



Aromatherapy Everyday Basics

Essential Oil Tips and Recipes for
Health and Wellness



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Introduction

The therapeutic properties of plant oils have long been used to support optimal health and wellness, including to balance emotions, disinfect, and create pleasing environments. Today, the practice of aromatherapy is becoming more popular than ever—in the mainstream medical community and in the holistic health community.

This eBook will guide you through key topics in aromatherapy.

You will learn...

- The best essential oils for everyday use
- Essential information on safety and quality
- How to integrate aromatherapy into your everyday holistic wellness practices

Essential oils can enrich and invigorate your wellness routine. We hope you enjoy this eBook exploration into how you can start using essential oils in your life.

Warm wishes,

ACHS Staff



Section 1

Aromatherapy Terms to Know

Dorene Petersen

Aromatherapy Terms to Know

By Dorene Petersen



If you're an aromatherapy novice, it can sometimes be overwhelming to read essential oil descriptions like, "Yarrow essential oil is a wonderful aperient!" or "Eucalyptus can be used as a febrifuge."

It takes an aromatherapist years of education and practice to memorize the many therapeutic actions terms associated with aromatherapy. This scientific language can leave a lot of beginners scratching their heads and very confused about the actual functions of essential oils.

While there are hundreds of terms Registered Aromatherapists use to describe the therapeutic actions of herbs and essential oils, here's a list of 20 aromatherapy terms we think you need to know to choose the right essential oils for you, whether you are starting to work towards becoming a Certified Aromatherapist or you're just using essential oils for yourself and family.

1. Anodyne (an'o-dine)

Essential oil used to soothe pain when applied externally, also called analgesic: **Chamomile** *Chamaemelum nobile* (L.) All., **yarrow** *Achillea millefolium* (L.), and **peppermint** *Mentha x piperita* (L.).

2. Anticatarrhal (an" te-kah-tar'al)

Essential oil used to heal inflammation of the mucous membranes: **Pine** *Pinus sylvestris* (L.), **thyme** *Thymus vulgaris* (L.), and **yarrow** *A. millefolium*.

3. Antiemetics (an"te-e-met'ik)

Essential oil used to lessen nausea and ease vomiting: **Basil** *Ocimum basilicum* (L.), **clove bud** *Syzygium aromaticum* (L.), **fennel** *Foeniculum vulgare* (Hill), **ginger** *Zingiber officinale* (Roscoe), **lavender** *Lavandula angustifolia* (Mill.), and **peppermint** *M x piperita*.

4. Antibacterial (an"te-bak-ter're-al)

An essential oil that destroys or suppresses the growth or reproduction of bacteria: **Anise** *Pimpinella anisum* (L.), **bay** *Laurus nobilis* (L.), **benzoin** *Styrax benzoin* (Dryand.), **bergamot** *Citrus aurantium* (L.) var. *bergamia*, **black pepper** *Piper nigrum* (L.), and **cajuput** *Melaleuca leucadendron* (L.) var. *cajuputi*.

5. Antimicrobial: (an"te-mi-kro'be-al)

Essential oil capable of destroying micro-organisms or suppressing their multiplication or growth: **Black pepper** *P. nigrum*, **cajuput** *M. leucadendron* var. *cajuputi*, **tea tree** *Melaleuca alternifolia* (Cheel) and *Leptospermum scoparium* (Forst.) (Australia and New Zealand), and **thyme** *T. vulgaris*.

6. Antipruritic (an"te-pru-rit'ik)

Essential oil that soothes itching: **Chamomile** *C. nobile*, **geranium** *Pelargonium graveolens* (L'Her.), **lavender** *L. angustifolia*, and **yarrow** *A. millefolium*.

7. Antispasmodic (an"te-spaz-mod'ik)

Essential oil used to calm nervous irritability and reduce excessive involuntary muscular contractions and spasms: **Anise** *P. anisum*, **basil** *O. basilicum*, **bergamot** *C. aurantium* var. *bergamia*, **black pepper** *P. nigrum*, **cajuput** *M. leucadendron* var. *cajuputi*, **clove bud** *S. aromaticum*, **cypress** *Cupressus sempervirens* (L.), **fennel** *F. vulgare*, **garlic** *Allium sativum* (L.), **lavender** *L. angustifolia*, **marjoram** *O. majorana*, **peppermint** *M. x Piperita*, and **thyme** *T. vulgaris*.

8. Aperient (a-per're-ent)

Essential oil used as a mild evacuant or laxative to the bowels. (Also known as a Laxative): **Bergamot** *C. aurantium* var. *bergamia*, **black pepper** *P. nigrum*, **fennel** *F. vulgare*, **lemon** *Citrus limonum* (Risso), **marjoram** *O. majorana*, **nutmeg** *M. fragrans*, and **yarrow** *A. millefolium*.

9. Bitters (bit'ertz)

Essential oil with a bitter taste and serves as a stimulant to the gastro-intestinal membranes: **Black pepper** *P. nigrum*, **ginger** *Z. officinale*, and **yarrow** *A. millefolium*.

10. Carminative (kar-min'ah-tiv)

Essential oil, which stimulates intestinal peristalsis, soothes and promotes the expulsion of gas from the gastrointestinal tract: **Anise** *P. anisum*, **basil** *O. basilicum*, **benzoin** *S. benzoin*, **bergamot** *C. aurantium* var. *bergamia*, **black pepper** *P. nigrum*, **cajuput** *M. leucadendron* var. *cajuputi*, **cinnamon** *Cinnamomum zeylanicum* (Blume), **coriander** *Coriandrum sativum* (L.), **fennel** *F. vulgare*, **garlic** *A. sativum*, **lemon** *C. limonum*, **marjoram** *O. majorana*, **peppermint** *M. x Piperita*, **rosemary** *Rosmarinus officinalis* (L.), **thyme** *T. vulgaris*, and **yarrow** *A. millefolium*.

11. Cell Proliferant (selpro-lif'-er-ant)

Essential oil that promotes rapid restoration: **Lavender** *L. angustifolia*.

12. Cephalic (sef'al-ic)

Essential oil that is particularly helpful for cerebral conditions and diseases: **Basil** *O. basilicum*, **clary sage** *S. sclarea*, **garlic** *A. sativum*, **juniper berry** *Juniperus communis* (L.), and **rosemary** *R. officinalis*.

13. Depurative (dep'u-ra'tiv)

Essential oil that cleanses and purifies: **Eucalyptus** *Eucalyptus globulus* (Labill.), **fennel** *F. vulgare*, and **garlic** *A. sativum*.

14. Diaphoretic (di"ah-fo-ret'ik)

Essential oil that produces perspiration and sweat, as well as increased elimination through the skin. Differs from Sudorifics: **Basil** *O. basilicum*, **black pepper** *P. nigrum*, **cajuput** *M. leucadendron* var. *cajuputi*, **rosemary** *R. officinalis*, **thyme** *T. vulgaris*, and **yarrow** *A. millefolium*.

15. Febrifuge (feb'-ri-fuj)

Essential oil that reduces fever. (Also called Antipyretic): **Basil** *O. basilicum*, **bergamot** *C. aurantium* var. *bergamia*, **black pepper** *P. nigrum*, **cajuput** *M. leucadendron* var. *cajuputi*, **cedarwood** *Cedrus atlantica* (G.Manetti), **chamomile** *C. nobile*, **eucalyptus** *E. globulus*, **lavender** *L. angustifolia*, **thyme** *T. vulgaris*, and **yarrow** *A. millefolium*.

16. Hypnotic (hip-not'ik)

Essential oil that is a powerful relaxant and can induce sleep: **Chamomile** *C. nobile*

17. Pectoral (pek'to-ral)

Essential oil that soothes complaints of the lungs: **Cedarwood** *C. atlantica*, **eucalyptus** *E. globulus*, **marjoram** *O. majorana*, **peppermint** *M. xperita*, and **yarrow** *A. millefolium*.

18. Styptic (stip'tik)

Essential oil that stops local bleeding and hemorrhaging, applied externally: **Benzoin** *S. benzoin*, **bergamot** *C. aurantium* var. *bergamia*, **geranium** *P. graveolens*, and **yarrow** *A. millefolium*.

19. Tonic (ton'ik)

Essential oil, which stimulates, energizes, and strengthens the body: **Basil** *O. basilicum*, **bergamot** *C. aurantium* var. *bergamia*, **black pepper** *P. nigrum*, **cajuput** *M. leucadendron* var. *cajuputi*, **thyme** *T. vulgaris*, and **yarrow** *A. millefolium*.

