

## **ABSTRAK**

### **PENGARUH SUARA MUSIK KLASIK, ROCK, DAN MUROTTAL TERHADAP PERKECAMBAHAN BENIH SENGON (*Paraserianthes falcataria* (L.) Nielsen)**

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Sengon merupakan salah satu jenis pohon yang dikembangkan pada pembangunan hutan tanaman industri (HTI) di Indonesia. Seiring dengan tingginya permintaan kayu komersial, budidaya sengon mengalami perkembangan untuk mendapatkan bibit yang baik. Frekuensi suara dapat berperan sebagai faktor eksternal yang memengaruhi proses perkecambahan benih dan pertumbuhan semai. Penelitian ini bertujuan untuk mengetahui pengaruh musik klasik, musik rock, dan murottal terhadap perkecambahan benih sengon. Rancangan percobaan yang digunakan adalah Rancangan Acak Lengkap (RAL) dengan empat perlakuan, meliputi kontrol (tanpa perlakuan suara), musik klasik, musik rock, dan murottal. Masing-masing perlakuan diulang tiga kali dengan masing-masing ulangan sebanyak 50 benih. Selanjutnya data dianalisis menggunakan analisis varian (anova) dan Uji Beda Nyata Jujur (BNJ) pada taraf 5%. Hasil penelitian menunjukkan bahwa perlakuan suara berpengaruh nyata terhadap beberapa variabel pengamatan. Perlakuan murottal berpengaruh paling baik terhadap panjang akar senilai 3,42 cm. Perlakuan musik rock berpengaruh paling rendah terhadap jumlah daun senilai 4,02 helai. Adapun parameter indeks vigor pada perlakuan musik klasik berbeda nyata dibandingkan kontrol, namun tidak berbeda nyata dibandingkan musik rock dan murottal. Indeks vigor benih pada perlakuan musik klasik dan kontrol berturut-turut adalah 54,67% dan 39,33%. Parameter tinggi pada perlakuan murottal berbeda nyata dibandingkan kontrol dan musik rock, namun tidak berbeda nyata dibandingkan perlakuan musik klasik. Tinggi kecambah pada perlakuan murottal, kontrol dan musik rock berturut-turut adalah 9,57 cm, 8,41 cm, dan 8,35 cm. Parameter bobot basah pada perlakuan murottal berbeda nyata dibandingkan kontrol dan musik rock, namun tidak berbeda nyata dibandingkan perlakuan musik klasik. Bobot basah kecambah pada perlakuan murottal dan musik rock berturut-turut adalah 0,23 g dan 0,14 g.

Kata kunci: perkecambahan, sengon, suara.

## **ABSTRACT**

### **THE EFFECTS OF CLASSICAL, ROCK, AND MUROTTAL MUSIC ON THE SENGON (*Paraserianthes falcataria* (L.) Nielsen) SEED GERMINATION**

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Sengon is one of the tree species which is developed in the development of industrial forest plantations in Indonesia. Along with the high demand for commercial wood, sengon cultivation is developing to get good seedlings. Sound frequency can act as an external factor that affects the process of seed germination and seedling growth. This study aims to determine the effect of classical, rock, and murottal music on the germination of sengon seeds. This study used experimental design which was a Completely Randomized Design (CRD) with four treatments, including control (without sound treatment), classical, rock, and murottal music. Each treatment was repeated three times with each repetition consisted of 50 seeds. Furthermore, the data were analyzed using analysis of variance and Tukey's HSD (honestly significant difference) test at the 5% level. The results showed that the sound treatment had a significant effect on several observation variables. First, murottal treatment had the best effect on root length. The longest root length of sengon seedling was 3.42 cm. Second, the rock music treatment had the lowest effect on the number of sengon seedling leaves. The number of sengon seedling leaves was at least 4.02 strands. Third, the vigor index of sengon seeds showed that the classical music treatment was significantly different from the control, but not significantly different from rock and murottal music. The vigor index of sengon seeds in classical music treatment and control was 54.67% and 39.33%. Fourth, the height of sengon seedling showed that the murottal treatment was significantly different from the control and rock music, but not significantly different from classical music treatment. The height of sengon seedlings in the murottal, control and rock music treatments were 9.57 cm, 8.41 cm, and 8.35 cm. Last, the fresh weight of sengon seedling showed that the murottal treatment was significantly different from the control and rock music, but not significantly different from the classical music treatment. The fresh weight of sengon seedling in the murottal and rock music treatments were 0.23 g and 0.14 g.

Keywords: germination, sengon, sound.