

THE SCIENCE OF ESSENTIAL OILS AND MAKING THE PERFECT DIYS

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What is an Essential Oil?

Essential oils are concentrated plant extracts from a wide variety of plant materials. Essential oils can come from leaves, stems, and twigs; flowers and flower buds, fruit or peels; wood or bark; resins, oleoresins, or gums; roots, rhizomes, or bulbs; seeds, kernels, or nuts.

In traditional 5-element aromatherapy practices, essential oils are considered the spirit or ether of the plant, and it relates to fire (sunlight), air (sky), earth (soil), and water (rain).

How do we obtain essential oils?

Steam distillation, resin tapping, solvent extractions, or cold pressing.

Aromas Vary

From light, mild, medium, strong, and very strong.

Creating Perfect DIYS

There are three different theories on how to blend essential oils together, and additional theories on how to select carrier oils.

Blending by Botanical Family

When we classify living organisms, we describe from Kingdom, Phylum, Class, Order, Family, Genus and Species.

Humans are classified as follows:

Kingdom: Animalia

Phylum: Chordata

Class: Mammalia

Order: Primata

Family: Hominidae

Genus: Homo

Species: Sapiens

Plants can also be divided in this way, but they weren't always. Originally they were designated by simple intuitive categories, then by scientific studies. However, there were dozens of botanists naming the same botanicals without any logical system. The system of designating botanical families was modernized by Carl Linnaeus in the mid-1700s. He developed a system that became the basis of the International Code of Botanical Nomenclature. This became the system for naming all botanicals



into families. Essential oils from the same botanical family tend to blend well together, and blending based on family is the first theory that we have on how to create the perfect DIYs.

MAJOR ESSENTIAL OIL BOTANICAL FAMILIES

All of these oils blend well together, and below the list are some essential oils that work particularly well together.

1. Annonaceae: cananga, ylang-ylang
2. Apiaceae: angelica, anise, caraway, carrot, celery, coriander, cumin, dill, fennel, galbanum, lovage, parsley
3. Asteraceae: chamomile, helichrysum, tarragon, yarrow
4. Burseraceae: elemi, frankincense, myrrh
5. Cupressaceae: cedarwood, cypress, juniper
6. Lamiaceae: basil, clary sage, hyssop, lavender, lemon balm, marjoram, oregano, patchouli, peppermint, rosemary, sage, spearmint
7. Lauraceae: bay, camphor, cassia, cinnamon
8. Myrtaceae: clove, eucalyptus, myrtle, niaouli, tea tree
9. Myristicaceae: nutmeg
10. Oleaceae: jasmine
11. Pinaceae: fir, pine, spruce
12. Piperaceae: black pepper
13. Poaceae: citronella, lemongrass, palmarosa, vetiver
14. Rosaceae: rose
15. Rutaceae: bergamot, grapefruit, lemon, lime, mandarin, neroli, orange, petitgrain
16. Santalaceae: sandalwood
17. Styracaceae: onycha
18. Valerianaceae: spikenard, valerian
19. Zingiberaceae: cardamom, ginger, tarragon

MAJOR BOTANICAL GROUPS AND HOW TO COMBINE

Apiaceae: Includes many different vegetables, herbs, and spices. These plants symbolize cycles and renewals. A couple signature combinations include: angelica and coriander, carrot and cumin, dill and coriander, celery and coriander.

Asteraceae: These plants give the power of attraction. Chamomile tends to blend especially well with all the others.

Lamiaceae: Plants in this family are particularly good at helping people deal with change and for increasing vitality. Here are a couple of examples that work particularly well together: basil and spearmint, clary sage and patchouli, lavender and peppermint, marjoram and thyme, rosemary and oregano, thyme and lemon balm.

Rutaceae: These botanicals are great for confidence, strength, and well-being. A couple combinations that work particularly well together: bergamot and petitgrain, grapefruit and lime, lemon and neroli, orange and lime.

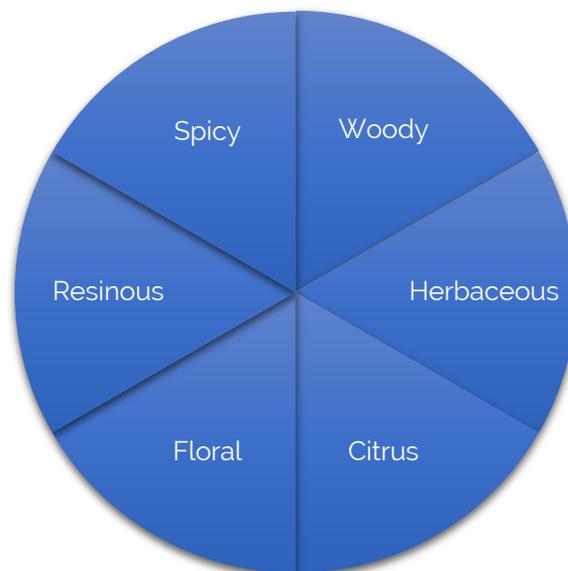


Pinales: The oils in this family are for growth, healing, protection, and the ability to connect with the divine. Here are some of the best combinations from this group: cedarwood and cypress, balsam fir and juniper, pine and spruce.