20. Vulnerary (vul'ner-er''e)

Essential oil that promotes normal restoration of fresh cuts or wounds: **Benzoin** *S. benzoin*, **bergamot** *C. aurantium* var. *bergamia*, **cajuput** *M. leucadendron* var. *cajuputi*, **chamomile** *C. nobile*, **clove bud** *S. aromaticum*, **eucalyptus** *E. globulus*, **garlic** *A. sativum*, **geranium** *P. graveolens*, **juniper berry** *J. communis*, **lavender** *L. angustifolia*, **rosemary** *R. officinalis*, and **thyme** *T. vulgaris*.

There are numerous other terms to learn when [choosing which oils to use](#), but with this list of 20, you're sure to start off on the right foot! We hope this helps you make informed decisions when shopping for essential oils for therapeutic use.

Section 2

Blending 101: Pairing Essential Oils

Dorene Petersen

Blending 101: Pairing Essential Oils

By Dorene Petersen



It's well-known that we're all wired so aromas trigger emotions and memories. In fact, the postage stamp-sized olfactory lobe, which is in charge of smell, is also part of the limbic system, which manages emotions and long-term memories. Imagine drifting off in a cloud of aromatic nostalgic happiness while crafting a delightful personal essential oil blend. Doesn't it seem lovely?

Now, let's get started!

Blending essential oils is all about inhaling! For those of you who are brand new to essential oils and aromatherapy, one of the best ways to begin creating personal fragrances is by experimenting with combining essential oils that you love from the very first inhale.

You can then experiment with using your blends in diffusers, soaps, and room and body sprays. While this is a fun and creative process, blending essential oils is an art and science that takes a bit of skill and knowledge. It's helpful to have a few tools in your toolbox when creating your perfect essential oil blend.

With that in mind, here are some essential oil blending and aromatherapy fundamentals. To start you blending today, we're going to limit the scope of this post to essential oil blending basics. But if aromatherapy fragrance blending with essential oils is a serious topic of interest for you, there are a lot of excellent books and classes you can take, including ACHS's [AROMA 101: Introduction to Aromatherapy course](#).

Fragrance Perception

Have you ever had this conversation?:

You: Ah, I just love the scent of lavender.

Friend: Really? Lavender's not my favorite. But lilacs smell delicious!

Everyone is unique, so every person will connect with fragrances differently as each person's memories surrounding that aroma will be different. Creating aromatherapy blends is a personal and creative activity, so it's helpful to remember to start off blending essential oils that **you** love and then branch out to creating perfume blends and natural products for others.

The Song of Scent: Identifying Aromatic Notes

The first skill you'll need to develop is identifying aromas. Perfumers and aromatherapists catalog aromas into components or "notes." The language is very similar to the language of music, like the notes of a chord.

An individual essential oil can be categorized as a **top, middle, or base note**. It's important to know that oils can have components of **all three notes**, so you'll notice that each oil can have a top, middle, and base note. However, individual oils can be predominantly categorized as a single, dominant note. For example, **bergamot** *Citrus aurantium* (L.) var. *bergamia* is a top note. So when we blend, we choose oils from each category, essentially creating an aroma chord.

Each blend is composed of three main notes:

- **Top Note:** This is the first noticeable impression in a blend, and is often the characteristic feature of the oil. It springs swiftly from the aroma, has a sharp tone, and does not last long.
- **Body or Middle Note:** An essential oil that is a middle note will last for longer (about one to two hours) on a perfume testing strip. The middle note of a blend can also be referred to as the “heart” or “bouquet” of the aroma.
- **Base Note or Fixative:** The base note within a blend appears much later than the first two notes. This is the note that gives a blend staying power. The base note can appear a few hours or even a whole day after the perfume testing strip is dry. Also called the dry out note, this note helps you discern the lasting ability of your essential oil blend. Effective blends with powerful base notes help soaps maintain their fragrance. (Reminder: don't confuse base note with base oil. A base oil is a fixed oil used to dilute essential oils).

Let's Get Blending with Essential Oils

(Exercise!)

To begin, choose essential oils that you believe will create a pleasant aromatherapy blend. Go ahead and get creative! Start inhaling! Don't worry what category they fall into (top, middle, or base). Keep it simple: choose five essential oils to begin with.

Step 1

Reflect on what fragrances you naturally enjoy. This will help you choose the right essential oils for your blend. Try asking yourself questions like:

- Do I like the zest of any specific herbs and/or spices?
- Do I yearn for the smell of any specific flowers?
- Do I love crisp, green aromas (like freshly cut grass, a pine forest, or after a rainfall)?

Step 2

Perform an organoleptic test on the oils you've chosen. Place one drop of each essential oil on a perfume testing strip. Slowly draw the strip to your nose, creating circles in the air about a foot away.

It's helpful to note at what distance you begin to notice the aroma. Hold the testing strip to your nose, breathe in quickly at first, and then take a few slow, deep inhales.



Step 3

This is where you may want to start taking notes. Use any words you can to describe the images, thoughts, feelings, and sensations you experience. These could be shapes, textures, colors, sounds, emotions. Is the aroma heavy, sharp, dark, woody, loud...?

Step 4

Let the essential oil evaporate for 10 to 30 minutes. Take a moment to get some fresh air or sniff some coffee grounds to clear your olfactory senses. Next, smell your testing strip again. Notice if the aroma is heavy or light. Did the initial aroma last long? Use terms such as mossy, fruity, floral, and green to describe the fragrance. Try to identify the main trait of the note. Is it nutty, grassy, or musky?

Step 5

Let your imagination run wild. Try envisioning the fragrance as a shape. Is it square, sharp, level, rough, round, boxy, large, or tiny?

Step 6

Close your eyes and imagine the fragrance with a personality. Describe this. Is it friendly, spunky, seductive, shy, or charismatic?

Step 7

Be cognizant of your body. How do you feel physically and emotionally? Is your essential oil volatile, darting quickly up your nose and into the space between your eyes? Or has the oil traveled straight to your chest? Concentrate and take notes on where you feel the essential oil in your body and spirit.

Step 8

See if you can separate your five chosen oils into top, middle, and base notes. Ideally, you will have at least two top, two middle, and one base note.

Formulating: How to Find the Perfect Balance in Blending

Now you have your five oils, it's important to consider the aroma strength of the oils you've chosen. Remember, strength is different from evaporation rate (how quickly the aroma evaporates from the testing strip); be careful not to confuse the two.

If one aroma is very powerful, you would not want to blend equal amounts of that into a formula as it will dominate. A great example is **lavender** *Lavandula angustifolia* (Mill.) blended with **Roman chamomile** *Chamaemelum nobile* (L.) All.

Chamomile has a much stronger aroma than lavender. Therefore, you need a bit more lavender to compensate—otherwise, the chamomile will overpower the blend. To complement the aromas of *both* lavender and chamomile, you need to blend four to eight drops of lavender with one drop of chamomile.

Formulating: Choosing the Right Ratios for Your Essential Oil Blend

You can start by creating an aroma wand: a few drops of the five oils you have selected on five separate perfume strips. Create a fan with these strips in your hand so you can waft them back and forth in front of your nose all the while inhaling. This is the time to adjust your ratio based on aroma strength.

A good rule of thumb is to start by basing your formula on 100 drops to help determine the percentage of each essential oil in your blend. Of course, you can increase or decrease the formula provided you maintain the ratio. Remember there is really no right or wrong—this is your blend. If it does not turn out quite how you envisaged, don't be discouraged. Aromatic bloopers can be [useful around the house for cleaning—but that is another blog post!](#) Bottom line: nothing needs to go to waste.

While you're formulating, remember to be mindful. Stop, inhale, and let the aroma lead you to your next choice. If you have difficulty deciding on which oils might be a spice, herbal, green, floral, etc., take a break and study the fragrance description chart (below). Remember, creating a blend is not a competition or a race. Take your time, be creative, and let your senses guide you.

