

ABSTRAK

Yulia Indriani, 4202220001 (2024). Uji Kandungan Bahan Pengawet Dan Deteksi Kontaminasi Bakteri *Salmonella* Sp. Pada Daging Ikan Kembung Asin (*Rastrelliger kanagurta*) Yang Dijual Dipasar Galang Kabupaten Deli Serdang.

Penelitian ini bertujuan untuk mengetahui kandungan bahan pengawet kimia seperti formalin dan boraks, serta mendeteksi kontaminasi bakteri *Salmonella* sp. pada ikan kembung asin yang dijual di Pasar Galang. Formalin dideteksi menggunakan reagen Kalium Permanganat (KMnO_4), sementara boraks diuji menggunakan reagen H_2SO_4 . Untuk mendeteksi kontaminasi *Salmonella* sp., metode pengujian dilakukan melalui media selektif *Salmonella Shigella Agar* (SSA). Hasil penelitian menunjukkan bahwa ikan kembung asin yang dijual di Pasar Galang negatif mengandung boraks, hal ini ditandai dengan tidak adanya perubahan warna api yang terjadi pada cawan porselin pada saat pengujian. Uji kandungan formalin ketiga ikan kembung asin menunjukkan hasil positif mengandung formalin, hal ini di tandai dengan terjadinya perubahan warna menjadi warna bening pada tabung reaksi. Hasil uji kadar formalin pada ikan kembung asin pertama memiliki kadar 1,61 mg/g, ikan asin kembung kedua memiliki kadar 1,55 mg/kg dan ikan asin ketiga memiliki kadar formalin 1,65 mg/kg sudah melebihi batas ambang toleransi yang dapat diterima oleh tubuh orang dewasa. Uji cemaran bakteri *Salmonella* sp. pada ketiga ikan kembung asin yang diuji menghasilkan hasil negatif, menunjukkan bahwa ikan kembung asin di Pasar Galang bebas dari kontaminasi *Salmonella* sp.

Kata Kunci: Ikan Kembung Asin, Formalin, Boraks, *Salmonella* sp.



ABSTRACT

Yulia Indriani, 4202220001 (2024). Preservative Content Test and Detection of Salmonella Sp Bacterial Contamination. On the Meat of Salted Mackerel Fish (*Rastrelliger kanagurta*) Sold in the Galang Market, Deli Serdang Regency.

This research aims to determine the content of chemical preservatives such as formalin and borax, as well as detecting bacterial contamination of *Salmonella* sp. on salted mackerel fish sold at Galang Market. Formalin is detected using Potassium Permanganate (KMnO₄) reagent, while borax is tested using H₂SO₄ reagent. To detect *Salmonella* sp. contamination, the test method is carried out using selective *Salmonella* Shigella Agar (SSA) media. The results of the research showed that the salted mackerel fish sold at Galang Market contained negative borax, this was indicated by the absence of changes in flame color that occurred on the porcelain cup during testing. The formalin content test of the three salted mackerel fish showed positive results for formalin content, this was indicated by a change in color to clear in the test tube. The results of the formalin level test in the first salted mackerel fish had a level of 1.61 mg/g, the second salted mackerel fish had a level of 1.55 mg/kg and the third salted fish had a formalin level of 1.65 mg/kg, already exceeding the acceptable tolerance threshold. accepted by the adult body. *Salmonella* sp. bacterial contamination test. The three salted mackerel fish tested produced negative results, indicating that the salted mackerel fish at Galang Market were free from *Salmonella* sp contamination.

Keywords: Salted Mackerel, Formalin, Borax, *Salmonella* sp.