Blending by Scent Group

Carl Linnaeus designated the nomenclature of botanicals, but the way that he described the aroma of the oil was medicinal. In the early 1900s, Hans Henning created the smell prism of six principal odors. Then In 1927, Ernest Crocker and Lloyd Henderson related odors to the four primary types of olfactory nerves.

From here, aromatherapist and author Julia Lawless created the scent group circle.

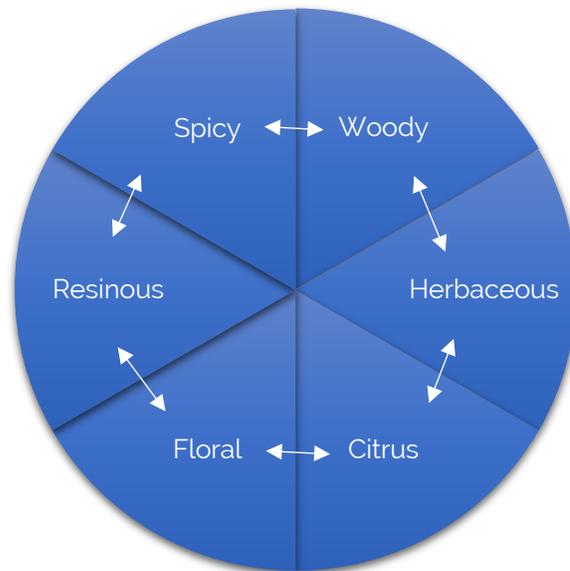


SCENT GROUPS

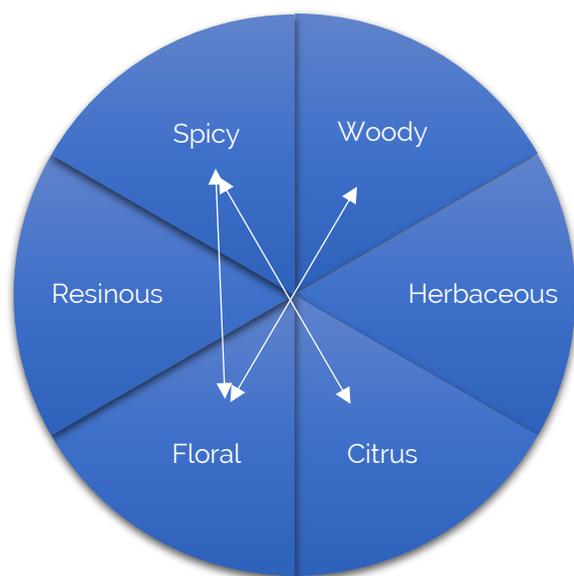
1. Woody: cedarwood, cypress, eucalyptus, fir, juniper, patchouli, pine, sandalwood, spikenard, spruce, valerian, vetiver
2. Herbaceous: angelica, basil, carrot, citronella, clary sage, helichrysum, hyssop, lavender, marjoram, niaouli, oregano, peppermint, rosemary, sage, savory, spearmint, tea tree, thyme, yarrow
3. Citrus: bergamot, grapefruit, lemon, lemon balm, lemongrass, lime, mandarin, orange
4. Floral: chamomile, geranium, jasmine, lavender, neroli, palmarosa, rose, ylang ylang
5. Resinous: frankincense, myrrh, onycha
6. Spicy: caraway, cardamom, celery, cassia, cinnamon, clove, coriander, cumin, dill, elemi, fennel, ginger, myrtle

There are Three Ways to Blend by Scent Group

1. **Single-Group Blending:** When blending in this way, select three oils all from the same scent group. You can select more, but the aromas can get muddled if you do. Two oils usually do not give enough variety in chemical constituents to make a big impact.
2. **Good-Neighbor Blending:** When you blend based on neighboring groups, you select three oils from two groups that are side by side. This is simply a starting point, and from there you can play around with blending spicy, woody and herbaceous or floral, resinous, and spicy, etc.



3. **Opposite Group Blending:** Opposite group blending isn't as straightforward as it sounds because not all opposites work exceptionally well together, and some groups that are opposites tend to work really well together. For example, resinous and herbaceous are not thought to work well together even though they are opposites. Conversely, spicy and floral do work well together even though they are not opposites.



Here are a few potential blends that show how blending by scent groups can work effectively.

