

**ISOLATION AND SCREENING OF ACID AND BILE  
TOLERANT LACTIC ACID BACTERIA FROM  
INFANT FECES**

**YUWATHIDA THEPYOT**

**MASTER OF SCIENCE  
IN BIOTECHNOLOGY**

ลิขสิทธิ์มหาวิทยาลัยเชียงใหม่

Copyright© by Chiang Mai University

All rights reserved  
THE GRADUATE SCHOOL  
CHIANG MAI UNIVERSITY

**MARCH 2008**

**ISOLATION AND SCREENING OF ACID AND BILE  
TOLERANT LACTIC ACID BACTERIA FROM  
INFANT FECES**

**YUWATHIDA THEPYOT**

**A THESIS SUBMITTED TO THE GRADUATE SCHOOL IN  
PARTIAL FULFILLMENT OF THE REQUIREMENTS  
FOR THE DEGREE OF  
MASTER OF SCIENCE  
IN BIOTECHNOLOGY**

ลิขสิทธิ์มหาวิทยาลัยเชียงใหม่

Copyright© by Chiang Mai University

All rights reserved  
**THE GRADUATE SCHOOL  
CHIANG MAI UNIVERSITY**

**MARCH 2008**

ISOLATION AND SCREENING OF ACID AND BILE TOLERANT  
LACTIC ACID BACTERIA FROM  
INFANT FECES

YUWATHIDA THEPYOT

THIS THESIS HAS BEEN APPROVED  
TO BE A PARTIAL FULFILLMENT OF THE REQUIREMENTS  
FOR THE DEGREE OF MASTER OF SCIENCE  
IN BIOTECHNOLOGY

EXAMINING COMMITTEE



CHAIRPERSON

Dr. Suphawatt Sinsuwongwat



MEMBER

Dr. Wasu Pathom-aree



MEMBER

Dr. Tonglian Buwjoorn

ลิขสิทธิ์มหาวิทยาลัยเชียงใหม่  
Copyright © by Chiang Mai University  
All rights reserved

17 March 2008

© Copyright by Chiang Mai University

## ACKNOWLEDGEMENTS

I wish to express my sincere gratitude to Dr. Supphawat Sinsuwongwat, my advisor, for all valuable suggestions, supporting and encouragement throughout this thesis investigation. This thesis would not be accomplished without his assistant and great comments.

I would like to thank all lecturers, technicians, classmates and students at the Department of Biotechnology, Faculty of Agro-Industry, Chiang Mai University, for their sincere, valuable help and friendship during my graduate study.

Lastly, I deeply thank my beloved parents for their patience and constant encouragement during my study.

ลิขสิทธิ์ © by Chiang Mai University  
All rights reserved

Yuwathida Thepyot