



### Abstract

*Trachyspermum ammi* L. is a fragrant, yearly plant having its place in Apiaceae family. It is a traditionally utilized therapeutically important herb. It is rich in naturally accruing monoterpenoids especially thymol. In present study a simple and effective method for extracting thymol was designed. The amount of thymol extracted from seeds of plant was determined using UHPLC technique. A number of influential factors like concentration of solvents, extracting time and pH of extracting solvent system were investigated for optimization the extraction yield of thymol. Extraction strategy was designed using single factor system. Results revealed the optimization conditions for thymol extraction were: 2 g plant sample with 25 ml of 80% methanol (pH 7), shaking for 4 hours at 150 rpm at 25° C. This study offers productive information for further optimization on extraction of thymol from *Trachyspermum ammi*. The results acquired are helpful for the full application of *Trachyspermum ammi* which also indicated that the extraction through maceration is a powerful tool in extracting important phytochemicals from plant materials.