

Evaluation of Cytotoxic Compounds from *Calligonum comosum* L. Growing in Egypt

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Calligonum comosum (Polygonaceae), an Egyptian desert plant, was extracted and fractionated using petroleum ether, methylene chloride, and ethyl acetate. The total methanolic extract and other fractions were tested for their anticancer activity using Ehrlich ascites, brine shrimp and antioxidant assays. Ethyl acetate fraction proved to be the most active in all assays. Eight compounds were isolated, purified, and identified from this fraction as (+)-catechin (**1**), dehydrodicatichin A (**2**), kaempferol-3-*O*-rhamnopyranoside (**3**), quercitrin (quercetin-3-*O*-rhamnopyranoside) (**4**), β -sitosterol-3-*O*-glucoside (**5**), isoquercitrin (quercetin-3-*O*-glucopyranoside) (**6**), kaempferol-3-*O*-glucuronide (**7**), and mequilianin (quercetin-3-*O*-glucuronide) (**8**). All isolated compounds were tested for their cytotoxicity and antioxidant activity. Compound **2** showed the best cytotoxic and antioxidant activity.

Key words: *Calligonum*, Anticancer, Ehrlich Ascites, Dehydrodicatichin