

Essential Oils by Plant Family

It can be educational and informative to place essential oils in the plant family from which they are derived to study them. Plants are classified according to the structure of their flowers, but this classification goes beyond the flower itself to include leaf and seed structure, similar rhythm (time of year, etc.) and similar chemical composition.

In homeopathy and other philosophies, the physical nature of plants and their interactions with the environment have been noted to correlate with their medicinal properties. A type of therapeutic activity is attributed to each botanical family and the variations within it, and this approach seems to be quite accurate and very informative. It is amazingly consistent with the more traditional systems of herbal and aromatherapies. I have found that careful observation or study of a plant and its environment can tell me much about its medicinal properties and uses.

Classification of essential oils by botanical families tells more about their therapeutic activity than a simple alphabetical listing. Unless you understand botanical families well, however, a botanical listing can be cumbersome and annoying. I will attempt to give you a condensed version here.

Botanical Families:

For information on the 'elements' mentioned here, refer to Chapter 11

Burseraceae: This family is considered dry fire in the Eastern tradition. The oils in this family are strengthening to all of the meridians. Myrrh has a particular affinity for the metal (#4) element, while frankincense is particularly effective at grounding our energies to the physical, more earthly (element #5) aspects of life. This family includes the essential oils of elemi, frankincense, myrrh, and opoponax. This botanical family grows in desert and tropical areas and in some of the most extreme climates imaginable. The sun's rays burn hot in these areas and these oils act in a drying manner against congestive ailments such as bronchitis, coughs, and pleurisy. They are especially useful in diseases related to over secretion and inflammation. In the desert, life is harsh and elemental. It takes great strength to exist and flourish there. This strength of purpose and character is reflected in the emotional healing qualities of these oils. They are soothing and comforting to the soul and they encourage us to find our own inner strength. For centuries, myrrh and frankincense have been used in religious ceremonies.

Coniferae: Affinity for the Central and Governing Meridian, referred to as the Air Element (#0). In the Eastern tradition they are considered to bring light and inner warmth. Members of this family are cedarwood, cypress, fir, juniper, pine, spruce and thuja. This botanical family is imposing in its simplicity; everything is structured around the central vertical trunk. Conifers are noted for their longevity, as a coniferous forest shelters and protects its creatures and appears immortal and eternal. An outstanding characteristic of conifers is their ability to maintain their foliage through cold winters. This indicates an inner fire and stability which is indicative of their therapeutic uses. Conifer oils are warming, reviving and give a feeling of protection and safety. Their major influence in the body is on the nervous system and they are best taken in through the lungs. Interestingly, conifer oils are often used for arthritis.

Labiatae: Labiatae are considered plants of heat. Every one of them is warming to the body and the spirit. All members of the labiatae family balance yang energy (see Chapter 9). Each member of this family has an affinity for a particular element/meridian or two. This family includes basil, catnip, clary sage, hyssop, lavender, marjoram, melissa, mints, oregano, patchouli, rosemary, sage, and thyme. All members of the labiatae family have some known healing attributes that are being used around the world by different cultures and people. In addition many labiatae are culinary herbs, which indicates their strong affinity for digestive and metabolic processes as well as respiration and blood formation. There are no bland, gloomy or narcotic oils in this family. These plants adapt well to changes in their environment which is indicative of their immuno-stimulant properties. They are often used for conditions of weakness and for bringing increased vitality to organs and body systems. Essential oils from this plant family should be considered for anemia, digestive problems, respiratory problems, diabetes. They are often employed by healers and those who are overly sensitive to the environment and the energy of others.

Compositae: This well-structured and varied family is considered in Eastern thought to strengthen the spiritual aspects of the realization of one's goals, the organization of one's life and mission, and the physical structure of the body. Plants in this family include arnica, blue tansy, all of the chamomiles, davanna, helichrysum, Idaho tansy, tagette, tarragon, yarrow, and wormwood. The compositae constitute the largest botanical family and grow all over the world in profuse abundance. Member of this family grow from seashores to mountain tops, from deserts to swamps. They all seem to have a love of open spaces and crave exposure to light. Like the plants themselves, the therapeutic action of this family shows a great diversity; there seems to be a plant and an essential oil with an affinity for every organ or system of the body. It is almost impossible to categorize this large and varied family except to note that no matter what element or organ a particular oil may have the most affinity for, it is the yin side of that element that will be most benefited. The theme of this family, and the action of the essential oils, is the return of perfect balance and harmony to all aspects of the body and the soul.