Woody Scent	Within Group	Neighboring Group		Opposite-Group
		Spicy	Herbaceous	Floral
Balsam Fir	Cedarwood, Cypress, Juniper	Tarragon	Lavender	Lavender
Sandalwood	Patchouli, Vetiver	Clover, Black Pepper	Clary Sage	Jasmine, Palmarosa, Lavender

Herbaceous Scent	Within Group	Neighboring Groups	
		Woody	Citrus
Basil	Citronella, Spearmint	Juniper	Bergamot, Lime
Peppermint	Marjoram	Eucalyptus	Lemon

Citrus Scent	Within Group	Neighboring Group		Opposite-Group
		Herbaceous	Floral	Spicy
Lemon	Lemongrass, Lime	Sage	Lavender, Rose	Elemi, Fennel
Orange	Lemon, Lime	Labdanum	Lavender, Neroli	Cinnamon, Clove, Dill, Neroli

Blending by Perfume Note

In the mid-1800s, GW Septimus Piesse devised a method for classifying scents according to musical scales, based on his belief that the brain links sound and smell. According to this method, he created what he called harmonious scents. The system was complicated and was ultimately simplified by chemist William Arthur Poucher into just three notes. He called these notes top, middle and base.

The top note is the aroma that is first detected by the nose but rapidly evaporates. It can be detected on the skin within 10 minutes of applying perfume. The middle note is the heart, or modifier, and it is usually detected between 10-45 minutes after applying perfume. It can last on the skin for several hours or even days. The base note, or fixative, is the anchor of the aroma, and it holds the fragrance together. Working together, the top note introduces the scent, while the middle note and the base note create the core of the aroma.

This theory has since evolved as not every oil fits into just one category. Below is a table describing a few essential oils as top, middle to top, middle, middle to base, and base. When you begin blending in this way, you can easily start with three different oils.

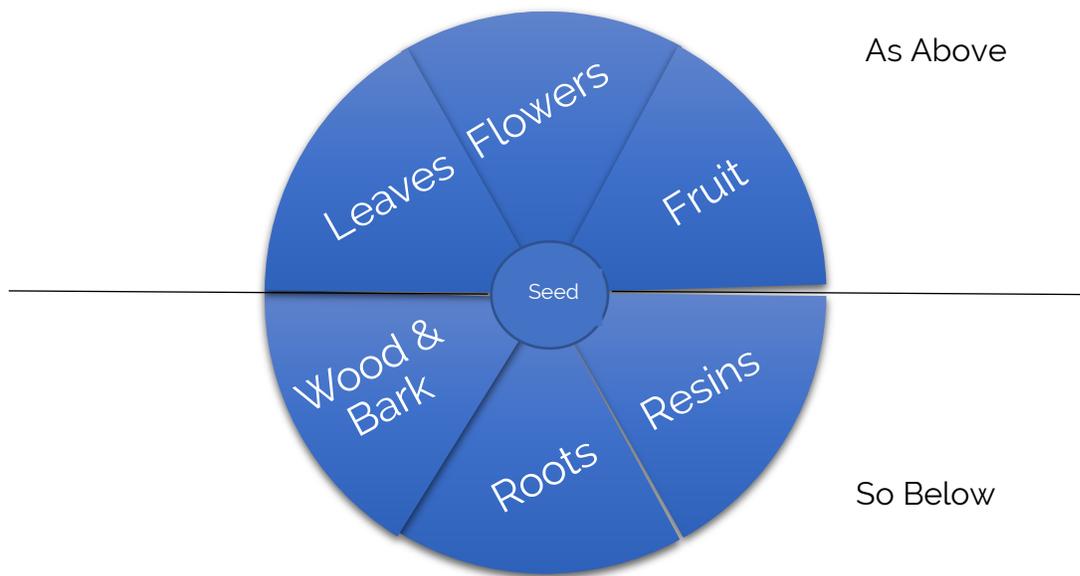
Top	Middle to Top	Middle	Middle to Base	Base
Bergamot	Basil	Caraway	Onycha	Frankincense
Lemon	Celery	Clove	Cypress	Patchouli
Peppermint	Lemongrass	Fennel	Pepper	Sandalwood
Petitgrain	Pine	Ginger	Rose	Vetiver

Oils that Combine Well According to Perfume Note				
Top	Middle to Top	Middle	Middle to Base	Base
Bergamot	Angelica	Geranium	Cedarwood	Patchouli
Lemon	Pine	Marjoram	Cypress	Sandalwood
Peppermint	Tea tree	Fir	Cedarwood	

As Above, So Below

Medieval herbalists believed different parts of the plant serve different purposes. Roots keep our energy grounded and give our work stability. Wood and bark represent the middle and center, give us balance, help us grow, and provide protection. Resins represent life-giving blood and vitality, and provide control and the power to heal. Leaves symbolize growth and expansion and can be used for meditation. Flowers represent beauty, fertility, and sexuality. Fruits represent completion, culmination, and abundance. Seeds and nuts represent the beginnings of things and can encourage growth and change.





From here there are a couple of different ways to blend essential oils together. You can use oils of the same plant part, use oils of multiple plant parts from either the As Above or So Below group, or balance several oils from both groups.

This methodology can also be applied to carrier oils, with avocado, jojoba, and olive oil being As Above oils; and almond, apricot, flax, grapeseed, sesame, and sunflower oils being So Below oils.