



## **The pain decreasing effect of the alcoholic extract of *Trachyspermum ammi*(L.) (Ajwain) in experimental animals**

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**Abstract:** In Iraq traditional medicine, the decoction of *Trachyspermum ammi* is claimed to possess antinociceptive activity. The purpose of this research is to study the pain decreasing effect of alcoholic extract of *Trachyspermum ammi* in experimental animals, using three algometric methods and different doses. The results appear that extract intended to have an acceptable statistical values  $P < 0.05$  as a pain decreasing agent. The antinociceptive action of the extract was rapid in onset in action with prolonged time of activity. The pain decreasing effect of the extract was inhibited by Metoprolol and Atropine. Moreover, the extract has no sedative activity. The extract consists of many chemical components such as alkaloids, flavonoids, steroids, and polyphenols that possess the pain decreasing effect. The pain decreasing effect may be due to "dopaminergic and cholinergic muscarinic activity" of the extract. The net effect of the extract shows effectiveness on neural and inflamed pain in the body. The effect obtained of this work was a new aspect and determine that *Trachyspermum ammi* exerts a long term high decreasing effect on different types of pain, which indicate its folkloric uses as a pain decreasing plant.

**Key word:** *Trachyspermum ammi*(L.) (Ajwain), "dopaminergic mechanisms, muscarinic mechanisms", pain decreasing, toxic effect.

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