

NEW PHOMACTINS FROM A MARINE-DERIVED FUNGUS

Biatriospora sp.

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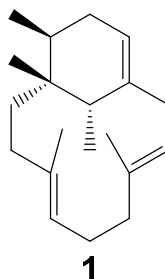
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Abstract:

During the last decade, marine-derived fungi have been thoroughly investigated as a source of bioactive secondary metabolites. Among the metabolites isolated from marine-derived fungi, phomactins are diterpenes first isolated from a marine-derived *Phoma* sp. Phomactins are antagonists of the platelet activating factor (PAF), inhibiting PAF-inducer platelet aggregation and the binding of PAF to its receptors [1]. We report the isolation and structural elucidation of new phomactins produced in culture by a marine-derived *Biatriospora* sp. (D8). Extensive purification of the growth medium EtOAc extract by several chromatographic steps led to the isolation of new phomactins, which were identified by analysis of spectroscopic data. Phomactins have a carbon framework originated from a common biosynthetic precursor, phomactin-1(14),3,7-triene **1**, related to that of taxanes [2]. We are currently evaluating the PAF antagonistic activity of the phomactins produced by the marine-derived strain *Biatriospora* sp.



References:

- [1] Elissawy, A. M., El-Shazly, M., Ebada, S. S., Singab, A. B., Proksch, P. 2015. Bioactive Terpenes from Marine-Derived Fungi. *Mar. Drugs*. 13:1966-1992.
- [2] Ciesielski, J., Frontier, A. 2014. The Phomactin Natural Products from Isolation to Total Synthesis. A Review. *Org. Prep. and Proc. Intern.* 46: 214-251.

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