

## Four New *cis*-Clerodane-type Furanoditerpenoids of the Dry Stem of *Tinospora crispa*

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*Tinospora crispa* (Lour.) Merr (Menispermaceae) is a folk medicine widely used in Thailand, Malaysia, Indonesia and China to treat jaundice, rheumatism, urinary disorders, and, especially, diabetes mellitus, and is regarded as one of valuable traditional Chinese medicine in China. Our preliminary bioassay test indicated that the methanol extract of both the stems and leaves of this plant showed a dose-dependent effect to stimulate insulin excretion of  $\beta$ -cells. In the previous study, we found *N*-formylornuciferine and cycloeucalenol showed the stimulation of insulin secretion of  $\beta$ -cells. In addition, borapetosides A and C showed the protective effect on the viability of  $\beta$ -cells under the treatment of dexamethasone, a glucocorticoid that promotes cell death. Continuing in the study on this plant, four new clerodane-type furanoditerpenoids 1-4, as well as 10 known compounds, were isolated from the methanol extract of the dry stem. Herein, we will report the structure elucidation of these new compounds by 1D, and 2D-NMR, and other spectra. The biologic activity of these isolates are under investigation.

