



UNIVERSITI PUTRA MALAYSIA

**ECOLOGY OF GECKOS IN EDIBLE BIRD NEST SWIFTLET
Aerodramus fuciphagus RANCH**

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RANCH**

**BY
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A project report submitted to Faculty of Agriculture, Universiti Putra Malaysia, in fulfillment of the requirement of PRT 4999 (Final Year Project) for the award of the degree of Bachelor of Agricultural Science.

**Department of Plant Protection
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Serdang, Selangor
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This project report entitled ‘Ecology of Geckos in Edible Bird Nest Swiftlet *Aerodramus fuciphagus* ranch’ is prepared by Siti Fatimah Mohd Azmi and submitted to the Faculty of Agriculture in fulfillment of the requirement of PRT4999 (Final Year Project) for the award of the degree of Bachelor of Agricultural Science.

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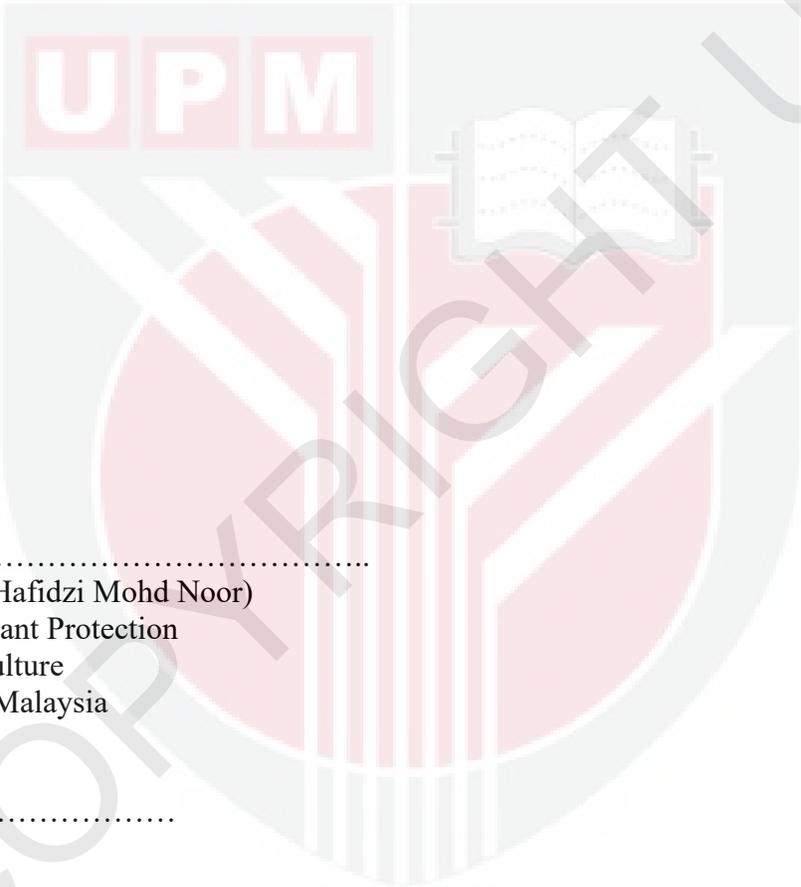
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With the name of Allah the Most Gracious and Most Merciful

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ABSTRACT

Swiftlet farming industry is an emerging industry due to high demand and prices. Malaysia is one of the leading country in this industry. Although it is a profitable industry, there are also many problems and challenges faced by the farmers that goes into the industry. This research is done to study on the pests in swiftlet ranch, specifically geckos. Research swiftlet ranch in UPM is still new. It was established in 2015 so it was just about a year and few months there. Not so many birds are going in and out or colonizing the ranch yet. Until now, it was recorded about 4 birds are entering the ranch and only 2 edible bird nest are found in the ranch. Based on the research, the main species of geckos inhabiting the swiftlet ranch is *Hemidactylus frenatus* and *Hemidactylus parvimaculatus*. It was found that most of the lizards are feeding on the insects. These insects are attracted to the light that is automatically on during night. It was no sign of geckos preying on nestlings or eating the nest. The birds are not having any nestling yet since it is not in the mating season. Geckos are found to be active throughout the day. There is presence of geckos in every hour but it is the highest during early morning around 5 a.m. to 6 a.m. and also late evening from 6 p.m. to 7 p.m.

ABSTRAK

Industri burung walit merupakan satu industri yang berkembang dengan pesat atas sebab permintaan dan harga yang tinggi. Malaysia adalah salah satu negara yang menerajui industri ini.

Walaupun ia adalah satu industri yang mampu memberikan keuntungan besar, terdapat banyak masalah dan halangan yang perlu dihadapi oleh para usahawan yang melibatkan diri didalam industri ini. Kajian ini dibuat bagi mengkaji dengan lebih dalam mengenai salah satu masalah yang dihadapi dalam industri ini iaitu masalah haiwan perosak, secara khususnya ialah cicak tokek. Rumah burung walit kajian di UPM adalah rumah yang baru dibina pada tahun 2015. Sehingga sekarang, ia beroperasi lebih kurang setahun lebih. Masih tidak banyak burung yang keluar masuk ke dalam rumah burung walit ini. Sehingga sekarang, direkodkan hanya 4 ekor burung yang keluar masuk dan hanya 2 sarang burung yang ditemui. Setelah kajian ini dibuat, didapati bahawa sepsis utama cicak yang mendiami rumah ini ialah *Hemidactylus frenatus* dan *Hemidactylus parvimaclatus*. Cicak-cicak ini kebanyakannya memakan serangga yang datang ke rumah burung walit kerana tertarik dengan lampu yang automatik terpasang pada waktu malam. Tiada ditemui tanda yang mengesahkan bahawa cicak ini memakan sarang atau anak burung walit. Tiada anak burung ditemui berkemungkinan kerana belum sampai kepada musim mengawan. Didapati cicak aktif sepanjang hari tetapi waktu mereka paling aktif berkeliaran di dalam rumah

burung dan mencari makanan ialah pada awal pagi iaitu antara pukul 5 pagi hingga 6 pagi dan lewat petang iaitu pada pukul 6 petang hingga 7 malam.



CHAPTER 1

INTRODUCTION

Swiftlet is a bird where its specialty is producing an edible nest that is known as edible bird nest. The nest produced by swiftlet are known well especially among Chinese society as an exquisite meal when it is cooked as soup. But technically, these bird does not live in China. They live mostly in South East Asia region including Malaysia, Indonesia and Philippines.

Swiftlet farming industry is a practice where a special house or building are built with some technical stuffs that can attract these swiftlets to live in that house. Later, the nests produced by the birds are collected and sold to any company that demands for it.

The nests are high in money value where 1 kilogram of the raw nests can reach thousand Ringgit Malaysia. Many entrepreneurs are trying to invest in this industry but most of them failed due to lack of knowledge.

Besides, there are also issues of pests that have been infesting the ranch that makes the edible bird nest production fall. One of the pests known are geckos.

There is still no official study on the geckos that is being pest in this industry, but most of the reports are from website or personal blogs of the farmers that do swiftlet farming. The objective of this research is to investigate on geckos as potential pest in swiftlet ranch and to investigate the activity of geckos in swiftlet ranch.



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