

SKRIPSI SARJANA FARMASI

**PRODUKSI DAN ANALISIS MUTU GAMBIR TERSTANDARISASI
UNIT TEACHING INDUSTRY GAMBIR (KEBUN TANAMAN OBAT)**



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FAKULTAS FARMASI

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ABSTRAK
PRODUKSI DAN ANALISIS MUTU GAMBIR TERSTANDARISASI
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Gambir adalah ekstrak kering hasil ekstraksi daun dan ranting tanaman *Uncaria gambir* (Hunter) Roxb. yang telah dikukus, dikempa, diendapkan, dicetak, dan dikeringkan. Unit *Teaching Industry* Gambir merupakan pusat pengembangan produk turunan gambir berbasis teknologi dibawah naungan *Science Techno Park*, Universitas Andalas. Namun, Unit *Teaching Industry* Gambir belum beroperasi. Penelitian ini dilakukan di Unit *Teaching Industry* Gambir Universitas Andalas untuk mengetahui pengukusan yang baik dengan metoda dua kali proses pengukusan dan analisis efektivitas pengempaan pada produksi katekin dari tanaman gambir. Sampel yang digunakan adalah daun dan ranting segar, daun dan ranting sisa pengempaan, sisa air kukusan, dan *air kalincuang*. Penilaian mutu gambir dilakukan berdasarkan parameter Standar Nasional Indonesia (SNI) 01-3391-2000 dan Farmakope Herbal Indonesia (FHI). Hasil penelitian menunjukkan kadar katekin, kadar abu, kadar abu tak larut asam, kadar air, kadar bahan tak larut air dan kadar bahan tak larut alkohol dari gambir hasil produksi pengukusan pertama berurutan sebesar 86,835%; 0,813%; 0,084%; 11,562%; 2,297%; 7,288%; dan pada pengukusan kedua sebesar 76,176%; 0,828%; 0,086%; 11,439%; 3,395%, 8,330%. Hasil kadar katekin pada daun segar, ranting segar, ampas daun, ampas ranting, sisa air kukusan, dan air kalincuang berurutan sebesar 14,654%; 3,716%; 3,726%; 2,133%; 0,721% dan 0,716%. Berdasarkan nilai tersebut, gambir hasil produksi baik pengukusan pertama dan kedua telah memenuhi persyaratan mutu SNI 01-3391-2000. Namun, gambir tersebut tidak memenuhi persyaratan FHI. Rendemen gambir yang dihasilkan dari produksi tersebut yaitu sebesar 2,997%. Pengempaan di Unit *Teaching Industry* Gambir dengan metoda yang digunakan sudah mampu mengekstraksi total katekin sebanyak 74,573% dari daun dan 25,427% dari ranting tanaman *Uncaria gambir* (Hunter) Roxb..

Kata Kunci: Gambir, katekin, mutu, pengukusan, pengempaan

ABSTRACT
STANDARDIZED MANUFACTURING AND QUALITY EVALUATION
OF GAMBIR IN TEACHING INDUSTRY GAMBIR IN (KEBUN
TANAMAN OBAT) ANDALAS UNIVERSITY

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Gambier is a dry extract from leaves and twigs of *Uncaria gambir* (Hunter) Roxb. plant that undergoes steaming, pressing, precipitation, molding, and drying processes. The Gambir Teaching Industry Unit is a technology-based gambier derivative product development center under the Science Techno Park at Andalas University. Although the Gambir Teaching Industry Unit is not yet operational, a study was conducted at the Gambir Teaching Industry Unit of Andalas University to determine the condition of good steaming with two steaming processes and analysis of catechin production to obtain quality catechin. The samples are leaves, twigs of gambier plants, leaf and twigs residue, steaming water, and kalincuang water analyzed for catechin content. The quality assessment of Gambier is based on the parameters of Indonesia National Standard (SNI) 01-3391-2000 and Indonesian Herbal Pharmacopoeia (FHI). The results showed the catechin content, ash content, acid insoluble ash content, water content, water-insoluble material content, and alcohol-insoluble material content of gambier from the first steaming production were 86,835%; 0,813%; 0,084%; 11,562%; 2,297%; and 7,288%, respectively. The results of catechin content in fresh gambier leaves, gambier twigs, leaf residue, and twig residue were 14,654%; 3,716%; 3,726%; 2,133%; 0,721%; and 0,716% respectively. Based on these values, the catechin produced from both steaming has met the quality requirements of SNI 01-3391-2000. However, it does not meet the requirements from FHI. The yield of gambier obtained in production is 2,997%. Gambir Teaching Industry Unit can extract 74,573% of total catechins from the leaves and 25,426% from the twigs of the gambier plant using this method.

Keywords: Gambier, catechins, quality, steaming, pressing