INVESTIGATION OF THE SAPOGENINS FROM THE RHIZOMES OF COSTUS LACERUS GAGN.

SUPRANEE SEANGSAI

A THESIS SUBMITTED TO THE GRADUATE SCHOOL IN
PARTIAL FULFILLMENT OF THE REQUIREMENT
FOR THE DEGREE OF

MASTER OF PHARMACY

IN PHARMACOGNOSY

CHIANG MAI UNIVERSITY

MAY 1987

INVESTIGATION OF THE SAPOGENINS FROM THE RHIZOMES OF COSTUS LACERUS GAGN.

SUPRANEE SEANGSAI

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

MININGS COMMITTEE	
Sasri Prinyarajun	_CHAIRMAN
Professor Dr.Sasri Punyarajun	51//
Boonson Liannungrath	_MEMBER
Assistant Professor Dr. Boonsom Liawruangr Krisana Pootakham	
Assistant Professor Dr. Krisana Pootakham	JIBE
Suverma Vojabnikul	MEMBER
Assistant Professor Suwanna Vejabhikul	
DATE 22 MONTH MAY YEAR 1987	

Acknowledgement

I would like to express my deep sincere gratitude to Prof.Dr. Sasri Punyarachun, Assist.Prof.Dr. Boonsom Liawruangrath and Assist. Prof. Suwanna Vejabhikul, my thesis advisors for their advice, supervision and invaluable help during these studies.

I wish to express my thanks to Assoc.Prof.Dr. Viboon and Assoc. Prof.Dr. Nitiya Ratanapanondh for their provision of useful plant samples and to the head of the Forest Herbarium, Royal Forest Department for his help in plant identification.

Finally, without the invaluable supervision of Assist.Prof.Dr. Chaichan Sangdee, Head of Pharmacology Department, Faculty of Medicine and the excellent typing of Miss Duangdern Vichaiwong, this thesis would not be accomplished.

ลิขสิทธิ์มหาวิทยาลัยเชียงใหม่ Copyright[©] by Chiang Mai University All rights reserved