Studies on Secondary Metabolites from the Soft Coral Sinularia nanolobata

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Soft coral *Sinularia nanolobata* was reported to contain xeniaphyllane-type diterpenoids, caryophyllane-type norsesquiterpenoids, and furanone derivative. An investigation on the chemical constituents of the coral *Sinularia nanolobata* collected at San-Shen-Tai has led to the isolation of six new compounds (1–6), including two novel skeletons (1 and 2), two new diterpenoids (3 and 4), two new norsesquiterpenes (5 and 6), along with ten known compounds (7–16). The structures of these compounds were determined on the basis of their spectroscopic analysis (¹H NMR, ¹³C NMR, ¹H–¹H COSY, HSQC, HMBC, IR and HRESIMS) and by comparison of the physical and spectral data with those of the related known compounds. The cytotoxicity of 1–3, 6–10, 12, 13 and 15 toward P-388 (mouse lymphocytic leukemia), HT-29 (human colon adenocarcinoma), and A-549 (human lung epithetlial carcinoma) was assayed. That were found that all of the metabolite was inactive (ED₅₀'s >50 µg/ml) toward the above cancer cell lines.

