

Bidenphytins A and B, unexpected novel pheophytin peroxides from the leaves of *Biden pilosa* Linn. var. *radiata* Sch. Bip.

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Abstract

Two new pheophytins, bidenphytins A (1) and B (2), with peroxide functionalities on ring E, were isolated from *Biden pilosa* Linn. var. *radiata* Sch. Bip., a popular Taiwanese folk medicine. Also isolated were the following six known compounds: pheophytin a (3), (132R)-132-hydroxypheophytin a (4), (132S)-132-hydroxypheophytin a (5), (132R)-132-hydroxypheophytin b (6), (132S)-132-hydroxypheophytin b (7), and aristophyll-C (8). Their structures were elucidated by spectroscopic methods (UV, IR, 1D- and 2D-NMR) and by mass spectrometry (HR-FAB-MS). Possible biosynthetic pathways for 1 and 2 are proposed.