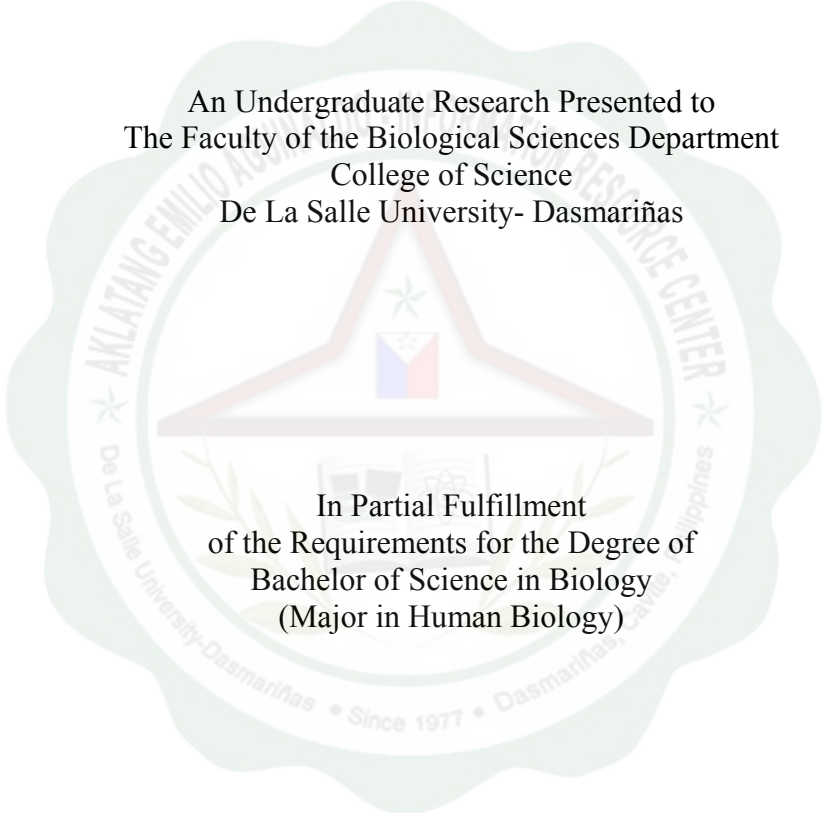


**Uptake and Distribution of Heavy Metals on the
Root and Shoot of *Coleus aromaticus* L. (Oregano)
Grown in Artificially Contaminated Soils**

An Undergraduate Research Presented to
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ABSTRACT

The phytoremediation ability of *Coleus aromaticus* L. (oregano) in soils contaminated with low and high levels of chromium (125 mg/kg and 250 mg/kg) and manganese (150 mg/kg and 300 mg/kg) were determined. The experimental study used three treatments for each of the heavy metals with three replicates. The plants were observed and grown for five consecutive weeks with which height and dry mass of the plants were measured. Results revealed that oregano was tolerant only in low and high concentrations of manganese and in low concentration of chromium as shown in the index of tolerance higher than 50%. There was significant decrease in the final heights of those treated with high levels of metal contamination as compared with the control. Oregano was able to uptake both chromium and manganese although it showed early aging when treated with high concentration of chromium because of the metal's toxicity. In this study, the plants were able to uptake higher amount of heavy metals in the shoot system. The study concludes that oregano can be a good phytoremediant for both chromium and manganese.

TABLE OF CONTENTS

TITLE PAGE	i
APPROVAL SHEET	2
ABSTRACT	3
ACKNOWLEDGEMENTS	4
TABLE OF CONTENTS	5
LIST OF TABLES	7
LIST OF PLATES	8
LIST OF FIGURES	9
1.0 INTRODUCTION	10
1.1 Background of the Study	10
1.2 Theoretical/Conceptual Framework	13
1.3 Objectives of the Study	14
1.4 Hypotheses	15
1.5 Scope and Delimitation	16
1.6 Significance of the Study	17
1.7 Definition of Terms	17
2.0 REVIEW OF LITERATURE	19
2.1 Conceptual Literature	19
2.2 Related Studies	33
3.0 METHODOLOGY	41

3.1 Research Design	41
3.2 Research Setting	41
3.3 Research Procedure	42
3.4 Data Gathering	44
3.5 Statistical Treatment	45
4.0 RESULTS AND DISCUSSION.....	46
4.1 Results	46
4.2 Discussion	50
5.0 CONCLUSION AND RECOMMENDATION	59
5.1 Conclusion	59
5.2 Recommendation	60
6.0 LITERATURE CITED	62
7.0 APPENDICES.....	73
7.1 Standard Procedure.....	74
7.2 Raw Data and Statistical data.....	76
7.3 Figures.....	85
7.4 Photo Documentation.....	86
7.5 Certification from Other Institution.....	92
8.0 CURRICULUM VITAE	93

LIST OF TABLES

Table 4.1	Relative increase in Height of Oregano in 5 weeks	48
Table 4.2	Total metal uptake and distribution of heavy metals after 5 weeks of growing	49



LIST OF PLATES

Plate 1	Oregano set ups.....	86
Plate 2	Contaminating the soil.....	87
	Measuring of the plants.....	87
Plate 3	Removal of pots.....	88
	Removal of the plants.....	88
	Measuring the final height.....	88
Plate 4	Drying up of the plants.....	89
	Weighing dried samples.....	89
	Dried samples.....	89
Plate 5	Ashing of the samples.....	90
	Weighing of the ashed samples.....	90
	Ashed samples.....	90
Plate 6	Mixing of the samples.....	91
	Filtering the plants.....	91
Plate 7	Samples containing the metals.....	91

LIST OF FIGURES

Figure 4.1 Index of Tolerance of Oregano After Harvesting.....46

Figure 4.2 Average Final Height of the Plants after five weeks of Growing Period.....85

