

# ***In Vitro* Cytotoxicity of Some Natural and Semi-Synthetic Isocoumarins from *Paepalanthus bromelioides***

Karina F. Devienne<sup>a</sup>, Maria Stella G. Raddi<sup>b,\*</sup>, Eliana A. Varanda<sup>b</sup>  
and Wagner Vilegas<sup>a</sup>

<sup>a</sup> Instituto de Química de Araraquara,

<sup>b</sup> Faculdade de Ciências Farmacêuticas de Araraquara, Universidade Estadual Paulista “Júlio de Mesquita Filho”, Rodovia Araraquara-Jaú, Km 1, 14801–902, Araraquara, SP, Brazil. Fax: (0055) 16 2320880. E-mail: raddims@fcfar.unesp.br

\* Author for correspondence and reprint requests

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Numerous natural compounds have a potential for therapeutic applications, but may have to be chemically modified to alter toxic side effects. We investigated structural parameters that could affect the cytotoxicity of isocoumarins similar to 9,10-dihydroxy-5,7-dimethoxy-1*H*-naphtho(2,3*c*)pyran-1-one (paepalantine 1). Paepalantine 1 has antimicrobial activity, as well as significant *in vitro* cytotoxic effects in the McCoy cell line. Two other natural and two semi-synthetic isocoumarins with similar structures obtained from the capitula of *Paepalanthus bromelioides* were tested on the same cell line by the neutral red assay. Substitution of the 9 and/or 10-OH group made these compounds less cytotoxic.