Entry prepared by Megan Bumb '10 in College Seminar 235 Food for Thought: The Science, Culture, & Politics of Food Spring 2008

LEMON BALM

Originating in the Middle East and North Africa, lemon balm moved very early northwest to Southern Europe (it was naturalized in Europe in the 1500's)¹ and then to America by 1700.



Kingdom	Plantea
Division	Magnoliophyta
Class	Magnpliopsoda
Order	Lamiales
Family	Lamiaceae (Mint)
Genus	Melissa
Species	M. officinalis L.

Etymology:

This herb's genus gets its name from the Greek word for "honey bee;" lemon balm attracts bees. The word "balm" is derived from the Greek word "balsamon" which means "balsam," an oily, sweet smelling resin.² Lemon balm is also known as Apiatrum, Balm, Bee Balm, Bee's Leaf, Honey Plant, Labiates, Lemon Fragrance, Melissa and Sweet Balm.

Cultural Significance:

Lemon Balm holds a significant place in Greek culture. The ancient Greeks believed that lemon balm and bees have a strong relationship; for example, they believed that bees would never abandon a hive if the herb grew nearby. Similarly, bees use the herbs as a marker to find their way back to their hive after traveling beyond the hive. Because of these views, Greeks would even rub hives with lemon balm to make bees feel welcome³ The Greeks also believed very strongly in melissa as a promoter of long life. The last prince of Wales, Prince Llewellyn, who lived in the 13th and 14th centuries, was said to have drunk melissa tea every day of his 108 year life.

Lemon balm was used in medieval times as a strewing herb (see Southernwood.) Less practically, people also used the herb to "transmit messages between lovers," for lemon balm represented sympathy (probably because of its use in relaxing medicines.)⁴

Various cultures held the belief that Lemon Balm retained mystical soothing powers. The Ancient Arab physician from the 11th Century named Avicenna also agreed that melissa "causeth the mind and heart to become merry." His influence most likely introduced this herb to medicine as a cure

¹ http://www.victoryseeds.com/catalog/themes/18th_century.html, March, 12 2008.

² Reader's Digest Association, <u>Magic and Medicine of Plants</u> (Pleasantville: Reader's Digest Association, 1986) 90.

³ Harrop, Renny, <u>Encyclopedia of Herbs</u> (Secaucus: Chartwell Books Inc., 1977) 7.

⁴ Kowalchik, C. & Hylton, W.H., <u>Rodale's Illustrated Encyclopedia of Gardening</u> (Emmaus: Rodale Press, 1987) 357.

Image: "Lemon Balm:" http://www.flickr.com/photos/smoo/490106598/

for depression and anxiety.⁵ Similarly in 1530, the German Brunschwig stated in the *Book of Distillation* that sweet balm contributed to a "sharp wytte" and "good memory" and restores those who were angry to be "mery and refressht again."⁶

Uses:

The medicinal use of lemon balm dates back into ancient times. Dioscorides used balm for dog and scorpion bites and also in wine to soothe patients. The ancient Arabs used the herb to treat heart disorders.⁹ In the middle ages, a sprig of lemon balm was said to staunch the blood of a sword wound and to help relieve an ear ache, toothache, pregnancy sickness, fix crooked necks, and prevent baldness.¹⁰ There were also the beliefs that carmelite water (lemon balm, lemon peel, nutmeg and Angelia root) was useful against nervous headaches and neurologic affections and that lemon balm would cure bites and scorpion stings.¹¹

Language	Common Name ^{7&8}
French	- Melisse citronelle
	- Melisse officinale
	- Citronelle
German	- Melisse
	- Citronelle
	- Herzkraut
	- Zintronmelisse
Italian	- Appiastro
	- Cedronella
	- Cedrina
Spanish	- Melissa
	- Toronjil

In more recent history, lemon balm was used against catarrh, fevers and flatulence problems. People realized that the oil makes for great surgical dressing because it kills off germs and while the oil dries, it seals up wounds (the practice was also used archaically without the scientific understanding.) 19th century physicians used the herb to entice sweat for fevers and regulating menstrual cycles;¹² though, lemon balm was not as preferred as other mints because it contains less volatile oil.

Today, lemon balm is still widely used in medicine. The herb works as a useful astringent to cleanse pores for people with acne. Furthermore, a recent study shows the herb has a sedative effect on the central nervous system of mice¹³ which explains its use as a type of valium by several cultures. Lemon balm oil has also been found to reduce bacteria and viruses. When the herb is combined with St. John's Wort or *Echinacea*, a topical application of the mixture is effective in treating cold sores of the Herpes Simplex Virus. The herb also inhibits thyroid functioning so it works to combat hyperthyroidism and as a mood enhancer for depressed patients. While studies are still inconclusive, there is very strong evidence to suggest that lemon balm is also effective in decreasing symptoms of Alzheimer's and dementia such as memory loss. There are no known side effects or symptoms of toxicity from taking Lemon balm.¹⁴

⁵ Reader's Digest Association 90.

