

Abstract

The aim of this study was to evaluate the effect of garlic powder on the quality of *Scomberoide tol* surimi during storage in a refrigerator. Prepared surimi from *Scomberoide tol* fillet was mixed with 0.1, 0.2, and 0.3% of garlic powder, packed, and stored in a refrigerator. Chemical (pH, PV, TBA, TVB-N, HI), Microbial parameters (TVC, PTC, EBC) and sensory analysis of surimi were measured at days 0, 3, 6, 9, 12, 15, and 18. Results of this study showed that the TVB-N, TBA, and PV values of garlic powder samples were lower than the control sample, and a significant increase ($P < 0.05$) was observed with an increase in storage time. Microbial parameters (TVC, PTC, EBC) showed that the microbial count of garlic powder treatments was less than the control. While the lowest and highest microbial counts were observed in 0.3% and 0.1% garlic powder treatments, respectively. Thus, it can be concluded that the use of natural preservatives may increase the shelf-life of surimi during refrigerated storage. Also, 0.3% garlic powder caused an increase in the shelf life of surimi at 4°C for 3 days.

Keywords: *Scomberoide tol*, Garlic powder, Coliform count, Shelf life



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