Phytochemical and Molluscicidal Investigations of *Fagonia arabica*

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The aqueous methanolic extract of the aerial parts of *Fagonia arabica* L. (family Zygophyllaceae) was successively fractionated using certain organic solvents. From the ethyl acetate fraction, two flavonoid glycosides were isolated and identified as kaempferol-7-*O*-rhamnoside and acacetin-7-*O*-rhamnoside. Four triterpenoidal glycosides were isolated from the butanolic layer. Their structures were elucidated on the basis of the spectral and chemical data as 3-*O*-*β*-D-glucopyranosyl-(1→3)-*α*-L-arabinopyranoside oleanolic acid (**1**), 3-*O*-*α*-L-arabinopyranosyl quinovic acid 28-*O*-*β*-D-glucopyranoside (**2**), 3-*O*-[*β*-D-glucopyranosyl-(1→2)]-*β*-D-glucopyranosyl-(1→3)-*α*-L-arabinosyl oleanolic acid (**3**) and 3-*O*-*β*-D-glucopyranosyl-(1→3)-*α*-L-arabino-pyranosyl quinovic acid 28-*O*-*β*-D-glucopyranoside (**4**). The two monodesmosidic saponins **1** and **3** were found to possess strong molluscicidal activity against *Biomphalaria alexandrina* snails, the intermediate host of *Schistosoma mansoni* in Egypt (LC_{90} = 13.33 and 16.44 μM), whereas the other two bidesmosidic saponins **2** and **4** as well as the two flavonoid glycosides were inactive up to 50 μM.

Key words: Fagonia arabica, Flavonoids, Triterpenoidal Glycosides, Molluscicides