TOXICITY HAZARDS OF SOME HEAVY METALS TO PLANTS GROWN IN POLLUTED SOILS

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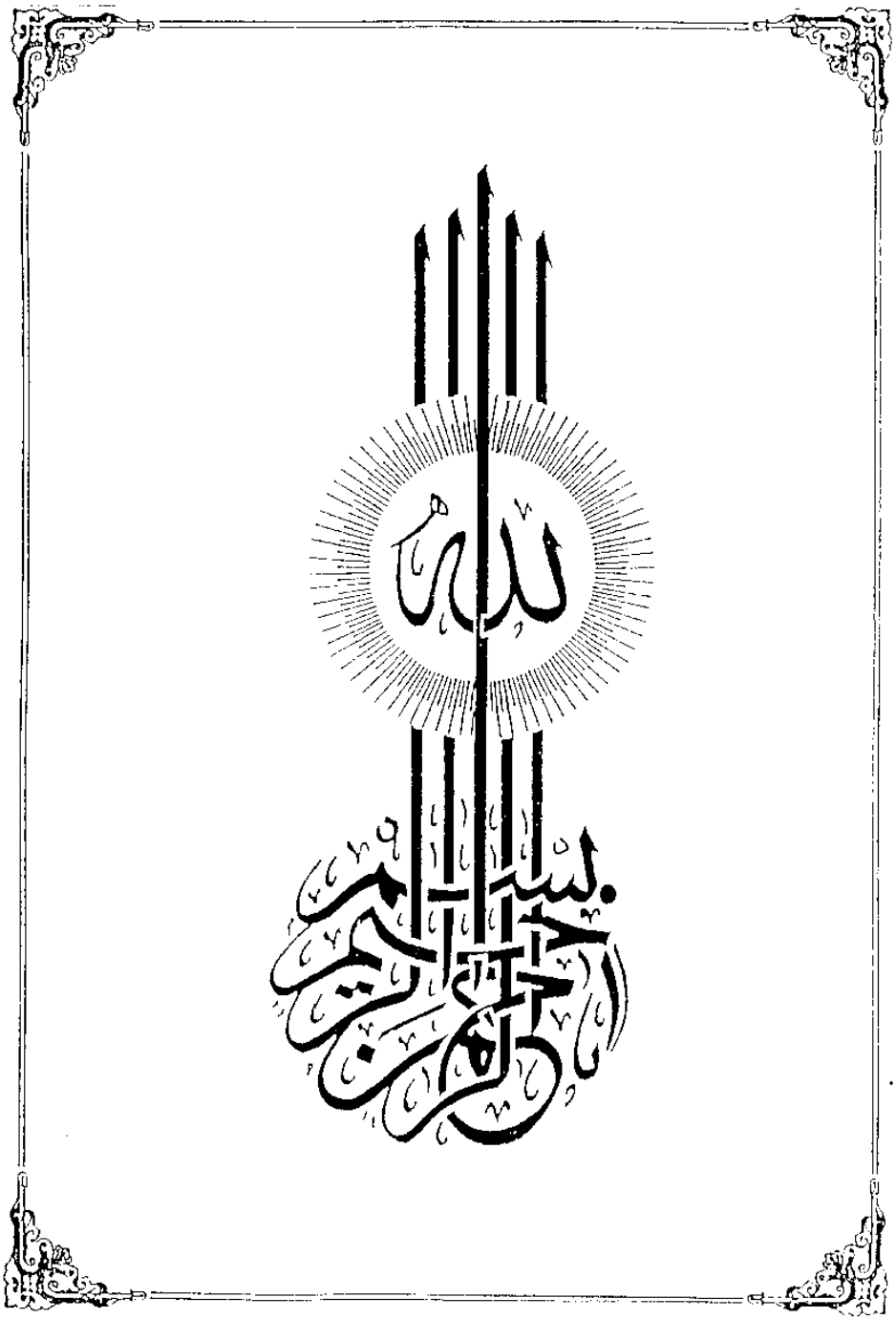

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CONTENTS

LIST OF TABLES

LIST OF FIGURE

"""""""""""

LIST OF APPENDIX

INTRODUCTION

The transfere of heavy metals from sludge-amended soil to plant and grains and on to the animal is of concern to those involved with the application of municipal wastes on land. Maximum loading rates for sewage sludges on land will be influenced by the degree to which crops will absorb hazardous heavy metals from sludge amended soils and the degree to which animals will absorb these elements from the grains and forage.

Many workers pointed out that metal-rich sewage sludge, drastically reduced the yield of some crops after a critical amount of that sludge was added to the soil. These critical limits depend on the source of the sewage sludge, the application rate and its frequency, the soil removal mechanisms and the removal capabilities of plant species.

Sewage sludge contains more than 50% of its weight, organic matter . Humic and fulvic acids