

# SKRIPSI

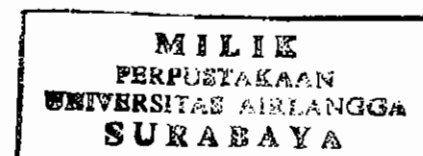
SUHRIYAH

UJI AKTIVITAS ANALGESIK  
ASAM *p*-METOKSISINAMAT DAN  
METIL *p*-METOKSISINAMAT DENGAN METODE  
*WRITHING TEST* PADA MENCIT



FAKULTAS FARMASI UNIVERSITAS AIRLANGGA  
BAGIAN KIMIA FARMASI  
SURABAYA

2004



Lembar Pengesahan

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**“Dibuat Untuk Memenuhi Syarat Mencapai Gelar Sarjana Farmasi  
Pada Fakultas Farmasi Universitas Airlangga”**

**2004**

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**Suhriyah**  
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**Disetujui Oleh:**

**Pembimbing Utama**

**Pembimbing Serta**

A handwritten signature in black ink, appearing to read "Andhy m".

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## ABSTRACT

An effort to develop the new drug of NSAIDs have been done by synthesizing the *p*-methoxycinnamic acid and methyl *p*-methoxycinnamic. The analgesic activity of the compound was tested with writhing test methods using acetylsalicylic acid, as reference.

Analgesic activity represented by median effective dose ( $ED_{50}$ ) was calculated by log x regression analysis based on log dose versus pain inhibition percentage curve.

The results showed that *p*-methoxycinnamic acid has  $ED_{50}$  93.65 mg/kg (0.53 mmol/kg), methyl *p*-methoxycinnamic has  $ED_{50}$  92.76 mg/kg (0.48 mmol/kg), while acetylsalicylic acid, as reference, has  $ED_{50}$  82,49 mg/kg (0.46 mmol/kg). The analgesic activity of APMS and MPMS was comparable with acetylsalicylic acid on the molar basis.

**Key Word:** *p*-methoxycinnamic acid and methyl *p*-methoxycinnamic, analgesic activity, writhing test.