

***Ferulago macrocarpa* (Fenzl) Boiss. fruits as a source of bornyl acetate and 1,10-di-epi-cubenol**

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Background and Aims: The genus *Ferulago*, which belongs to the Umbelliferae family consists of about seven species in Iran. *Ferulago macrocarpa* (Fenzl) Boiss. is a perennial herb which grows in western Iran. Previous phytochemical studies of *Ferulago* have led to the isolation of various coumarins and volatile oils. Some of the isolated coumarins have shown antimicrobial, antioxidant, cytotoxic and acetylcholinesterase inhibitor activities. In addition, the essential oils of many other *Ferulago* species have exhibited antimicrobial activities.

Methods: The acetone extract of the fruits of this plant was prepared using maceration method. Repeated open column chromatography in normal phase and HPLC using petroleum ether, toluene, ethyl acetate and n-heptane as mobile phase resulted in isolation of these compounds. The structures of compounds were elucidated using NMR and MS spectra.

Results and Conclusions: According to spectroscopic data, the isolated compounds were assigned as a bornyl acetate and 1,10-di-epi-cubenol. These compounds are mainly used as antioxidant, antifungal, antibacterial and anti-inflammatory agents.

Keywords: *Ferulago macrocarpa*; Bornyl acetate; 1,10-di-epi-cubenol