Umbelliferae (Apiaceae): Plants of the Air Element (#0)—Central and Governing Meridian. This family includes ajowan, angelica, aniseed, cilantro, coriander, caraway, carrot seed, celery seed, cumin, dill, fennel, galbanum, and parsley. The plants of this species have large, hollow, airy spaces in their stems, seeds and roots. The essential oils created from members of this family have an affinity for the respiratory system, the intestinal areas of the digestive system, and glandular system. They are considered outstanding tissue regenerators. This is especially true of cumin, fennel, celery and parsley, which are all produced from seeds. Each plant as an herbal remedy and each essential oil derived from plants of this family has a special affinity for a particular body organ or system.

Geraniaceae: The geranium species has been cultivated into many sub-species (rose geranium, tangerine, geranium, lemon geranium, etc.) and can be made to produce a wide variety of chemotypes and fragrances. There are even geranium oils that imitate the burning heat of plants containing thymols. These plants are very different from the sweet-smelling rose geranium oil that is marketed commercially. Geraniums show strong adaptability and the expected immuno-stimulant properties that adaptability indicates. These oils are astringent and diuretic, among other properties, and useful for diabetes, kidney stones, wounds, and burn care. In the emotional realm they are used for depression and stress management. Geraniums have a particular affinity for the heart and triple warmer meridians. These two meridians are the yang portions of element #5 and #6. Essential oils of this family include geranium and rose geranium.

Rutaceae with the genus of Citrus: Essential oils produced from this family include bergamot, clementine, grapefruit, lemon, lime, mandarin, neroli, orange, petitgrain, tangerine, zanthoxylum. Most of the large and complex rutaceae species grow in mild tropical areas. They display beautiful abundant flowers which are shaped like symmetrical stars. They have delicious, exhilarating fragrances. Essential oils are produced from the bark, the fruit, and the flower, in different instances. The part of the plant used and the time of year that the plants are harvested greatly affects the therapeutic qualities of the essential oil produced. This makes this family of essential oils very versatile. Varying members of this family are strengthening to different elements and chakras. All of them seem to affect the energy of the solar plexus chakra. The solar plexus chakra radiates a generous, giving light. This light glows, in varying degrees, from each of us. Balance in this chakra makes us radiant, generous, confident, and outgoing, and gives us vibrant physical health. The general therapeutic characteristics of this family are in the maintenance of fluid levels and warmth in the tissues of the body. The oils produced from flowers are cooling, refreshing and sedating; the fruits exert control over liquid processes and secretions. Pettitgrain, distilled from orange bitter leaves and twigs, is sedative to the nervous system and an intellectual stimulant.

Graminae: A large majority of the plants which are considered ground covers or grasses belong to the Graminae family. The graminae species is considered, in both herbal medicine and Eastern tradition, to be the nutritious family. Essential oils included are citronella, gingergrass, lemongrass, litsea cubeba, palmarosa, and vetiver. From the poles to the equator, from the swamps to the deserts, this family shows an amazing adaptability and diversity. Graninae's ability to cover huge areas, spreading very quickly, denotes great strength. This strength lies in its powerful root systems, which form an intricate network that efficiently utilize and incorporate nutrients from the soil of its environment into itself. This family does not spend much energy in the floral process. Its leaves and seeds are a gift to the animal kingdom and essential oils distilled from this family are a gift of grounding, strength, and nutrition to us. The plants of this family, though having few flowers, develop very distinctive fragrances. There is often a scent reminiscent of freshly cut hay. There is also a fresh, green, lemony, slightly rosy fragrance. The subtleties vary from plant to plant and become quite pronounced in the essential oils because of their concentration. Oils in this family are used for stimulation of the digestive system, as diuretics, for disinfection, and for pest and parasite control.

Mints: Mints are a subspecies of the **Labiatae** family and include the essential oils of peppermint in all its varieties, spearmint, catnip, and pennyroyal. The members of the mint family, both as herbs and as essential oils, have the distinction of being both warming and cooling. They can act in the capacity of stimulants and revitalizers or they can be used to produce a calming, even analgesic, effect. In the essential oils and herbals of this family, whether it will act as a stimulant or a nervine depends on the quantities used and the frequency of the applications. Aromatically, a little bit calms and relaxes the nerves, while larger quantities refresh and stimulate. Peppermint is often used by long-haul truck drivers and others to maintain alertness and stay awake. (This really works!) Topically, the mints relieve pain, but they do this in part by increasing circulation and healing to the area while also acting as an analgesic. In Eastern traditions, increasing circulation is a 'warming' application, while relieving pain is considered a 'cooling' function. There are about 20 members of the mint family, only a few of which are being utilized as essential oils at this time. Common uses include confusion, mental and physical fatigue, pain, digestive problems, motion sickness, poor circulation, nerve regeneration and loss of memory.