Essential Oil Fragrance Description Chart

(t) = Top Note, (m) = Middle Note, (b) = Base Note

Citrus

- (t) **Lemon** *Citrus limonum*
- (t) **Lime** *Citrus aurantifolia*
- (t) **Mandarin** *Citrus reticulata*
- (t) **Orange** *Citrus sinensis*
- (m/t) **Petitgrain** *Citrus aurantium*
- (t) **Bergamot** *Citrus aurantium var. bergamia*



Floral

- (m) **Geranium** *Pelargonium graveolens*
- (b/m) **Jasmine** *Jasminum grandiflorum*
- (m/t) **Lavender** *Lavandula angustifolia*
- (m/t) **Rose** *Rosa damascena*
- (b) **Ylang Ylang** *Cananga odorata var. genuina*



Green

- (m/t) **Basil** *Ocimum basilicum*
- (b) **Immortelle** *Helichrysum italicum*
- (m/t) **Bay** *Laurus nobilis*



Warm

- (t) **Anise** *Pimpinella anisum*
- (b) **Benzoin** *Styrax benzoin*
- (b) **Cedarwood** *Cedrus atlantica*
- (b/m) **Ginger** *Zingiber officinale*
- (m) **Marjoram** *Origanum majorana*



Minty

- (t) **Peppermint** *Mentha x piperita*
- (t) **Spearmint** *Mentha spicata*
- (t) **Sage** *Salvia officinalis*



Fruity

- (m) **Cajuput** *Melaleuca leucadendron*
- (m) **Juniper** *Juniperus communis*
- (m) **Pine** *Pinus sylvestris*
- (m) **Chamomile Roman** *Chamaemelum nobile*



Herbal Spice

- (m/t) **Basil** *Ocimum basilicum*
- (m) **Black Pepper** *Piper nigrum*
- (m/t) **Clove** *Syzygium aromaticum*
- (m) **Rosemary** *Rosmarinus officinalis*
- (m) **Thyme** *Thymus vulgaris*



Sultry

- (t) **Jasmine** *Jasminum grandiflorum*
- (t) **Neroli** *Citrus aurantium var. amara*
- (t) **Sandalwood** *Santalum album*
- (t) **Vetiver** *Vetiveria zizanioides*



Sample Essential Oil Blends

If you're not sure where to get started with your personal essential oil blend, try practicing with these pre-formulated essential oil recipes to get an idea of your personal preferences:

Luxurious Floral Blend:

Bergamot *Citrus aurantium* var. *bergamia* (top note)

Anise *Pimpinella anisum* (top note)

Geranium *Pelargonium graveolens* (middle note)

Jasmine *Jasminum grandiflorum* absolute (middle/base note)

Sandalwood *Santalum album* (base note)

Green and Herbaceous Blend:

Basil *Ocimum basilicum* (top note)

Peppermint *Mentha x piperita* (top note)

Rosemary *Rosmarinus officinalis* (middle note)

Pine *Pinus sylvestris* (middle note)

Vetiver *Vetiveria zizanioides* (base note)

If you need some ratio ideas to get blending, we've prepared the **Green and Herbaceous** blend with this ratio:

Basil *Ocimum basilicum*: 10 drops

Rosemary *Rosmarinus officinalis*: 4 drops


Vetiver *Vetiveria zizanioides*: 3 drops

Pine *Pinus sylvestris*: 2 drops

Peppermint *Mentha x piperita* : 1 drop

(20 drops total)

It's fresh and clarifying yet grounding (good ol' vetiver!). The peppermint is strong at first but wears off a bit once it has been exposed to air.



So get out your essential oils and mix and match your 100 drops to find the blend that blends best with YOU.

Happy blending!

P.S. Organoleptic testing is the process of using your senses to evaluate or test your essential oils, and is an important skill for aromatherapists and perfumers.

Section 3

How to Check the Quality of Your Essential Oils

Dorene Petersen

How to Check the Quality of Your Essential Oils

By Dorene Petersen



How do you ensure that the essential oils you're buying are the best possible quality? We can all use a brush up on the most important techniques to ensure the quality of our essential oils.

Just like a fine wine, a number of factors affect the quality of an essential oil, including:

- The botanical origin of the essential oil
- The part of the plant used
- The climate where the plant was grown
- The cultivation and harvest techniques
- The time of harvest
- The method of oil production, and
- The method and length of storage after production

The quality of the finished product may be compromised if any one of these factors is not considered carefully for that particular plant.

When an essential oil is intended for clinical aromatherapy purposes, the specific botanical sourced and its quality become even more important; a positive outcome is a direct result of the constituent profile and quality of the oil (and of course the skill of the professional aromatherapist).

As with any investment, it's important to identify best practices for evaluating and purchasing essential oils, particularly when buying essential oils for clinical aromatherapy use. Here are my top five assessment tools to determine the quality and potential of an essential oil for clinical aromatherapy—a skill that is both an art and a science.

1. Gas Chromatography (GC) and Mass Spectrometry (MS)

Gas chromatography (GC), mass spectrometry (MS), and similar additive-revealing techniques can analyze the constituents in oils. Ever wondered how a GC really works? It is a technique that separates the components of an essential oil according to the differences in molecular volume. It provides a fingerprint of the oil, and as I said, it can reveal additives, but it is not always conclusive.

A GC will identify the presence and relative quantities of chemical constituents within an essential oil.

Very simply, the steps are as follows:

- The essential oil is introduced into the injection chamber where it is vaporized.
- It is then transported by helium to a column where it enters a stationary phase. The rate of movement through the stationary phase of each compound varies.
- The molecules separate and are sent to a vacuumed ionization chamber where electronic bombardment gives a recording of the quantities.

The chromatogram shows the relative concentration of chemical compounds according to retention time, but it does not identify the specific component.

The next stage of obtaining a more definitive reading and identifying the components (and potentially revealing the presence of adulterants) requires an experienced technician who can carry out the analysis and interpretation of the MS.

This is a device in which molecules are ionized and the accelerated ions are separated according to their mass-to-charge ratio. An ion is an electrically charged particle or group of atoms. The MS measures the positive or negative ion currents determining molecular weight. The results are recorded graphically or as a computer output. Each peak is compared with a database, which contains about 75,000 spectra. So the mass spectrometer (MS) can measure the presence and quantity of chemical constituents.

The downside is GC/MS testing is expensive. Ideally, a GC/MS should be conducted for each batch, as natural factors will affect each batch of essential oil and we're looking for constituents to be within certain ranges. The cost can be prohibitive for small distillers, who may make very high quality essential oils but not be able to pass on the cost to have a GC/MS for each batch.

In addition, reading a GC/MS requires skill and experience, and it is important to have an understanding of what pharmacological constituents you are looking for to compare it to. You need to have the "standard" or accepted ranges for each constituent to determine whether your particular sample fits these ranges. (Remember that a GC/MS cannot always detect specific synthetic diluents nor even specific diluents of natural origin.)

So you may be wondering is it worth it. The answer is a resounding yes! A GC/MS can detect if two or more oils with similar chemical composition have been mixed together, if an oil has had the terpenes removed, or if an oil has been rectified. It will also reveal traces of solvents or mineral oils.

As an aromatherapist, it is important to realize that a GC/MS is not always a guarantee of quality but it is a great start, and it is also important to note that one test does not replace another. If you can, make use of all available best practices and tests in combination to evaluate the quality of an essential oil.



2. Know Your Supplier

Another great resource for aromatherapists and consumers to help ensure that essential oils are of a therapeutic quality and optimal for clinical aromatherapy is **to develop a relationship with a supplier that can be trusted.**

ACHS encourages aromatherapy students and graduates to talk with suppliers who either distill their own material, deal directly with reputable distillers, or buy from a company that does.

We also encourage you to work with suppliers who will provide a small sample (a small fee is reasonable if you are not a large buyer) of the oil to perform independent testing on before purchasing larger quantities, especially if a GC is not immediately available.

3. Not All Plants Are Created Equal: Know Your Latin Names

As a consumer, if you are purchasing 5 or 10 ml bottles of essential oils, one of the simplest things you can do to be certain you are purchasing the right essential oil is to **read the label.** Many plant names around the world also have similar common names,

but they are not all created equal and can produce different results. **A good tip is to always purchase by Latin name, and always check for the correct botanical name.**

Looking to curl up and relax with some lavender aromas? This plant is a good example of the importance of Latin names. *Lavandula angustifolia* (Mill.), also referred to as “true lavender,” is the preferred lavender for clinical aromatherapy—not lavandin *Lavandula intermedia* (Emeric ex Loisel.).

While *L. angustifolia* should have a higher content of the anti-inflammatory and sedative ester, linalyl acetate, it is the camphor constituent that most differentiates *L. angustifolia* from *L. intermedia*. True lavender has almost no camphor, or it is completely absent, whereas *L. intermedia* can have up to 40%, depending on the variety.

