

BIOACTIVE SECONDARY METABOLITES FROM TWO SPECIES OF MARINE SPONGES OF THE GENUS *Aaptos*

**Barbara Aliende Almeida^{1*}, Cauê A. W. Zuccarino¹, Karina F. Baraco¹, Rafael V. C. Guido²,
Antônio G. Ferreira³, Roberto G. S. Berlinck¹**

barbaraaliende14@usp.br

1-IQSC, Instituto de Química de São Carlos, USP, Av. Trab. São Carlense 400, São Carlos, SP, Brazil.

*2-IFSC, Instituto de Física de São Carlos, USP, Av. Trab. São Carlense 400, São Carlos, SP, Brazil. 3-
Departamento de Química, UFSCAR, Rod. Washington Luís, São Carlos, SP, Brazil.*

Marine sponges are a prolific source of secondary metabolites. Marine sponges of the genus *Aaptos* are broadly distributed in the marine ecosystem, with approximately 20 species described. Since the beginning of the 1980s, many research groups worldwide have carried out chemical investigations on *Aaptos* species that culminate in the discovery of the representative 1*H*-benzo[d,e][1,6]-naphthyridine alkaloids, collectively known as aaptamines.¹ These alkaloids present several potent biological activities.

In this report we present the biological and chemical investigation of two marine sponges belonging to the genus *Aaptos* collected along the Bahia state coastline, Brazil. The two specimens of *Aaptos* sp. (BA07ES-60 and 100) were freeze-dried, extracted with MeOH, the extract evaporated and partitioned with hexane, and subsequently between AcOEt and H₂O. Fractionation of the organic fraction by size-exclusion chromatography and solid-phase extraction (SPE-C18 and SPE-CN) resulted in chemically enriched fractions which were subjected to HPLC-UV-MS analyses. The aqueous fractions obtained from the extracted material of BA07ES-100 were analysed by HPLC-UV-MS. Subfractions that possibly contain structurally correlated aaptamine derivatives are currently undergoing purification and isolation by HPLC-UV. Pure compounds will be subjected to the antiplasmodial assay to investigate their biological activity. Our results demonstrate the importance of studying the ecological diversity of the Tropical Southwestern Atlantic coast of Brazil. The authors thank CNPq, CAPES for the student's scholarship as well as FAPESP for the financial support.

Keywords: *Marine sponge, isolation, antiplasmodial, HPLC-UV-MS, NMR*

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1. He, Q., Miao, S., Ni, N., Man, Y., & Gong, K. (2020). A review of the secondary metabolites from the marine sponges of the genus *Aaptos*. *Natural Product Communications*, 15(9). <https://doi.org/10.1177/1934578x20951439>

