



## LEMON BALM

Jeanine M. Davis, Extension Horticultural Specialist

Lemon balm (*Melissa officinalis* L.) is a lemon scented member of the mint family. A native to southern Europe, it is a perennial which will over-winter in hardiness zones 4 to 5. The plant develops many branches and grows to a height of about two feet. The leaves are 2 to 3 inches long, oval to almost heart shaped, shiny and wrinkled with scalloped edges. Small light blue to white flowers appear in late spring through midsummer.

**Planting** – Lemon balm is easy to grow from seed sown in the spring or early fall. The seed is very small and should be covered with only a fine layer of soil. Cuttings and root divisions, however, are faster and easier ways to establish lemon balm. Stem cuttings can be made from the vigorous summer growth or the roots can be divided in the spring or fall. Root cuttings should contain three to four buds each. In the fall, plant root cuttings early enough for the plants to become established before the first frost and mulch for the winter. Suggested spacing is 12 to 24 inches apart in the row and 24 inches, or whatever distance is practical for cultivation, between the rows. Close spacing of rows and individual plants will result in the highest yields. When choosing a site, keep in mind that lemon balm self-sows freely, spreads rapidly and can quickly become a weed.

Lemon balm grows best in fertile, moist soil with a pH of 5 to 7.5. It prefers a cool, partially shaded habitat but will grow in full

sun. Plants grown in shade, however, tend to be larger and more succulent than those grown in direct sunlight. In regions where the ground freezes, the crowns should be mulched for the winter.

**Fertilization** – Although specific recommendations are not available for fertilization of lemon balm, for mint production 80 to 100 pounds of nitrogen, 100 pounds of phosphorus and 400 pounds of potash per acre are often recommended. Yield and oil content may be increased by sidedressing with nitrogen several times during the growing season.

**Irrigation** – Provide a regular supply of water through drip or overhead irrigation.

**Weed Control** – Currently, there are no herbicides cleared for use on lemon balm in North Carolina. Weed control is important, however, because the presence of weeds in the dried product will reduce quality and, consequently, price. Shallow cultivation and the use of plastic or organic mulches are recommended.

**Disease and Insect Control** – There are no pesticides registered for lemon balm in North Carolina. Prevention of disease through good cultural practices is the most effective means for healthy crop production. To reduce the incidence of soil borne diseases, rotate plantings of lemon balm to soils that have not been used for cultivation of another

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member of the mint family for several years. To prevent foliar diseases, keep foliage as dry as possible by watering early in the day or by using drip irrigation. Insects are not usually a problem on lemon balm. If populations become unacceptably high, however, various organic controls such as beneficial insects, traps, mild soap solutions and hand-picking, can be tried. Before spraying any homemade insecticide solution on a crop, test for adverse effects to the foliage by spraying a small area first and observing for a day or two.

**Harvest and Handling**—Lemon balm can be harvested for fresh sales once or twice a week. Frequent trimming encourages branching and will result in a bushy, compact plant. For a dried product, harvest at least twice a season just as the plant comes into bloom. For large scale operations, foliage can be cut with a side-bar cutter. An acre may produce 1000 pounds or more of dried herb. Be careful not to bruise the leaves during the harvest and drying operations as quality will be reduced. Although lemon balm dries quickly and easily it will not be as fragrant dried as fresh. It can be dried outside in partial shade but will brown quickly if there is any night moisture. Plants may also be hung in bunches and air dried in a shed or barn or oven dried on screens. When dry, store in tightly closed containers. If hung to dry in bunches, lemon balm can be rapidly processed by rubbing each bundle across a half-inch mesh screen to crumble the leaves.

**Uses**—Lemon balm, with its delicate lemon scent and flavor, is valued as a culinary, cosmetic and medicinal herb. Fresh sprigs are used to top drinks and as garnishes on salads and main dishes. Fresh or dried leaves make a refreshing tea, either iced or hot. Dried leaves are used as an ingredient in many pot-pourris and the oil is used in perfume. Used throughout history as a medicinal herb, lemon balm has mild sedative properties and has been used to relieve gas, reduce fever, and increase perspiration. The volatile oil contains citral, citronellal, eugenol acetate and geraniol. Both oil and hot water extracts of the leaves have been shown to possess strong antibacterial and antiviral qualities.

## References

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