It's very important to identify the oil specifically by Latin name—especially since *L. intermedia* has its own therapeutic uses and must not be interchanged with *L. angustifolia*. Camphor is a ketone known to have a stimulating effect. In addition, 1,8 cineole (also known as eucalyptol or cajuputol) also has a stimulating effect. Since lavender's reputation is primarily that of a sedative, the therapeutic results can be disappointing if the two lavender essential oils are used interchangeably. This means that if you purchase lavender using just the common name, you could end up with an oil that will keep you or your client alert rather than lulled off into relaxation. **So if we say "lavender" and you buy "lavandin," they are definitely not the same thing.**

Check out the chart below for other differences. You can see how it can get confusing.

	Lavender	Lavandin
Source	Lavandula angustifolia Otherwise known as: <i>Lavandula officinalis</i>	Lavandula intermedia Hybrid: <i>L. latifolia</i> x <i>L. angustifolia</i>
Constituents	Linalool (25-28%), linalyl acetate (25-45%), 1,8 cineole (0%) and camphor (0%)	Linalyl acetate (28-28%), 1,8 cineole (6-20%), and camphor (7-40%)
Oil Characteristics (color and scent)	Colorless to pale yellow; sweet, floral herbaceous	Colorless to pale yellow, yellow-green; similar but with camphor tones and rose-like note due to “rhodinol”
Therapeutic Action	More sedating	Less sedating

4. Trust Your Nose: Organoleptic Testing

Aromatherapists are also trained in organoleptic testing to help identify potential adulterants and extenders. The sense of smell, taste, feel, and look of essential oils can expose important information about its quality and whether it should be used in clinical aromatherapy. This is discussed in a little more in depth in the ACHS blog post, [Quality of Essential Oils: Diluents, Extenders, Synergy...Oh My!](#) Students pursuing [accredited aromatherapy training with ACHS](#) receive extensive experience with organoleptic testing but anyone can do it. Start building your organoleptic skills.

5. Check the Price Tag!

There is an awareness that a price that is very low comparatively may indicate that an oil is not sourced from the correct plant or part of the plant, or that it is diluted in a base oil, or is otherwise adulterated.

The more expensive oils, specifically sandalwood *Santalum album* (L.), rose *Rosa damascena* (Mill.), and neroli *Citrus aurantium* (L.) var. *amara*, are frequently sold in the retail sector diluted in a base oil, such as sweet almond oil or fractionated coconut oil. Transparency is the key here and the label should identify the diluent. If it is not on the label, there are simple tests you can try. For example, dropping a few drops in water will usually reveal a diluent as the water will turn cloudy, and the essential oil will have an oily feel and slower evaporation.

Similarly, these expensive oils, especially sandalwood *S. album*, may be sourced from the supplier already adulterated with a diluent. Adulterated or extended oils will not have a predictable therapeutic benefit, and they can even have harmful physical effects.

But always remember that a higher price does not necessarily mean a higher quality. **All oils should be checked thoroughly regardless of the price.**



Section 4

Essential Oils For Homemade Hand Soap

ACHS Staff

Essential Oils for Homemade Hand Soap

By ACHS Staff



In a long overdue move, the Food and Drug Administration (FDA) in 2016 announced a ban on antibacterial soaps containing potentially harmful chemicals. Echoing what holistic wellness experts have known for a while, the FDA stated that chemicals in antibacterial soaps are no more effective at killing germs and preventing illness than plain soap and water.

Not only are these chemicals not as effective, they're actually harmful to you. According to the director of the FDA's Center for Drug Evaluation and Research (CDER), "We have no scientific evidence that they are any better than plain soap and water. In fact, some data suggests that antibacterial ingredients may do more harm than good over the long-term."

Two of the main active ingredients used in antibacterial products (like antibacterial hand soaps, body washes, dish soap, etc.), triclosan and triclocarban, can contribute to bacterial resistance and even negative hormonal effects. In 2013, the FDA instated a rule that required manufacturers to provide data on the efficacy and safety of 19 ingredients used in antibacterial soaps.

The manufacturers could not produce this data. (Probably because these chemicals are not more effective than plain soap and water and actually cause major health issues!)

You Might Be Thinking: Are Plain Soap And Water Really Enough to Protect My Family and Me?

Yes. When you wash your hands correctly, you decrease your chances of catching a plethora of communicable diseases. (Washing correctly: wet your hands with plain soap and water; lather well; rub hands, sides of fingers, and beneath finger nails for at least 30 seconds; rinse thoroughly with running water; and dry well with a fresh towel, hot air, or a clean disposable towel.) According to the CDC: “Handwashing has been clearly shown to prevent a variety of diseases and is one of the most important ways to protect oneself and others from infections.”

“

Handwashing has been clearly shown to prevent a variety of diseases and is one of the most important ways to protect oneself and others from infections.



Give Plain Soap and Water a Boost with Essential Oils

One way to get the most out of your hygiene routine: **add essential oils to your hand soap.**

While nasty chemicals like triclosan and triclocarban can actually cause harm to you and the environment, essential oils smell great and provide natural disinfecting benefits.

Plus, essential oils can be uplifting, energizing, calming, and purifying. So you can even customize your DIY soap experience for your mood or time of day!

Here are 30 cleansing essential oils you can add to plain, organic liquid hand soap. Plus, they smell amazing! Not sure how to get the perfect blend of aromas in your soap? Refer back to the section Blending 101: Pairing Essential Oils earlier in this eBook.

30 Cleansing Essential Oils You Can Add to Plain, Organic Liquid Hand Soap.

1. **Basil** *Ocimum basilicum* (L.)
2. **Bay** *Laurus nobilis* (L.)
3. **Bergamot** *Citrus aurantium* (L.) var. *Bergamia*
4. **Black pepper** *Piper nigrum* (L.)
5. **Cajuput** *Melaleuca leucadendron* (L.)
6. **Cardamom** *Elettaria cardamomum* (L.)
7. **Clary sage** *Salvia sclarea* (L.)
8. **Cedar** *Cedrus atlantica* (G.Manetti)
9. **Chamomile, Roman** *Chamaemelum nobile* (L.) All.
10. **Cinnamon** *Cinnamomum zeylanicum* (Blume)
11. **Clove** *Eugenia caryophyllata* (Thunb.)
12. **Eucalyptus** *Eucalyptus globulus* (Labill.)
13. **Fir needle** *Abies balsamea* (L.)
14. **Geranium** *Pelargonium graveolens* (L'Her.)
15. **Ginger** *Zingiber officinale* (Roscoe)
16. **Grapefruit** *Citrus paradisi* (Macfad.)
17. **Lavender** *Lavandula angustifolia* (Mill.)
18. **Lemon** *Citrus limonum* (Risso)
19. **Immortelle** *Helichrysum italicum* (Roth)
20. **Juniper** *Juniperus communis* (L.)
21. **Patchouli** *Pogostemon cablin* (Benth.)
22. **Peppermint** *Mentha x piperita* (L.)
23. **Pine** *Pinus sylvestris* (L.)
24. **Rosemary** *Rosmarinus officinalis* (L.)
25. **Sandalwood** *Santalum album* (L.)
26. **Spearmint** *Mentha spicata* (L.)
27. **Tea tree Australia** *Melaleuca alternifolia* (Cheel)
28. **Tea tree New Zealand** *Leptospermum scoparium* (Forst.)
29. **Vetiver** *Vetiveria zizanioides* (Nash)
30. **Ylang ylang** *Cananga odorata* (Lam.) var. *genuina*



Make the Switch but Stay Green!

Now go swap those “antibacterial” products with delicious-smelling essential oil hand soap!

An important note before you swap: since triclosan and triclocarban are very toxic to aquatic life, **do NOT pour these products down the drain**. One option is to bring them to your local Household Hazardous Waste depot (if they accept soap products).

If they’re not accepted at your local Household Hazardous Waste depot, solid products, such as bar soap, can be disposed of in the trash. With liquid products, however, it can be a bit trickier. Try this:

Dissolve liquid antibacterial soap in water and place into a container with a charcoal filter (such as those used for water purification). Let sit for 24 hours. Then, dispose of the water from the container down the drain and throw the charcoal filter in the trash. While the charcoal cannot capture all the harmful chemicals in antibacterial soap, it will at least reduce the amount that is released into the environment.

Lastly, don’t forget to recycle any plastic containers!

