

AULANA ISTIKHAROH NIM.160311100011. Effect The Composition Of Growing Media On Growth, Yield And Alkaloid Content In Leaves Of Binahong (*Anredera cordifolia*). Under the guidance of **Dr. Catur Wasonowati, S.P., M.Si** dan **Ir. Amin Zuchri, M.P.**

ABSTRACT

Binahong is a plant that has many health benefits, however the cultivation of Binahong plants is still very rare so that production is also low. The composition of growing media is the main component in conducting cultivation. This study aims to determine the effect of the composition of the growing media on growth, yield and alkaloid content in leaves of binahong (*Anredera cordifolia*). The research was conducted at the Agroecotechnology Greenhouse from February to April 2020. This study used a non-factorial randomized block design (RBD) with 4 treatments including T0 (soil), T1 (soil + manure) with a ratio of 2: 1, T2 (soil + compost) with a ratio of 2: 1, and T3 (soil + manure + compost) with a ratio of 2: 1: 1 which was repeated 5 times. The data from the observations were analyzed using analysis of variance and Duncan's advanced test (BNJD) with a level of 5%. The results showed that the composition of the planting medium had a significant effect on plant growth (stem diameter, leaf area, number of leaves, number of branches, number of roots, and root length) and had a significant effect on yields such as fresh weight, dry weight and alkaloid content in leaves binahong. The best composition treatment of growing media to get the highest production is found in the composition of soil media: manure: compost (2: 1: 1) with plant dry weight of 11.82 g / plant and the best composition of growing media to produce the highest alkaloid content, composition of soil media: manure (2: 1) with alkaloid levels of 155.697 mg, equivalent to caffeine / plant.

Keywords: Binahong (*Anredera cordifolia*), growing media, Alkaloid

AULANA ISTIKHAROH NIM.160311100011. Pengaruh Komposisi Media Tanam terhadap Pertumbuhan, Hasil dan Kandungan Alkaloid Daun Binahong (*Anredera cordifolia*). Dibawah bimbingan **Dr. Catur Wasonowati, S.P., M.Si** dan **Ir. Amin Zuchri, M.P.**

ABSTRAK

Binahong merupakan tanaman yang memiliki banyak manfaat dalam bidang kesehatan, akan tetapi budidaya tanaman binahong masih sangat jarang sehingga produksinya juga rendah. Komposisi media tanam merupakan komponen utama dalam melakukan budidaya. Penelitian ini bertujuan untuk mengetahui pengaruh komposisi media tanam terhadap pertumbuhan, hasil dan kandungan alkaloid pada daun binahong (*Anredera cordifolia*). Penelitian dilaksanakan di Greenhouse Agroekoteknologi pada bulan Februari sampai dengan April 2020. Penelitian ini menggunakan Rancangan Acak Kelompok (RAK) nonfaktorial dengan 4 perlakuan diantaranya T0 (tanah), T1 (tanah + pupuk kandang) dengan perbandingan 2: 1, T2 (tanah + kompos) dengan perbandingan 2: 1, dan T3 (tanah + pupuk kandang + kompos) dengan perbandingan 2: 1: 1 yang diulang sebanyak 5 kali. Data hasil pengamatan dianalisis menggunakan Analisis Sidik Ragam dan uji lanjut Duncan (BNJD) dengan taraf 5%. Hasil penelitian menunjukkan bahwa komposisi media tanam berpengaruh nyata terhadap pertumbuhan tanaman (diameter batang, luas daun, jumlah daun, jumlah cabang, jumlah akar, dan panjang akar) serta berpengaruh nyata terhadap hasil seperti bobot segar, bobot kering dan kadar alkaloid daun binahong. Perlakuan komposisi media tanam terbaik untuk mendapatkan produksi tertinggi terdapat pada komposisi media tanah: pupuk kandang: kompos (2:1:1) dengan bobot kering tanaman sebesar 11, 82 g/tanaman dan komposisi media tanam terbaik untuk menghasilkan kadar alkaloid tertinggi yaitu komposisi tanah: pupuk kandang (2:1) dengan kadar alkaloid sebesar 155,697 mg setara kafein/tanaman.

Kata Kunci : Binahong (*Anredera cordifolia*), Media tanam, Alkaloid.