

- STAPHYLOCOCCUS AUREUS

ky
FF.25/05

Muh
w

SKRIPSI

WACHID MUHAMSYAH

**SINTESIS N-(4-NITRO BENZOIL) SEFRADIN DAN
UJI AKTIVITASNYA TERHADAP
STAPHYLOCOCCUS AUREUS ATCC 25923**

**MILIK
PERPUSTAKAAN
UNIVERSITAS AIRLANGGA
SURABAYA**



**LABORATORIUM KIMIA MEDISINAL
FAKULTAS FARMASI UNIVERSITAS AIRLANGGA
SURABAYA**

2004

Lembar Pengesahan

**SINTESIS N-(4-NITRO BENZOIL) SEFRADIN DAN
UJI AKTIVITASNYA TERHADAP
Staphylococcus aureus ATCC 25923**

SKRIPSI

Dibuat Untuk Memenuhi Syarat Mencapai Gelar Sarjana Sains
Pada Fakultas Farmasi Universitas Airlangga

Surabaya

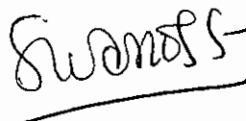
2004

Oleh :

WACHID MUHAMSYAH
059211409

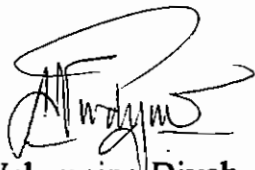
Disetujui Oleh :

Pembimbing Utama



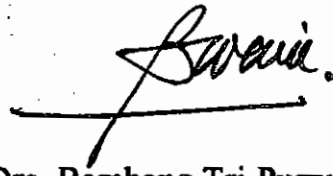
Dr. Siswandono, Apt,MS.
NIP. 130809079

Pembimbing Serta 1



Dra. Nuzul Wahyuning-Diyah, MSi,Apt.
NIP. 132011698

Pembimbing Serta 2



Drs. Bambang Tri Purwanto, MSi.Apt.
NIP. 131470996

ABSTRACT

Synthesis of N-(4-nitrobenzoyl) cephradine and activity test in *Staphylococcus aureus* ATCC 25923.

The synthesis of N-(4-nitrobenzoyl)cephradine had been done by reacting cephradine with 4-nitrobenzoyl chloride in tetrahydrofuran (THF) with the presence of NaOH 1 N. The procedure used was the method of Schotten-Baumann with modification. This procedure yields 52,29%. The purity was analyzed by melting point test and thin layer chromatography. The structure identification of the compound was based on the spectrometric data of ultraviolet, infrared and nuclear magnetic resonance (¹HNMR).

Antibacterial activity of the compound was tested against *Staphylococcus aureus* ATCC 25923. The activity was expressed as minimal inhibition concentration (MIC). The minimal inhibition concentration of N-(4-nitrobenzoyl) cephradine was less than N-benzoyl cephradine.

Keyword : N-(4-nitrobenzoyl) cephradine, synthesis, antibacterial test, *Staphylococcus aureus* ATCC 25923.