

UJI EFEKTIVITAS EKSTRAK ETANOL PAKKAT (*CALAMUS CAESIUS BLUME*) DAN BIJI PALA (*MYRISTICA FRAGRANS HOUTT*) TERHADAP BAKTERI PADA IKAN SALAI DI DAERAH ROKAN HULU

ABSTRAK

Pakkat atau juga dapat di sebut Rotan Muda merupakan makanan khas suku maindailing. Hasil skrining fitokimia dari tumbuhan pakkat ini menunjukkan bahwa terdapat golongan senyawa terpenoid, saponin, flavonoida dan tannin yang termasuk golongan metabolik sekunder. Tanaman pala pada bagian biji, daging, buah dan kulit telah banyak dimanfaatkan sebagai antibakteri, Biji buah pala (*Myristica Fragrans Houtt*) mengandung minyak atsiri, saponin, terpenoid, flavonoid, yang diketahui berpotensi sebagai antibakteri. Tujuan penelitian ini adalah mengetahui efektivitas ekstrak pakkat dan biji pala terhadap Bakteri yang terdapat pada ikan salai. Jenis Jenis penelitian yang di gunakan adalah eksperimen. Penelitian ini dilakukan di Laboratorium Basic Science Universitas Prima Indonesia pada bulan Maret 2024 sampai bulan Juni 2024. Populasi ikan salai dengan berat 10-30 gram. Ekstrak Pakkat ada 5 kelompok yaitu K-, K+ amoxicilin dan ciprofloxacin, ekstrak pakkat 12,5%, 25% dan 50% dan ekstrak biji pala 12,5%, 25% dan 50%. Analisa data menggunakan uji kruskall-wallis. Hasil uji statistik Kruskal Wallis menunjukkan zona hambat pada ekstrak biji pala dengan nilai rata rata paling tinggi di konsentrasi 50% yaitu 8,05 mm dalam kategori sedang, tetapi tidak efektif untuk di jadikan sebagai antibakteri karena belum masuk kategori zona hambat kuat atau sangat kuat. tidak terdapat zona hambat ekstrak pakkat dan biji pala terhadap *Shigella* dan *S-Aureus* ($p > 0,05$), tidak terdapat efektivitas ekstrak pakkat dan biji pala terhadap bakteri pada ikan salai dan tidak ditemukan dosis yang efektif terhadap pemberian ekstrak pakkat pada ikan salai.

Kata Kunci : Bakteri *Salmonella Shigella*, Ekstrak Pakkat, Ekstrak Biji Pala, dan *Staphylococcus Sureus*, Ikan Salai

**TESTING THE EFFECTIVENESS OF ETHANOL EXTRACT OF PAKKAT
(CALAMUS CAESIUS BLUME) AND NUTMEG SEEDS (MYRISTICA
FRAGRANS HOUTT) AGAINST BACTERIA IN SMOKED FISH IN THE
ROKAN HULU REGION**

ABSTRACT

Pakkat or can also be called Young Rattan is a typical food of the Maindailing tribe. The results of phytochemical screening of this pakkat plant show that there are groups of trepenoid compounds, saponins, flavonoids and tannins which belong to the secondary metabolic group. Nutmeg plants in the seeds, flesh, fruit and skin have been widely used as antibacterial, Nutmeg seeds (Myristica fragrans Houtt) contain essential oils, saponins, terpenoids, flavonoids, which are known to have the potential to be antibacterial. The purpose of this study is to determine the effectiveness of pakkat and nutmeg seed extracts against bacteria found in smoked fish. Type The type of research used is experimental. This research was conducted at the Basic Science Laboratory of Prima Indonesia University from March 2024 to June 2024. Smoked fish population weighing 10-30 grams. There are 5 groups of Pakkat extracts, namely K-, K+ amoxicilin and ciprofloxacin, pakkat extract 12.5%, 25% and 50% and nutmeg seed extract 12.5%, 25% and 50%. Data analysis using the kruskall-wallis test. The results of the Kruskal Wallis statistical test showed that the inhibition zone in nutmeg seed extract with the highest average value at the concentration of 50%, which was 8.05 mm in the medium category, but it was not effective to be used as an antibacterial because it was not in the category of strong or very strong inhibition zone. there was no inhibition zone of pakkat extract and nutmeg seeds against Shigella and S-Aureus ($p > 0.05$), there was no effectiveness of pakkat extract and nutmeg seeds against bacteria in smoked fish and no effective dose was found for administration of pakkat extract in smoked fish.

Keywords: *Salmonella Shigella and Staphylococcus Sureus bacteria, Pakkat Extract, Nutmeg Seed Extract, Smoked Fish*