

Rini Fitriah. 220311100051. Pengaruh Komposisi Media Tanam terhadap Pertumbuhan dan Biomassa Tanaman Meniran (*Phyllanthus Niruri* L.). Dibimbing oleh : Dr. Diana Nurus Sholehah, S.Farm., Apt., M.Si dan Choirul Umam, S.T.P, M.T.

ABSTRAK

Tanaman meniran (*Phyllanthus niruri* L.) merupakan tanaman obat yang banyak dimanfaatkan dalam pengobatan herbal. Saat ini, budidayanya masih relatif terbatas sehingga diperlukan penelitian untuk meningkatkan pertumbuhan dan hasil tanaman, salah satunya melalui pengaturan komposisi media tanam. Penelitian ini bertujuan untuk mengetahui pengaruh komposisi media tanam terhadap pertumbuhan dan hasil tanaman meniran. Penelitian dilaksanakan di kebun percobaan agroekoteknologi pada bulan Desember 2025 hingga Maret 2026 menggunakan Rancangan Acak Kelompok (RAK) nonfaktorial yang terdiri atas lima perlakuan dan lima ulangan. Perlakuan media tanam yang digunakan meliputi M0 = tanah; M1 = tanah : pupuk kandang kambing : sekam (1:1:1); M2 = tanah : pupuk kandang kambing : sekam (2:1:1); M3 = tanah : pupuk kandang kambing : arang sekam (1:1:1); dan M4 = tanah : pupuk kandang kambing : arang sekam (2:1:1). Hasil penelitian menunjukkan bahwa perlakuan M4 memberikan pertumbuhan terbaik pada parameter diameter batang, jumlah cabang berdaun, dan panjang cabang berdaun, serta menghasilkan bobot basah dan bobot kering akar tertinggi. Pertumbuhan tinggi tanaman terbaik diperoleh pada perlakuan M0, sedangkan kadar klorofil tertinggi diperoleh pada perlakuan M2. Dengan demikian, media tanam M4 (tanah : pupuk kandang kambing : arang sekam = 2:1:1) merupakan komposisi media tanam yang paling efektif untuk mendukung pertumbuhan dan biomassa tanaman meniran.

Kata Kunci : Arang Sekam, Media Tanam, Meniran

Rini Fitriah. 220311100051. The Effect of Growing Medium Composition on the Growth and Biomass of Meniran (*Phyllanthus niruri* L.) Plants. Supervised by : Dr. Diana Nurus Sholehah, S.Farm., Apt., M.Si and Choirul Umam, S.T.P, M.T.

ABSTRACT

*Meniran (*Phyllanthus niruri* L.) is a medicinal plant nowadays utilized in herbal medicine. The cultivation remains relatively limited, highlighting the need for studies aimed at improving its growth and yield, one of which is through the optimization of planting media composition. This study aimed to determine the effect of different planting media compositions on the growth and yield of meniran plants. The research was conducted at the agroecotechnology experimental field from December 2025 to March 2026 using a non-factorial Randomized Complete Block Design (RCBD) consisting of five treatments and five replications. The planting media treatments were M0 = soil; M1 = soil : goat manure : rice husk (1:1:1); M2 = soil : goat manure : rice husk (2:1:1); M3 = soil : goat manure : rice husk charcoal (1:1:1); and M4 = soil : goat manure : rice husk charcoal (2:1:1). The results showed that treatment M4 produced the best growth performance in terms of stem diameter, number of phyllantoid, and length of phyllantoid, and also resulted in the highest fresh and dry root weights. The greatest plant height was obtained under treatment M0, while the highest chlorophyll content was recorded in treatment M2. Therefore, M4 (soil : goat manure : rice husk charcoal = 2:1:1) was the most effective planting medium composition for supporting the growth and biomass of meniran.*

*Keywords : *Phyllanthus niruri*, Plant growth, Rice husk charcoal*