

CHEMICAL COMPOSITION OF *Croton laevigatus*

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The tree *Croton laevigatus* Vahl. (Euphorbiaceae) is distributed mainly in China in the provinces of Yunnan, Guangdong, and Hainan. Roots and leaves of the plant are usually used by the Dai people as a traditional drug for treating fractures, malaria, stomach ache, and wounds received from falling [1]. Phytochemical studies of *C. laevigatus* have not yet been reported with the exception of diterpenoids with interesting skeletons [2, 3].

Air-dried ground leaves (20 kg) were extracted with MeOH (3 × 80 L) in order to obtain the crude extract (2120 g) after evaporation *in vacuo*. The extract was suspended in H₂O (8.0 L) and fractionated successively with petroleum ether, CHCl₃, and *n*-BuOH (3 × 8.0 L). The petroleum-ether extract (673 g) was chromatographed over a column of silica gel with elution by petroleum ether:EtOAc mixtures (1:0, 9:1, 4:1, 3:2, 0:1) to afford compounds **1** (3 g) and **5** (10 g). The BuOH fraction was chromatographed over a column of silica gel with gradient elution by CHCl₃:CH₃OH mixtures (50:1→0:1) to afford **2** (50 mg), **3** (5 mg), **4** (20 mg), and **6** (20 mg).

PMR and ¹³C NMR spectra were used to identify **1–4**. Compounds **5** and **6** were identified by direct comparison with authentic samples as β -sitosterol and daucosterol, respectively.

3'-(4''-Hydroxy-3'',5''-dimethoxyphenyl)propylbenzoate (1), brown oil, C₁₈H₂₀O₅. EI-MS (*m/z*, %): 316 (90) [M]⁺, 194 (100), 179 (23), 167 (52), 163 (53), 105 (75), 77 (92). The PMR and ¹³C NMR spectra were published [4].

Dihydrodehydrodiconiferyl alcohol β -D-glucoside (2), yellow semi-solid compound, C₂₆H₃₄O₁₁. ESI-MS (*m/z*, +ions): 545.2 [M + Na]⁺, 383.1 [M + Na – glucose]⁺, 365.1 [M + Na – glucose – H₂O]⁺. The PMR and ¹³C NMR spectra were published [5].

Myrsinioside C (3), yellow semi-solid compound, C₁₉H₃₆O₇. ESI-MS (*m/z*, +ions): 400.2 [M + Na]⁺. The PMR and ¹³C NMR spectra were published [6].

Alangionoside J (4), yellow semi-solid compound, C₁₉H₃₆O₇. ESI-MS (*m/z*, +ions): 400.2 [M + Na]⁺. The PMR and ¹³C NMR spectra were published [7].

All compounds were isolated from *C. laevigatus* for the first time whereas **2–4** were isolated for the first time from a plant of the genus *Croton*.

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