



In Vitro and *In Vivo* Antitumor Effects of the Flavonol Glycosides Isolated of *Herissantia crispa* (L.) Brizicky

Paulo R.C. CARVALHO¹, Jaciana S. AGUIAR¹, Wemerson N. MATIAS², Roosevelt A. GOMES²,
Yanna C.F. TELES², Maria de F.V. SOUZA², Paloma L. MEDEIROS³, Eliete C. SILVA³,
Teresinha GONÇALVES-SILVA* & Silene C. NASCIMENTO¹

¹ Department of Antibiotics, Federal University of Pernambuco, R. Prof. Moraes Rego, 1235
Cidade Universitária 50670-901, Recife-PE, Brazil,

² Pharmaceutical Technology Laboratory, Federal University of Paraíba,
University Campus, 970, João Pessoa-PB, Brazil

³ Department of Histology and Embryology, Federal University of Pernambuco,
50670-901, Recife-PE, Brazil,

SUMMARY. This paper describes the cytotoxic and antitumoral activities of kaempferol 3-*O*-(6''-*O*-*E*-*p*-coumaroyl)- β -D-glucopyranoside (tiliroside), kaempferol 3,7-di-*O*- α -L-rhamnoside (dhiramnoside) and of the mixture of sitosteryl-3-*O*- β -D-glucopyranoside and stigmasteryl-3-*O*- β -D-glucopyranoside (GM) isolated of the *Herissantia crispa*. The compounds did not present cytotoxic activity against NCI-H292, HEP-2 and KB cells. *In vivo*, dhiramnoside did not present significant inhibitory activity of the growth of sarcoma 180 when compared with the control group; however, tiliroside and GM-treated animals showed a high inhibition rate in the growth of the tumor. Tiliroside inhibits significantly the growth of the carcinoma of Ehrlich. In conclusion, tiliroside exhibited promising antitumor effects without an expressive toxicity.

KEY WORDS: Antitumor activity, Flavonol, glycosides, *Herissantia crispa*.

* Author to whom correspondence should be addressed. *E-mail:* teresinha.goncalves@ufpe.br