

A Review on Peppermint

Suraj Chavan¹, Sandesh Dhadambe², Anish Mane³, Puja Jagtap⁴

Mandesh Institute of Pharmaceutical Science and Research Center, Mhaswad¹⁻⁴

Abstract: *Peppermint oil is made from Mentha piperita L., a perennial herb, and Mentha arvensis var. piperascens, which belongs to the Labiatae family. Other essential oils, like spearmint, basil, lavender, rosemary, sage, marjoram, and thyme, also come from this family. Peppermint oil is valued for its many health benefits, such as pain relief, numbing effects, antiseptic properties, and helping with digestion, respiratory issues, and inflammation. It is used in various traditional medicine systems for treating stomach problems, ulcers, and other ailments. This review looks into the chemistry, health effects, and uses of peppermint oil.*

Aromatic herbs like peppermint are in high demand in industries such as biotechnology, cosmetics, medicine, and food, which has increased their market value. Peppermint (Mentha piperita L.) is a popular medicinal herb known for its many health benefits and is widely used in the food and medicine industries. While it is commonly used as a flavoring in food, it is most recognized for its antimicrobial and antioxidant properties. Peppermint oil and its by-products are used in products like candies, teas, toothpaste, mouth fresheners, beverages, liqueurs, jellies, syrups, ice creams, cough drops, chewing gums, soaps, detergents, and mosquito repellents. Since peppermint is a seasonal and perishable plant, it needs to be dried to ensure it is available year-round.

This interaction shows that the compounds can block the activity of the enzyme. Quantum studies found that menthol ($E_{gap} = 16.9$ eV) is a stable compound, while pulegone ($E_{gap} = 12.6$ eV) is less stable. These theoretical findings match previous experimental results. Overall, peppermint is a promising plant for research, and more studies should explore its role in preventing human diseases.

Due to the importance of Mentha piperita, a detailed overview has been prepared. It covers almost all aspects of the plant to offer a complete source of information for current and future researchers. This will help in better understanding its health benefits and commercial uses.

Keywords: Taxonomy, Morphology, Chemical composition, Cultivation, Harvesting, Therapeutic effect, Adverse effect, Contraindications

