Secondary Metabolites from the Soft Coral

Sarcophyton cinereum

Yi-Ju Chen#,1, Tzu-Zin Huang1, Chiung-Yao Huang1 and Jyh-Horng Sheu*,1

¹Department of Marine Biotechnology and Resources, National Sun Yat-sen University, Kaohsiung 804, Taiwan

Abstract:

Soft coral *Sarcophyton cinereum* collected by SCUBA from the coast of Hsiao Liouciou Island, Taiwan in 2012, was stored in a freezer at the Department of Marine Biotechnology and Resources, NSYSU until extraction. The frozen bodies of *S. cinereum* were sliced and exhaustively extracted with EtOAc. The crude extract showed significant anti-inflammatory activity on inhibition of superoxide anion generation and elastase release in fMLP/CB-induced human neutrophils. The EtOAc residue was separated with column chromatography and RP-HPLC to afford ten new cembranolide-related compounds (1–10) and 12 known compounds (11–22). The structures of the new compounds were elucidated by spectroscopic analyses, including 1D NMR data and 2D NMR correlations.

Key words: Soft coral, Sarcophyton cinereum, Secondary Metabolite, cembranolide-related compound, anti-inflammatory activity,