

**CHEMICAL CONSTITUENTS, ANTIBACTERIAL  
AND ANTIOXIDANT ACTIVITIES OF LANNA  
MEDICINAL PLANTS USED IN  
MAHOOG FORMULA**



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**DOCTOR OF PHILOSOPHY**

**ลิขสิทธิ์มหาวิทยาลัยเชียงใหม่**  
**IN PHARMACY**

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**GRADUATE SCHOOL  
CHIANG MAI UNIVERSITY**

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**SARINYA KADCHUMSANG**

**A THESIS SUBMITTED TO CHIANG MAI UNIVERSITY IN PARTIAL  
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THIS THESIS HAS BEEN APPROVED TO BE A PARTIAL FULFILLMENT OF  
THE REQUIREMENTS FOR THE DEGREE OF  
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