

ABSTRAK

INVENTARISASI JENIS POHON DI AREAL SEKITAR PABRIK SEMEN PT SEMEN BATURAJA, BANDAR LAMPUNG

Oleh

WINDA AMBARWATI

Industri semen mengakibatkan dampak buruk lingkungan berupa gas polutan, debu, maupun zat berbahaya lainnya. Penelitian ini bertujuan untuk mengidentifikasi jenis pohon dan kesesuaian jenis pohon di sekitar areal pabrik semen PT Semen Baturaja, Bandar Lampung. Pengumpulan data menggunakan metode observasi langsung di lapangan. Pengambilan data dilakukan selama bulan September-Desember 2022. Data yang diambil meliputi data komunitas jenis pohon, kebisingan, kelembaban dan suhu. Data komunitas dikumpulkan menggunakan metode sensus pada zona 0-500 meter dari batas areal pabrik dengan jarak 100 meter setiap gradien. Pengukuran kelembaban dan suhu diukur menggunakan *thermometer* dan *thermohygrometer* yang dilakukan pada 3 periode waktu pada 4 titik di setiap segmen. Pengukuran kebisingan diukur menggunakan sound level meter dengan 3 periode waktu pada areal di dalam dan luar ruang terbuka hijau. Data dianalisis menggunakan metode deskripsi kuantitatif untuk komunitas tumbuhan dan deskripsi kualitatif untuk kesesuaian jenis pohon. Hasil penelitian menunjukkan terdapat 57 jenis pohon dengan total 745 individu dengan jenis dominan pada setiap gradien yaitu, gradien 1 glodokan tiang (58,56%), gradien 2 mangga (61,00%), gradien 3 mangga (59,54%), gradien 4 mangga (52,44%) dan mahoni (44,59%) serta gradien 5 glodokan tiang (45,60%) dan mangga (44,68%). Pohon yang ada di sekitar pabrik juga terbukti menurunkan suhu sebesar 1,8°C dan menaikkan kelembaban sebesar 2,1%. Kesuaian jenis pohon dikatakan cukup baik yaitu, 23 jenis penyerap gas polutan, 20 jenis penjerap debu, 17 jenis peredam kebisingan, 37 jenis pengontrol kelembaban dan suhu serta 17 jenis estetika.

Kata kunci: jenis pohon, semen, debu, ekologis, ruang terbuka hijau

ABSTRACT

INVENTORY OF TREE SPECIES IN THE VICINITY OF PT SEMEN BATURAJA'S CEMENT FACTORY IN BANDAR LAMPUNG

By

WINDA AMBARWATI

The cement industry has a negative impact on the environment due to pollutant gases, dust, and other hazardous substances. The purpose of this research is to identify tree species and tree species suitability in the vicinity of PT Semen Baturaja's cement factory in Bandar Lampung. Data collection in the field through direct observation. The information was collected in September-December 2022. The information gathered included data on tree species communities, noise, humidity, and temperature. The census method was used to collect community data in the zone 0-500 meters from the factory area boundary, with a distance of 100 meters for each gradient. A thermometer and thermohygrometer were used to measure humidity and temperature at four points in each segment over three time periods. Over three time periods, noise levels were measured with a sound level meter inside and outside the green open space. Data were analyzed using quantitative plant community description methods and qualitative tree species suitability descriptions. The results revealed 57 tree species with a total of 745 individuals was found, with the gradient 1 pole tree (58.56%), the gradient 2 mangoes (61.00%), the gradient 3 mangoes (59.54%), the gradient of 4 mangoes (52.44%) and mahoni (44,59%), and the gradient of 5 pole tree (45.60%) and mangoes (44,68%) being the dominant species. Hedges in the vicinity of the factory have also been shown to reduce temperatures by 1.8 degrees Celsius while increasing humidity by 2.1%. Tree species are said to be suitable for a wide range of applications, including 23 types of pollutant gas absorbers, 20 types of dust absorbers, 17 types of noise absorbers, 37 types of humidity and temperature controllers, and 17 types of decorative plants.

Keywords: Tree species, cement, dust, ecology, green open space