

KEANEKARAGAMAN NYAMUK *Toxorhynchites* DAN NYAMUK PAKANNYA DI SEKITAR SUNGAI BEDOG, D.I YOGYAKARTA

Oleh

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INTISARI

Nyamuk merupakan insekta ordo Diptera yang banyak berperan sebagai vektor penyakit seperti demam berdarah, malaria, filariasis dan demam kuning. Dibutuhkan berbagai upaya untuk mengurangi penyebaran penyakit melalui vektor nyamuk, salah satunya dengan menekan populasi nyamuk vektor. Cara efektif yang dapat dilakukan adalah dengan pengendalian hayati menggunakan nyamuk predator *Toxorhynchites*. Informasi mengenai keanekaragaman, distribusi serta preferensi pakan nyamuk ini masih kurang, terutama di Indonesia.

Tujuan dari penelitian ini adalah untuk mengetahui keanekaragaman nyamuk *Toxorhynchites* dengan nyamuk pakannya (*prey*) di sekitar Sungai Bedog, Daerah Istimewa Yogyakarta. Penelitian ini dilakukan dari bulan Desember 2017-Mei 2018. Penelitian ini memiliki 5 tahap yakni persiapan, survey lapangan, pengambilan sampel, pemeliharaan dan identifikasi. Persiapan, pemeliharaan dan identifikasi dilakukan di Laboratorium Entomologi Fakultas Biologi UGM. Survey lapangan dan pengambilan sampel dilakukan di sepanjang tepi aliran sungai Bedog, Daerah Istimewa Yogyakarta.

Berdasarkan penelitian yang telah dilakukan, didapatkan dua jenis nyamuk predator yaitu *Toxorhynchites leicesteria* dan *Toxorhynchites splendens*. Hasil menunjukkan bahwa nyamuk predator *Toxorhynchites leicesteria* memiliki preferensi pakan *Tripteroides aranoidea* dan *Aedes albopictus*. *Toxorhynchites splendens* memiliki preferensi pakan *Tripteroides aranoidea*, *Aedes albopictus* dan *Aedes annandalei*. Larva predator yang tidak berhasil di rearing (*Toxorhynchites* sp.) diduga memiliki preferensi pakan *Tripteroides* (Trp) sp., *Tripteroides aranoidea*, *Aedes albopictus*, *Aedes annandalei* dan *Lutzia vorax*. Larva Predator dan *prey* yang ditemukan berada pada habitat dengan kisaran intensitas cahaya 31-9890 lux, suhu 26,4-35,4 °C, kelembaban 57-99% dan pH air 4,40-8,32.

Kata kunci : Nyamuk, Keanekaragaman, *Toxorhynchites*, *prey*

THE DIVERSITY OF MOSQUITO *Toxorhynchites* AND ITS PREY IN RIVERSIDE SUNGAI BEDOG, D.I YOGYAKARTA

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ABSTRACT

Mosquito is an insect of dipteran order that play many roles as vector of disease such as dengue fever, malaria, filiriasi and yellow fever. It takes various efforts to reduce the spread of disease through mosquito vectors, one of them by suppressing the population of vectors (mosquitoes). The effective way that can be done is by using biological control such as predatory by mosquito of *Toxorhynchites* genus . Information of the diversity, distribution and prey of this genus is still lacking, especially in Indonesia.

The purpose of this research is to determine the diversity of *Toxorhynchites* mosquito and its prey in the riverside Sungai Bedog, Daerah Istimewa Yogyakarta. This research was conducted from Desember 2017-Mei 2018. There are five steps of this research. That is preparation, survey, sampling, rearing and identification. Preparation, rearing and identification were conducted in Laboratory of Entomologi, Faculty of Biologi Universitas Gadjah Mada. While field surveys and sampling were conducted along the riverside of Sungai Bedog, Daerah Istimewa Yogyakarta.

Based on the research that has been done, the result obtained that there are two species of predatory mosquito, *Toxorhynchites leicesteria* and *Toxorhynchites splendens*. Predatory mosquito *Toxorhynchites leicesteria* have *Tripteroides aranoides* and *Aedes albopictus* as prey preference. *Toxorhynchites splendens* have *Tripteroides aranoides*, *Aedes albopictus* and *Aedes annandalei* as prey preference. Predatory larvae that have not success being reared and identified are suspected to have *Tripteroides (Trp) sp.*, *Tripteroides aranoides*, *Aedes albopictus*, *Aedes annandalei* and *Lutzia vorax* as prey preference. Predator and prey larvae were found in habitat with light intensity range 31-9890 lux, temperature 26,4-35,4 °C, moisture 57-99% dan water pH 4,40-8,32.

Key words : Mosquito, Diversity, *Toxorhynchites*, prey