

**DETERMINATION OF SPECIFIC AND NON-SPECIFIC
PARAMETERS OF ETHANOL 96% REFLUX EXTRACTS
FROM *Fraxinus griffithii* Clarke LEAVES**

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ABSTRACT

The standardization process should be done to control the quality of the extract, and it was begun by determination of specific and non-specific parameters of extract. This study was conducted to determine the specific and non-specific parameters of ethanol 96% reflux extracts from *Fraxinus griffithii* Clarke leaves. *Fraxinus griffithii* Clarke leaves powder was extracted with ethanol 96% using reflux method. The extract was concentrated with rotary vacuum evaporator, then evaporated on waterbath until viscous extract obtained. This study was determined loss on drying, total ash content, total bacterial plate count, TLC-Densitometry profile and HPLC profile. The results showed that loss on drying was $(11,35 \pm 0,18)\%$, total ash content was $(2,00 \pm 0,16)\%$, and total bacterial count was $<1 \times 10^{-5}$ CFU. TLC-Densitometry profile was performed using stationary phase of silica gel GF 254 and mobile phase of chloroform : methanol (5:2), showed three specific peaks with Rf value of 0,55; 0,77; and 0,91. HPLC profile was performed using RP-18 column and gradient mobile phase (water, acetic acid (0.15%) and methanol), showed five main peaks with Rt of 15,277; 31,870; 33,613; 42,070; and 42,880 minutes.

Key words: *Fraxinus griffithii* Clarke, *tiken*, reflux, specific parameters, non-specific parameters.

**PENENTUAN PARAMETER SPESIFIK DAN NON SPESIFIK
EKSTRAK ETANOL 96% HASIL REFLUKS DAUN TIKEN
(*Fraxinus griffithii* Clarke)**

ABSTRAK

Untuk mengontrol kualitas ekstrak, proses standardisasi harus dilakukan; yang dimulai dengan penentuan parameter spesifik dan non-spesifik dari ekstrak. Penelitian ini dilakukan untuk menentukan parameter spesifik dan non-spesifik dari ekstrak etanol 96% hasil refluks daun tiken (*Fraxinus griffithii* Clarke). Serbuk daun *Fraxinus griffithii* Clarke direfluks dengan pelarut etanol 96%. Ekstrak dipekatkan menggunakan *rotary vacuum* evaporator, kemudian diuapkan di atas *waterbath* sampai diperoleh ekstrak kental. Parameter-parameter yang ditentukan adalah susut pengeringan, kadar abu total, cemaran bakteri, profil KLT-Densitometri, serta profil KCKT. Hasil penelitian menunjukkan susut pengeringan ($11,35 \pm 0,18$)%, kadar abu ($2,00 \pm 0,16$)%, ALT cemaran bakteri $<1 \times 10^{-1}$ * CFU. Profil KLT-Densitometri dengan fase diam silika gel GF 254 dan fase gerak kloroform:metanol (5:2) menunjukkan adanya tiga puncak spesifik, dengan harga Rf masing-masing 0,55; 0,77; dan 0,91 dengan area masing-masing 27,88%; 7,85%; dan 15,96%. Profil KCKT dengan kolom Lichrospher RP-18 dan fase gerak *pump* A air dan asam asetat (0.15%), *pump* B metanol dan asam asetat (0.15%) menunjukkan adanya lima puncak utama, dengan waktu retensi 15,277; 31,870; 33,613; 42,070; dan 42,880 menit dengan area masing-masing sebesar 9,18%; 5,74%; 20,94%; 27,70%; dan 8,35%.

Kata kunci: *Fraxinus griffithii* Clarke, tiken, refluks, parameter spesifik, parameter non-spesifik.

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