

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

BY

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THESIS

Submitted in Partial Fulfilment of
the Requirements of the Degree of

DOCTOR OF PHILOSOPHY

IN

AGRICULTURE

(SOIL SCIENCE)

Department of Soil Science

Faculty of Agriculture

Ain-Shams University,

1987

APPROVAL SHEET

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ACKNOWLEDGEMENT

Firstly, ultimata thanks to God.

The present work has been carried out under the direct of supervision of Prof.Dr. Saad M. El-Sherif, Soil Science Department, Faculty of Agriculture, Ain-Shams University, Prof.Dr. A.F. El-Sherif and Dr.L.A. Abdel-Dayem, Associate Prof., Soils and Water Use Lab.National Research Center, to whom the author is greatly indebted for their extremely valuable suggestions, kind encouragement and keen interest in the progress of the work.

The facilities provided by the National Research Center are greatly appreciated.

Thanks are also due to all colleagues in the Soils and Water Use Laboratory, NRC for their valuable help in various ways during procurement of this work.

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INTRODUCTION

The transference 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