

INTISARI

Permasalahan lingkungan perkotaan meliputi peningkatan suhu, pencemaran udara akibat kendaraan bermotor, serta peningkatan kebisingan sehingga menciptakan kondisi kurang nyaman bagi masyarakat. Pengelolaan jalur hijau menjadi salah satu alternatif mengatasi permasalahan tersebut. Tujuan penelitian ini adalah menentukan keanekaragaman dan kategori pohon untuk fungsi ekologis di jalur hijau serta mempelajari kondisi iklim dan tingkat kebisingan di jalur hijau kawasan permukiman Kotabaru. Penelitian dilaksanakan pada bulan Juli hingga Desember 2018. Penelitian dilaksanakan pada 20 ruas jalan lokal di Kelurahan Kotabaru, Kecamatan Gondokusuman, Kota Yogyakarta. Metode penelitian yang digunakan adalah metode survei, dengan *purposive sampling*, analisis KPI (*Key Performance Index*), Indeks Keanekaragaman Vegetasi, dan uji Anova. Hasil penelitian menunjukkan nilai indeks keanekaragaman spesies sebesar 2,14 dengan kategori sedang. Vegetasi di kawasan permukiman Kotabaru yang memiliki karakteristik morfologi sangat baik dan baik sebagai peredam kebisingan sebesar 21,84% dan 51,84%; sebagai peneduh 4,21% dan 26,05%; sebagai kontrol kelembaban 8,42% dan 60%; serta sebagai penahan angin 20,26% dan 68,42% dari total pohon sampel. Pohon dengan nilai tertinggi kategori sangat baik untuk fungsi peredam kebisingan adalah tanjung (*Mimusops elengi*), fungsi peneduh adalah ketapang (*Terminalia catappa*), fungsi kontrol kelembaban adalah kelapa gading (*Cocos nucifera*), serta fungsi penahan angin adalah biola cantik (*Ficus lyrata*). Kondisi kebisingan di Kotabaru lebih bising dan kondisi suhu lebih panas dibandingkan standar kenyamanan ekologis, sedangkan kondisi kelembaban dan kecepatan angin memenuhi standar kenyamanan ekologis.

Kata kunci: fungsi ekologis, *Key Performance Index*, Kotabaru, jalur hijau

ABSTRACT

Environmental problems in urban area include the increases of temperature, vehicles' air pollution, as well as noise which make less comfortable condition within the society. Urban roadside management is an alternative to overcome this problem. The purpose of the research was to determine the diversity and category of trees for ecological function along the urban roadside greenery and to learn the climate condition and noise level in the urban roadside greenery of Kotabaru Residential Area. The research was conducted in July until December 2018. The research was performed in 20 local roads in Kotabaru Village, Gondokusuman District, Yogyakarta City. The research method was survey with purposive sampling, analyzed using KPI (Key Performance Index) Analysis, Plant Diversity Index, and Anova testing. The result showed that the species diversity index's score was 2,14 of moderate category. Plants in Kotabaru area had very good and good morphology characteristics as noise reducer consequently at 21,84% and 51,84%; as shading at 4,21% and 26,05%; as humidity control at 8,42% and 60%; and as windbreaker at 20,26% and 68,42% out of total sample trees. The trees which had the highest and best scores in the category of noise reducer was Spanish Cherry (*Mimusops elengi*), in the shade category was Country-Almond (*Terminalia catappa*), in the humidity control function was Coconut tree (*Cocos nucifera*), and in the windbreaker category was Fiddle-Leaf Fig (*Ficus Lyrata*). Kotabaru had more noise and hotter temperature if compared to the standard of eco-comfort, while the humidity level and wind speed had met the standard.

Keywords: ecological function, Key Performance Index, Kotabaru, urban roadside greenery