

**KADAR FLAVONOID TOTAL DAN KAPASITAS PEREDAMAN
RADIKAL BEBAS FRAKSI ETIL ASETAT, N-BUTANOL & AIR DAUN
SENDOK (*Plantago major L.*) TERHADAP 1,1-DIPHENYL-2-PICRYL
HIDRAZYL (DPPH)**

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ABSTRAK

Telah dilakukan pengukuran kapasitas peredaman radikal bebas (KPRB) dari 3 fraksi daun sendok (*Plantago major L.*), masing-masing fraksi: etil asetat, n-butanol dan air terhadap 1,1-diphenyl-2-picrylhidrazyl (DPPH) dengan metode spektrofotometri sinar tampak. Selain itu, juga dilakukan penetapan kadar flavonoid total terhadap ketiga fraksi tersebut yang dihitung sebagai *catechin equivalent* (CE). Hasil pengukuran menunjukkan bahwa harga KPRB (EC₅₀) ketiga fraksi masing-masing adalah: 113,95; 117,26 dan 2850,17 bpj dengan kadar flavonoid total berturut-turut: 8,45; 5,51 dan 1,22% b/b CE. Berdasarkan data tersebut dapat disimpulkan bahwa: KPRB dan kadar flavonoid total fraksi etil asetat > n-butanol > air. Kadar flavonoid total menentukan kekuatan KPRB dari masing-masing fraksi.

Kata kunci : *Plantago major L.*, kapasitas peredaman radikal bebas, DPPH, flavonoid total, *Catechin equivalent*

ABSTRACT

The measurement of free radicals scavenger capacity (FRSC) have been done on 3 fractions of daun sendok (*Plantago major L.*), i.e.: ethyl acetate, n-buthanol and water fraction to the 1,1-diphenyl-2-picrylhidrazyl (DPPH) using spectrophotometric method. In addition, the total flavonoid content of those fractions also have been determined, which is calculated as catechin equivalent (CE). The results shown that the FRSC (EC₅₀) of each fraction are: 113.95; 117.26 and 2850.17 ppm with total flavonoid content are: 8.45; 5.51 and 1.22% w/w CE, respectively. Based on these data can be concluded that: FRSC and total flavonoid content of ethyl acetate > n-buthanol > water fraction. The total flavonoid content determined FRSC strength of each fraction.

Keywords: *Plantago major L.*, free radicals scavenger capacity, DPPH, total flavonoid, Catechin equivalent