

**ANTIOXIDANT, TOXICITY AND PROXIMATE ANALYSIS
OF *Archidendron pauciflorum* (JERING)**

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TABLE OF CONTENT

	PAGE
ACKNOWLEDGEMENTS	II
TABLE OF CONTENT	III
LIST OF TABLES	V
LIST OF FIGURES	VI
LIST OF PLATES	VII
LIST OF ABBREVIATIONS	VIII
ABSTRACT	IX
ABSTRAK	X
CHAPTER 1: INTRODUCTION	1
1.1 Background of Study	1
1.2 Problem Statement	3
1.3 Significance of the Study	4
1.4 Objectives of the Study	5
CHAPTER 2: LITERATURE REVIEW	6
2.1 History, Taxonomy and Biology of <i>Archidendron pauciflorum</i>	6
2.2 Secondary Metabolite	8
2.3 Antioxidant	9
2.4 Brine Shrimp Lethality Test	11
2.4.1 <i>Artemia salina</i>	11
2.4.2 Toxicity	12
2.5 Proximate Analysis	13
CHAPTER 3: METHODOLOGY	15
3.1 Materials	15
3.1.1 Raw materials	15
3.1.2 Apparatus	15
3.2 Sampling Site	16
3.3 Method	16
3.3.1 Sample preparation	16
3.3.1 Solvent extraction using sonicator	16
3.3.3 DPPH radical scavenging activity assay	17
3.3.4 Brine shrimp lethality test	18
3.3.5 Proximate analysis	19
3.3.5.1 Moisture determination	19
3.3.5.2 Fat determination	19
3.3.5.3 Crude protein determination	20

3.3.5.4 Carbohydrate determination	21
3.3.5.5 Ash determination	23
3.3.6 Statistical analysis	23
CHAPTER 4: RESULT AND DISCUSSION	25
4.1 Determination of antioxidant activity in different explant of <i>Archidendron pauciflorum</i>	25
4.2 Detection of toxicity level of <i>Archidendron pauciflorum</i>	29
4.3 Determination of proximate composition	33
CHAPTER 5: CONCLUSION AND RECOMMENDATION	35
CITED REFERENCES	36
APPENDICES	40
CURRICULUM VITAE	50

ABSTRACT

ANTIOXIDANT, TOXICITY AND PROXIMATE ANALYSIS OF *Archidendron pauciflorum*

A research has being conducted on *Archidendron pauciflorum* obtained from argo market at Kuala Pilah. The study aim is to determine the presence of antioxidant properties of *Archidendron pauciflorum* by using DPPH assay, which potentially can be used in pharmaceutical and human health. The samples were extracted by using sonicator. The explant such as seeds and pods were screening for antioxidant activity. The highest percentage of scavenging activity was showed by seeds (91.87%) followed by pods (85%). Then, these two samples were further tested to investigate the toxicity level of *Archidendron pauciflorum* by using brine shrimp lethality assay and also determination of lethal concentration LC₅₀ as a standard toxicity indicator. Explant that showed highest lethal concentration LC₅₀ effected in 24 hours was seeds (1.944 mg/ml) followed by pods (1.884 mg/ml). This two sample showed low toxicity level since the lethal concentration was higher than 1 mg/ml. This study showed that explant might become potential sources since as it has high antioxidant with low toxicity level. Then, these two were continues study to determine the proximate analysis. Explant that showed the higher carbohydrate and protein was seeds (84.45%) and (3.33%) while pods (76.84%) and (2.03%). But seeds were lower in moisture, ash and fat content (8.85%), (3.17%) and (0.20%) compared to pod (10.67%), (10.23%) and (0.23%). This study showed that explant also might become the potential to produce healthy snack since it has high carbohydrate and protein content.