



DIVINE SCENTS
aromatherapy

SPECIALIZING IN THE SCIENCE OF AROMATHERAPY

Aromatherapy = Use of aromas for their healing properties.

Aromatherapy is the educated use of essential oils to promote health - wellness of the mind, body and spirit.

Divine Scents – Bethany Unger

<https://www.divinescentsaromatherapy.com>

What Is an Essential Oil?

Essential oils are extracted from a flower, plant or tree.
The components that make up an essential oil are already in the plant.

Essential oils can come from many different parts of the plant, and each part is specific to a particular oil. For example, rose essential oil comes from the rose petals, lemon is produced from the peel, juniper is produced from the berries, valerian from a root, and cinnamon from the leaf or bark.

The key factors of the qualities of an essential oil include: the time of day and time of year the plant material is harvested, the region of the world as well as the temperature of the region. Each of these factors plays a very important part in producing an oil that renders the desired chemistry so it will have therapeutic/functional impact.

How are essential oils extracted? The methods used include distillation, expression (also referred to as cold pressed), solvent/absolute extraction, CO₂ extraction, maceration and effleurage.

Essential oils are very concentrated. Example - Did you know it takes approximately 2,000 rose petals to make 1 lb. of rose essential oil?



Distillation: The process of passing steam through plant material.

1. Load plant material into the still, usually copper or stainless steel
2. Steam or water/steam passes through the still.
3. The steam breaks down the plant material and removes the components of the plant in the form of vapor.
4. Oil and water vapor move to the still's condenser, where the steam changes back to water or oil droplets.
5. The water and oil separate. Most often, but not always, the oils sits on the surface.
6. Oil is captured by pouring the water off, leaving the essential oil.



Like the tree VOCs (volatile organic compounds) that are mentioned in *Lab Girl*, essential oils are also volatile. This means that essential oils can evaporate and easily turn into vapor. The vapor of the oil when released into the air travels as molecules.

These molecules travel to your nose. From the minute an aroma hits your nose, there is a process that occurs. In this process, there are four key concepts that are important to understand: Detect, Transmit, Perceive and Analyze.

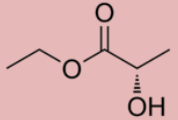
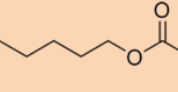
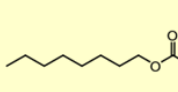
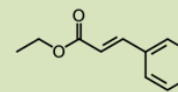
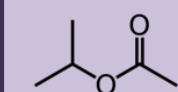
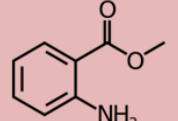
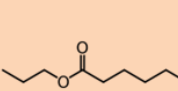
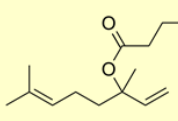
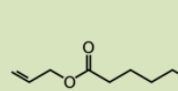
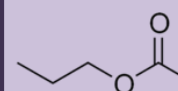
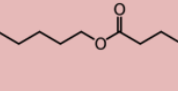
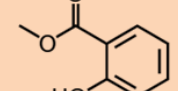
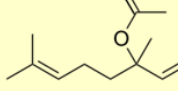
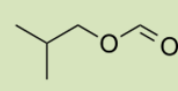
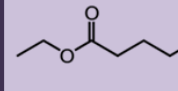
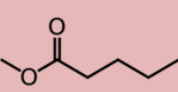
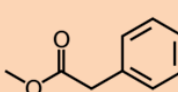
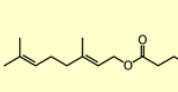
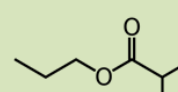
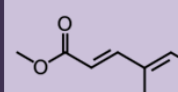
DETECT: Essential oil molecules travel up the nose into the nasal cavity, where they come into contact with chemoreceptors. When an odor molecule stimulates a chemoreceptor, changes to your brain occur.

TRANSMIT: The change to your brain is caused by a nerve impulse that creates a signal (known as an aroma print) that travels to the olfactory bulb.

PERCEIVED & ANALYZED: The aroma print travels to other parts of the brain for perception, analysis, storage in memory and emotional response.



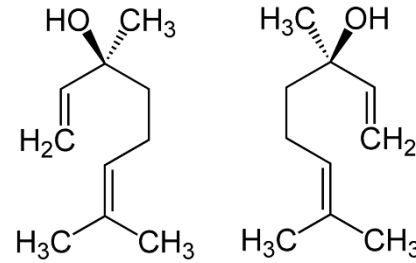
The essential oils that result from this process contain many individual chemical components. While these components are specific to each plant, there are certain characteristics/molecular structures that are often found in certain groups of plants. These structures are important because they allow each oil to be categorized based on its function (or therapeutic property). An example of these structures would be esters, alcohols and terpenes.

