

**POPULATION OF *Coptotermes curvignathus* ON RUBBER TREE AT  
KAMPUNG KUBANG AGOL TO'UBAN PASIR MAS KELANTAN**

**FAZILA BINTI MAT YAMAN**

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## ABSTRACT

### **POPULATION *Coptotermes curvignathus* ON RUBBER TREE AT KAMPUNG KUBANG AGOL TO'UBAN PASIR MAS KELANTAN**

*Coptotermes curvignathus* are known as the Rubber Tree Termite is the one major that affecting rubber latex production on rubber tree. As the one of commodity in Kelantan it cannot escape from that pest attack at farmer smallholder rubber tree plantation. The main focus of this study to identify the population of that species termite on rubber area and field research was conducted at Kampung Kubang Agol To' Uban Pasir Mas Kelantan. The study was conducted in five weeks .and the data was randomly selected among 20 rubber trees. The SPSS analysed the data was not normally distributed ( $P < 0.05$ ) while the Kruskal – Wallis Test was carried out not significant ( $X^2 = 1.766$ ;  $df = 9$ ;  $P > 0.05$ ). The mean population of *C.curvignathus* are lowest on 8<sup>th</sup> collection and the higher is on 1<sup>st</sup> collection.

Keyword: *Coptotermes curvignathus*, Rubber tree,

## CHAPTER 1

### INTRODUCTION

#### 1.1 Background

Rubber is one of the important crop in Malaysia that provide latex as crop product's that used for many purpose in many sector such as transportation sector, manufacturing sector and others. Today, government agencies such as LGM (Malaysian Rubber Board) or RISDA (Rubber Industry Smallholder Development Authority) had provide many development program that involved rubber industry to increase their productivity that given benefit to our country in term of economy. Many type of rubber variety had be made to generate more productivity in short term such as clone 350 and other, that provide high productivity of latex production and resistant to disease. The most problem in rubber sector or plantation are pest and disease. Most crucial pest in rubber plantation is termites.

Termites in the natural tropical ecosystem serve as important decomposing agents of organic matter. Their feeding and tunneling activities improve porosity, aeration, stability and nutrient enrichment of the soil as well as facilitating C mineralization and N fixation. A total of 175 species of termites from 42 genera have been recorded in Peninsular Malaysia (Aiman & Abu Hassan, 2011).

In Malaysia, the cost for termite control in 2003 was approximately USD10-12 million while the cost of repairs was estimated to be much higher. Termite species of the genus *Coptotermes* are considered the most economically important, responsible for almost 85% of all infestations in Malaysia. Besides that, the several way termites are relate with the plant-soil- system are pathway to show how direct action of termites will impact of ecosystem functioning, either given positive or negative impact toward plant because of the several modes of feeding and nesting.