

# Chemical Constituents and Biological Activities of *Senecio aegyptius* var. *discoideus* Boiss.

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A new eremophilane sesquiterpene, 1- -hydroxy-8-oxoeremophila-7,9-dien-12-oic acid (**1**), in addition to two known flavonol glycosides, rutin (**2**) and quercetin-3-*O*-glucoside-7-*O*-rutinoside (**3**), was isolated from the ethyl acetate fraction obtained from the aqueous alcoholic extract of the aerial parts of *Senecio aegyptius* var. *discoideus* Boiss. (family Asteraceae). The chemical structures of the isolated compounds were established by 1D and 2D NMR analysis (<sup>1</sup>H, <sup>13</sup>C, COSY, HMQC, HMBC), MS and UV data, and through comparison with the literature. The ethyl acetate fraction and the isolated rutin showed significant cytotoxic activity against colorectal carcinoma (HCT 116) and to less extent against brain (U 251) and breast carcinoma (MCF 7). The ethyl acetate fraction showed a significant level of activity against *Klebsiella pneumoniae*, while the total extract showed the best antifungal activity against *Candida albicans* and *Saccharomyces cerevisiae*. DPPH radical scavenging activity of the ethyl acetate fraction was significant (96.7%) when compared to ascorbic acid. It also showed anti-inflammatory activity but no diuretic effect.

*Key words:* *Senecio aegyptius* var. *discoideus*, Eremophilane Sesquiterpene, Flavonoids