

# **ANALISIS KEPADATAN LALAT DI AREA PERMUKIMAN SEKITAR TEMPAT PENGOLAHAN SAMPAH TERPADU(TPST) PIYUNGAN, KABUPATEN BANTUL, DAERAH ISTIMEWA YOGYAKARTA**

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## **INTISARI**

Lalat merupakan anggota Arthropoda yang termasuk dalam kelas Heksapoda. Lalat berperan sebagai vektor mekanis, karena sebagai perantara berbagai macam penyakit terutama penyakit pencernaan. Secara umum, lalat dapat menjadi vektor penyakit diare, *typhus*, dan juga *kolera*. Lalat menyukai tempat yang lembab dan berisi materi organik seperti sampah. Keberadaan sampah di Tempat Pengelolaan Sampah Terpadu (TPST) sangat sesuai untuk lalat dalam mencari makan dan berkembang biak. Selain itu, terdapat area permukiman warga yang jaraknya kurang dari 500 m dan kondisinya kumuh dengan sampah berserakan dan irigasi yang buruk. Hal yang harus diperhatikan dalam pencegahan penularan penyakit oleh lalat ke masyarakat adalah dengan melihat Kepadatan lalat. Penelitian dilakukan pada Juli–September 2021. Kepadatan lalat didapatkan dari koleksi menggunakan *fly grill* dan *sweep net*. Lalat yang dikoleksi kemudian diidentifikasi berdasarkan ciri morfologiknya. Analisis keanekaragaman dilakukan dengan indeks keanekaragaman Shannon-Wiener dan pola distribusi lalat menggunakan Indeks Morisita. Penelitian ini menunjukkan bahwa Kepadatan lalat di area permukiman TPST Piyungan tinggi yaitu sebesar 43,6. Indeks keanekaragaman di area permukiman TPST Piyungan sebesar 1,07 yang tergolong sedang. Spesies lalat yang ditemukan ada 5, yakni *Musca domestica*, *Fannia* sp., *Chrysomya megacephala*, *Lucilia* sp., dan *Sarcophaga* sp. Pola distribusi kelima spesies lalat tergolong kedalam penyebaran secara mengelompok. Pada penelitian ini populasi dan persebaran lalat dipengaruhi oleh faktor seperti suhu dengan rata-rata 28-29,5°C dan kelembaban berkisar 69%-78% yang optimal untuk kelangsungan hidup lalat.

Kata kunci: Kepadatan, permukiman, TPST Piyungan, Keanekaragaman, Lalat, Vektor

# **DENSITY ANALYSIS OF FLIES AT RESIDENTIAL AREA AROUND THE INTEGRATED WASTE MANAGEMENT SITE(TPST)PIYUNGAN, BANTUL REGENCY , SPECIAL REGION OF YOGYAKARTA**

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## **ABSTRACT**

Flies are members of Arthropods which is belong to the Hexapoda class. Flies are often called mechanical vectors because of their role as intermediaries for various diseases like diarrhea, typhoid, and cholera. Flies live in a humid places that contain garbage. The existence of garbage in the Piyungan Integrated Waste Management Site or TPST Piyungan is suitable for flies to find food and continue their life cycle. Furthermore, there are residential area around TPST which is less than 500 meters away and the conditions are slums with scattered garbage and poor water irrigation. The first action to prevent disease transmission by flies to the community is to look at the fly density. This study was conducted from July–September 2021. The fly density was shown by the number of flies that collected by using a fly grill and sweep net. After collecting the flies, they were identified through their morphological features. The diversity analysis was conducted by using the Shannon-Wiener diversity index and the distribution pattern was by using the Morisita index. This study showed that the density of flies in the residential area around TPST Piyungan was high, which was 43.6. The diversity index was about 1.07, which means moderate, there were only five species of flies namely, *Musca domestica*, *Fannia* sp., *Chrysomya megacephala*, *Lucilia* sp., and *Sarcophaga* sp. The distribution pattern of each species was classified into clumped. Population and distribution of flies were determined by several factors like temperature which was about 28-29,5°C , and humidity was around 69%-78%, which was optimal for flies for stayed alive.

**Keywords:** Density, Diversity, Flies, Residential area, TPST Piyungan, Vector