

## Essential Oil of *Daucus glaber* Forssk

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The composition of the essential oil of the fruits, leaves and stems of *Daucus glaber* Forssk has been studied by GC/MS. It was found that, the essential oil of the fruits consists of monoterpene hydrocarbons (limonene and sylvestrene are the majors) and phenylpropanoids (elemicin is the major). Sylvestrene has never been reported before in the essential oil of any *Daucus* species. The study of the essential oil of the leaves revealed the presence of monoterpene hydrocarbons; limonene and  $\gamma$ -terpinene are the majors and a small amount of sylvestrene. The essential oil of stems consists of monoterpene hydrocarbons ( $\gamma$ -terpinene is the major), terpene alcohols (mainly 4-terpineol) and phenylpropanoids (myristicin and elemicin are the majors). It is interesting that, the essential oil of the fruits is free from any oxygenated terpenes while that of the stems is free from limonene and sylvestrene which are present in the essential oil of the fruits and leaves in fairly large amounts. The essential oil of the fruits, leaves and stems shows broad antimicrobial activities against both gram positive and gram negative bacteria. In addition, the volatile oil of the stem, particularly, show activities against *Candida albicans* (yeast). Also, the prepared oils have variable cytotoxic activities with LC<sub>50</sub> 21.52, 36.01 and 42.34  $\mu$ g/ml, respectively.

*Key words:* *Daucus glaber*, Essential Oil, GC/MS