EVALUATION OF TOTAL SECONDARY METABOLITES AND CYTOTOXIC EFFECT OF HAPLOPHYLLUM TUBERCULATUM AGAINST 1321N1 CANCER CELL LINE

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Haplophyllum tuberculatum (Rutaceae) as a traditional medicinal plant has pharmaceutical effects such as effect on the cardiovascular and nervous systems [1]. The plant is distributed from central to southeastern parts of Iran with the local name "gahij" [2]. The present study is focused on the total secondary metabolites and anticancer activity of methanolic extract of the dried aerial parts of this species. Aerial parts of H. tuberculatum were gathered from Hormozgan province, south of Iran, which dried at room temperature. Total alkaloids, phenols and flavonoids contents of the methanolic extract were evaluated with spectrophotometer. The results indicate that total alkaloids, phenols and flavonoids contents of the extract were 17.41, 0.147 and 0.508 mg/g DW, respectively. The cytotoxic properties of the extract was examined against 1321N1 cells (cancer cell lines of glial-like) using MTT assay which showed moderate cytotoxic activity against this cell line with IC50 value of 100.48 µg/ml.

References
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