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ISOLATION AND STRUCTURAL ELUCIDATION OF COMPOUNDS  
FROM ROOT BARK OF *Harrisonia perforata* Merr.

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*perforata Merr.*

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พิมพ์ต้นฉบับทดลองที่วิทยาลัยวิทยาศาสตร์ภายในกรอบสี่เหลี่ยมนี้เพียงแผ่นเดียว



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นำเปลือกรากคันทา (*Harrisonia perforata* Merr.) มาสกัดด้วยเมทานอล ได้สารสกัดเมทานอล นำสารสกัดนี้มาสกัดต่อด้วยไดเอทิลอีเทอร์และเมทานอล ได้สารสกัดไดเอทิลอีเทอร์และเมทานอล นำสารสกัดทั้งสองมาทำการแยกด้วยวิธีคอลัมน์โครมาโทกราฟี สามารถแยกสารได้ 5 ชนิด การหาสูตรโครงสร้างของสารเหล่านี้ อาศัยคุณสมบัติทางกายภาพ คุณสมบัติทางเคมีและหลักฐานทางสเปกโทรสโกปี สาร 4 ชนิดที่สามารถหาสูตรโครงสร้างได้คือ ของผสมของ saturated and unsaturated hydrocarbon, ของผสมของ campesterol, stigmasterol และ  $\beta$ -sitosterol, harrisonin และ obacunone สำหรับสารอีกชนิดหนึ่งยังไม่สามารถบอกสูตรโครงสร้างได้

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The root bark of *Harrisonia perforata* Merr. was extracted by methanol to afford crude extract. This crude was further extracted by diethyl ether and methanol, giving diethyl ether and methanol crude extracts. All of crudes were isolated by column chromatography and five compounds were obtained. The structures of these compounds were established on the basis of physical properties, chemical properties and spectral evidences. Four identified components were a mixture of saturated and unsaturated hydrocarbon compounds, a mixture of campesterol stigmasterol and  $\beta$ -sitosterol, harrisonin and obacunone. In addition, there was another compound whose structure was unidentified.

ภาควิชา..... ๖๗๕๑  
สาขาวิชา..... ๖๗๕๑  
ปีการศึกษา..... ๒๕๓๖

ลายมือชื่อผู้คิด..... ประวิทย์ สิงห์โตทอง  
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## LIST OF ABBREVIATION

<b>b</b>	<b>broad</b>
<b><math>\delta</math></b>	<b>chemical shift</b>
<b><math>^{\circ}\text{C}</math></b>	<b>degree Celsius</b>
<b>GLC</b>	<b>gas-liquid chromatography</b>
<b>g</b>	<b>gram (s)</b>
<b>m/e</b>	<b>mass to charge ratio</b>
<b>m</b>	<b>medium (IR)</b>
<b>m.p.</b>	<b>melting point</b>
<b>mg</b>	<b>milligram (s)</b>
<b>ml</b>	<b>milliliter (s)</b>
<b>mm.</b>	<b>millimeter</b>
<b>min</b>	<b>minute</b>
<b>MW</b>	<b>Molecular weight</b>
<b>pp</b>	<b>page</b>
<b>ppm</b>	<b>part per million</b>
<b><math>R_f</math></b>	<b>rate of flow in chromatogram</b>
<b><math>R_t</math></b>	<b>retention time</b>
<b>s</b>	<b>strong (IR)</b>
<b>TMS</b>	<b>tetramethyl silane</b>
<b>TLC</b>	<b>thin layer chromatography</b>
<b>cm</b>	<b>unit of centimeter</b>
<b><math>\text{cm}^{-1}</math></b>	<b>unit of wave number</b>
<b>w</b>	<b>weak (IR)</b>
<b>wt</b>	<b>weight</b>