

- ANTIBACTERIALS AGENT.

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**SKRIPSI**

**EMI SULISTIONINGSIH**

**SINTESIS N-(4-TRIFLUOROMETILBENZOIL)  
SEFRADIN DAN UJI AKTIVITAS ANTIBAKTERI  
TERHADAP *Staphylococcus aureus* ATCC 25923**

**MILIK  
PERPUSTAKAAN  
UNIVERSITAS AIRLANGGA  
SURABAYA**



**FAKULTAS FARMASI UNIVERSITAS AIRLANGGA  
BAGIAN KIMIA FARMASI  
SURABAYA**

**2004**

Lembar Pengesahan

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Dibuat Untuk Memenuhi Syarat Mencapai Gelar Sarjana Farmasi  
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## ABSTRACT

### **Synthesis *N*-(4-trifluoromethylbenzoyl)cephradine and its antibacterial activity against *Staphylococcus aureus* ATCC 25923**

Synthesis of *N*-(4-trifluoromethylbenzoyl)cephradine had been done by acylation 4-trifluoromethylbenzoyl chloride with cephradine in THF, used Schotten-Baumann method. This procedure yields 46,55% of *N*-(4-trifluoromethylbenzoyl)cephradine. The purity was analyzed by melting point determination and Thin Layer Chromatography. The structure identification of functional compound was based on the ultraviolet spectrophotometry, infra red spectrophotometry and <sup>1</sup>H-NMR spectrometry.

Determination of antibacterial activity of *N*-(4-trifluoromethylbenzoyl)cephradine by metal ring diffusion method was expressed as minimal inhibitory concentration (MIC) against *Staphylococcus aureus* ATCC 25923. The result showed that the antibacterial activity of *N*-(4-trifluoromethylbenzoyl)cephradine was lower than *N*-benzoyl cephradine.

**Key words:** synthesis, *N*-(4-trifluoromethylbenzoyl)cephradine, antibacterial activity, *Staphylococcus aureus*.