<h2 style="text-align: center;">Flavor & Scent</h2> <p style="text-align: center;"><i>The Esters Responsible</i></p>				
Buttery <i>Ethyl Lactate</i> 	Banana <i>Amyl Acetate</i> 	Citrus <i>Octyl Acetate</i> 	Cinnamon <i>Ethyl Cinnamate</i> 	Fruity <i>Isopropyl Acetate</i> 
Grape <i>Methyl Anthranilate</i> 	Blackberry <i>Propyl Hexanoate</i> 	Peach <i>Linalyl Butyrate</i> 	Pineapple <i>Allyl Hexanoate</i> 	Pear <i>Propyl Acetate</i> 
Apricot <i>Amyl Butyrate</i> 	Wintergreen <i>Methyl Salicylate</i> 	Lavender <i>Linalyl Acetate</i> 	Raspberry <i>Isobutyl Formate</i> 	Apple <i>Ethyl Pentanoate</i> 
Flowery <i>Methyl Pentanoate</i> 	Honey <i>Methyl Phenylacetate</i> 	Cherry <i>Geranyl Butyrate</i> 	Rum <i>Propyl Isobutyrate</i> 	Strawberry <i>Methyl Cinnamate</i> 

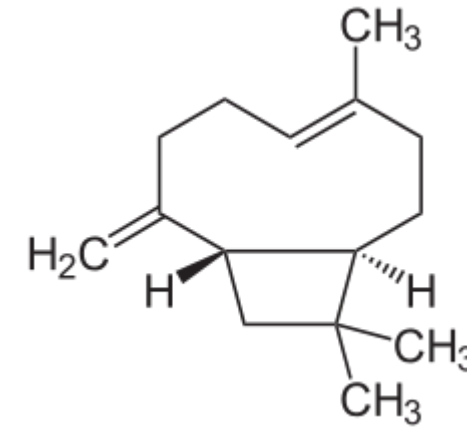
derekcarrsavvy-chemist.blogspot.com

(Using the image to the right.) If you were able to look inside the essential oil Coriander seed, you would see structures like Linalool and Pinene, floating around; or perhaps Thyme, which contains Caryophyllene and Carvacrol in its composition.

Linalool

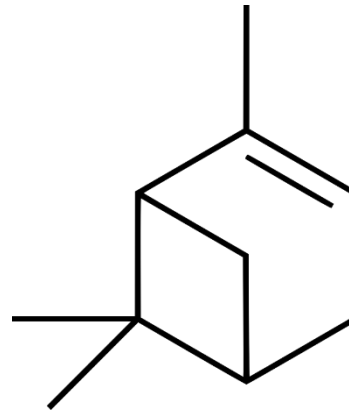


Caryophyllene

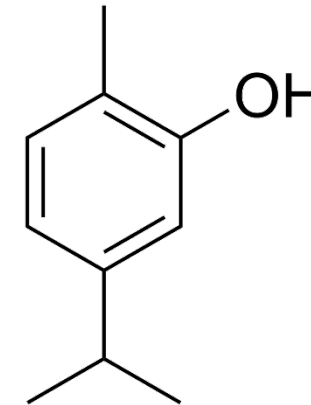


Essential oils are just made up of a bunch of structures. If you understand these structures, you can understand the functions of your oil.

Take Terpenes/Terpenoids, for example. They are known for anti-inflammatory, antiseptic, antiviral and bactericidal therapeutic actions. This then tells you how you should use your oil.



Pinene



Carvacrol

Wikipedia

Lavender - made from the distilled flowers.

Analgesic, antidepressant, anti-inflammatory, antibacterial,

Uses: skin healing, sedative

Bergamot - obtained by expression from the fruit peel

Antidepressant, deodorant, anti-viral, anti-inflammatory

Uses: mood support

Sandalwood - obtained by distilling the root and heartwood of the sandal tree

Antidepressant, antifungal, sedative

Uses: stress, tension, insomnia, infection



Dilution

Essential oils should always be diluted. You can use jojoba oil, vegetable oil or something like apricot or almond oil. For whole body lotions and massage oils, essential oils can be used at 1-3%; facial applications 0.5-1%; Pain or wounds 5-15%. Children and the elderly should use much less 0.5-1%. If pregnant or taking medications, you need to be particularly careful since essential oils can interfere with the metabolism of some drugs. It is not recommended to use essential oils with children under 2. There are a few exceptions, like rose. Hydrosols are a better avenue for children under 2 years of age.

