

**THE EFFECT OF *Trichoderma viride* FUNGI ON  
GROWTH OF NAPIER GRASS (*Pennisetum  
purpureum*).**

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## APPROVAL SHEET

This Final Year Project Report entitled “**The Effect Of *Trichoderma viride* Fungi On Growth Of Napier Grass (*Pennisetum purpureum*)**” was submitted by Ahmad Ariff Zuhdi Bin Zull, in partial fulfilment of the requirements for the Degree of Bachelor of Biology (Hons) in the Faculty of Applied Sciences and was approved by

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# TABLE OF CONTENT

	<b>Page</b>
<b>ACKNOWLEDGEMENT</b>	i
<b>TABLE OF CONTENT</b>	ii
<b>LIST OF TABLES</b>	iv
<b>LIST OF FIGURES</b>	v
<b>LIST OF ABBREVIATIONS</b>	vi
<b>ABSTRACT</b>	vii
<b>ABSTRAK</b>	viii
<b>CHAPTER 1 INTRODUCTION</b>	1
1.1 Background of Study	1
1.2 Problem Statement	3
1.3 Objectives of Study	3
1.4 Significance of Study	4
<b>CHAPTER 2 LITERATURE REVIEW</b>	5
2.1 Domestic production of grazing animal Feeds	5
2.2 <i>Trichoderma viride</i> as plant growth promoter	6
2.3 Napier grass ( <i>Pennisetum purpureum</i> )	6
<b>CHAPTER 3 METHODOLOGY</b>	10
3.1 Materials	10
3.1.1 Raw materials	10
3.1.2 Apparatus	10
3.2 Methods	11
3.2.1 Preparation of <i>Trichoderma viride</i> concentration.	11
3.2.2 Preparation of Napier Grass ( <i>Pennisetum purpureum</i> ) in polybag	11
3.2.3 Experimental treatment and design.	11
3.2.4 Application of <i>Trichoderma viride</i> extract	13
3.3 Analysis of data.	13
3.3.1 Height of plants. (cm)	13
3.3.2 Dry and fresh weight (g)	13
3.3.3 Number of leaves (unit)	13
3.3.4 Length of leaves (cm)	14
3.3.5 Number of shoots (unit)	14
3.4 Statistical Analysis	14

3.5	Tukey's range test.	13
<b>CHAPTER 4 RESULT AND DISCUSSION</b>		<b>15</b>
4.1	Height of plant	15
4.2	Number of leaves	18
4.3	Number of shoots	19
4.4	Fresh weight	21
4.5	Dry weight	23
4.6	Discussion	25
<b>CHAPTER 5 CONCLUSION AND RECOMMENDATIONS</b>		<b>26</b>
<b>CITED REFERENCES</b>		<b>28</b>
<b>APPENDICES</b>		<b>32</b>
<b><i>CURRICULUM VITAE</i></b>		<b>50</b>

## ABSTRACT

Nowadays agricultural industry demand for higher agricultural productivity and quality besides that, global demands encourage domestic production of animal feeds to be more advanced in term of scientific researches. Therefore, this will led to excessive use of chemical fertilizers, creating serious environmental pollution in order to cover all demand and need. The study of *Trichoderma* spp and the interaction between Napier grass (*Pennisetum purpureum*) is a efficient way to solve this problem. *Trichoderma* spp is an alternative for sustaining high production with low ecological impact and as we know soil-borne bacteria and fungi are able to colonize plant roots and may have beneficial effects on the plant This project is conducted to determine effect of *Trichoderma viride* fungi on growth of Napier grass (*Pennisetum purpureum*) and the different volume percent concentration *Trichoderma viride* fungi effect on growth in Napier grass (*Pennisetum Purpureum*). The method to apply *Trichoderma* spp in soil by using four different volume percent concentrations which is 20%, 40%, 60%,80, and including control 0%. The parameter growth of Napier grass (*Pennisetum purpureum*) is recorded based on height plants, number of leaves, and number of shoot, fresh weight and dry weight. From this research it shows that for height of plant, number of shoot, fresh weight and dry weight applied with 80% volume percent of *Trichoderma viride* had highest mean with average 66.022(HOP), 11.90(NOL), 296.00(FW) and 292.50(DW), followed by volume percent concentration, 60%, 40%, 20% and the lowest is 0% which is control with mean 38.77(HOP), 6.04(NOL), 216.00(FW) and 211.00(DW). The number of shoot had highest at 60% volume percent concentration mean with average 2.06 followed by volume percent concentration 80%, 40%, 20% and the lowest is 0% which is control with mean 1.26. On top of that,these proved that the usage of *Trichoderma viride* will increased the development of plant growth.