

ANTI-BACTERIAL DITERPENES FROM BORNEAN

SOFT CORALS *SINULARIA FLEXIBILIS*

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ABSTRACT

Two new compounds, (13Z,16E)-fuscol (**1**) and (13E,16Z)-fuscol (**2**), along with five known and related metabolites fuscol (**3**), 18-methoxyloba-8,10,13(15),16(17)-tetraene (**4**), isofuscol (**5**), 17,18-epoxyloba-8,10,13(15)-trien-16-ol (**6**) and loba-8,10,13(15)-triene-16,17,18-triol (**7**) were isolated from the methanolic extract of Bornean soft coral *Sinularia flexibilis* (Dinawan Island). Meanwhile, one new compound, (3E,5E)-2-methyl-6-[(2'R*,4a'S*,8a'R*)-4a'-methyl-8'-methylene-*trans*-perhydronaphthalen-2'-yl]hepta-3,5-dien-2-methoxy (**8**) together with a known compound, (3E,5E)-2-methyl-6-[(2'R*,4a'S*,8a'R*)-4a'-methyl-8'-methylene-*trans*-perhydronaphthalen-2'-yl]hepta-3,5-dien-2-ol (**9**) were isolated from the methanolic extract of another populations of Bornean *S. flexibilis* from Banggi Island. The structures of these three new molecules were elucidated based on spectroscopic methods (NMR, HR-ESI-MS and IR). In addition, their anti-bacterial activity was evaluated.

KEYWORDS: lobane; diterpenoid; *Sinularia flexibilis*; soft coral; anti-bacterial activity