

HUBUNGAN KONDISI PEWADAHAN SAMPAH, SUHU, KELEMBABAN, DAN INTENSITAS CAHAYA TERHADAP *FLY DENSITY INDEX (FDI)* DI PASAR MINGGU JAKARTA SELATAN TAHUN 2026

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Abstrak

Kepadatan lalat merupakan indikator sanitasi lingkungan yang penting karena lalat berperan sebagai vektor mekanik penyakit. Pasar tradisional memiliki risiko kepadatan lalat tinggi akibat timbunan sampah organik, aktivitas perdagangan, dan kondisi pewadahan sampah yang bervariasi antar kios atau los. Penelitian ini bertujuan menganalisis hubungan pewadahan sampah, suhu, kelembaban, dan intensitas cahaya dengan *Fly Density Index* di Pasar Minggu. Penelitian ini menggunakan desain kuantitatif analitik dengan pendekatan cross-sectional. Instrumen penelitian yang digunakan adalah *Fly Grill*, *Thermo hygrometer*, dan *Lux Meter*. Penyusunan proposal hingga penelitian selesai dilaksanakan mulai dari bulan Februari-Juni 2026. Data dianalisis menggunakan uji korelasi *Spearman* dengan tingkat kepercayaan 95% ($\alpha=0,05$). Hasil penelitian menunjukkan terdapat hubungan signifikan antara pewadahan sampah dengan *Fly Density Index* ($p<0,001$; $\rho=-0,677$), suhu dengan *Fly Density Index* ($p<0,001$; $\rho=0,698$), dan kelembaban dengan *Fly Density Index* ($p=0,002$; $\rho=0,432$). Intensitas cahaya tidak berhubungan signifikan dengan *Fly Density Index* ($p=0,848$). Penelitian ini menyimpulkan bahwa kondisi pewadahan sampah, suhu, dan kelembaban berperan dalam peningkatan kepadatan lalat di Pasar Minggu, sedangkan intensitas cahaya bukan faktor dominan.

Kata Kunci: Kepadatan lalat, kelembaban, pewadahan sampah, pasar tradisional, suhu.

THE CORRELATION BETWEEN WASTE CONTAINER CONDITIONS, TEMPERATURE, HUMIDITY, AND LIGHT INTENSITY ON THE FLY DENSITY INDEX (FDI) AT PASAR MINGGU SOUTH JAKARTA 2026

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Abstract

Fly density is an important indicator of environmental sanitation because flies act as mechanical vectors of disease. Traditional markets are at risk of high fly density due to the accumulation of organic waste, commercial activities, and varying waste containment conditions among stalls. This study aims to analyze the relationship between waste containment, temperature, humidity, and light intensity and the Fly Density Index at Pasar Minggu. This study employed a quantitative analytical design with a cross-sectional approach. The research instruments used were a Fly Grill, a thermo-hygrometer, and a lux meter. The study, from proposal development through completion, was conducted from February to June 2026. Data were analyzed using Spearman's correlation test with a 95% confidence level ($\alpha = 0.05$). The results showed a significant relationship between waste containment and the Fly Density Index ($p < 0.001$; $\rho = -0.677$), between temperature and the Fly Density Index ($p < 0.001$; $\rho = 0.698$), and between humidity and the Fly Density Index ($p = 0.002$; $\rho = 0.432$). Light intensity was not significantly associated with the Fly Density Index ($p = 0.848$). This study concludes that waste containment conditions, temperature, and humidity play a role in increasing fly density at Pasar Minggu, whereas light intensity is not a dominant factor.

Keyword : *Fly density, humidity, , temperature, , traditional market, waste containment*