A New Bioactive Steroidal Saponin from Leaves of *Furcraea gigantea*

Bernadete P. da Silva and José P. Parente

Laborat´ orio de Qu´ ımica de Plantas Medicinais, N´ ucleo de Pesquisas de Produtos Naturais, Universidade Federal do Rio de Janeiro, PO Box 68045 CEP 21944-970 Rio de Janeiro, Brazil

Reprint requests to Prof. Dr. J. P. Parente. Fax: +55-21-2562-6791. E-mail: parente@nppn.ufrj.br

Z. Naturforsch. **61b**, 1153 – 1157 (2006); received December 13, 2005

A new bidesmosidic furostanol saponin was isolated from leaves of *Furcraea gigantea* Vent. Its structure was established as 3-[(O-6-deoxy-α-L-mannopyranosyl-(1→4)-O-β-D-glucopyranosyl-(1→3)]-O-[O-β-D-glucopyranosyl-(1→3)]-O-[O-β-D-glucopyranosyl-(1→3)]-O-[O-β-D-glucopyranosyl-(1→4)]-β-D-galactopyranosyl)]oxy]-3β,5α,15α,22α,25R]-26-(β-D-glucopyranosyloxy)-15,22-di-hydroxy-furost-12-one. Its structural identification was performed using detailed analyses of $^1$H and $^{13}$C NMR spectra including 2D NMR spectroscopic techniques (DEPT, COSY, HETCOR and COLOC) and chemical conversions. The steroidal saponin showed no haemolytic effects in the *in vitro* assays and demonstrated inhibition of the capillary permeability activity.

*Key words: Furcraea gigantea, Agavaceae, Steroidal Saponin, anti-Inflammatory Activity*