CYTOGENETIC EVALUATION OF THE EFFECTS OF MONOCROTOPHOS INSECTICIDE USING THE ALLIUM ASSAY 80000

A Thesis Fresented to the Faculty of Graduate Studies
DE LA SALLE UNIVERSITY

In Partial Fulfillment
of the requirements for the degree of
MASTER OF SCIENCE IN BIOLOGY

by

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December 1994

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ABSTRACT

In this study an evaluation of the morphological and cytogenetic effects of monocrotophos insecticide on Allium cepa L. was considered.

Onion bulbs were grown in three dilute concentration levels of the test insecticide; 0.5, 1.0 and 1.5%.

One group of the red creol onion variety was exposed for six hours and another group for the same number of hours but allowed to recover. The control group consisted of onions grown in distilled water only.

The results showed that the test insecticide (can) can induce morphological effects such as inhibition of root growth, bending, twisting of roots and root tip swelling.

The main types of cytogenetic effects observed were chromosome stickiness, chromosome bridges and c-mitosis.



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