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STANDARISASI SPESIFIK DAN NON SPESIFIK EKSTRAK DAUN KENCUR (*Kaempferia galanga* L.)

ABSTRAK

Latar belakang: Daun kencur (*Kaempferia galanga* L.) secara empiris digunakan sebagai bahan tambahan. Dugaan adanya kandungan flavonoid menyebabkan daun tersebut dapat digunakan sebagai bahan tambahan. Untuk mengidentifikasi senyawa pada daun kencur perlu dilakukan penelitian awal menggunakan ekstrak. Standarisasi ekstrak daun kencur dilakukan untuk menjamin hasil yang diperoleh memiliki mutu sesuai dengan yang ditetapkan.

Metode: Standarisasi ekstrak secara spesifik menggunakan metode gravimetri meliputi organoleptis, kadar senyawa larut air, kadar senyawa larut etanol dan standarisasi non spesifik menggunakan metode gravimetri meliputi susut pengeringan, kadar air, kadar abu total, serta kadar abu tidak larut asam. Analisis kandungan flavonoid secara kualitatif metode skrining fitokimia dan metode KLT, secara kuantitatif metode spektrofotometri. Penentuan standarisasi menggunakan FHI dan kadar ditentukan dari persamaan regresi linier dari absorbansi yang diperoleh.

Hasil: Hasil rendeman (17.45%), uji bebas etanol negatif, standarisasi spesifik meliputi organoleptis ekstrak (berbentuk kental, warna coklat tua, dan bau khas), kadar senyawa larut air ($0.36 \pm 0.03\%$), kadar senyawa larut etanol ($0.45 \pm 0.05\%$), non spesifik meliputi susut pengeringan ($0.09 \pm 0.01\%$), kadar air (2.41% MC), kadar abu total ($28.72 \pm 1.03\%$), kadar abu tidak larut dalam asam ($29.16 \pm 1.03\%$). Senyawa flavonoid uji reaksi warna menunjukkan hasil positif dan pada KLT diperoleh nilai R_f 0,96 sama dengan kontrol kuersetin. Kadar flavonoid total ekstrak daun kencur pada panjang gelombang 413.70nm sebesar 66.740 ± 0.137 (mgQE/g).

Kesimpulan: Hasil penelitian diperoleh standarisasi spesifik dan non spesifik tidak memenuhi syarat, akan tetapi organoleptis, susut pengeringan, dan kadar air memenuhi syarat yang diperbolehkan berdasarkan Farmakope Herbal Indonesia. Ekstrak daun kencur mengandung senyawa flavonoid.

Kata kunci: Daun kencur, Parameter standarisasi ekstrak, Flavonoid total

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STANDARDIZATION SPECIFIC AND NON SPECIFIC OF KENCUR LEAF EXTRACT (*Kaempferia galanga* L.)

ABSTRACT

Background: The leaves of kencur (*Kaempferia galanga* L.) are empirically used in several areas as a spice in cooking and as an additive. The alleged presence of flavonoids causes the leaves to be used as additives. To identify compounds in kencur leaves, it is necessary to conduct preliminary research using extracts. The standardization of kencur leaf extract is carried out to ensure that the results obtained are of the specified quality.

Methods: The extract standardization specifically includes organoleptic, water soluble compound content, ethanol soluble compound content, and non-specific standardization includes drying shrinkage, moisture content, total ash content, and the ash content is not soluble in acid using the gravimetric method. Qualitative analysis of flavonoid content, phytochemical screening method and TLC method, quantitatively by spectrophotometric method. Determination of standardization using FHI and the content is determined from the linear regression equation of the absorbance that has been obtained.

Results: The yield (17.45%), the ethanol-free test was negative, the results of specific standardization include organoleptic extracts (viscous form, dark brown color, and characteristic odor), levels of water soluble compounds ($0.36 \pm 0.03\%$), levels of ethanol soluble compounds ($0.45 \pm 0.05\%$), non-specifics include drying shrinkage ($0.09 \pm 0.01\%$), moisture content (2.41% MC), total ash content ($28.72 \pm 1.03\%$), acid insoluble ash content ($29.16 \pm 1.03\%$). Flavonoid compounds with color reaction test showed positive results and on TLC obtained an Rf value of 0.96 which was the same as that of quercetin control. The total flavonoid content of kencur leaf extract at a wavelength of 413.70nm was $66,740 \pm 0.137$ (mgQE/g).

Conclusion: From the results of the study, it was found that the specific and non-specific characteristics of kencur leaf extract does not qualify, however organoleptic, drying shatytes, and moisture content are allowed on the basis of Indonesian Herbal Pharmacopoeia. Kencur leaf extract contains flavonoid compounds.

Keywords: Kencur leaves, Standardization parameters extract, Total flavonoids