Here’s a Favorite Aromatic Hand Soap Recipe We Use at the Achs and Apothecary Shoppe Campuses:

Light and Happy Liquid Hand Soap

Lavender *Lavandula angustifolia* oil: 10 drops

Ylang ylang *Cananga odorata* var. *genuina* oil: 6 drops

Bergamot *Citrus aurantium* var. *bergamia* oil: 4 drops

Add the blend to 120 ml (4 ounces) of plain liquid soap base. This is about a 2% dilution, and the soap is quite fragrant, so dilute more if you prefer a gentler aroma.

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Note of caution: be sure to rinse your hands thoroughly when using citrus oils like bergamot, grapefruit, etc. as these oils can cause photosensitivity when applied topically.

Section 5

Essential Oils that Naturally Repel Insects

Erika Yigzaw

Essential Oils that Naturally Repel Insects

By Erika Yigzaw



Ah, summertime! It's that time of year to relax out on the porch, sip some lavender iced-tea, and watch the sun slowly dip behind the tree line. But if there's one thing that can snap you straight out of that soothing summer bliss, it's mosquitoes and other creepy crawlies found around your home!

If you've read our blog post on tips for green cleaning with essential oils, you know we strongly discourage the use of chemical cleaners and pesticides. But living with colonies of unwanted critters is not exactly how we like to spend our time either. So how can you repel insects naturally while sticking to your green cleaning principles? As with all our green cleaning solutions, we use the natural insecticidal powers of essential oils.

Here are 10 fabulous essential oils that naturally repel insects:

1. Lavender

When you think of lavender *Lavandula angustifolia* (Mill.), relaxation and restful sleep are usually the first things that come to mind. But along with its lovely floral aroma and soothing qualities, lavender is also effective at battling the bugs.

Lavender pillows and sachets are wonderful in linen cupboards and chests of drawers and will keep away moths and other insects while leaving a fresh scent. Lavender *L. angustifolia* oil can be sprayed from an atomizer or left in a saucer to help keep away ants and insects, and to disinfect the air.

2. Basil

Not just a zesty addition to your tomato sauce, basil *Ocimum basilicum* (L.) essential oil is ideal for summer pest control, especially if you live in a wet climate with lots of lakes and ponds. One study showed *O. basilicum* exhibiting both mosquito repellent and larvicidal activity. Basil *O. basilicum* is an uplifting oil, so add some to an atomizer and spray outside for a natural mosquito repellent and a well-deserved mood boost!



Additionally, if you suffer from indoor allergies on those rainy, summer days, a 2014 study also concluded that practical dust mite control can be achieved with basil oil. Yet another reason to clean green with versatile essential oils!

3. Thyme

All of us can agree that the common housefly is one of the most aggravating creatures on the planet. If you've ever lived on a farm, these pests are even more of a headache! Lucky for us, thyme *Thymus vulgaris* (L.) has been found to be a highly effective insecticide against houseflies. A 2005 study also found thyme *T. vulgaris* to be an excellent mosquito repellent as well. Win, win!

4. Pine

If you love camping but despise using Deet or other chemical bug sprays, pine *Pinus sylvestris* (L.) is your perfect companion. A natural repellent against mosquitoes, pine *P. sylvestris* will also keep you smelling fresh as the forest!

5. Vetiver

In Java, [Indonesia](#), sustainable vetiver *Vetiveria zizanioides* (Nash) essential oil production has produced a viable vetiver craft industry with items such as aromatic mats, baskets, candles, and soaps—all being produced from the spent root. The added benefit is vetiver *V. zizanioides* acts as a natural mosquito deterrent in the house. Diffusing a few drops of this oil will help repel the mosquitoes and also create a spicy, Balinese ambience for summer.

6. Bergamot

Is there anything more refreshing than citrus? Bergamot *Citrus aurantium* (L.) var. *bergamia* is one of my favorite oils to use for green cleaning, and it's also the perfect addition to your natural insect repellent spray as it adds a mood boosting, fruity lift. It's important to note that bergamot *C. aurantium* var. *bergamia* is very phototoxic, so you should not use it outside as a topical insect repellent, but rather an aromatic insect repellent spray.

If the bugs happen to make a meal out of you on those long summer evenings, bergamot *C. aurantium* var. *bergamia* is a wonderful oil for topical use on insect bites or stings (just keep out of the sun)!

7. Peppermint

If you would rather a fresh and minty clean aroma in your bug spray than that icky chemical smell, peppermint *Mentha x piperita* (L.) is the perfect choice. Peppermint *M. x piperita* is a natural insecticide that kills as well as repels mosquitoes.

In one study, *M. x piperita* showed repellent action when applied to exposed body parts. It also displayed significant larvicidal and mosquito repellent action: Larvae of *Culex quinquefasciatus* were completely killed 24 hours after exposure (in water) to 3 ml of *M. x piperita* per square meter of water.

Peppermint *M. x piperita* is also useful on insect stings and bites! Here's a great recipe:

Insect Stings and Bites

Tea tree Australia *Melaleuca alternifolia*: 10 drops

Peppermint *Mentha x piperita*: 10 drops

Apply to the area undiluted as often as needed.



8. Tea Tree Australia

Will the wonders of Australian tea tree *Melaleuca alternifolia* (Cheel) oil ever cease? Tea tree *M. alternifolia* is not only a [green cleaning powerhouse](#), but it is also an antiparasitic, capable of destroying or suppressing the growth of parasites such as fleas, leeches, lice, and ticks. Use diffusion or direct topical application. Like bergamot *C. aurantium* var. *bergamia*, if those nasty critters do make a meal out of you, Australian teatree can help beat the irritation from bites or stings.

9. Eucalyptus

A standard in any natural green cleaning kit, your eucalyptus *Eucalyptus globulus* (Labill.) essential oil can also be used as an insecticide.

In a 2010 study, three species of eucalyptus (*E. staigeriana*, *E. citriodora*, and *E. globulus*) were tested for use with the blood-sucking sandfly, lutzomyia *Lutzomyia longipalpis*. Researchers found the eucalyptus essential oils were more effective against *L. longipalpis* than other natural products.



10. Lemon Eucalyptus

As mentioned above, lemon eucalyptus *Eucalyptus citriodora* (Hook.) can also be used as a natural insecticide—especially for those who love that citrusy smell! It was also discovered that the distillate or hydrosol was very effective against mosquitoes and not as volatile as the essential oil. This could be a great essential oil mosquito repellent option for use around children and pets, since the hydrosol still provides very high protection from a broad range of insects over several hours.

ACHS Founding President Dorene Petersen was lucky enough to visit an essential oil lab run by the Ethiopian government in 2006. They were doing a lot of work with lemon eucalyptus *E. citriodora* essential oil as an insect repellent—critical in parts of the world where malaria is running rife! *Eucalyptus citriodora* is an excellent resource as the tree grows quickly and has a fairly high yield of essential oil.

Now that you have your oils ready to arm yourself against bites and stings, here is our favorite natural insect repellent recipe for keeping those bugs at bay!



Natural Insect Repellent Spray

- **Lavender** *Lavandula angustifolia* oil: 15 drops
- **Lemon eucalyptus** *Eucalyptus citriodora* oil: 10 drops
- **Tea tree Australia** *Melaleuca alternifolia* oil: 10 drops
- **Lime** *Citrus aurantifolia* oil: 6 drops
- **Bergamot** *Citrus aurantium* var. *bergamia* oil: 6 drops
- **Distilled water**: 2 ounces
- **Vinegar from your kitchen**: 2 ounces (I prefer white vinegar, but apple cider works too! Leave the balsamic for the Caprese salad!)

Blend all the ingredients and put into a spray bottle. Shake well before using.

Note: Both bergamot C. aurantium var. bergamia and lime C. aurantifolia are photosensitive oils. This is an aromatic blend meant to be diffused into the air around you and is not intended for topical or internal use. Also, lavandin Lavandula intermedia (Emeric ex Loisel.) can be substituted, as it is also a useful insect repellent. However, it's important to note that L. intermedia and L. angustifolia have different therapeutic effects. Lavender is known for its calming and sedating qualities while lavandin can have stimulating effects.

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Section 6

Cooking With Essential Oils

Dorene Petersen

Cooking With Essential Oils

By Dorene Petersen



Using essential oils in the kitchen will not only spice up your cooking... it's also incredibly fun and an easy way to add flavor and flair to your recipes! But, there are a few key things you should always keep in mind. We have another eBook just on this topic, ***Top 10 Culinary Essential Oils*** ([follow this link to download](#)), but here's a sneak peek at some of our quick tips for cooking with essential oils:

Tip 1 – Use Certified Organic Essential Oils

When cooking with essential oils, use only Certified Organic, or at the very least, pesticide-free essential oils. Once you've determined that your oils are of the highest quality and suitable for internal use, you can rest easy knowing there are no hidden chemicals and additives lurking in your culinary masterpiece.

