

- PLASMA DA FACCIPANDU:
- SPECTROPHOTOMETRY

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FITRIANA KARTIKA DEWI

**PENENTUAN KELARUTAN DAN pKa
ANDROGRAFOLIDA TERHADAP FUNGSI pH**



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PERPUSTAKAAN
UNIVERSITAS AIRLANGGA
SURABAYA

**FAKULTAS FARMASI UNIVERSITAS AIRLANGGA
BAGIAN FARMASETIKA
SURABAYA
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Lembar Pengesahan

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ANDROGRAFOLIDA TERHADAP FUNGSI pH**

SKRIPSI

Dibuat untuk memenuhi syarat mencapai gelar Sarjana Farmasi
pada Fakultas Farmasi Universitas Airlangga

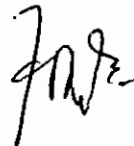
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ABSTRACT

Determination of solubility and pKa value of Andrographolide toward changing of pH is to find out how is far the effect of pH to Andrographolide,s solubility. The result of this research can be use as prediction of relationship between in vitro - in vivo dissolution, so it would be useful as consideration in the development of Andrographolide's formulation.

The chosen pH is 1,0; 3,0; 5,0; 7,0; 8,0 and 10,0. To determine the Andrographolide 's solubility, the observation of Andrographolide concentration at maximum wavelength of each solution is using spectrophotometer UV-Vis. By making regression equation between pH and $\log [(S-S_0)/S_0]$, the intercept of this equation is the pKa value of Andrographolide. If pKa value are known, the total solubility of Andrographolide in the current pH can be calculated and increasing solubility because of influence of pH changing are known.

The profile of Andrographolide's solubility at several pH values shows that increasing pH solution can increase the solubility of Andrographolide. The obtained pKa value from the result of this research is 9,59. We can conclude that Andrographolide is very weak acid substance.

Key words : Andrographolide, Spectrophotometry UV-Vis, pH and solubility, pKa value.