Dinamika Fluks Emisi Gas Karbon Dioksida Tanah dengan Perbedaan Persentase Tutupan Kanopi Vegetasi di Ekosistem Hutan Kota Srengseng, Jakarta Barat = Dynamics of Soil Carbon Dioxide Gas Emission Flux with Different Percentage of Vegetation Canopy Cover in Srengseng Urban Forest Ecosystem, West Jakarta

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Abstrak

Peningkatan emisi gas karbon dioksida mendorong terjadinya pemanasan global dan perubahan iklim. Tanah memiliki kemampuan menyimpan emisi gas karbon dioksida yang diserap oleh vegetasi. Kajian mengenai dinamika fluks emisi gas karbon dioksida tanah dengan perbedaan persentase tutupan kanopi vegetasi di ekosistem Hutan Kota Srengseng belum pernah dilakukan. Penelitian ini bertujuan untuk menganalisis dan membandingkan dinamika fluks emisi gas karbon dioksida tanah di ekosistem Hutan Kota Srengseng dengan perbedaan persentase tutupan kanopi vegetasi serta menganalisis hubungan antara suhu udara, kelembapan tanah, suhu tanah, dan derajat keasaman (pH) tanah dengan fluktuasi emisi gas karbon dioksdia tanah. Metode penelitian yang digunakan adalah metode penangkapan gas rumah kaca menggunakan chamber, pengukuran faktor lingkungan, dan analisis data menggunakan uji ANOVA dan korelasi Spearman. Hasil penelitian serta kesimpulan peneleitian menyatakan bahwa nilai fluks emisi gas karbon dioksida tanah tidak berbeda signifikan di berbagai tutupan kanopi vegetasi Hutan Kota Srengseng. Lebih lanjut, faktor lingkungan yang memiliki hubungan terhadap fluks emisi gas karbon dioksida di Hutan Kota Srengseng, yakni suhu tanah, kelembapan tanah, dan derajat keasaman (pH) tanah, kecuali suhu udara. .....Increasing carbon dioxide gas emissions encourages global warming and climate change. Soil can store carbon dioxide gas emissions, which are absorbed by vegetation. Studies on the dynamics of soil carbon dioxide gas emission fluxes with differences in the percentage of vegetation canopy cover in Srengseng Urban Forest ecosystem have never been carried out. This research aims to analyze and compare the dynamics of soil carbon dioxide gas emission fluxes in Srengseng Urban Forest ecosystem with different percentages of vegetation canopy cover and analyze the relationship between air temperature, soil moisture, soil temperature and soil acidity (pH) with carbon gas emission fluxes soil dioxide. The research method used is the greenhouse gas capture method, which uses a chamber to measure environmental factors and data analysis using the ANOVA test and Spearman correlation. The research results and research conclusions state that no significant difference between the percentage of vegetation canopy cover of the Srengseng Urban Forest and the flux of carbon dioxide gas emissions. Environmental factors related to the flux of carbon dioxide gas emissions in Srengseng Urban Forest are soil temperature, humidity, and acidity (pH), except air temperature.