

**A REVIEW ON THE EFFECTIVENESS BETWEEN ORGANIC AND
INORGANIC FERTILIZER TOWARDS GROWTH AND PRODUCTIVITY
OF OIL PALM**

NUR AIN NADIA BINTI MOHD AZNI

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NUR AIN NADIA BINTI MOHD AZNI

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ABSTRACT

A REVIEW ON THE EFFECTIVENESS BETWEEN ORGANIC AND INORGANIC FERTILIZER TOWARDS GROWTH AND PRODUCTIVITY OF OIL PALM

Oil palm has overtaken all commercial vegetable oil crops in the world in oil production terms even though it is commercially grown on a tropical with low fertility soil. The secret to the wellbeing of oil palm as well as its productivity and sustainability of industry is undoubtedly due to good fertilizer and nutrition management. Through years of decades, good fertilizer and nutrition management of oil palm have become the priority and are continuously applied in all oil palm plantations throughout the world. Fertilizer that consists of organic and inorganic types is one of the good agricultural practices as it helps to improve fertility of soil and provides nutrient to the oil palm tree. However, the application of both types' fertilizers sometimes can increase the cost, lead to pollution and reduce the effective and efficiency of fertilizer application. This paper analyzed the comparison of growth and productivity of oil palm based on application of both fertilizer, and the effectiveness of each fertilizer. Reviews for a few parameters such as soil chemical properties, leaf nutrient, plant height were also included to support the prove. Results show that organic fertilizer is better for growth of oil palm seedling while inorganic fertilizer is more suitable in providing nutrient for oil palm's productivity. Ultimately, the best fertilizer application is the combination of organic fertilizer along with inorganic fertilizer because it will provide more benefit for the productivity of oil palm.

Keywords: Fertilizer management, organic fertilizer, inorganic fertilizers, growth, productivity

CHAPTER 1

INTRODUCTION

1.1 Background of review

1.1.1 Background of oil palm tree

The scientific classification for oil palm tree is show below.

Kingdom	: Plantae
Subkingdom	: Viridiplantae
Infrakingdom	: Streptophyta
Superdivision	: Embryophyta
Division	: Tracheophyta
Subdivision	: Spermatophytina
Class	: Magnoliopsida
Superorder	: Liliales
Order	: Arecales
Family	: Arecaceae
Genus	: <i>Elaeis</i> Jacq.
Species	: <i>Elaeis guineensis</i> Jacq.
Other species	: <i>Elaeis oleifera</i> , <i>Elaeis odora</i>
Common name	: Oil palm, “Kelapa Sawit”, “dende”