

Medicinal Plant of the Year 2004

Mentha piperita L. (Peppermint)

Peppermint has been chosen as “medicinal plant of the year 2004” by the study group „History of development of medicinal plants” University Würzburg.

Peppermint, *Mentha piperita* L.: *perennial*, up to 90 cm high herbaceous plant from the family of the Lamiaceae. P. develops out of a wooden rhizome upstanding ramified stems as well as overground and underground offshoots. The tetragonal stems are often reddish. The opposite standing ovate to lanceolate leaves have short rachis and a sharply serrate margin. The bright violet or reddish blooms are densely arranged in cylindrical false spicae. The plant has a characteristic aromatic smell.



Flowering time: June, July.

Origin: The P. is a breed, which is entirely obtained from cultivation and through vegetative multiplication from *Mentha spicata* and *Mentha aquatica*. There are several cultivars with somewhat different appearance. In contrast to other mint cultivars undomesticated forms are rarely to be found. The P. is cultivated in Europe, and in North- and South-America. During the second year of cultivation highest yields are obtained.

Drug Production: At the beginning of the flowering time the first cut is done, the second in September. The herb is harvested mechanically and dried at temperatures of 45°C in special plants. The separation of the stems occurs after chopping up of the dried herb.

Drug Description: The drug *Menthae piperitae folium* consists of the dried leaves and stalks. The cut drug is characterized by thin, dark green, breakable pieces of the leaves. The leaf undersurface exhibits a reticulated violet nervature. Also several stem pieces are present. The drug has a characteristic aromatic smell and a spicy aromatic and soothing flavor.

Constituents: 0,5 to 4% essential oil containing more than 130 substances. Determinants for the quality of the essential oil are the constituents menthol (35-45%), menthylacetate, menthone (15-20%), menthofurane und Jasmone. Further constituents are tannins, triterpenes and flavonoids.

Effects and Therapeutic Use: The preparations of the drug (tea, tincture) have a mild spasmolytic, carminative and cholagogue effect. These effects depend mainly on the essential oil, but probably also on the flavonoids. The drug induces a distinct increase of bile formation. The tannins have a slightly congesting effect. The characteristic cooling flavor depends on the constituent menthol. Main indications of peppermint tea and peppermint tincture are acute and chronic gastritis and enteritis, in colicky disorders of the gastrointestinal tract, and in flatulence: and also in chronic cholecystopathies. Peppermint leaves belong to the most important drugs, which are used as medicines. They are also components of various tea mixtures, because of their flavour ameliorating effect.

For making peppermint tea boiling water is poured over 1,5 g drug, covered and stood for 5-10 minutes before being passed through a tea strainer. 3- to 4 times a day one cup of fresh prepared warm tea is drunk between the meals.

The drug is also constituent of finished tea products, which are used for the treatment of indigestions and as light depressants. Besides the peppermint leaves also peppermint oil (*menthae piperitae aetheroleum*) is used. It is used in finished products for the treatment of complaints of liver and gall bladder and external for the treatment of muscle and nerves aches and in respiratory catarrhs. In the case of gall stones a doctor should be consulted before taking the medicament.

In babies and infants peppermint oil containing preparations should not be applied in the face, especially in the area of the nose.

In folk medicine the drug is used in cases of nausea caused by overloading of the stomach and in common cold. Efficacy in nausea is substantiated by experience.

Adverse effects: also with longterm application not known.

Historical: P. is a between *Mentha aquatica* and *Mentha spicata*, which arose by spontaneous hybridisation in England in the 17th century. The species was first mentioned 1696 by the British Botanist John Ray (1628 – 1705) who had obtained it from cultures in Herefordshire. From England the peppermint by vegetative multiplication also spread into other European and overseas countries. In Germany the medicinal plant initially called “English Mint” spread. Because of the especially intensive odor and smell at that time the plant was called peppermint. About 1825 it was already cultivated in kitchen gardens.