Chapter 15
Labiatae Family

It is the plant family of aromatic plants consisting of the mints or deadnettle family. In this the flowers on the plants resemble lips. The leaves are opposite and the stems are squared.

Herbs: lemon balm, basil, bergamot, horehound, hyssop, lavenders, marjoram, mints, rosemary, clary sage, thymes, oregano and sages.

Flowers: salvias, Oswego tea (bee balm or bergamot), false dragonhead and wild bergamot.

Bergamot leaves are toothed, oval and coming to a point, with dark green color and the veins being reddish in color. Young leaves have a very strong scent. The stem is squared and hairy.

Lemon Balm leaves have a very aromatic lemon scent. They are toothed and oval with a green color. The stem is squared and hairy sometimes it has purple markings.

Oval: broadly elliptic.

Elliptic: broadest at the middle with two equal rounded ends.

Hairy: indument type where individual hairs are visible.

Indument: any covering of hairs or scales; indumentum is the preferred term.

Vein: strand of vascular tissue in a flat organ, often visible on the surface.

Vascular tissue: tissue consisting mostly of strands or vessels, as opposed to cellular tissue.
**Bergamot** *(Monarda didyma)*

Common names: bee balm, Oswego tea, Indian nettle and golden Melissa.

The Native Americans discovered and were the first to use this as a drink and for medicinal value. Bergamot has a citrus scent. The flowers are edible (organic only) and can be used in salads and the leaves can be dried for tea or used fresh in cooking. Leaves can be added when making apple jelly or put a flower in an ice cube tray cover with water and freeze then add to ice tea or punch for a nice surprise. The highly colorful flowers attract bees and butterflies. The dried flowers add a citrus note to potpourris and wreaths. Bergamot is used in lotions it helps to stimulate the skin or toss some flowers into bathwater. If planted by tomatoes is said to help them grow. The leaves are opposite, ovate shape with toothed edges. It produces a fruit that looks similar to seeds, it is four nutlets. The bright flowers grow in whorls on the top of the stem. This herb prefers the sun and grows to about 3’ tall, it is a perennial.

Ovate: egg-shaped and about 1.5x as long as broad, with the wider part below the middle.

Nutlets: a small nut; one of the lobes or sections of the mature ovary of some members of the Boraginaceae, Verbenaceae and Labiatae.

Draw an ovate leaf and nutlet.
Bergamot (Monarda didyma)
**Lemon Balm** *(Melissa officinalis)*

Common name: balm, bee balm, Melissa, balm mint, heart’s delight, common balm, Melissa balm and elixir of life.

Named after the Greek word for honeybee it is a sweet scented lemon herb that sends the blues away. In the Victorian language of the flowers it was used to send messages between lovers and meant sympathy. It is mentioned in several of Shakespeare’s plays, and in the “Merry Wives of Windsor” it says “The several chairs of order scour well with juice of Balm” and being also mentioned as “strewn on floor to freshen it.” Lemon balm is a key ingredient in Carmelite Water. It was created by nuns and monks used as a perfume, since baths were not common place in medieval England it helped with the smell and used on those with the plague. It is used to help with depression today as back then. You can use the fresh leaves in cooking for tea and the leaves and stems can be dried to use for tea also. It grows well from seeds and do not cover seeds with dirt. Harvest the leaves to dry right before the flowers open. Dry right away as it will turn black if you wait. Lemon balm is perennial and likes full sun. It can grow to a height of 3’. The leaves are lemon scented and opposite. They are hairy, veined, toothed and oval bright green color. The stem is squared with sometimes purple markings. The flowers are white or yellow and appear from July to September. They grow on axillary spikes.

**Axillary:** positioned in or arising in an axil.

**Axil:** the point of the upper angle formed between the axis of a stem and any part (usually a leaf) arising from it.

**Axis:** the longitudinal, central supporting structure or line around which various organs are borne, as a stem bearing leaves.

**Spike:** an unbranched, elongated inflorescence with sessile or sub sessile flowers or spikelets maturing from the bottoms upwards.

**Spikelet:** a small spike or secondary spike.

**Sessile:** attached directly, without a supporting stalk, as a leaf without a petiole.

**Sub:** meaning under, slightly, somewhat or almost.

**Petiole:** a leaf stalk.
Lemon Balm (*Melissa officinalis*)
HAPPY VALENTINE’S DAY!