

## ABSTRAK

**Wulandari. 2018. Pengaruh Durasi Paparan Suara *Murattal* Surat Al-Fatihah terhadap Pertumbuhan Bibit Kopi Arabika (*Coffea arabica* L.) Varietas Sigarar Utang. Di bawah bimbingan Muhammad Subandi dan Budy Frasetya.**

Tanaman kopi merupakan tanaman yang memiliki prospek yang sangat besar untuk dikembangkan di Indonesia. Produktivitas dari kopi dapat dimaksimalkan dengan menghasilkan bibit kopi yang berkualitas. Guna menghasilkan bibit yang berkualitas digunakan teknologi *sonic bloom* untuk merangsang pembukaan stomata agar bibit dapat tumbuh optimal. Suara yang digunakan merupakan suara *murratal* surat Al-Fatihah dengan frekuensi 3000-5000 Hz. Penelitian ini bertujuan untuk mengetahui pengaruh durasi paparan suara *murattal* surat Al-Fatihah terhadap pertumbuhan bibit tanaman kopi varietas Sigarar utang dan mengetahui durasi terbaik pemberian paparan suara *murattal* surat Al-Fatihah terhadap pertumbuhan bibit tanaman kopi varietas Sigarar utang. Penelitian ini dilaksanakan di Balai Pengembangan Benih Tanaman Perkebunan (BPBTP) Jalan Arcamanik 106 Sindanglaya Bandung pada bulan Maret 2018 – Juni 2018. Penelitian ini menggunakan Rancangan Acak Lengkap Pola Tersarang dengan 4 perlakuan, M0 = Tanpa paparan suara *murattal*, M1 = Paparan suara *murattal* selama 10 menit, M2 = Paparan suara *murattal* selama 20 menit, dan M3 = Paparan suara *murattal* selama 30 menit yang diulang sebanyak 6 kali. Hasil penelitian menunjukkan pengaruh paparan suara *murattal* selama 10 menit (M1) dan 30 menit (M3) berpengaruh nyata terhadap penambahan tinggi, penambahan jumlah daun, luas daun, bobot basah serta bobot kering, dan berpengaruh sangat nyata terhadap jumlah dan kerapatan stomata daun.

Kata kunci: Bibit kopi, *Murattal*, *Sonic Bloom*, Q.S Al-Fatihah

## ***ABSTRACT***

**Wulandari. 2018. Effect of Sound Exposure Duration *Murattal* Al-Fatihah on Growth of Arabica Coffee Nursery (*Coffea arabica* L.) Varieties of Sigarar Utang. Under the guidance of Muhammad Subandi and Budy Frasetya.**

Coffee is plant that has a very good prospects to be developed in Indonesia. The productivity of coffee can be maximized by producing quality coffee. In order to produce good seeds quality, sonic bloom technology was used to stimulate stomatal opening so that it can grow optimally. The sound used is the *murattal* Al-Fatihah with a frequency of 3000-5000 Hz. This study aims to determine the effect of the duration of the exposure of *murattal* Al-Fatihah sound to the growth of coffee nursery of Sigarar Utang variety and to find out the best duration of exposure to *murattal* Al-Fatihah sound on the growth of Sigarar Utang variety coffee. This research was conducted at the Plant Development Center (BPBTP) Arcamanik Road 106 Sindanglaya Bandung in March 2018 - June 2018. This study used a completely nested pattern randomized design with 4 treatments, M0 = without sound application, M1 = *murattal* duration 10 minutes, M2 = *murattal* duration 20 minutes, and M3 = *murattal* duration 30 minutes repeated 6 times. The results showed the effect of *murattal* sound exposure for 10 minutes (M1) and 30 minutes (M3) significantly affected the height growth, addition of leaf number, leaf area, wet weight, dry weight, and had a very significant effect on the number and density of leaf stomata.

Keywords: Coffee, *Murattal*, Sonic Bloom, Al-Fatihah