

**ASSESSMENT OF CADMIUM CONCENTRATION IN FISH  
AND EDIBLE PLANT IN TUARAN RIVER AND ITS  
RISK TO HUMAN HEALTH**

**PUTRI DIYANAH BINTI ALIAS**

**BACHELOR OF SCIENCE (Hons.) BIOLOGY  
FACULTY OF APPLIED SCIENCE  
UNIVERSITI TEKNOLOGI MARA**

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## TABLE OF CONTENTS

	<b>PAGE</b>
<b>ACKNOWLEDGEMENTS</b>	<b>iii</b>
<b>TABLE OF CONTENTS</b>	<b>iv</b>
<b>LIST OF TABLES</b>	<b>vi</b>
<b>LIST OF FIGURES</b>	<b>vii</b>
<b>LIST OF ABBREVIATIONS</b>	<b>viii</b>
<b>ABSTRACT</b>	<b>ix</b>
<b>ABSTRAK</b>	<b>x</b>
<b>CHAPTER 1: INTRODUCTION</b>	
1.1 Background Study	1
1.2 Problem Statement	3
1.3 Significant of Study	4
1.4 Objectives of the Study	4
<b>CHAPTER 2: LITERATURE REVIEW</b>	
2.1 Study Site	5
2.2 Cadmium	
2.2.1 Cadmium Toxicity	6
2.2.2 Effect to Ecology	7
2.2.3 Effect to Human	7
2.3 Risk Assessment	
2.3.1 Risk Assessment of Heavy Metal	8
2.3.1 Risk Management	10
<b>CHAPTER 3: METHODOLOGY</b>	
3.1 Materials	
3.1.1 Raw Materials	11
3.1.2 Chemicals	11
3.1.3 Apparatus	11
3.2 Methods	
3.2.1 Sampling Method	12
3.2.2 Samples Extraction	
3.2.2.1 Plant Extraction	12
3.2.2.2 Fish Extraction	13
3.2.2.3 Heavy Metal Identification	13
3.2.3 Risk Assessment of Human Health	14
3.2.4 Guided Questionnaires	14

3.3	Data Analysis	
3.3.1	Hazard Quotient	15
3.3.2	Hazard Index	16

#### **CHAPTER 4: RESULTS AND DISCUSSION**

4.1	Concentration of Cadmium in Fish and Edible Plant at Tuaran River	17
4.1.1	Concentration of Cadmium in Fish	17
4.1.2	Concentration of Edible Plant	19
4.2	Risk Assessment of Cadmium	20
4.2.1	Hazard Quotient of Cadmium	
	(i) Hazard Quotient of Fish and Edible Plant	21
4.2.2	Hazard Index of Cadmium	22

#### **CHAPTER 5: CONCLUSION AND RECOMMENDATIONS**

	<b>CITED REFERENCES</b>	24
	<b>APPENDICES</b>	26
	<b>CURRICULUM VITAE</b>	40

## ABSTRACT

### **ASSESSMENT OF CADMIUM CONCENTRATION IN FISH AND EDIBLE PLANT IN TUARAN RIVER AND ITS RISK TO HUMAN HEALTH**

The progress of industries has led to the increased of pollutants emission into the ecosystems. One of the most common pollutants is heavy metals. This research deals with human health risk assessment of heavy metal cadmium contamination through the consumption of fish and edible plant at Tuaran River, Kota Kinabalu, Sabah. The objective of this research is to determine the concentration of cadmium contaminant in fish and edible plant, and to calculate the risk hazard to human from the consumption. Atomic Absorption Spectrophotometer (AAS) model PG-990 was used to determine the concentration of the heavy metal in samples. The concentration obtained will be used in HQ calculation. Hazard Quotient (HQ) and Hazard Index (HI) was used in the health risk assessment to determine carcinogenicity of the sample. The result shows that the concentration and HQ of fish and edible plant samples are less than 1; signifies that a daily exposure at this level is unlikely to cause any adverse effects on human.