

INTISARI

Tanaman pandan wangi (*Pandanus amaryllifolius* Roxb.) merupakan salah satu tanaman yang dimanfaatkan sebagai obat peluruh batu ginjal. Hal ini karena adanya kandungan flavonoid dalam pandan wangi, khususnya di bagian daun. Fraksinasi daun pandan wangi menggunakan air dan etil asetat bertujuan mengetahui pengaruh kedua fraksi terhadap kelarutan kalsium batu ginjal.

Penelitian ini termasuk dalam rancangan eksperimen murni lengkap pola searah. Analisis kualitatif kandungan flavonoid dalam daun pandan wangi menggunakan kromatografi lapis tipis. Hasil analisis menunjukkan bahwa fraksi air dan etil asetat daun pandan wangi mengandung glikosida flavonoid yang mengarah pada golongan flavonol.

Subjek uji batu ginjal direndam dalam sembilan kelompok perlakuan yaitu, kontrol negatif, fraksi air dan etil asetat daun pandan wangi dengan konsentrasi 2,5% v/v , 5% v/v , 7,5% v/v , dan 10% v/v . Filtrat hasil perendaman diukur kadar kalsium terlarutnya menggunakan spektrofotometer serapan atom.

Data kadar kalsium terlarut yang diperoleh diuji dengan analisis statistik deskriptif *Explore*, dilanjutkan uji *One Way Anova* dan uji *post hoc* LSD. Hasil analisis menunjukkan bahwa fraksi etil asetat daun pandan wangi mampu melarutkan kalsium batu ginjal lebih tinggi daripada fraksi airnya. Kedua fraksi daun pandan wangi tersebut memiliki daya melarutkan tertinggi pada konsentrasi 10% v/v .

Kata kunci : pandan wangi, batu ginjal kalsium, air, etil asetat, spektrofotometer serapan atom

ABSTRACT

Pandan Wangi (*Pandanus amaryllifolius* Roxb.) is one of the plant that can be used as a drug which decreases the size of the kidney stones. This presumed because of the flavonoids which contained in pandan wangi, particularly in its leaves. Fractionation the pandan wangi leaves using water and ethyl acetate has a purpose to know the influence from both of the fraction in solubilizing the calcium kidney stones.

This research is a kind of a complete pure experimental research with one way pattern. Qualitative analysis of flavonoids in pandan wangi leaves carried out by thin layer chromatography. The result of analysis showed that pandan wangi leaves contained glycosides flavonoid which supposed to flavonol group.

The test subject, kidney stones, submered in nine treatment groups involved negative control, water and ethyl acetate fraction of pandan wangi leaves in concentration 2,5%^{v/v}, 5%^{v/v}, 7,5%^{v/v}, 10%^{v/v}. The filtrates after the submersion then measured by atomic absorption spectrophotometer to know the concentration of the soluble calcium.

The data of soluble calcium which obtained from the measurement by atomic absorption spectrophotometer tested by *Explore* descriptive statistical analysis, then continued by *One Way Annova* and *post hoc* LSD. The results showed that the fraction of ethyl acetate of pandan wangi leaves could dissolves the calcium kidney stones higher than the fraction of water of pandan wangi leaves. Both of the fractions of pandan wangi leaves gave the highest solubility in concentration 10%^{v/v}.

Key words : pandan wangi, calcium kidney stones, water, ethyl acetate, atomic absorption spectrophotometer