

**ISOLATION OF SOME BIOACTIVE COMPOUNDS FROM
HELIOTROPIMUM INDICUM LINN. AND ASYMMETRIC
SYNTHESIS OF (+)-CASTANOSPERMINE**

THEERAPHAN MACHAN

**A THESIS SUBMITTED TO THE GRADUATE SCHOOL IN
PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR THE DEGREE OF
DOCTOR OF PHILOSOPHY
IN PHARMACY**

ลิขสิทธิ์มหาวิทยาลัยเชียงใหม่

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**GRADUATE SCHOOL
CHIANG MAI UNIVERSITY
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EXAMINING COMMITTEE


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11 May 2007

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