Myrtaceae: Traditional philosophy and usage claims that this family brings balance to and between all of the meridians/elements and all of the chakras. These plants are powerful healers. The essential oils include allspice, bay, cajeput, clove, eucalyptus, myrtle, nutmeg, niaouli, and tea tree. Plants of this family grow in every tropical region of the world. They have learned to survive and thrive amidst the powerful forces of earth, water and heat. An interesting fact about the plants and trees of this family is that, while there are no mild plants among them, there are also no poisonous plants to be found here. Among this diverse family are plants which have very hard woods, strong leaves, intense flowers, and others that produce strong, sugary fruits and/or pungent spices.

The scope of action of myrtaceae includes metabolism, the energy centers (Chakras), the meridians, and the lungs. They are effective for respiratory diseases, metabolic or energetic imbalances, and helping us to be more resistant to disease. Just as the plants themselves are robust and strong, the aromas of the essential oils are strong and pungent. Each essential oil is unique in fragrance and therapeutic usage. You would hardly suspect from their aroma that they are members of the same species. Eucalyptus is such a potent and versatile oil that it is regarded in Australia, and even other parts of the world, as a cure-all. Eucalyptus is such a strong oil that it actually becomes more antiseptic and therapeutic as it ages.

Zingiberaceae: The not so commonly used oils of cardamom, ginger, and turmeric are members of this family. They have been used for thousands of years in India and China. References to them are found in writings from the middle ages. All members of this family have an impact on the entire body, physically through the organs and systems and energetically through the meridians and chakras. There is, however, a particularly affinity for the digestive system and, like the mints, can be both a stimulant and an analgesic. All essential oils of this family impact the base chakra and the core of our beings. These oils are extremely potent and should always be used sparingly or in a blend with other mild or stabilizing essential oils..

Betulaceae: Birch is the only oil of this family that is produced in quantity. Birch is strongly analgesic, and has excellent diuretic and lymph cleansing and draining properties. Wintergreen oil is quite similar to birch as far as constituents go, although the amounts of the individual components vary a great deal. Birch and wintergreen, although from different species, contain large amounts of methyl salicylate. This ingredient is considered by many 'experts' to be toxic. (Please see the General Information section in the description of birch essential oil in Chapter 14 of this booklet for more information about the safety of oils containing methyl salicylate. There are many rumors and falsehoods in print. If the essential oil has been made from actual plants and no chemically produced methyl salicylate has been added, both birch and wintergreen are safe to use).

Rosaceae: Rose essential oil has the highest frequency of any of the oils. Growing conditions and the type of roses used affect the finished essential oil in many ways. Rose essential is often diluted or adulterated because of the expense involved in its production. The essential oil that is the result of this adulteration does not have the expected high frequency of rose and is, of course, not as therapeutic as it should be. It is much better to buy a little bit of pure rose oil, and use it sparingly, than to use an adulterated or diluted version. A single drop of rose oil in a carrier is all that you will need for most applications. The frequency of rose and its amazing volatility makes the aroma alone highly therapeutic. Rose oil is specific to the female reproductive system and the heart chakra, although the high frequency of this oil raises the overall frequency of every body system and function.

Santalaceae: In the world of essential oils, this family is represented by the various species of sandalwood. Sandalwood (*Santalum album*) is considered sacred in India. Sandalwood essential oil contains a high percentage of sesquiterpenes, which cross the blood/brain barrier, carrying oxygen and nutrients to the brain. Sesquiterpene rich essential oils such as sandalwood are also said to go into the DNA of the cell and unlock emotional trauma. Sandalwood is a very ‘warm’ oil. It is loved by most people because it opens the mind and heart to feelings of contentment and well-being. Breathe sandalwood in deeply and, if it is a good one, you will feel the center of the chest (solar plexus chakra) open immediately and expand emotionally. A wonderful oil! Only patchouli and cedarwood essential oils have a higher percentage of sesquiterpenes than sandalwood oil. Frankincense, which is the best known of the essential oils for its sesquiterpene content and the therapeutic properties that are the result, actually has a much lower percent of sequiterpenes than sandalwood.

