

SKRIPSI

MOHAMAD DARAM FATCHUR RACHMAN

**PENGARUH LAMA REAKSI TERHADAP
PERSENTASE HASIL SINTESIS ASAM 4-HIDROKSI-
SINAMAT DENGAN METODE KNOEVENAGEL**



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

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**MILIK
PERPUSTAKAAN
UNIVERSITAS AIRLANGGA
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LEMBAR PENGESAHAN

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

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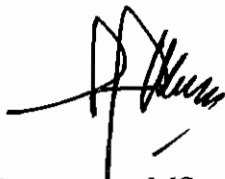
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ABSTRACT

The aim of this research is to examine the influence of reaction time on percentage of *p*-hydroxy cinnamic acid synthesized by Knoevenagel reaction. Experiments were carried out by refluxing mixtures of *p*-hydroxybenzaldehyde and malonic acid in the presence of pyridine-piperidine catalyst within different reaction times. Refluxing the reaction mixture for one, five and seven hours gave 21 %, 23% and 25% yield of *p*-hydroxycinnamic acid, respectively. UV, IR, NMR and mass spectroscopies confirmed structure of the product.

As conclusion, reaction time influences percentage yield of *p*-hydroxy cinnamic acid synthesized by Knoevenagel reaction.

Keywords: Knoevenagel reaction, reaction time, *p*-hydroxycinnamic acid