

ABSTRAK

PENGARUH KOMPOSISI MEDIA TANAM TERHADAP PERTUMBUHAN BIBIT SENGON (*Paraserianthes falcataria* (L.) Nielsen)

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Sengon (*Paraserianthes falcataria* (L.) Nielsen) dikenal sebagai salah satu jenis pohon yang cepat tumbuh serta banyak dibudidayakan di sektor kehutanan dan perkebunan di Indonesia. Meskipun memiliki keunggulan dalam kecepatan tumbuh, sengon memiliki keterbatasan dalam jumlah benih akibat produksi buah yang relatif sedikit. Untuk mendukung pertumbuhan bibit sengon yang optimal di lapangan, diperlukan bibit berkualitas tinggi, yang salah satunya dipengaruhi oleh media tanam yang digunakan di persemaian. Penelitian ini bertujuan untuk mengetahui pengaruh komposisi media tanam terhadap pertumbuhan bibit sengon serta menentukan komposisi media tanam terbaik terhadap pertumbuhan bibit sengon. Percobaan ini dilaksanakan pada bulan Januari sampai April 2025 di Desa Harumandala, Kecamatan Cigugur, Kabupaten Pangandaran, Jawa Barat. Penelitian ini menggunakan Rancangan Acak Kelompok (RAK) dengan 5 perlakuan dan 5 ulangan. Perlakuan terdiri dari p_0 = top soil, p_1 = top soil : pasir : pupuk kotoran domba (1 : 1 : 1), p_2 = top soil : pasir : pupuk kotoran domba (2 : 1 : 1), p_3 = top soil : pupuk kotoran domba : arang sekam (1 : 1 : 1), dan p_4 = top soil : pupuk kotoran domba : arang sekam (1 : 2 : 1). Pengamatan dilakukan pada umur 30, 60, 90, dan 98 hari setelah tanam. Hasil penelitian menunjukkan bahwa komposisi media tanam berpengaruh terhadap tinggi tanaman, diameter batang, luas daun, volume akar, bobot kering akar, dan bobot kering tajuk. Top soil : pupuk kotoran domba : arang sekam dengan perbandingan (1 : 1 : 1) merupakan komposisi media tanam terbaik untuk pertumbuhan bibit sengon.

Kata kunci: arang sekam, pembibitan, pupuk kotoran domba, sengon, top soil

ABSTRACT

EFFECT OF GROWING MEDIA COMPOSITION ON THE GROWTH OF SENGON (*Paraserianthes falcataria* (L.) Nielsen) SEEDLINGS

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Sengon (*Paraserianthes falcataria* (L.) Nielsen) is known as a fast-growing tree species and is widely cultivated in the forestry and plantation sectors in Indonesia. Despite its rapid growth, sengon has a limitation in seed production due to relatively low fruit yield. To support optimal seedling growth in the field, high-quality seedlings are required, one of which is influenced by the growing media used in the nursery. This study aimed to determine the effect of growing media composition on the growth of sengon seedlings and to identify the best media composition for optimal seedling development. The experiment was conducted from January to April 2025 in Harumandala Village, Cigugur Subdistrict, Pangandaran Regency, West Java. The research used a Randomized Block Design (RBD) with five treatments and five replications. The treatments consisted of p_0 = topsoil, p_1 = topsoil : sand : sheep manure (1 : 1 : 1), p_2 = topsoil : sand : sheep manure (2:1:1), p_3 = topsoil : sheep manure : rice husk charcoal (1 : 1 : 1), and p_4 = topsoil : sheep manure : rice husk charcoal (1 : 2 : 1). Observations were conducted at 30, 60, 90, and 98 days after planting. The results showed that the composition of the growing media had a significant effect on plant height, stem diameter, leaf area, root volume, root dry weight, and shoot dry weight. The best growing media composition for sengon seedling growth was a mixture of topsoil : sheep manure : rice husk charcoal in a (1 : 1 : 1) ratio.

Keywords: rice husk charcoal, seedling, sheep manure, sengon, topsoil