



Antioxidant potential of rosemary extract and thyme in prolonging the shelf life of minced carp (*Hypophthalmichthys molitrix*)

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Abstract

The use of natural antioxidants in the composition of boneless fish meat while increasing its shelf life is effective in optimizing sensory properties by reducing fat oxidation. Frozen minced meat of Kilka fish has been done. In this study, four treatments of frozen minced meat in ordinary packages (witness), frozen minced meat + thyme 300 mg / kg in normal packaging, frozen minced meat + rosemary 200 Mg per kilogram in regular packaging, stewed minced meat + Lineup Rosemary (100 ppm) and thyme (100 ppm) was considered normal packaging. The treatments were continuously frozen at -40. C and then refrigerated at -18. C for three months. Sample quality was assessed using chemical and sensory experiments. In the selected sample (frozen minced meat + rosemary 200 mg / kg in normal packaging) in comparison with the mean control of pH values (0.67 40 0.5 and 5.62 34 0.34 (free fatty acids (007 /) 0.65 ۛ and 0.006 ± 2.71 g /%), thiobarbituric acid (0.62 62 0.62 and 2.28 28 1.96 mg / kg), peroxide (1.61 61 1.61) And 0.28 26 2.26 mg / kg of oil per kilogram of oil), nitrogen nitrogen (16.73 65 6.65 and 17.19 4.91 mg / kg of meat) showed a significant decrease (P <0.05). Sensory characteristics including odor, texture, taste and color index and overall acceptance were evaluated based on a 9-point scale of the hydronic method. In sensory characteristics including color and texture in minced meat containing antioxidants There was a significant difference compared to the control sample (P <0.05). The experimental samples were of good quality in the cold storage for three months, but the control samples lost their quality after two months.

Keywords : Rosemary extract, Shirazi thyme extract, minced meat, silver carp, longevity, antioxidants