Columbamides D and E: Chlorinated Fatty Acid Amides from the Marine Cyanobacterium Moorea bouillonii Collected in Malaysia ABSTRACT

Two new chlorinated fatty acid amides, columbamides D (1) and E (2), along with apratoxins A and C and wewakazole, were isolated from the organic extract of a Moorea bouillonii sample from Sabah, Malaysia. Structure elucidation was accomplished by a combination of MS and NMR analyses. The total synthesis of all four stereoisomers of 1 was completed, and the absolute configuration was determined by chiral-phase HPLC and Marfey's analysis.