Eyes

Never put EOs in the eye. What to do if: (1) you get an EO in your eye by accident (2) EO irritates or burns the skin? Use milk to flush or wash it off. Water can make it worse. The fat from the milk will soothe the irritation.

Allergic Reactions

Allergic reactions can sometimes happen. An allergic reaction could range from mild redness of the skin, red and slightly thickened skin, red and swollen skin and water blisters to intense swelling, redness and large blisters. If any of these symptoms occur, discontinue use of the essential oil that is causing the reaction.

Diffusion

A cold air diffuser should be used. Never use heat with oils since they are volatile. The oil will evaporate and/or break down under heat. The benefits you will get from the oil will be less than with a cold air diffuser. Many are on the market. I recommend one that has a timer so that you can regulate how much you are diffusing.

Symptoms that may indicate you are diffusing too much: Headache, nausea, dizziness, shortness of breath. If this happens, move to an area with fresh air.

Diffusing all day, every day is not recommended. When you inhale an essential oil, as much as 70% can be absorbed. That is a lot of essential oil to adsorb into your body. If you are diffusing a lot, you are exposing yourself to a higher chance of sensitization. EOs filter themselves through the liver and kidney, and you could be unnecessarily taxing your organs by overexposure. Recommended diffusing times: 3-4 hours a day, 30-40 minute intervals.

Photosensitivity

EOs can cause photosensitivity, meaning that you should be extra careful when exposed to UV or sunlight. Diffusing EOs will not cause photo-sensitivity, but topical application may. Citrus EOs, such as **pressed** lemon, lime, grapefruit and bergamot oil can cause sensitivity to the sun if applied to the skin.

If using one of these oils, do not expose the area to the sun for 12 to 24 hours. Make sure to cover the area where the EO was applied to so that it is not exposed to sun or UV. (Could cause sunburn.) This is especially important for people on medications that also cause sensitivity to the sun.

Nomenclature for Essential Oils

Make sure that you use the correct Latin name when buying the essential oil. For example, lavender is known as *Lavendula angustifolia (officinalis)*. Do not mistake this with *lavendula abrialis*, which is lavandin and has very different properties from lavender.

Buying Essential Oils

Where should you buy your EOs. When making your decision, the two most important qualifications are these: (1) They should be organic, unsprayed or wild crafted and (2) They should be a very high-quality grade. EOs are very concentrated, and if they are not organic or unsprayed, then you are getting concentrated pesticide with it. High-quality grade is important because some companies will put additives into their oils, thus diluting the oil and reducing the effectiveness of the oil. Some companies publish their testing results on their websites. This is a great way to know that your oils contain what they are supposed to.

Storage of Essential Oils

Always store oils in a cool, dark place, away from humidity. Citrus oils should be stored in the fridge. If at all possible, store all essential oils in the fridge.



Resources

Books

Essential Oil Safety by Robert Tisserand and Rodney Young

Websites

<http://www.usingeosafely.com/>

<http://www.aromaweb.com/>

<http://tisserandinstitute.org/>

<https://essentialoils.org/research>

Aromatherapy Organizations

NCCIH - National Center for Complementary and Integrative Health

NAHA - National Association for Holistic Aromatherapy

AIA - Alliance of International Aromatherapists

Databases on Adverse Effects of Aromatherapy

<http://aromatherapyunited.org/injury-reports/injury-reports-2016/>

<http://tisserandinstitute.org/safety/adverse-reaction-database/>



Restful Roll-On Blend

7 drops Sweet Orange – Used for depression; emotionally uplifting

3 drops Ylang Ylang – Used for depression, melancholy, stress and insomnia

Do not use if pregnant or breastfeeding. Do not use on children under 2 years of age. Do not use on damaged or diseased skin.

Maximum dermal = 0.8%.

3 drops Patchouli – Used for depression and anxiety; emotionally balancing

Do not use in cases of anorexia. May inhibit blood clotting. May have potential drug interactions.

1 drop Clary Sage – Used for lack of energy, nervous exhaustion, migraine, nervousness, muscle aches

Do not use if pregnant or in cases of low blood pressure, endometriosis, estrogen-dependent cancer and epilepsy.

**Combine with 10 mls of apricot kernel oil or other desired carrier oil