A New Bioactive Steroidal Saponin from Agave shrevei

Bernadete Pereira da Silva and José Paz Parente*

Universidade Federal do Rio de Janeiro, PO Box 68045, CEP 21944-970, Rio de Janeiro.

Z. Naturforsch. **60 c**, 57–62 (2005); received August 5/September 29, 2004 A new steroidal saponin was isolated from the leaves of Agave shrevei Gentry. Its structure was established as $26-(\beta-p-glucopyranosyloxy)-22-methoxy-3-\{O-\beta-p-glucopyranosyl-(1\rightarrow 2)-glucopyranosyl-(1\rightarrow 2$

 $O-[O-\beta-D-glucopyranosyl-(1\rightarrow 4)-O-[O-\beta-D-glucopyranosyl-(1\rightarrow 6)]-O-\beta-D-glucopyranosyl-(1\rightarrow 6)$ $(1\rightarrow 4)$ - β -p-galactopyranosyl]oxy]- $(3\beta,5\alpha,25R)$ -furostane. The structural identification was

performed using detailed analyses of ¹H and ¹³C NMR spectra including 2D NMR spectroscopic techniques (COSY, HETCOR, and COLOC) and chemical conversions. The steroidal saponin showed absence of haemolytic effects in the in vitro assay, but demonstrated a signifi-

* Author for correspondence and reprint requests

Key words: Agave shrevei, Steroidal Saponin, Anti-inflammatory Activity

cant inhibition of the capillary permeability activity.

Brazil. Fax: +55-21-2562-6791. E-mail: parente@nppn.ufrj.br

Laboratório de Química de Plantas Medicinais, Núcleo de Pesquisas de Produtos Naturais,