⁶ O'Connor, A., Hirshfeld, M. & Cornell Plantations, <u>An Herb Garden Companion and Guide to the</u> <u>Robison York State Herb Garden</u> (Ithaca: Cornell University, 1984) 15.

⁷ Muenscher, W., Leopold, C., & Rice, M. A., <u>Garden Spice and Wild Pot-Herbs : An American Herbal</u> (Ithaca: Comstock Pub. Associates printing, 1955) 99.

⁸ Chadwick, A.F., Cracker, L. E. & Simon, J.E., <u>Herbs An Indexed Bibliography 1971- 1980 The</u> <u>Scientific Literature on Selected Herbs, and Aromatic and Medicinal Plants of the Temperate Zone</u> (Hamden: Archon Books, 1984) 56.

⁹ Kowalchik 355.

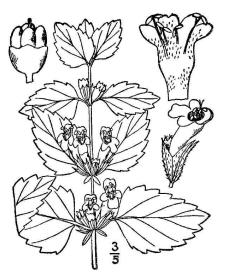
¹⁰ Harrop 7.

¹¹ Grieve 76.

¹² Materia Medica

¹³ Racz-Kotilla, E., Racz, G., & Jozsa, J., <u>Activity of some species belonging to the Labiatea on the central nervous sytem of mice (Acta Hort. 1980)</u> 49 - 53.

¹⁴ Shan, Yaso, "Lemon Balm (Melissa Officinalis)" <u>Mental Health Practice</u> 9.1, 2005, 11.



Lemon balm was and continues today to be used for relatively few culinary aspects. One would use the dried leaves of the herb in confection, deserts, meats, salad dressings, sauces, and soups. As for beverages, the herb's dried leaves are used in teas (medical or regular), wines, liquors (Benedict and Chartreuse,) vinegars, brews, and restorative cordials; it leaves a lemon-minty flavor in hot/cold drinks. Below is one of the wine recipes used in 1829:

40 pounds sugar dissolves in 9 gallons of boiling water poured/cooled over 2 ½ pounds of balm - set open for 24 hours, under cover for 6 weeks to ferment than bottled – improves with age.¹⁵

Melissa is also used in many aspects of life today. The herb's essential oil makes a great furniture polish with a fresh lemon scent. Its oil is also used to make perfume; though perfumers rarely use the volatile oil because they are able to stimulate the aroma of lemon balm with cheaper extracts from other plants.¹⁶ The oil,

leaves and flowers are used to make potpourri. For the best effects, lemon balm should be harvested at its most potent, in late summer.

Do not harvest something you intend to dry if the weather will not be sunny for several days. Optimum drying conditions are between 90 degrees and 110 degrees Fahrenheit, on trays or sieves in the shade and not on strings.¹⁷ Cosmetically, the herb is used in facial toners (cold teas that should be patted and left on the skin) which close pores and smooth wrinkles.¹⁸ Lemon balm can be rubbed on your hands to prevent bee stings; it also works as an insect repellent. While bee keepers do not cultivate lemon balm as a forage plant (the corolla tube of the flowers is too narrow to get all the nectar) they still grow melissa to prevent the swarming or to attract new swarms of bees.

Botanical Description:

Lemon balm grows 1-2 feet high and emits a lemon smell when bruised (the herb also has a lemon taste.) The scent of the herb is more attractive than its appearance. Characteristic of the mint family, lemon balm's leaves are squarely stemmed, ovate, toothed, opposing, coarse and 1-3 inches long. Its flowers are white and yellow, have 4 stamens and are $\frac{1}{2}$ inch long.

Cultivation:

While several other varieties of melissa have been reported in the Mediterranean and Asia only *Melissa officanalis* L. is cultivated. Balm is a perennial herb which flowers white and pink from June – October.¹⁹ For optimum cultivation, each plant should be two feet apart and propagated in the spring or fall. This herb is very slow to germinate, but it can be propagated with seeds, cuttings or root divisions. The seeds will germinate best if they are not covered and are planted in well drained soil with a pH between 4.5 - 7.8.²⁰ Lemon balm can be very invasive, but growing it in partial shade makes it more

¹⁵ Kowalchik 356.

¹⁶ Chadwick 56.

¹⁷ Kowalchik 357.

¹⁸ Harrop 18

¹⁹ Chadwick 56.

²⁰ Bailey, L.H., <u>Manual of cultivated plants</u> (New York: Macmillan Pub., 1949) 1116.

compact and the heart shaped leaves a deeper green. The only maintenance with this herb is to protect it from weeds and cut it down after it flowers. This plant can only be harvested once in the first year and then twice in subsequent years. Lemon balm is a great plant to use as a border to a garden because not only will it emit its fragrant lemony odor when brushed, but it will attract bees into the garden.

Image: Britton, N.L., Brown, A. & USDA-NRCS PLANTS Database "*Melissa Officinalis* L.- common balm" <u>An illustrated flora of the northern United States, Canada and the British Possessions</u> Vol. 3(1913) 137.