Tip 2 – Start Small and Add to Taste

Start with a very small amount of essential oil, and then continue to add drops until you've reached the desired taste. Remember, it's always easier to add more, and it can be difficult to adjust your recipe if you add too much.

When adding culinary essential oils, don't hold the bottle directly over the pot or pan you're cooking with. Instead, add your essential oils to a measuring spoon held over a cup (so you don't lose any oil if you over pour).



Tip 3 – Use Appropriate Measurements for Baking

All bakers know that baking is both an art and a science. You have to get the measurements just right or you could wind up spoiling your dish.

For most baking recipes, start with 1-2 drops of essential oil(s) and then taste. Again, use the trick of adding your essential oils into a measuring spoon over a cup so you don't accidentally add too much to your mix.

Tip 4 – Add Essential Oils Toward

The End of Cooking

When it makes sense for the recipe, you'll achieve the best (and tastiest) results when you add your essential oils toward the end. This helps keep the oil and delicate flavors—from essential oils such as lemon *Citrus limonum* (Risso)—from evaporating away! Try a drop of lemon with your fish dishes!

Tip 5 – Experiment and Have Fun!

Even if you're not the biggest fan of cooking, the versatility of essential oils adds a splash of pizzazz to quick and easy recipes.

Make cooking with essential oils a family activity! Have the kids gather and add the oils or even taste test your recipe with essential oils while you're cooking. (But remember: always keep essential oils out of the reach of children.)

Experiment with different types of culinary essential oils. You never know: maybe you'll discover some new essential oils or find a new, unique recipe for a longtime favorite (did you know that basil *Ocimum basilicum* (L.) is great to mix with strawberries in dessert recipes?).

“

Even if you're not the biggest fan of cooking, the versatility of essential oils adds a splash of pizzazz to quick and easy recipes.

Get Cookin'!

Now that you have these quick tips for how to cook with essential oils, you're ready to get in the kitchen and start having fun!

Bon appétit!

Section 7

Essential Oils For Men

ACHS Staff

Essential Oils for Men

By ACHS Staff



All aromatherapists know: every person is different.

Each person experiences aromas and tastes differently, and individuals will always have personal preferences.

However, when blending for a targeted group, such as men or women, it's helpful to have a few “general” favorites in mind. For example, many men prefer heartier spices and woodier scents when choosing aromatic fragrances.

Whether you're looking to work with aromas and blends yourself or you're looking to create formulas for your clients (or favorite dudes!), **here are 5 essential oils for men to get you started:**



1. Black Pepper Essential Oil

Black pepper *Piper nigrum* (L.) has a rich history. Pliny once spoke of it as “more expensive than gold.” Today, it is one of the most commonly used spices and a favorite aroma for men.

Black pepper *P. nigrum* has a spicy, sporty, and woody aroma that adds a classic and robust vibe to men’s blends. It’s also ideal in after-exercise formulas.

Try black pepper *P. nigrum* with cardamom *Elettaria cardamomum* (L.), lavender *Lavandula angustifolia* (Mill.), marjoram *Origanum majorana* (L.), rosemary *Rosmarinus officinalis* (L.), and/or rose attar *Rosa damascene* (Mill.).

2. Bay Essential Oil

Bay *Laurus nobilis* (L.) also has interesting historic roots. It was once known as Daphne to the ancient Greeks because the nymph Daphne eluded the lovestruck Apollo by transforming into a bay tree. The god of music and poetry then took the bay tree as his emblem. (Hence the term: poet laureate.)

Bay *L. nobilis* essential oil has a sweet, uplifting aroma with a hint of spice. Try bay *L. nobilis* with bergamot *Citrus aurantium* (L.) var. *bergamia*, black pepper *P. nigrum*, cypress *Cupressus sempervirens* (L.), juniper *Juniperus communis* (L.), and/or vetiver *Vetiveria zizanioides* (Nash).

3. Copaiba Balsam Essential Oil

Woody and rustic, copaiba balsam *Copaifera officinalis* (Jacq.) L. is a unique and hearty base note for men's blends. It promotes nourished and cleansed skin, so copaiba *C. officinalis* is a fantastic addition to homemade aftershave and other bath products for men.

Try copaiba balsam *C. officinalis* with cypress *C. sempervirens*, frankincense *Boswellia* spp., lemon *Citrus limonum* (Risso), nutmeg *Myristica fragrans* (Houtt.), and/or sandalwood *Santalum album* (L.).

4. Sandalwood Essential Oil

A beloved classic of men's blends and fragrances, sandalwood *S. album* essential oil's distinct, sweet, woody, and long-lasting aroma is uplifting and invigorating. It's a favorite choice for men's soaps, aftershave, and colognes.

It's important to know that all sandalwood is not created equal. Due to overharvesting and slow replanting, the *S. album* tree is vulnerable. Because of this, the ACHS College Store sources sandalwood essential oil exclusively from a sustainable sandalwood plantation in northern Australia. This is one of the many reasons it's important to know where your oils are coming from and how they're produced—so you can feel good about your purchase and smell great, too!

Try sandalwood *S. album* with benzoin *Styrax benzoin* (Dryand.), bergamot *C. aurantium* var. *bergamia*, black pepper *P. nigrum*, clove *Syzygium aromaticum* (L.), and/or myrrh *Commiphora myrrha* (Engl.).

5. Vetiver Essential Oil

Vetiver roots have been used to fragrance fabrics and clothing for centuries. The roots have even been used to create traditional, aromatic baskets and mats.

With a deep, husky, earthy aroma, vetiver *V. zizanioides* essential oil's strength is a superb fixative in blends for men.

An added benefit: vetiver *V. zizanioides* is uplifting and has been said to promote concentration and focus.

Try vetiver *V. zizanioides* with bay *L. nobilis*, black pepper *P. nigrum*, Atlas cedarwood *Cedrus atlantica* (G.Manetti), cinnamon *Cinnamomum zeylanicum* (Blume), and/or sandalwood *S. album*.





The Naturalist Men's Fragrance Spray

- **Copaiba balsam** *Copaifera officinalis* oil: 10 drops
- **Black pepper** *Piper nigrum* oil: 10 drops
- **Sandalwood** *Santalum album* oil: 1 drop
- **Vetiver** *Vetiveria zizanioides* oil: 1 drop
- **Alcohol**: 1 tablespoon
- **Filtered water**: To fill bottle

Add essential oils and alcohol to a two-ounce spray bottle and shake well. Add filtered water to fill the bottle and shake again. Spray upward into the air as a room freshener or use as a natural body spray.



Section 8

Essential Oils for the Office

ACHS Staff

Essential Oils for the Office

By ACHS Staff



If you commute to your job, you spend a lot of time at your workplace. The average American spends about 1,600 hours per year at the office. Even though you're thriving in a career and workplace that is fulfilling and allows you to live out your passions, there's always room to make the office a more inviting and productive place.

Aromatherapy in the workplace can give an office a quick, no fuss face-lift! Essential oils have qualities that can truly enhance your work environment. From encouraging focus, to purifying the air, to boosting the mood, there's something for every office personality.

You should check with your supervisor and co-workers before diffusing essential oils in the office, and make sure you're diffusing in a well-ventilated space. For example, if you are using your diffuser in an individual office, place the diffuser on the far side of your desk or a few feet away from your desk on a side table or ledge. If you're diffusing in a shared or open office space, choose a central location where the aroma molecules will have room to rise and disperse as evenly as possible. It's safer to plan ahead than to risk toxicity.

Here's a rundown of our **5 favorite work-enhancing essential oils for the office:**

1. Rosemary

How it benefits the office: One of the most popular oils to promote productivity and concentration, rosemary *Rosmarinus officinalis* (L.) is lauded for its uplifting and stimulating effects on the mind and memory. This is an ideal oil for an office environment where deep concentration is a necessity.

All about the aroma: Rosemary's aroma is strong, fresh, and uplifting. It is a middle-note and blends well with lavender *Lavandula angustifolia* (Mill.), cedarwood *Cedrus atlantica* (G.Manetti), bay *Laurus nobilis* (L.), or citrus oils. This is a strong aroma, so dilute well and be sure your officemates enjoy this green, stimulating scent, too.

