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Antivirial activity of elemicin from *Peucedanum pastinacifolium*

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Background and Aims: Peucedanum genus (Apiaceae) consists of 120 species growing widespread in the world and Iran. Peucedanum pastinacifolium Boiss. & Haasskn. has been used by local inhabitants in central and western Iran as an antihyperlipidemic vegetable which have been verified in vivo. Previous studies on some Peucedanum species demonstrated antibacterial, antiplatelets and antimutagenic activities.
Methods: Aerial parts of P. pastinacifolium at full flowering stage were collected from Isfahan province, Iran. The acetone extract of the fruits of this plant was prepared using maceration method for two days. The extract was concentrated with rotary evaporator to form a dark green viscous mass. Medium pressure liquid chromatography (MPLC) was performed using n-heptan and ethyl acetate as mobile phase. The fractions were dried and the isolated compound was elucidated by using NMR, and MS spectra. The anti-HSV and cytotoxic effect of this compound was evaluated.
Results and Conclusion: Elemicin was a pale yellow liquid characterized and antimicrobial and antifungal effects are the most prominent effects of the compound. This compound has a significant anti HSV effect whitout any cytotoxic effect on Vero cells.

Keywords: Apiaceae; Elemicin; HSV; Vero; NMR