

Pengaruh Cekaman Kering dan Pupuk Bokashi terhadap Kandungan Flavonoid pada Tanaman Binahong  
(*Anredera cordifolia* (Ten.) Steenis)

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## INTISARI

Tanaman binahong (*Anredera cordifolia* (Ten.) Steenis) mengandung senyawa polifenol yang memiliki aktivitas antioksidan. Pemberian cekaman kering meningkatkan sintesis metabolit sekunder pada tanaman, namun menurunkan laju pertumbuhannya. Penelitian ini bertujuan untuk melihat pengaruh pemberian cekaman kering, pemupukan, dan kombinasi keduanya terhadap pertumbuhan dan peningkatan flavonoid pada tanaman binahong. Penelitian menggunakan rancangan acak lengkap faktorial. Cekaman kering diberikan dengan variasi nilai *Fraction Transpirable of Soil Water* (FTSW) (0.25, 0.5, 1.0). Pemupukan diberikan dengan variasi dosis pupuk pada perbandingan tanah : bokashi (1:0; 1:1; 1:2; 1:3). Data yang diperoleh dianalisis menggunakan *Anova two way* pada tingkat kepercayaan 95% dan tingkat signifikansi  $\alpha$  0,05. Hasil penelitian menunjukkan bahwa perlakuan cekaman kering, pemupukan dan kombinasi keduanya berpengaruh nyata terhadap laju pertumbuhan dan jumlah total senyawa fenolik pada tanaman binahong kecuali pada perlakuan kombinasi terhadap berat basah total, perlakuan cekaman kering terhadap berat kering total dan total tanin pada perlakuan cekaman kering dan kombinasi perlakuan. Uji lanjut menggunakan LSD (Least Significant Different) dan DMRT (Duncan's Multiple Range Test) menunjukkan bahwa A2B0 menjadi kombinasi terbaik yang menghasilkan total fenol dan total tanin tertinggi serta pertambahan jumlah daun, pertambahan tinggi batang, pertambahan panjang akar, berat basah total, berat basah daun, berat kering daun terbesar.

Kata kunci : binahong, flavonoid, cekaman kering, bokashi

Effect of Drought Stress an Bokashi Fertilizer on the Flavonoid Contents of Madeira-vine (*Anredera cordifolia* (Ten.) Steenis)

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## ABSTRACT

Binahong plant (*Anredera cordifolia* (Ten.) Steenis) contains polyphenolic compounds which have antioxidant activity. Drought stress increase the synthesis of secondary metabolites, but reduce the plant growth rate. This study aimed to examine the effect of dry stress, fertilization, and combination of both on the growth and increasement of flavonoids in binahong plants. The study used a factorial completely randomized design. Dry stress was given with variations in the value of Fraction Tranpirable of Soil Water (FTSW) (0.25, 0.5, 1.0). Fertilization is given by varying the dose of fertilizer in the ratio of soil: bokashi (1:0; 1:1; 1:2; 1:3). The data obtained were analyzed using two-way Anova at a 95% confidence level and a significance level of 0.05. The results showed that dry stress treatment, fertilization and a combination of both had a significant effect on the growth rate and total amount of phenolic compounds in binahong plants except for dry weight of binahong plants treated with dry stress, total wet weight given combination treatment and total tannins in stress treatment. dry and combination treatments. Further tests using LSD (Least Significant Different) and DMRT (Duncan's Multiple Range Test) showed that A2B0 is the best composition which was significantly different in the leaf increment, stem hight, total wet weight, leaf wet weight, leaf dry weight total phenol, and total tannin.

Key words: binahong, flavonoids, dry stress, bokashi