag:60 (24). Salted eggs were analyzed for sodium levels methods with AAS instruments and chloride using argentometric, and the results showed that sodium levels in eggs decreased by 1,442 mg/Kg; 1,343 mg/Kg; and 1,042 mg/Kg. The chloride levels were at 2,580 mg/Kg; 3,200 mg/Kg; and 3,680 mg/Kg. Seawater samples before treatment were analyzed for chloride levels by argentometric methods, as well as sodium and potassium with MP-AES instruments, and chloride analysis on samples after treatment. Before treatment, seawater samples contained as much chloride, sodium, and potassium as possible 17,340 mg/L, 10,080 mg/L, and 136 mg/L. After treatment, seawater experienced an increase in chloride levels of around 935 mg/L, 688 mg/L, and 1182 mg/L. Based on the results of the study, it can be concluded that salted eggs most liked by panelists in terms of taste are Tag:60 (24), aroma Tag:40 (12), color Tag:50 (15), and texture Tag:40 (18). As well as salted eggs from broiler chicken eggs soaked with sea water do not meet the quality standards of salted eggs according to SNI 01-4277-1996.

Keywords: sea water; acetic acid; citric acid; salted eggs; and broiler chicken eggs.