

ABSTRAK

AFRILIA ARIFATUL LAEL. Karakteristik Fisikokimia Sup Jagung Instan yang Diperkaya Tepung Cangkang Telur Bebek dengan Perbedaan Teknik Pengemasan dan Lama Penyimpanan. Dibimbing oleh SITI AMINAH dan NURHIDAJAH.

Produk kering dalam bentuk tepung seperti sup jagung instan mempunyai sifat higroskopis yang tinggi. Transfer uap air dari lingkungan dapat menyebabkan terjadinya penurunan mutu selama penyimpanan. Penurunan mutu tersebut memicu reaksi kimia, enzimatis atau fisik hingga perubahan sifat sensoris. Pengemasan diketahui mampu meminimalkan penurunan mutu produk. Teknik pengemasan dapat dilakukan dengan teknik vakum dan non vakum. Tujuan umum penelitian ini yaitu untuk mengetahui pengaruh teknik pengemasan dan lama penyimpanan terhadap karakteristik fisik dan kimia sup jagung instan yang diperkaya tepung cangkang telur bebek. Metode penelitian berjenis eksperimental menggunakan Rancangan Acak Lengkap (RAL) faktorial, yang terdiri dari 2 faktor 8 perlakuan yaitu teknik kemasan dengan jenis *metallized* (vakum dan non vakum) dan lama penyimpanan (1, 2, 3, dan 4 minggu). Setiap perlakuan dilakukan pengulangan sebanyak 4 kali, sehingga diperoleh 32 unit percobaan. Data hasil uji karakteristik fisik dan karakteristik kimia dianalisis menggunakan metode statistik ANOVA diikuti uji lanjut DMRT (*Duncan Multiple Range Test*). Hasil penelitian menunjukkan tidak ada pengaruh teknik pengemasan dan lama penyimpanan terhadap karakteristik fisik (warna dan susut bobot). Selain itu, ada pengaruh teknik pengemasan dan lama penyimpanan terhadap karakteristik kimia (kadar TBA dan aktivitas antioksidan), namun tidak ada pengaruh terhadap kadar air sampel. Perlakuan terbaik diperoleh dari kemasan *metallized* vakum dengan penyimpanan 3 minggu yang menghasilkan warna (13,56%), susut bobot (-3,04%), kadar air (5,72%), kadar TBA (0,52 mgMA/kg bahan), dan aktivitas antioksidan (8,94 %RSA).

Kata Kunci : Sup jagung instan, teknik pengemasan, lama penyimpanan, karakteristik fisikokimia

ABSTRACT

AFRILIA ARIFATUL LAEL, Physicochemical Characteristics of Instant Corn Soup Enriched with Duck Eggshell Flour with Different Packaging Techniques and Storage Time, Guided by SITI AMINAH and NURHIDAJAH.

Dry products in the form of flour such as instant corn soup have high hygroscopic properties. Water vapor transfer from the environment can cause quality degradation during storage. The decline in quality triggers chemical, enzymatic or physical reactions to changes in sensory properties. Packaging is known to be able to minimize product quality degradation. The packaging technique can be done by vacuum and non-vacuum techniques. The general objective of this study was to determine the effect of packaging techniques and storage time on the physical and chemical characteristics of instant corn soup enriched with duck eggshell flour. The experimental research method uses factorial completely randomized design (CRD), which consists of 2 factors 8 treatments, namely metallized (vacuum and non vacuum) packaging techniques and storage time (1, 2, 3, and 4 weeks). Each treatment was repeated 4 times, so that 32 units of the experiment were obtained. Data on the results of physical characteristics and chemical characteristics were analyzed using ANOVA statistical methods followed by advanced DMRT (Duncan Multiple Range Test) tests. The results showed no effect of the packaging technique and storage time on physical characteristics (color and weight loss). In addition, there is an effect of packaging technique and storage time on chemical characteristics (TBA levels and antioxidant activity), but there is no effect on sample water content. The best treatment was obtained from metallized vacuum packaging with 3 weeks storage which produced color (13.56%), weight loss (-3.04%), water content (5.72%), TBA content (0.52 mgMA / kg of material), and antioxidant activity (8.94% RSA).

Keywords: Instant corn soup, packaging technique, storage times, physicochemical characteristics

