



27TH INTERNATIONAL SYMPOSIUM ON THE CHEMISTRY OF NATURAL PRODUCTS

7TH INTERNATIONAL CONFERENCE ON BIODIVERSITY

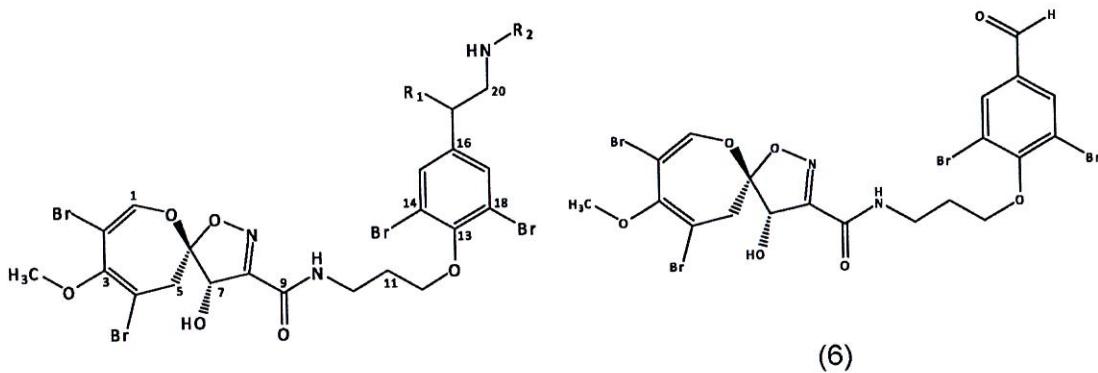
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NEW BROMOTYROSINE DERIVATIVES FROM THE BALINESE MARINE SPONGE *APLYSINELLA STRONGYLATA*

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Sponges of the order Verongida have been a prolific source of bromotyrosine-derived metabolites including those possessing a distinctive spirooxepinisoazoline (oxepin) moiety.¹ There have been ten oxepin bromotyrosine metabolites identified from marine sponges so far, demonstrating *in vitro* cytotoxicity towards the human colon tumor cell-line, anti-HIV activity against the Haitian RF strain, and activity against *Plasmodium falciparum*.¹⁻² A series of known oxepin-containing metabolites named psammaplyns (**1**, **2-5**) together with two new metabolites were isolated from sponge *Aplysinella strongylata*, obtained from Bali.³ An attempt to determine the absolute configuration through a single crystal X-ray study on psammaplysin-A acetamide acetate (**2**) is underway.



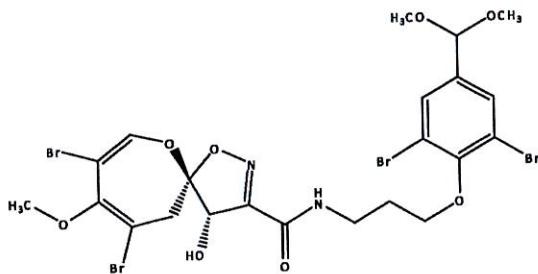
(1) Psammaplysin A R₁ = R₂ = H

(2) Psammaplysin A acetamide acetate R₁=H, R₂ = COCH₃

(3) Psammaplysin B R₁ = -OH, R₂ = H

(4) 19-Deoxypsammaplysin D R₁ = H, R₂ = CO(CH₂)₁₁CH(CH₃)₂

(5) Psammaplysin E R₁=H, R₂ =



(7)

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3. (a) Roll, D. M.; Chang, C. W. J.; Scheuer, P. J.; Gray, G. A.; Shoolery, J. N.; Matsumoto, G. K.; Duyne, G. D. V.; Clardy, J. *J. Am. Chem. Soc.* **1985**, 107,