2. Bergamot

How it benefits the office: A sweet and uplifting citrus, bergamot *Citrus aurantium* var. *bergamia* (Risso) orange is the signature flavor of Earl Grey tea, and the essential oil has been shown to have significant [mood boosting qualities](#). It's a delightful and powerful purifier in a DIY office cleaning spray. Plus, who doesn't swoon for the scent of fresh orange?

All about the aroma: Bergamot is a bright, clean, and happy top note. A distinctive citrus, it imparts a refreshing, characteristic Eau de Cologne fragrance. This oil is ideal in invigorating summer and mood-boosting blends. Try blending bergamot with cypress *Cupressus sempervirens* (L.), geranium *Pelargonium graveolens* (L'Her.), lavender *L. angustifolia*, and sandalwood *Santalum album* (L.) essential oils.

3. Geranium

How it benefits the office: Geranium *P. graveolens* is a luxurious floral perfect for the self-professed “flower children” in the office. A notable mood lifter, geranium offers the hope of spring flowers on dreary days.

All about the aroma: This delicious, balancing aroma is akin to rose *Rosa damascena* (Mill.) essential oil, but is significantly more affordable for the office budget. Geranium is a light, high intensity middle note, so you only need a few drops to fill your office with the aroma of flowers. Geranium blends well with bergamot *C. aurantium* var. *bergamia*, clove *Syzygium aromaticum* (L.), and juniper *Juniperus communis* (L.) essential oils.

4. Lemongrass

How it benefits the office: The fresh, lemony aroma of lemongrass *Cymbopogon citratus* (Stapf) will invigorate your senses and open your mind. Your office mates will feel awake and aware with this energetic, earthy essential oil. If your workspace has an issue with fruit flies or gnats, lemongrass can act as a natural insect repellent.

All about the aroma: Fresh, earthy, and citrusy. Lemongrass is a lively and herbaceous top note. Try blending with lemon *Citrus limonum* (Risso), lavender *L. angustifolia*, or rosemary *R. officinalis* essential oils.

5. Clove

How it benefits the office: Everyone loves the spicy, warm aromas of fall. When the leaves start to change and you want to “pumpkin spice” everything in the office, clove *Syzygium aromaticum* (L.) essential oil is your best friend.

All about the aroma: A fresh and comforting top note, clove’s warming and spicy aroma adds a peaceful and grounding ambience to any office. It’s lovely around the holidays. Try blending this fun spice with bergamot *C. aurantium* var. *bergamia*, clary sage *Salvia sclarea* (L.), lavender *L. angustifolia*, or ylang ylang *Cananga odorata* (Lam.) var. *genuina* .



Office Essential Oils – Honorable Mentions

There are way more than just five essential oils to use in the office. Really, it's about crafting an aroma that is right for you and your co-workers. Why not have a “blending party” as a team-building exercise?

Here are even more delightful essential oils you can try out in the workplace:

- **Cypress** *C. sempervirens*
- **Cinnamon** *Cinnamomum zeylanicum* (Blume)
- **Black Pepper** *Piper nigrum* (L.)
- **Clary Sage** *S. sclarea*
- **Grapefruit** *Citrus paradisi* (Macfad.)
- **Ylang Ylang** *C. odorata* var. *genuina*
- **Ginger** *Zingiber officinale* (Roscoe)
- **Lavender** *L. angustifolia*
- **Lemon** *C. limonum*
- **Lime** *Citrus aurantifolia* (Christm.)
- **Vetiver** *Vetiveria zizanioides* (Nash)



Happy Office Diffuser Blend

If you're skeptical about blending essential oils yourself, don't fret. Give this pre blended recipe a try the next time your workspace needs an aromatic lift. Don't forget—check with your co-workers and supervisor before diffusing essential oils in the office.

- **Geranium** *Pelargonium graveolens* essential oil: 6 drops
- **Lemon** *Citrus limonum* essential oil: 2 drops
- **Rosemary** *Rosmarinus officinalis* essential oil: 2 drops

Blend essential oils and add to the diffuser. Be sure to follow the instructions on your diffuser—they are all different.

Happy blending!

Section 9

Aromatherapy and Yoga

Oleg Maksimov and Lauren Shapiro

Aromatherapy and Yoga

By Oleg Maksimov and Lauren Shapiro



Aromatherapy and yoga are both ancient healing practices focused on physical, mental, and spiritual health. They have developed in close connection for thousands of years, and historically have been used in tandem to support the body, clear the mind, and lift the spirit.

But you don't have to be a history expert to benefit from combining essential oils and yoga. There are lots of ways you can safely start using aromatherapy to support your personal practice, enhance your teaching space, or create a must have experience for your clients.

Some Important Background on Aromatherapy and Yoga

The ancient Indian healing system, Ayurveda, uses essential oils and asana to balance and unblock the body's chakras, which promotes the flow of life energy. The chakras are the energy centers of the body.

According to Ayurveda, there are seven major chakras and each is associated with a major nerve plexus and endocrine gland. **It is believed that physical problems that manifest in the body are the result of blocked energy flow through the chakras.**

Now, maybe the language of the chakras doesn't speak to you. That's okay. Modern science has also shown a strong connection between aromatherapy and asana practice.

The combination has been shown to **balance the autonomic nervous system**, raise the levels of gamma amino-butyric acid in the brain, and help reach **hormonal homeostasis**. In addition, **essential oils possess cleansing properties** that make them extremely useful hygiene tools in public places, like yoga studios.

Here are three ways you can start reaping the benefits of aromatherapy in your yoga practice:

1. Add Essential Oils into Your Morning Vinyasa

What better way to start your day than with 6 a.m. vinyasa? It is a healthier and more efficient way to awaken the body than drinking a cup of coffee!

Studies have shown that morning yoga can elevate your mood, particularly if you incorporate standing poses, back-bends, and inversions. Some good poses for a morning practice might include mountain pose (tadasana), bridge pose (setu bandha sarvangasana), and legs up the wall (viparita karani).

If you want to enhance your morning practice, consider diffusing an energizing essential oil or essential oil blend in your practice space. You might try spearmint

Mentha spicata (L.), peppermint *Mentha × piperita* (L.), bergamot *Citrus aurantium* var. *bergamia* (Risso), grapefruit *Citrus paradisi* (Macfad.), or lemon *Citrus limonum* (Risso). These essential oils are known for their ability to boost mood, and will help you to feel more vigorous.

In other words, morning yoga combined with aromatherapy can help you to start your day more energized and in a happy mood!



2. Add Essential Oils into Your Restorative Evening Yoga Practice

Restorative yoga in the evening is a great way to calm down the nervous system and to **alleviate some of the stress that has accumulated during the day**. Standing and sitting exercises followed by deep relaxation poses, [meditation](#), and [breath counting](#) can help to **bring the body to a state of rest**; these practices have also been reported to significantly **improve sleep quality**.

A few relaxation poses you might want to try in your restorative yoga practice include child's pose (balasana), reclining bound angle pose or reclining butterfly (supta baddha konasana), and supported bridge pose (setu bandha sarvangasana).

To enhance your evening practice, consider diffusing a soothing essential oil or essential oil blend in your practice space. You might try clary sage *Salvia sclarea* (L.), lavender *Lavandula angustifolia* (Mill.), or ylang ylang *Cananga odorata* (Lam.). These calming essential oils have been shown to slow down heart rate and reduce blood pressure. They may also help improve sleep quality.

In other words, evening yoga combined with aromatherapy can help you to reduce stress, rest, and may even help achieve good-quality sleep. The combo may also be a healthy alternative to drug interventions if you struggle with sleep issues like insomnia. But always check with your primary care physician, naturopathic doctor, and/or Registered Aromatherapist before making any changes to your health and wellness routine.

3. Add Essential Oils in Your Yoga and Studio Hygiene Practice

Essential oils are effective natural cleaning agents. They've actually been tested in hospitals as a way to battle hospital-acquired infections and to prevent the spread of diseases. You can achieve a similar effect by **using essential oils to clean your yoga gear and your yoga space.**

Diffusing essential oils in your practice space—especially if it's a studio with a lot of people coming in and out—can help protect you and your yogis from infections ... especially during the colder, harsher seasons.

Both eucalyptus *Eucalyptus globulus* (Labill.) and tea tree New Zealand *Leptospermum scoparium* (Forst.) essential oils are great options.

Experiment with combining different essential oils to increase effectiveness (different essential oils will be effective against different bacteria) and to create a more unique and pleasant odor. **We recommend a blend of eucalyptus *E. globulus*, lavender *L. angustifolia*, and lemon *C. limonum* essential oils in a 3:1:1 ratio.** So, three drops eucalyptus, one drop lavender, and one drop lemon. You can increase the volume, but keep the ratio the same (e.g., nine drops eucalyptus, three drops lavender, and three drops lemon).

