FISH WASTE AS BIOFERTILIZER

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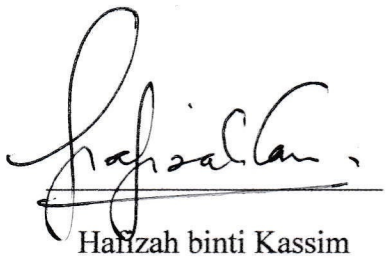
Final Year Project Report Submitted in
Partial Fulfilment Requirements for the
Degree of Bachelor of Science (Hons.) Biology
in the Faculty of Applied Sciences
Universiti Teknologi MARA

JULY 2018

This Final Year Project Report entitled **"Fish Waste as Biofertilizer"** was submitted by Nur Husnina Binti Hadzeri, in partial fulfilment of the requirements for the Degree of Bachelor of Science (Hons.) Biology, in the Faculty of Applied Sciences, and was approved by



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Date: 23 May 2018

TABLE OF CONTENTS

ABSTRACT

FISH WASTE AS BIOFERTILIZER

Plant growth depends on the nutrient uptake from its surrounding mainly from the soil. Applying fertilizer in order to replace the nutrient loss due to uptake by plant may enhance the plant growth. Fish waste contains macronutrients that are necessary for the growth of plant. This research aimed to determine the Nitrogen (N), Phosphorus (P) and Potassium (K) concentration in fish waste biofertilizer. Based on the proximate analysis obtained, N, P and K concentration were recorded as 14.8 ± 1.2 mg/g, 10.0 ± 0.9 mg/g and 14.1 ± 1.5 mg/g respectively. The concentration of these macronutrients was found to give a positive impact on growth of Mustard throughout the period of 9 weeks. Mustard that receive treatment with fish waste had recorded higher total average height of plant, total average length of leaf and total average number of leaves of 10.8 cm, 10.2 cm and 7.0 respectively than unfertilized Mustard. Thus, fish waste can be an effective biofertilizer to plant.