Chemical and Bioactive Constituents Isolated from the Formosa Zamia furfureace L.

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Abstract : Secondary metabolites are applied in the human life of the Chinese herbal medicine. Many drugs are originally extracted from natural products with combination of pharmaceutical and chemical studies. Crude extract of the leaves from Zamia furfureace L. has been shown to exhibit anticancer activities. The first chemical investigation of this plant was carried out by our group. In this study, four known compounds were isolated from Zamia furfureace L. with three lignins (Sesamin (1), Wodeshiol (2) and Paulownin (3)), and one dipeptide (Aurantiamide acetate (4)). The structures of these compounds were analyzed through the 1D-NMR(1H-NMR,13C-NMR)[]2D-NMR(COSY[]HMQC[]HMBC[]NOESY) spectroscopic analysis, and by comparison of variety of physical data (IR, mass spectrometry, ultraviolet, optical rotation). Among them, Aurantiamide acetate (4) exhibited weak cytotoxic activity against human gastric cancer cells.

Keywords : Zamia furfureace L., AGS, sesamin, Aurantiamide acetate, secondary metabolites

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