

SKRIPSI - CARBON NIST

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FRANSISKA ANGGRAENI HARSO

PENGARUH KEPOLARAN PELARUT ETIL ASETAT
DAN *n*-HEKSANA TERHADAP PERSENTASE HASIL
REAKSI HIDROGENASI KATALITIK ASAM
ANAKARDAT HASIL ISOLASI MINYAK KULIT BIJI
JAMBU METE (*Anacardium occidentale* Linn)



MILIK
PERPUSTAKAAN
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SURABAYA

FAKULTAS FARMASI UNIVERSITAS AIRLANGGA
BAGIAN KIMIA FARMASI
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Lembar Pengesahan

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

2004

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ABSTRACT

The catalytic hydrogenation of anacardic acid was done successfully. Ethyl acetate (dielectric constant = 6,02) and *n*-hexane (dielectric constant = 1,88) was used as the solvent, which has different polarity.

The starting material was anacardic acid which is isolated from Cashew Nut Shell Liquid (CNSL). The isolation from CNSL gave 50-60% of anacardic acid as a brownish yellow thick liquid. The isolated product was treated to TLC and HPLC analysis and functional group's identification using FeCl_3 test, UV Spectrophotometry, IR Spectrophotometry and $^1\text{H-NMR}$ Spectrometry.

The hydrogenation of the isolated anacardic acid using ethyl acetate gave saturated anacardic acid as white crystal (mp. = 84-85°C) in 84% yield, while the reaction using *n*-hexane gave the same result (mp. = 84-85°C) in 83% yield.

The polarity difference between ethyl acetate and *n*-hexane didn't influence the yield of saturated anacardic acid.

Keywords : anacardic acid, saturated anacardic acid, catalytic hydrogenation, ethyl acetate, *n*-hexane.