

ISSN: 0301-4606

BANGLADESH PHARMACEUTICAL JOURNAL

Vol. 18, No. 1 January 2015

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E-mail: bps@agni.com, Web: www.bps-bd.org

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Rashid, M.A., Gustafson, K.R., Crouch, R.C., Groweiss, A., Pannell, L.K., Van, Q.N. and Boyd, M.R. 2002. Application of high-field NMR and cryogenic probe technologies in the structure elucidation of poecillastrin A, a new antitumor macrolide lactam from the sponge *Poecillastra* species. *Org. Lett.* 4, 3293-3296.

Harborne, J.B. and Williams, C.A. 2000. Advances in flavonoid research since 1992. *Phytochemistry* **55**, 481-504.

Mabry, T., Markham, K.R. and Thomas, M.B. 1971. *The Systematic Identification of Flavonoids*. Springer Verlag, New York, p. 43.

Harborne, J.B. 1983. In: *Chemistry and Chemical Taxonomy of the Rutales* (Waterman, P.G. and Grundon, M.F., Eds.), Academic Press, London, Chapter 2, pp. 147-173.

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Printed by:

Asiatic Civil Military Press, 43/10 C, Swamibag, Dhaka-1100, Bangladesh. Phone: 7120428