

# Formulation and Evaluation of Herbal Pain Relief Oil

**Mr. Yash Anupkumar Gore, Mr. Swapnil B. Tatewar, Mr. Yash R. Kawale,  
Mr. Prashik V. Manwar, Mr. Pratham R. Regulwar**

B.K.S.S. Ishwar Deshmukh Institute of Pharmacy, Digras, Maharashtra, India  
yashgore263@gmail.com

**Abstract:** Herbal remedies have gained increasing attention as alternative therapies for pain management due to their minimal side effects and natural origin. This study focuses on the formulation and evaluation of a herbal pain relief oil using *Trachyspermum ammi*, commonly known as carom seeds or ajwain. Carom seeds are rich in thymol, a bioactive compound known for its anti-inflammatory, analgesic, and antimicrobial properties. The oil was prepared using cold infusion techniques, combining ajwain seed extract with a carrier oil such as sesame or mustard oil, both traditionally used for topical applications. The formulation was tested for its efficacy in reducing muscle and joint pain through in vivo and sensory evaluation methods. Results indicated a significant reduction in pain perception and inflammation, supporting the therapeutic potential of ajwain-based herbal oil. This research highlights the value of carom seeds in natural pain relief applications and supports their integration into traditional and modern medicinal practices.

**Keywords:** Carom seeds, Turmeric, Ginger, Coconut oil, Camphor, Clove oil, Eucalyptus oil

