Cytotoxic Cholestane and Pregnane Glycosides from *Tribulus macropterus*

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Z. Naturforsch. **62c**, 319–325 (2007); received November 14, 2006/January 17, 2007

The methanol extract of the whole parts of *Tribulus macropterus* Boiss. (family Zygophyllaceae) showed cytotoxic activity against a human tumour cell line (hepatocyte generation 2, HepG2) (IC_{50} = 2.9 μg/ml). The *n*-butanolic fraction obtained from successive fractionation of the methanolic extract exhibited activity against HepG2 (IC_{50} = 2.6 μg/ml). Therefore, this fraction was subjected to separation using different chromatographic techniques. Five compounds, **1**–**5**, were isolated and identified as: (22*S*,25*S*)-16β,22,26-trihydroxy-cholest-4-en-3-one-16-*O*-β-D-glucopyranosyl-(1→3)-β-D-xylopyranoside (**1**), (22*S*,25*S*)-16β,22,26-trihydroxy-cholest-4-en-3-one-16-*O*-β-D-glucopyranosyl-(1→3)-β-D-glucopyranoside (**2**), sucrose (**3**), D-pinitol (**4**) and 3β-hydroxy-5α-pregn-16(17)en-20-one-3-*O*-β-D-xylopyranosyl-(1→2)-[β-D-xylopyranosyl-(1→3)]-β-D-glucopyranosyl-(1→4)-[α-L-rhamnopyranosyl-(1→2)]-β-D-galactopyranoside (**5**) on the basis of spectroscopic and chemical data. The three steroidal compounds **1**, **2** and **5** were also tested against the same cell line HepG2 and their IC_{50} values were 2.4, 2.2 and 1.1 μg/ml, respectively.

Key words: Tribulus macropterus, Cholestane Glycosides, Cytotoxic