

## Abstract

The aim of this research was to develop an optimized method for the extraction of Thymol from *Thymus Vulgaris*. Throughout the history of human society, the use of medicinal herbs has been an extremely important factor. Plants with medicinal properties are a rich source of potential novel medications, and a significant proportion of today's pharmaceuticals are derived, directly or indirectly, from plant sources. *Thymus Vulgaris* is common thyme and have number of different medicinal values. The primary monoterpene phenol present in thyme essential oil is called thymol, and it has the chemical formula 2-isopropyl-5-methylphenol. This substance has been shown to possess a variety of biological activities, including anti inflammatory, anti bacterial, and anti-oxidant qualities. In this research extraction of *Thymus Vulgaris* is carried in different solvents by using solvent mixtures at different ratios. Three solvents i.e., methanol, acetonitrile and n-hexane with distilled water were used having 100%, 75%, 50% and 25%. Two traditional and one modern method was adopted, maceration, infusion and Soxhlet extraction, respectively. Estimation of extracted amount was done by high-performance liquid chromatography with uv/vis detector. Optimum extraction was achieved through comparing the results of HPLC analysis. It was found that 75% methanol solvent system has highest amount of thymol.