

**OR-20****A new Fistularin-3 Derivative from an Australian Sponge *Pseudoceratina* sp.**

Pinus Jumaryatno<sup>1,4</sup>, Tina Skinner-Adams<sup>2,3</sup>, Katherine T. Andrews<sup>2,3</sup>, Rohan A. Davis<sup>2</sup>, Joanne T. Blanchfield<sup>4</sup> and Mary J. Garson<sup>4,\*</sup>

<sup>1</sup>Pharmacy Department, Faculty of Mathematic and Natural Sciences, Universitas Islam Indonesia, Yogyakarta 55584, Indonesia; <sup>2</sup>Eskitis Institute, Griffith University, Brisbane, QLD 4111, Australia; <sup>3</sup>Queensland Institute of Medical Research, Locked Bag 2000, Herston 4029, Australia; <sup>4</sup>School of Chemistry and Molecular Biosciences, The University of Queensland, Brisbane, QLD 4072, Australia; E-mail: m.garson@uq.edu.au

Chemical investigation of an Australian marine sponge, *Pseudoceratina* sp., collected from Mooloolaba South-East Queensland has provided a series of bromotyrosine metabolites from a simple modified tyrosine to more elaborate linear compounds. Six known compounds, (+)-aeropylsinin-1 (**1**), a mixture of 19-deoxyfistularin-3 (**2**) and 11-deoxyfistularin-3 (**3**), 11,19-dideoxyfistularin-3 (**4**), aerothionin (**5**) and homoaerothionin (**6**) have been isolated together with a new fistularin-3 derivative, 11-deoxy-19-ketofistularin-3 (**7**). The structures of all compounds were characterised using 1D and 2D NMR techniques, MS and by comparison with literature data. Two selected fistularin-3 derivative metabolites **4** and **7** were screened for *in vitro* activity against chloroquine-sensitive (3D7) *P. falciparum* malaria parasites and showed antimalarial activity with IC<sub>50</sub> values of 5.4 and 2.8 µM, respectively.

**Keywords:** *Pseudoceratina* sp., bromotyrosine, fistularin-3, antimalarial.

---