

A new bisanthraquinone and cytotoxic xanthenes from *Cratoxylum cochinchinense*

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## Polyprenylated xanthenes with potential anti-inflammatory and anti-HIV effects from the stems and leaves of *Cratoxylum cochinchinense* (Lour.) Blume

Yong Zhang<sup>a,b</sup>, You-Di Rao<sup>a,b</sup>, Jing-Su Yu<sup>a,b</sup>, Jia-Yi Hu<sup>a,b</sup>, Wen-Hui Hu<sup>a,b</sup>,  
Shu-Ri Li<sup>a,b</sup>, Hui Yang<sup>a,b</sup>, Yan-Ping Liu<sup>a,c,d,e</sup>  and Yan-Hui Fu<sup>a,b,c,d,e</sup>

<sup>a</sup>Key Laboratory of Tropical Medicinal Resource Chemistry of Ministry of Education, Hainan Normal University, Haikou, P. R. China; <sup>b</sup>Engineering Research Center for Industrialization of Southern Medicinal Plants Resources of Hainan Province, Hainan Normal University, Haikou, P. R. China; <sup>c</sup>Key Laboratory of Research and Development of Tropical Fruit and Vegetable of Haikou City, Hainan Normal University, Haikou, P. R. China; <sup>d</sup>Key Laboratory of Southern Medicinal Plants Resources of Haikou City, Hainan Normal University, Haikou, P. R. China; <sup>e</sup>Key Laboratory of Tropical Medicinal Plant Chemistry of Hainan Province, Hainan Normal University, Haikou, P. R. China

### ABSTRACT

A phytochemical study on the stems and leaves of *Cratoxylum cochinchinense* (Lour.) Blume resulted in the isolation and characterisation of a new polyprenylated xanthone, cratocochinone (**1**), as well as seven known analogues, fuscaxanthone K (**2**), pruniflorone Q (**3**), 1,3,5,8-tetrahydroxy-2-(3-methylbut-2-enyl)-4-(3,7-dimethylocta-2,6-dienyl) xanthone (**4**), cochinensoxanthone (**5**), cratoxylum-xanthone B (**6**), cochinchinone I (**7**) and cochinchinone K (**8**). The chemical structure of **1** was determined by comprehensive spectral analyses. The known compounds **2–8** were identified by comparing their experimental spectroscopic data with those reported data in the literature. The anti-inflammatory and anti-HIV effects of all isolates **1–8** were evaluated. As a result, compounds **1–8** showed remarkable inhibitory effects against nitric oxide (NO) production induced by lipopolysaccharide in mouse macrophage RAW 264.7 cells showing IC<sub>50</sub> values ranging from 0.68 ± 0.06 to 10.27 ± 0.18 μM. Meanwhile, compounds **1–8** displayed notable anti-HIV-1 reverse transcriptase (RT) effects with EC<sub>50</sub> values ranging from 0.19 to 10.72 μM.

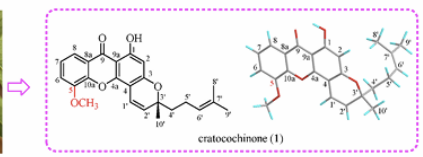
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