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A PHYTOCHEMICAL STUDY OF THE LEAVES OF
CASSIA SIAMEA LAMK. AND CASSIA SPECTABILIS DC.

Mr. Chaiyo Chaichantipyuth

A Thesis Submitted in Partial Fulfillment of the Requirements
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หัวขอวิทยานิพนธ์ การศึกษาทางพฤกษเคมีของใบชี้เหล็กและใบชี้เหล็กอเมริกัน
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บทคัดย่อ

จากการสกัดใบอ่อนของชี้เหล็ก (*Cassia siamea* Lamk.) แห่งวงศ์
 แคนทาลปีนิอาเคแธ (Caesalpinaceae) ได้ผลิตภัณฑ์เพิ่มสีเหลืองของบาราคอล, 3เอ,
 4-ไคไฮโคร-3เอ, 8-ไคไฮโครอกซี-2, 5-ไคเมทิล-1, 4-ไคออกซาฟีนาดีน (Barakol,
 3a, 4-dihydro-3a, 8-dihydroxy-2, 5-dimethyl-1, 4-dioxaphenalene)
 ในปริมาณร้อยละ 0.1

โดยใช้ Preparative thin layer chromatography สามารถแยก
 คาสซีน (Cassine) และสารที่ควรจะเป็นไอโซ-6-คาสซีน (Probably Iso-6-cassine)
 ซึ่ง เป็นพวกปิเปอริดีนอัลคาลอยด์ (Piperidine alkaloids) จากใบของต้นชี้เหล็กอเมริกัน
 (*Cassia spectabilis* DC.) และได้ทำการศึกษาคุณสมบัติทั้งทางสภาวะ และทาง
 เคมีของ บาราคอล, คาสซีน, และสารที่ควรจะเป็นไอโซ-6-คาสซีนด้วย.

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ABSTRACT

The young leaves of Cassia siamea Lamk. (Caesalpinaceae) was extracted, the yellow needle crystals were isolated and identified as barakol (3a,4-dihydro-3a,8-dihydroxy-2,5-dimethyl-1,4-dioxaphenalene) 0.1% yield. Cassine and probably iso-6-cassine, the piperidine 3-ol alkaloids were isolated from the leaves of Cassia spectabilis DC. by means of preparative thin layer chromatography. The physical and chemical properties of barakol, cassine, and probably iso-6-cassine were studied.

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