

## **SPESES LALAT DAN PERANANNYA SEBAGAI VEKTOR MEKANIK DI BEBERAPA PASAR TRADISIONAL KABUPATEN SLEMAN, DAERAH ISTIMEWA YOGYAKARTA**

Intan Kurniawati Pramitaningrum<sup>1</sup>, Budi Mulyaningsih<sup>2</sup>, Sitti Rahmah Umniyati<sup>2</sup>

<sup>1</sup>Program Studi Ilmu Kedokteran Dasar&Biomedis Minat Parasitologi FK UGM,

<sup>2</sup>Bagian Parasitologi Fakultas Kedokteran Universitas Gadjah Mada.

### **INTISARI**

**Latar Belakang:** Lalat berperan dalam masalah kesehatan sebagai vektor mekanik penyakit menular. Lalat membawa mikroorganisme melalui anggota tubuhnya. Pasar memiliki banyak tumpukan sampah yang disukai lalat untuk makan dan berkembangbiak.

**Tujuan Penelitian:** Penelitian ini bertujuan mengetahui gambaran sanitasi pasar tradisional, fauna lalat yang ditemukan, parasit usus pada tubuh lalat di pasar tradisional di Kabupaten Sleman, Daerah Istimewa Yogyakarta, mengetahui hubungan sanitasi pasar dan kepadatan lalat, dan mengetahui hubungan kepadatan lalat dan parasit usus.

**Metode Penelitian:** Metode yang digunakan dalam penelitian ini adalah observasional dengan metode survey *Cross-sectional*. Variabel independen meliputi sanitasi pasar dan fauna lalat. Variabel dependen meliputi protozoa usus dan telur cacing. Data sanitasi diperoleh dari jawaban kuesioner. Lalat dikoleksi dari Pasar Godean, P. Gamping, P. Condongcatur, P. Ngino, P. Cebongan, dan P. Sleman menggunakan *sweep net* selama 3 hari dan diperiksa parasit ususnya di Laboratorium Parasitologi UGM. Data dianalisis dengan *Fisher's Exact Test* ( $\alpha = 0,05$ ).

**Hasil Penelitian:** Pasar Cebongan, P. Sleman dan P. Condongcatur memiliki sanitasi baik, sedangkan P. Gamping, P. Godean dan P. Ngino memiliki sanitasi buruk. Fauna lalat yang ditemukan adalah *M. domestica*, *C. megacephala* dan *Sarcophaga* spp. Parasit usus tidak ditemukan dari tubuh lalat yang dikoleksi karena tidak ada warga yang buang air besar sembarangan. Analisis *Fisher's Exact Test* menunjukkan bahwa status sanitasi pasar tidak mempunyai hubungan dengan tinggi rendahnya kepadatan lalat ( $p=0,5$ ). Kepadatan lalat tidak memiliki hubungan dengan jumlah parasit usus pada tubuh lalat. Lalat *M. domestica* mampu berperan sebagai vektor mekanik setelah dipaparkan dengan tinja yang mengandung parasit usus.

**Kata Kunci:** Peran spesies lalat, spesies lalat, vektor mekanik, pasar tradisional

## **FLY SPECIES AND IT'S ROLE AS A MECHANICAL VECTOR IN TRADITIONAL MARKETS IN DISTRICT SLEMAN, REGION OF YOGYAKARTA**

Intan Kurniawati Pramitaningrum<sup>1</sup>, Budi Mulyaningsih<sup>2</sup>, Sitti Rahmah Umniyati<sup>2</sup>

<sup>1</sup>Student of Master Program in Basic Medical and Biomedical Science Main Concentration of Parasitology, <sup>2</sup>Department of Parasitology, Faculty of Medicine Gadjah Mada University, Yogyakarta, Indonesia

### **ABSTRACT**

Flies play a role in health problems as mechanical vectors of infectious diseases. Flies carry microorganisms through his body. The market has a lot of garbage that flies interested to eat and breeding. This study aims to determine the sanitation of traditional markets, fly species are found in the market, intestinal parasites on the body of the fly in the traditional market in Sleman, Yogyakarta, determine the corelation of market sanitation and density of flies, and determine the corelation of the density of flies and intestinal parasites. The method that used in this study is observational cross-sectional survey method. Independent variables include market sanitation and fly species. The dependent variables include intestinal protozoa and worm eggs. Data obtained from the questionnaire answers sanitation. Flies were collected from Godean Market, M. Gamping, M. Condongcatur, M. Ngino, M Cebongan, and M. Sleman using sweep net for 3 days and examined intestines parasites in Parasitology Laboratory UGM. Data were analyzed using Fisher's Exact Test ( $\alpha = 0.05$ ). Cebongan Market, M.Sleman and M. Condongcatur have good sanitation, whereas M. Gamping, M. Ngino and M. Godean have poor sanitation. Fauna flies were found was *M. domestica*, *C.megacephala* and *Sarcophaga* spp. Intestinal parasites are not found on the body of flies that were collected. Fisher's Exact Test analysis shows that the sanitary status of the market does not have a correlation with flies high and low density ( $p = 0.5$ ). The density of flies do not have a correlation with the amount of intestinal parasites on the body of the fly. *M. domestica* flies were able to act as mechanical vectors after presented with feces that contain intestinal parasites.

**Keywords:** Role of fly species, the species of flies, vector mechanics, traditional markets