Accepted Manuscript

Antiplasmodial alkaloids from bulbs of Amaryllis belladonna Steud.

Namki Cho, Yongle Du, Ana Lisa Valenciano, Maria L. Fernández-Murga, Michael Goetz, Jason Clement, Maria B. Cassera, David G.I. Kingston

PII: S0960-894X(17)31108-3

DOI: https://doi.org/10.1016/j.bmcl.2017.11.021

Reference: BMCL 25427

To appear in: Bioorganic & Medicinal Chemistry Letters

Received Date: 13 September 2017 Revised Date: 8 November 2017 Accepted Date: 10 November 2017



Please cite this article as: Cho, N., Du, Y., Valenciano, A.L., Fernández-Murga, M.L., Goetz, M., Clement, J., Cassera, M.B., Kingston, D.G.I., Antiplasmodial alkaloids from bulbs of *Amaryllis belladonna* Steud., *Bioorganic & Medicinal Chemistry Letters* (2017), doi: https://doi.org/10.1016/j.bmcl.2017.11.021

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

ACCEPTED MANUSCRIPT



Bioorganic & Medicinal Chemistry Letters

journal homepage: www.elsevier.com

Antiplasmodial alkaloids from bulbs of Amaryllis belladonna Steud.

Namki Cho^a, Yongle Du^a, Ana Lisa Valenciano^b, Maria L. Fernández-Murga^c, Michael Goetz^d, Jason Clement^d, Maria B. Cassera^b, David G. I. Kingston^a,*

- ^aDepartment of Chemistry and Virginia Tech Center for Drug Discovery, M/C 0212, Virginia Tech, Blacksburg, Virginia 24061, United States
- ^bDepartment of Biochemistry and Molecular Biology, and Center for Tropical and Emerging Global Diseases (CTEGD), University of Georgia, Athens, Georgia 30602. United States
- ^cDepartment of Biocchemistry, M/C 0308, Virginia Tech, Blacksburg, Virginia 24061, United States
- ^dNatural Products Discovery Institute, 3805 Old Easton Road, Doylestown, Pennsylvania 18902, United States

ARTICLE INFO ABSTRACT Article history: A bioassay-guided fractionation and chemical investigation of Amaryllis belladonna Steud. Received bulbs resulted in the isolation and identification of the new crinane alkaloid 1,4-dihydroxy-3methoxy powellan (1), along with the 3 known crinane alkaloids 2 - 4 and the two lycorane Received in revised form Accepted alkaloids 5-6. The structures were elucidated by interpretation of combined HR-ESIMS, CD and 2D NMR spectroscopic data. Among these isolated compounds the lycorane-type Available online alkaloid acetylcaranine (5) exhibited strong antiplasmodial activity, while compounds 3 and Keywords: 4 were moderately active, and compounds 1 and 6 were inactive. Amaryllis belladonna crinane lycorine antiplasmodial © 2017 bioassay-guided

*Corresponding author.

Email address: dkingston@vt.edu (D. G. I. Kingston)

Download English Version:

https://daneshyari.com/en/article/7780326

Download Persian Version:

https://daneshyari.com/article/7780326

<u>Daneshyari.com</u>