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Increasing medicinal compounds of *Althaea officinalis* L. using UV-light *in vitro*

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The present study was conducted in order to study ability of increasing the production of some medicinal compounds of *Althaea officinalis* L. *In Vitro*. Medicinal compounds quantitative and qualitative analysis using chromatography device with high performance liquid HPLC. In order to increase the production of medicinal compounds, (UV) light used with exposure (0, 10, 20, 30, 40) min. The results showed that exposure to UV light led to high significant in most medicinal compounds. *Althaea officinalis* L. belongs to family (Malvaceae). It is one of the medicinal plants used therapeutically since ancient time. The leaves of the *A. officinalis* plant as well as the root are used as medicine (Shah *et al.*, 2011); (Hage-Sleiman *et al.*, 2011). The studies shows that *A. officinalis* L. have antibacterial activity, anti-complement activity, antifungal activity, anti-inflammatory activity, anti-mycobacterial activity, antitussive activity, antiviral activity, antiyeast activity, common cold relief, cytotoxic activity (Ross, 2001). Cell and tissue *in vitro* culture is a useful tool for the production of secondary metabolites (Hussein *et al.*, 2012). Secondary metabolites are organic compounds synthesized by plants however they are not directly essential for photosynthesis, reproduction, respiration or other primary functions. The chemicals have extremely diverse effects. They often play an important role in the plant defense system. Some of them contribute to pollination and serve as protection from drought, salinity and UV radiation (Lila, 2005). The aim of this study to increase the production of secondary metabolites of *A. officinalis* L. which use as medicinal compounds using UV light as elicitor for the production of secondary plant products *In Vitro*.

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