

PARTIAL CHARACTERIZATION OF MUTAGEN(S) IN
SHALLOT (ALLIUM ASCALONICUM LINN.) AND
THE EFFECT OF SOME CHEMICALS ON ITS MUTAGENIC ACTIVITY

PRAYAD PANTASRI

A THESIS SUBMITTED TO THE GRADUATE SCHOOL IN
PARTIAL FULFILMENT OF THE REQUIREMENTS
FOR THE DEGREE OF MASTER OF SCIENCE
IN BIOCHEMISTRY

GRADUATE SCHOOL
CHIANG MAI UNIVERSITY

DECEMBER 1991

ลิขสิทธิ์มหาวิทยาลัยเชียงใหม่
Copyright© by Chiang Mai University
All rights reserved

PARTIAL CHARACTERIZATION OF MUTAGEN(S) IN
SHALLOT (ALLIUM ASCALONICUM LINN.) AND
THE EFFECT OF SOME CHEMICALS ON ITS MUTAGENIC ACTIVITY

PRAYAD PANTASRI

THIS THESIS HAS BEEN APPROVED TO BE PARTIAL
FULFILMENT OF THE REQUIREMENTS FOR THE DEGREE
OF MASTER OF SCIENCE
IN BIOCHEMISTRY

EXAMINING COMMITTEE

Vichai Wongchai..... CHAIRMAN
(Assist. Prof. Dr. Vichai Wongchai)

Usanee Vinitketkumnuen..... MEMBER
(Assist. Prof. Dr. Usanee Vinitketkumnuen)

Maitree Suttajit..... MEMBER
(Assoc. Prof. Dr. Maitree Suttajit)

Umnat Mevatee..... MEMBER
(Assist. Prof. Dr. Umnat Mevatee)

Date ²⁶..... Month December Year 1991

ACKNOWLEDGEMENTS

The author wishes to express his appreciation to Assistant Professor Dr. Vichai Wongchai for providing the opportunity to carry out the research described in this thesis and his valuable advise and guidance.

The author also wishes to express his gratitude to Assistant Professor Dr. Usanee Vinitketkumnuen, with whom this research was conducted, for her instruction and interest during the course of the study and her guidance in the preparation of manuscripts.

He would like to express his sincere thanks to Professor Dr. Taijiro Matsushima, Japan Bioassay Laboratory, Kanagawa 257 Japan, for his kind provision of standard mutagens and some chemicals used in Salmonella mutation assay.

Valuable suggestions and instructive criticism of, Associate Professor Dr. Maitree Suttajit, Department of Biochemistry and Assistant Professor Dr. Amnat Mevatee, Department of Anatomy, were deeply acknowledged.

He would like to extend his great appreciation to the Faculty of Medicine Endowment Fund for Medical Research, Chiang Mai University, for partially financial support. Also thanks to all the staff members of the Department of Biochemistry, for their interest, intensive teaching and guidance.

Finally, he is deeply indebted to his siblings and his parents for their love, support, understanding and encouragement throughout the period of study.