

POLTEKKES KEMENKES TANJUNGGARANG
JURUSAN TEKNOLOGI LABORATORIUM MEDIS
PROGRAM STUDI SARJANA TERAPAN
Skripsi, Juli 2024

Putri Yulia Rosalina

**EFEKTIVITAS BAWANG PUTIH (*Allium sativum* L.) DALAM
MEREDUKSI FORMALIN PADA IKAN ASIN JAMBAL ROTI**

xvi + 36 Halaman, 10 tabel, 10 gambar dan 10 lampiran

ABSTRAK

Formalin adalah zat berbahaya yang resmi dilarang oleh pemerintah sebagai pengawet makanan. Peraturan Menteri Kesehatan RI Nomor 033 Tahun 2012 Tentang Penambahan Bahan Pangan. Pemerintah sudah melarang penggunaan formalin, tetapi masih ada oknum pedagang yang sengaja menggunakan formalin. Tujuan Penelitian untuk mengetahui efektivitas larutan bawang putih sebagai pereduksi formalin pada ikan asin jambal roti. Penelitian ini bersifat eksperimen metode uji kuantitatif menggunakan spektrofotometer *UV-Visible*. Tempat penelitian dilakukan di Laboratorium Kimia jurusan Teknologi Laboratorium Medis Poltekkes Kemenkes Tanjung Karang. Penelitian ini dilakukan pada bulan Mei-Juni 2024. Analisa data uji *two way anova*. Hasil penelitian menunjukkan bahwa konsentrasi larutan bawang putih 50% dengan waktu perendaman 50 menit dapat menurunkan formalin paling tinggi yaitu sebesar 68,01%. Pada hasil uji *two way anova* diperoleh *p-value* 0,000 ($P < 0,05$) dan dapat disimpulkan bahwa terdapat perbedaan yang signifikan sehingga perendaman ikan asin jambal roti dengan variasi konsentrasi larutan bawang putih dan variasi waktu perendaman dapat menurunkan kadar formalin.

Kata Kunci : Formalin, Ikan Asin Jambal Roti, Larutan Bawang Putih

Daftar Bacaan : 50 (2007-2023)

**TANJUNGPURBA MINISTRY OF HEALTH POLYTECHNIC
DEPARTMENT OF MEDICAL LABORATORY TECHNOLOGY
MEDICAL LABORATORY TECHNOLOGY STUDY PROGRAM
APPLIED UNDERGRADUATE STUDY PROGRAM**

Thesis, July 2024

Putri Yulia Rosalina

The Effectiveness of Garlic (*Allium sativum* L.) in Reducing Formalin in Salted Jambal Roti Fish

xvi + 36 pages, 10 tables, 10 images dan 10 attachments

Abstract

Formalin is a hazardous substance officially prohibited by the government as a food preservative, as regulated in the Regulation of the Minister of Health of the Republic of Indonesia No. 033 of 2012 on Food Additives. Although the government has banned the use of formalin, some vendors still intentionally use it. The objective of this study was to investigate the effectiveness of garlic solution as a formalin-reducing agent in salted jambal roti fish. This experimental research employed a quantitative method using a UV-Visible spectrophotometer. The study was conducted at the Chemistry Laboratory of the Medical Laboratory Technology Department, Poltekkes Kemenkes Tanjung Karang, between May and June 2024. Data analysis was performed using two-way ANOVA. The results showed that a 50% garlic solution with a soaking time of 50 minutes resulted in the highest reduction of formalin, at 68.01%. The two-way ANOVA test yielded a p-value of 0.000 ($P < 0.05$), indicating a significant difference. It can be concluded that soaking salted jambal roti fish in varying concentrations of garlic solution and different soaking times can significantly reduce formalin levels.

Keyword : *Formalin, Salted Jambal Roti Fish, Garlic Solution*

Reading List : *50 (2002-2023)*