

INTISARI

Pengaruh Konsentrasi Perendaman Asam Hipoklorit terhadap Penurunan Jumlah *Klebsiella Pneumoniae* CK 13.2 dan Tekstur Daging Tuna

Penelitian ini bertujuan mengetahui pengaruh konsentrasi *Hypochlorous Acid* (HOCl) terhadap reduksi jumlah *Klebsiella Pneumoniae* pada daging tuna, mengetahui efektivitas *Hypochlorous Acid* (HOCl) dan NaOCl sebagai agen sanitasi dalam mereduksi jumlah *Klebsiella Pneumoniae* pada daging tuna, serta mengetahui pengaruh konsentrasi *Hypochlorous Acid* (HOCl) terhadap kualitas tekstur ikan. *Klebsiella Pneumoniae* CK 13.2 diinokulasikan pada daging tuna sirip kuning kemudian direndam selama 5 menit dengan konsentrasi 50 ppm, 75 ppm, dan 100 ppm HOCl. Pengaruh konsentrasi HOCl pada perendaman daging tuna dianalisis dengan Anova One-Way dan uji lanjut Duncan. Perbandingan efektivitas HOCl dan NaOCl dalam mereduksi *Klebsiella Pneumoniae* CK 13.2 dianalisis menggunakan T- Test. Perendaman daging tuna selama 5 menit dengan 50 ppm, 75 ppm dan 100 ppm HOCl mampu menurunkan jumlah *Klebsiella Pneumoniae* CK 13.2 masing – masing 4,47 log CFU/ml, 4,32 log CFU/ml dan 3,18 log CFU/ml pada medium TSA serta 4,40 log CFU/ml, 4,14 log CFU/ml, dan 3,00 log CFU/ml pada medium EMBA. Perendaman daging tuna selama 5 menit menggunakan 100 ppm HOCl dan 10 ppm NaOCl mampu mereduksi bakteri *Klebsiella Pneumoniae* CK 13.2 sebesar 99,33% dan 45,58% pada medium TSA serta 99,51% dan 47,07% pada medium EMBA. Perendaman dengan HOCl menunjukkan perbedaan yang signifikan terhadap kualitas tekstur ikan tuna dengan atribut *cohesiveness* dan *resilience*

KATA KUNCI : HOCl, perendaman daging, persen reduksi, *Klebsiella Pneumoniae* CK 13.2, pengaruh konsentrasi, *texture analyzer*

ABSTRACT

Impact of Hypochlorous Acid Concentration on *Klebsiella Pneumoniae* CK 13.2 Reduction and Texture of Tuna Flesh

This study aims to determine the effect of *Hypochlorous Acid* (HOCl) concentration on reducing the number of *Klebsiella Pneumoniae* CK 13.2 in tuna meat, determine the effectiveness of Hypochlorous Acid (HOCl) and NaOCl as sanitation agents in reducing the number of *Klebsiella Pneumoniae* in tuna meat, and determine the effect of Hypochlorous Acid (HOCl) concentration on the quality of fish texture. *Klebsiella Pneumoniae* CK 13.2 was inoculated into yellowfin tuna meat then soaked for 5 minutes with concentrations of 50 ppm, 75 ppm, and 100 ppm HOCl. The effect of HOCl concentration on soaking tuna meat was analyzed by One-Way Anova and Duncan's advanced test. Comparison of the effectiveness of HOCl and NaOCl in reducing *Klebsiella Pneumoniae* CK 13.2 was analyzed using T-Test. Soaking tuna meat for 5 minutes with 50 ppm, 75 ppm and 100 ppm HOCl was able to reduce the number of *Klebsiella Pneumoniae* CK 13.2 by 4,47 log CFU/ml, 4,32 log CFU/ml and 3,18 log CFU/ml respectively in TSA medium and 4,40 log CFU/ml, 4,14 log CFU/ml, and 3,00 log CFU/ml in EMBA medium. Soaking tuna meat for 5 minutes using 100 ppm HOCl and 10 ppm NaOCl was able to reduce *Klebsiella Pneumoniae* CK 13.2 bacteria by 99,33% and 45,58% in TSA medium and 99,51% and 47,07% in EMBA medium. Soaking with HOCl showed significant differences in the texture quality of tuna with attributes of cohesiveness and resilience

KEYWORDS : HOCl, meat soaking, percent reduction, *Klebsiella Pneumoniae* CK 13.2, concentration, texture analyzer