

## **ABSTRAK**

### **EFEK MUSIK KLASIK DAN MUROTTAL TERHADAP PERKECAMBAHAN BENIH MAHONI (*Swietenia mahagoni* (L.) Jacq.)**

**Oleh**

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Suara musik memiliki frekuensi yang dikenal tidak hanya mampu memberikan dampak positif terhadap kesehatan manusia, juga terhadap pertumbuhan tanaman. Namun, tidak semua tanaman mampu merespon baik jenis musik yang sama. Penelitian ini bertujuan untuk melihat pengaruh suara musik klasik dan murottal terhadap perkecambahan benih mahoni (*Swietenia mahagoni* (L.) Jacq.). Penelitian ini dilaksanakan di Rumah Kaca Laboratorium Lapang Terpadu dan Laboratorium Silvikultur dan Perlindungan Hutan Fakultas Pertanian Universitas Lampung pada bulan Januari–Maret 2021. Perlakuan disusun dengan menggunakan Rancangan Acak Lengkap (RAL) yang terdiri atas 3 perlakuan dan 3 ulangan. Perlakuan suara yang diberikan adalah musik klasik karya Mozart: *Eine kleine Nachtmusik: McGill Symphony Orchestra Montreal conducted by Alexis Hauser* dengan rentang level suara 73,4–102,3 dBA dan murottal surah Al-Hadid (57:1–29) oleh Ammar Fathani dengan rentang level suara 80,1–107,6 dBA. Data hasil pengamatan dianalisis dengan Uji Anova dan Uji Beda Nyata Terkecil (BNT) pada taraf 5%. Hasil penelitian menunjukkan bahwa (1) perlakuan musik klasik dinilai lebih baik dibandingkan perlakuan murottal dan kontrol karena memberikan pengaruh yang nyata terhadap beberapa parameter pengamatan, (2) perlakuan musik klasik berpengaruh terhadap rerata bobot basah (2,72 g), bobot kering (2,26 g) dan menghasilkan jumlah kecambah abnormal sebanyak 3 dan 4 kali lebih rendah dibandingkan perlakuan murottal dan kontrol. Sedangkan perlakuan murottal berpengaruh paling baik terhadap rerata jumlah daun (4,16 helai).

Kata kunci: musik klasik; murottal; perkecambahan; *Swietenia mahagoni* (L.) Jacq.

## **ABSTRACT**

### **THE EFFECT OF CLASSICAL AND MUROTTAL MUSIC ON THE MAHAGONY (*Swietenia mahagoni* (L.) Jacq.) SEED GERMINATION**

**By**

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The sound of music has a frequency that is known not only to have a positive impact on health, but also on plant growth. However, not all plants can respond to either of the same kind of music. This study aims to look at the influence of classical and muottal music sounds on the germination of mahogany seeds (*Swietenia mahagoni* (L.) Jacq.). This research was conducted in Integrated Field Laboratory Greenhouse and Silviculture Laboratory and Forest Protection Faculty of Agriculture, the University of Lampung in January–March 2021. The treatment was prepared using a Completely Group Plan consisting of three treatments and three replays. The treatment that given to the plant using classical music by Mozart: Eine Kleine Nachtmusik: McGill Symphony Orchestra Montreal conducted by Alexis Hauser with a sound level range of 73.4–102.3 dBA and muottal surah Al-Hadid (57:1–29) by Ammar Fathani with a sound level range of 80.1–107.6 dBA. The observation data were analyzed with Anova calculation and Least Significance Different (LSD) at a 5% level. The results showed that (1) classical music treatment was rated better than control and muottal treatment because it exerted a noticeable influence on several observation parameters, (2) classical music treatment had the best effect on the average wet weight (2.72 g), dry weight (2.26 g) and resulted in abnormal amounts of sprouts 3 and 4 times lower than muottal and control treatments. In comparison muottal treatment has the best effect on the average number of leaves (4.16 strands).

Keywords: classical music; muottal; germination; *Swietenia mahagoni* (L.) Jacq.