Cytotoxic Chalcones and Flavanones from the Tree Bark of Cryptocarya costata

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A new flavanone, 7-hydroxy-5,6-dimethoxyflavanone (1), together with three other flavonoids, didymocarpin (2), 2’,4’-dihydroxy-5’,6’-dimethoxychalcone (3), and isodidymocarpin (4), had been isolated from the methanol extract of the tree bark of Cryptocarya costata. The structures of these compounds were determined based on spectral evidence, including UV, IR, 1-D and 2-D NMR, and mass spectra. Cytotoxic properties of compounds 1–4 were evaluated against murine leukemia P-388 cells. The chalcones 3 and 4 were found to have substantial cytotoxicity with IC50 of 5.7 and 11.1 µm, respectively.

Key words: 7-Hydroxy-5,6-dimethoxyflavanone, Cryptocarya costata, Murine Leukemia P-388 Cells