

**KEANEKARAGAMAN JENIS SERANGGA EKTOPARASIT DAN
NONPARASIT DI KANDANG SAPI KOMUNAL
TARUNA BUMI, SEDYO MULYO, DAN HUNTAB KUWANG,
CANGKRINGAN, SLEMAN, YOGYAKARTA**

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INTISARI

Permintaan masyarakat akan daging sapi semakin meningkat, sementara laju produksi daging sapi nasional masih tergolong lambat. Usaha ternak sapi potong yang terkoordinir dalam bentuk kelompok tani di kecamatan Cangkringan, Sleman, Daerah Istimewa Yogyakarta merupakan suatu upaya untuk memenuhi permintaan masyarakat akan daging sapi. Keberadaan serangga ektoparasit berpotensi menurunkan produktifitas ternak karena beragam penyakit yang dapat ditimbulkan. Penelitian ini bertujuan untuk mempelajari jenis serangga ektoparasit yang terdapat di kandang sapi komunal Taruna Bumi, Sedyo Mulyo, dan Huntab Kuwang serta faktor-faktor yang mempengaruhinya. Penelitian berlangsung dari bulan Maret- Juni 2016. Serangga yang ditemui di tubuh sapi, kotoran sapi, dan lingkungan kandang sapi dikoleksi dengan teknik penangkapan langsung menggunakan *sweepnet*, dieuthanasi dengan *killing bottle*, dipreservasi dengan alkohol 70% dan dibawa ke laboratorium Entomologi, Fakultas Biologi Universitas Gadjah Mada untuk diidentifikasi jenisnya. Dipelajari dampak dan potensi bahaya jenis serangga yang diperoleh dan keanekaragamannya di setiap kandang sapi dianalisis dengan indeks *Shannon-Wiener*. Secara keseluruhan, jenis serangga ektoparasit yang diperoleh dari setiap kandang sapi meliputi *Haematobia irritans*, *Stomoxys calcitrans*, dan *Tabanus subsimilis*. Setiap kandang sapi memiliki keanekaragaman jenis serangga dengan kategori sedang menurut indeks *Shannon-Wiener*. Serangga ektoparasit ditemukan dalam jumlah yang di bawah ambang batas toleransi sapi, sehingga belum dinilai mengancam produktifitasnya. Kandang sapi Taruna Bumi dinilai memiliki pengelolaan kotoran ternak yang paling buruk karena ditemukan lalat ektoparasit dalam jumlah yang paling banyak, sebaliknya kandang sapi Huntab Kuwang dinilai memiliki pengelolaan kotoran ternak yang paling baik. Keberadaan lalat ektoparasit di masing-masing kandang sapi didukung oleh adanya akumulasi kotoran sapi, temperatur dan kelembaban lingkungan.

Kata kunci : keanekaragaman, serangga ektoparasit, kandang sapi komunal, indeks *Shannon-Wiener*, lalat ektoparasit

**SPECIES DIVERSITY OF ECTOPARASITIC AND
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ABSTRACT

The public demand for beef is increasing, while the rate of national beef production is still relatively slow. Group of farmers coordinated in the form of communal ranches in Cangkringan, Sleman, Yogyakarta is considered as an attempt to meet the public demand for beef. Presence of cattle ectoparasitic insects potentially reduce the livestock productivity because of various diseases that could be transmitted. This research aims to study the species diversity of cattle ectoparasitic insects in Taruna Bumi, Sedyo Mulyo, and Huntab Kuwang communal ranch, also the factors affecting. The study lasted from March to June 2016. Ectoparasitic insects were collected from cow's body, cow's dung, and environment surrounding by direct collections using sweepnet, collected insects were euthanized with killing bottle, preserved with 70% alcohol and delivered to laboratory of Entomology, Faculty of Biology, University of Gadjah Mada for species identification. Benefits and potential dangers of collected species were studied and species diversity of insects in every communal ranch were analyzed using *Shannon-Wiener* index. Overall, species of ectoparasitic insects were *Haematobia irritans*, *Stomoxys calcitrans*, and *Tabanus subsimilis*. Each communal ranch had moderate level of insect diversity according to *Shannon-Wiener* index. Amount of ectoparasitic insects was below the threshold of cow's tolerance in each communal ranch, thus it is not considered to threaten the livestock productivity. Taruna Bumi communal ranch were considered to have worst dung management due to the highest number of collected ectoparasitic insects, otherwise Huntab Kuwang communal ranch were considered to have the best among all. The presence of ectoparasitic insects were affected by cattle dung accumulation, temperature and humidity of the environment.

Keywords : diversity, ectoparasitic insects, communal ranch, *Shannon-Wiener* index, ectoparasitic flies