
# *PREVALENCE RATE OF ECTO AND ENDOPARASITES INFESTATION IN JAVAN MYNAS*

**NIK NUR SITI SYAFURA ROSLAM**

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**NIK NUR SITI SYAFURA ROSLAM**

**FACULTY OF VETERINARY MEDICINE**

**UNIVERSITI PUTRA MALAYSIA**

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# PREVALENCE RATE OF ECTO AND ENDOPARASITES INFESTATION IN JAVAN MYNAS

**NIK NUR SITI SYAFURA ROSLAM**

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It is hereby certified that we have read this project paper entitled Prevalence Rate of Ecto and Endoparasites Infestation in Javan Mynas by Nik Nur Siti Syafura Bt Mohd Roslam and my opinion is that it is satisfactory in terms of scope, quality and presentation of partial fulfillment of the requirement of the course VPD 4999.

……..

**PROFFESOR DR MOHAMED ARIFF OMAR**

**BS (LSU), MS (OSU), Ph.D (Texas A&M)**

Lecturer

Department of Veterinary Pre Clinical Sciences,

Faculty of Veterinary Medicine,

Universiti Putra Malaysia

(Supervisor)

…….

**ASSOCIATE PROFFESOR DR SHAIK MOHAMED AMIN BIN HJ BABJEE**

**BS (VS), Msc, Ph.D (Queensland)**

Lecturer

Department of Veterinary Pathology and Microbiology,

Faculty of Veterinary Medicine,

Universiti Putra Malaysia

(Co-Supervisor)

This project is dedicated to my beloved parents;

Mohd Roslam bin Musa and Nik Kamariah bt Nik Yaakob,

My super hero siblings:

Nik Ahmad Izanie, Nik Ahmad Zamran, and Nik Ahmad Syahruden

and

My lovely lecturers and friends.

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## ABSTRAK

Abstrak daripada kertas projek yang dikemukakan kepada Fakulti Perubatan Veterinar untuk memenuhi sebahagian daripada keperluan kursus VPD 4999-Projek

**KADAR PREVALENS EKTOPARASIT DAN ENDOPARASIT PADA BURUNG TIONG JAWA**

**Oleh**

**Nik Nur Siti Syafura Roslam**

**2015**

**Penyelia: Professor Dr Mohamed Ariff Omar**

Burung Tiung telah diakui di seluruh negara sebagai perosak yang diperkenalkan dan mempunyai potensi kemudaratan kepada kesihatan manusia, kerosakan tanaman dan persaingan dengan hidupan liar. Kajian ini dijalankan untuk menilai kadar prevalens ektoparasit dan endoparasit pada Burung Tiong Jawa. Sebanyak 19 ekor Burung Tiong Jawa ditangkap daripada satu kawasan liar di Banting, Selangor menggunakan jaring. Pengukuran Burung Tiong Jawa yang diambil ialah berat badan, saiz paruh, kepala, badan, sayap, kaki (tarsus) dan ekor. Kadar jangkitan daripada tiga spesies ektoparasit

ialah kutu *Felicola* sp 21%, *Myrsidea* 79%, dan sengkenit *Falculifer rostratus* 79%. Dua spesies endoparasit telah didapati daripada prosedur bedah siasat, yang merupakan kumpulan nematod *Diplotriaena* sp 53% dan *Pelecitus* sp 21%. Nilai korelasi menunjukkan bahwa tidak ada kolerasi yang signifikan antara jumlah ektoparasit dan endoparasit dalam Burung Tiong Jawa. Ini menunjukkan bahawa jika kiraan ektoparasit tinggi, tidak semestinya kiraan endoparasit juga tinggi. Burung Tiong Jawa di Malaysia telah terbukti sebagai pembawa pelbagai spesies ektoparasit dan endoparasit.

**Kata kunci**: Burung Tiong Jawa, ektoparasit, endoparasit, kadar prevalens

## ABSTRACT

An abstract of the project paper presented to the Faculty of Veterinary Medicine in partial fulfillment of course VPD 4999-Project

**PREVALENCE RATE OF ECTO AND ENDOPARASITE INFESTATION IN JAVAN MYNAS**

**By**

**Nik Nur Siti Syafura Roslam**

**2015**

**Supervisor: Professor Dr Mohamed Ariff Omar**

Myna spp are well recognized in the country as introduced pests having potential harm to human health, crop damage and competing with native wildlife. This study was undertaken to evaluate the prevalence rate of ectoparasites and endoparasites in Javan Mynas. A total 19 birds of Javan Mynas were captured from the wild in Banting, Selangor using a mist net. The measurements taken were body weight, size of bill, head, body, wing, tarsus, and tail. The infestation rate of three species of ectoparasites were lice *Felicola* sp 21%, *Myrsidea* 79%, and mite *Falculifer*

*rostratus* 79%. Two species of endoparasites were found from the post mortem procedure, nematode *Diplotriaena* sp 53% and *Pelecitus* sp 21%. There was no significant correlation between numbers of ectoparasites and endoparasites counted in Javan Mynas. This shows that if there was a higher infestation of ectoparasites, it does not necessarily result in a higher infestation of endoparasites. Javan Mynas in Malaysia are proven to be carriers of many species of ectoparasites and endoparasites.

**Keywords:** Javan Mynas, ectoparasites, endoparasites, prevalence rate

## 1.0 Introduction

According to website of *www.mygardenbirdwatch.com* the Common Myna and Javan Myna are reported to be among the top 10 most commonly sighted birds in Peninsular Malaysia, Sabah and Sarawak in June 2014. It can be concluded that the Myna species is relatively high in number found close to human population. Mynas are communal and commensal and highly vocal throughout the year, making them a public nuisance.

Their dropping is a nuisance to humans (Yap *et al*., 2002; Brook and Soh, 2003) and is of public health concern. Common mynas pose a human health risk as they carry bird mites such as *Ornithonyssus bursa* and *Dermanyssus gallinae* that may infect humans causing dermatitis, asthma, severe irritation and rashes (Stoner, 1923). The Javan Mynas (*Acridotheres tristis javanicus*) also known as the white vented mynas, are predominantly black in colour, and have white wing patches and are mostly found perching on top of the water buffaloes in paddy fields. The Javan Myna is considered as a pest, especially in urban areas which they prefer to inhabit. Thus the objectives of this study were:

1. To evaluate the prevalence rate of ecto and endoparasites infestation in Javan Mynas.
2. To evaluate the morphological characteristics of Javan Mynas.

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