

ABSTRACT

CHROMATOGRAM PROFILE DETERMINATION OF RHIZOMES EXTRACT OF *Curcuma longa* L. BY HPTLC- DENSITOMETRY METHOD

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The purpose of this study is to determine chromatogram profile of turmeric (*Curcuma longa* L.) rhizome extract as controlling quality of turmeric rhizome raw material using HPTLC-Densitometry. The samples used were simplicia turmeric from Materia Medika Batu, Purwodadi Botanical Garden and Surabaya Genteng Market and extracted using 70% ethanol with maseration method. All chromatogram profile of the samples were made by spotting 1 μ L of 5% b/v extract solution on HPTLC Silica Gel 60 F254 plate and eluted using chloroform methanol (93: 7) as mobile phase. Spotting was done using Linomat V and CAMAG TLC scanner 4 was used for peak anlysis and scanned at 254 nm wavelenght. From the obtained chromatogram profile, selected peaks were based on criteria of Rf value, peak identity, peak purity that meet the requirements as the characteristic peak of *Curcuma longa* L. The results show that the peak with Rf 0.55; 0.65 and 0.75 are selected as the characteristic peak of *Curcuma longa* L. Those peaks must arise with criteria of Rf value, peak identity and peak purity that meet the requirements.

Keyword : Rhizomes extract of *Curcuma longa* L., chromatogram profile, HPTLC-Densitometry.