Lauraceae: The essential oils distilled from the lauracea family includes cassia, cinnamon, cinnamon berry, howood, laurel, ravensara, rosewood, sugandha kokila, and tamala. The plants of this species are widely divergent but a common theme among them seems to be their anti-fungal properties. Though members of the same botanical family, cinnamon and rosewood are, in more than just aroma, very dissimilar. Cinnamon is one of the oldest spices of which we have recorded use and has been renowned for centuries for its medicinal value. Cinnamon oil is a stimulant to circulatory, cardiac and pulmonary functions. Rosewood, on the other side of the scale in this family, does not have any dramatic curative powers, but its mildness and safety to use make it useful in skin or body care. Rosewood, rather than being slightly caustic to skin and mucous membranes, is valued for its tissue regeneration properties. It is even said to slow the aging process when applied to the skin.

Anonaceae: The only essential oil that I know of from this family is ylang-ylang. Ylang ylang means, literally, ‘flower of flowers.’ The oil is distilled from the beautiful yellow flowers. This is a very delicate process. When purchasing, you will note that there are many gradients listed. The ‘complete’ is considered most therapeutic, although some of the other fine grades are very good. Ylang ylang is one of the best oils for balancing the male-female energies of the body but is not considered hormonal in a way that is balancing and harmonious. (See ylang ylang in the single oil descriptions in Chapter 14.)

Valerianaceae: The essential oils of valerian and spikenard represent this family. Oils in this family are calming and strengthening to the nervous system. They have a positive effect on the root and base chakras, making them effective for intestinal and reproductive issues. These two oils help us meet our emotional needs by calming the fears that reside in the root and base chakras. We can see more clearly and accept more openly the kindness, love, and respect of those around us.

Piperaceae: There are over 3,000 species in the pepper family, but only the *Piper nigrum* is used in essential oil production. The differences in green pepper and black pepper essential oil is brought about by the difference in harvest times. One is harvested when the berries are green and the other when the berries have ripened and turned black. Both are stimulating to the system and balance the yang energies, particularly those affecting the heart. *Piper nigrum* addresses the cores issues of feeling sufficiently strong within ourselves to reach out and bless the lives of others.

Ericaceae: This family is typically represented by wintergreen, benzoin, and ledum essential oils. There is a newcomer from Nepal, *Rhododendron anthopogon* (commonly called just anthopogon). The theme of this family seems to be resistance to disease and environmental pollutants and increased strength in the entire system. Perhaps this can be attributed to an affinity for the base and crown chakras. It is as though they strengthen the energetic connections between these two chakras, aiding energy flow up and down through the body. Essential oils from this family are high in sesquiterpenes and help break down fat in the liver. They are very supportive of the fire element (meridians #5 and #6).

Fabaceae (also call Leguminosae): The fabaceae is the third largest family of flowering plants on our planet with nearly 20,000 species. Many of these species are nutritionally, therapeutically, and economically important to mankind. There are a great many medicinal plants in this family. There is an astonishing variability in the plants from which essential oils are distilled. The various balsams, fenugreek, and cabreuva are representative of this variety in plant structure and therapeutic uses.

Oleaceae: In the essential oil world this family is represented by the jasmines and osmanthus. This family of plants includes many species that are recognized for their heady fragrances. This family also includes the olive and plants that are renowned for their tough woods.

Verbenaceae: Chaste tree essential oil is a member of this family. The theme of this family is rich personal experiences and relationships. There is a strong focus on the building or rebuilding of nerves and hormone balance.

Acoraceae: Calamus essential oil has been classified as belonging to the Araceae family, but recent studies have led to the conclusion that it should be placed in its own family. Although not all experts agree, many now list calamus as belonging to the Acoraceae family which is composed of a single genus called *Acorus*. Only *Acorus calamus* and one or two other species of *Acorus* are included in the genus. It is claimed that calamus will keep people young and improve their overall health. This oil is new to the market and it is very strong, so care should be taken with its use.

Lilliceae: This family includes everything from onions and garlic through asparagus and hyacinths. Garlic and onion are the most common essential oils in use from this family.

Orchidaceae: This family is the second largest among flowering plants, but vanilla is the only commonly used essential oil.

Cistaceae: This small family of plants is known for its ability to regrow rapidly after a wildfire has destroyed its natural habitat. This ability is reflected in the ability of cistus essential oil (a member of this plant family) to aid us in rebuilding and reconnecting emotionally after traumatic events or losses.

Clusiaceae: Two common genera of this family are *Hypericum* and *Caulophyllum*. Some members of these genera live as long as 50 years. This vitality and longevity seem to be such a part of the species that these aspects are found in the essential oil. St. John's Wort is a member of the *Hypericum* portion of this family.