



Proceraside A, a New Cardiac Glycoside from the Root Barks of *Calotropis procera* with In Vitro Anticancer Effects

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Abstract:

We have studied the ethyl acetate fraction of the methanolic extract of the root barks of *Calotropis procera* (Asclepiadaceae) from Egypt. Bioassay-directed fractionation and final purification of the extract resulted in the identification of a new cardenolide glycoside named proceraside A (1) together with two known compounds, frugoside (2) and calotropin (3). Their structures were elucidated by extensive NMR studies and mass spectrometric data. The in vitro cytotoxicity of the isolated compounds was evaluated against A549 non-small cell lung cancer, U373 glioblastoma and PC-3 prostate cancer cell lines. They showed potent activity against the tested cancer cell lines with IC₅₀ ranging from 0.005 to 0.3 µg/mL. Cisplatin was used as positive control.

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