Since essential oils also have antifungal properties, you can use them to create non-toxic cleaners for yoga mats. **Try making a spray with tea tree New Zealand *L. scoparium*, bergamot *C. aurantium* var. *bergamia*, and lavender *L. angustifolia* in the same 3:1:1 ratio.** So, three drops of tea tree, one drop of bergamot, and one drop of lavender essential oils dissolved into one tablespoon of vodka and added into two ounces of water.

In other words, essential oils can further boost your yoga practice by helping to support an already healthy immune system naturally.

4. BONUS: Aromatherapy Yoga Blend

Here's an aromatherapy essential oil blend you can start with. It's a well-balanced blend for mid-day, whether you're taking a yoga lunch break, teaching an afternoon class, or just need a little pick-me-up.

Combine lavender *L. angustifolia*, lemon *C. limonum*, and peppermint *M. x piperita* using a 1:1:1 ratio to achieve the desired effect.

You might also try experimenting with different essential oils to create your own “signature” yogi blend. Refer back to the earlier eBook chapter on blending if you need help getting started on crafting your personalized yogi blend.

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Ayurveda is a traditional Indian healing system. It has been traced back to around 5,000 BCE.

Asana is the physical practice of yoga, the poses.

Gamma amino-butyric acid is an important neurotransmitter that inhibits nerve transmission in the brain calming the nervous activity.

For an explanation of the chakra system, you might enjoy [Wheels of Light by Rosalyn Bruyere](#). There is also an interesting explanation incorporated into The Healing Power of Flowers by Rhonda PallasDowney.

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Section 10

Essential Oils for the Holidays

Dorene Petersen, Erika Yigzaw,
and Lauren Shapiro

Essential Oils for the Holidays

By Dorene Petersen, Erika Yigzaw, and Lauren Shapiro



Whether your holiday tradition is to sing carols, light the menorah, walk the spiral, or tell stories around the fire while eating homemade s'mores ... this time of year is all about bringing warmth to those dark winter days.

Our favorite way to warm up is with amazing aromas that invoke happy memories and cheer. Here are our “**12 Essential Oils of the Holidays**,” our aromatic spin on the 12 Days of Christmas! Feel free to sing along!

The 12th Oil of the Holidays is... Sweet Orange!

Sweet orange *Citrus sinensis* (Osbeck) essential oil has a pleasant sweet, fresh, and fruity scent. It is used extensively in aromatherapy, and commercially in soaps and floral perfumes. It harmonizes well in a blend at about a 5% concentration. Sweet orange *C. sinensis* volatilizes quickly (tis a top note) and does not store well, so blend in small quantities and keep in the refrigerator if possible.



The 11th Oil of the Holidays is... Fir Needle!

Fir needle *Abies balsamea* (L.) essential oil has a characteristic, fresh, and woody aroma, which makes it a frequent addition to aromatherapy seasonal blends, air fresheners, disinfectants, detergents, and household cleaners.

The 10th Oil of the Holidays is... Black Pepper!

Black pepper *Piper nigrum* (L.) aromatherapy essential oil has analgesic properties which make it great for pain relief, stiffness, hangovers, and headaches. Its spicy, fresh aroma blends well with cardamom *Elettaria cardamomum* (L.), frankincense *Boswellia carterii* (Birdw.), lavender *Lavandula angustifolia* (Mill.), marjoram *Origanum majorana* (L.), and rosemary *Rosmarinus officinalis* (L.).

The 9th Oil of the Holidays is... Anise!

Anise *Pimpinella anisum* (L.) essential oil is very effective in balancing digestion. It is particularly helpful for indigestion, nausea, and appetite stimulation. It also has demonstrated antibacterial and antifungal properties. Anise *P. anisum* has a warm, soft, spicy, sweet, and rich fragrance. It blends well with lavender *L. angustifolia*, pine *Pinus sylvestris* (L.), and rose *Rosa damascena* (Mill.) for aromatherapy blends.

The 8th Oil of the Holidays is... Cinnamon!

Cinnamon *Cinnamomum zeylanicum* (Blume) essential oil has a characteristic odor and taste of cinnamon, which just sings holidays! It blends well in aromatherapy blends with rosemary *R. officinalis*, pine *P. sylvestris*, and thyme *Thymus vulgaris* (L.).

The 7th Oil of the Holidays is... Spearmint!

Spearmint *Mentha spicata* (L.) essential oil has a minty aroma that is similar to peppermint *Mentha x piperita* (L.), but sweeter. Spearmint *M. spicata* blends well in aromatherapy with anise *P. anisum*, basil *Ocimum basilicum* (L.), cedarwood *Cedrus atlantica* (G. Manetti), cajuput *Melaleuca leucadendron* (L.), eucalyptus *Eucalyptus globulus* (Labill.), lavender *L. angustifolia*, lemon *Citrus limonum* (Risso), lime *Citrus aurantifolia* (Christm.), grapefruit *Citrus paradisi* (Macfad.), peppermint *M. x piperita*, and rosemary *R. officinalis*.

The 6th Oil of the Holidays is... Lavandin!

Lavandin *Lavandula x. intermedia* (Emeric ex Loisel.) essential oil is highly antiseptic, antifungal, and antibacterial. It has a similar aroma to lavender *L. angustifolia*, but offers camphor as a major constituent, making it a great antiseptic and a stimulating rather than sedating oil! Great for holiday parties when you don't want grandpa falling asleep during Twister!

The 5th Oil of the Holidays is... Clove!

Clove *Syzygium aromaticum* (L.) essential oil has a fresh and fruity top note. Clove blends well in aromatherapy blends with bay *Laurus nobilis* (L.), bergamot *Citrus aurantium* (L.) var. *bergamia*, black pepper *P. nigrum*, clary sage *Salvia sclarea* (L.), lavandin *L. intermedia*, lavender *L. angustifolia*, vanilla *Vanilla planifolia* (Andrews), and ylang ylang *Cananga odorata* (Lam.) var. *genuina*. Plus don't forget to grab bags of whole cloves and stud some oranges for homemade pomanders—a great activity for kids that last all year!

The 4th Oil of the Holidays is... Ginger!

Ginger *Zingiber officinale* (Roscoe) essential oil has antibacterial and antifungal properties. Ginger *Z. officinale* has a warm, fresh, woody, spicy, almost citrus top note, and blends well in aromatherapy with cedarwood *C. atlantica*, coriander *Coriandrum sativum* (L.), frankincense *Boswellia carterii* (Birdw.), grapefruit *C. paradisi*, lime *C. aurantifolia*, neroli *Citrus aurantium* (L.) var. *amara*, orange *C. sinensis*, patchouli *Pogostemon cablin* (Benth.), petitgrain *Citrus aurantium* (L.), rose *R. damascena*, sandalwood *Santalum album* (L.), and vetiver *Vetiveria zizanioides* (Nash). Plus you can use ginger *Z. officinale* essential oil in cooking—just a drop in gingerbread brings a new depth to a winter classic!

The 3rd Oil of the Holidays is... Petitgrain!

Also known as bitter orange, petitgrain *C. aurantium* var. *amara* essential oil has a woody, slightly floral aroma and blends well in aromatherapy with grapefruit *C. paradisi* and rosemary *R. officinalis*. It gives you the citrus hit without the sweetness, so tends to be a favorite with the guys.

The 2nd Oil of the Holidays is... Myrrh!

Myrrh *Commiphora myrrha* (Engl.) essential oil has been used to help soothe coughs and colds. Myrrh *C. myrrha* has an earthy, woody aroma, traditional for seasonal aromatherapy blends!

And Drumroll please....

The #1 essential oil of the holidays is... Frankincense!

Frankincense *Boswellia carterii* (Birdw.) essential oil has a balsamic, slightly spicy and fruity aroma, and is a common ingredient in perfumery and incense. Frankincense *B. carterii* also makes a great addition to aromatic holiday blends!

Why not start a new tradition this year? **Use these 12 Essential Oils of the Holidays to create your own aromatherapy blends for seasonal get-togethers.** Blending is a fun hands-on activity and a great way to spend quality time with loved ones.

May your holiday season be merry and bright! And filled with light, love, and wonderful memories!



Section 11

Debunking Dangerous Myths About Essential Oils

Oleg Maksimov

Debunking Dangerous Myths About Essential Oils

By Oleg Maksimov



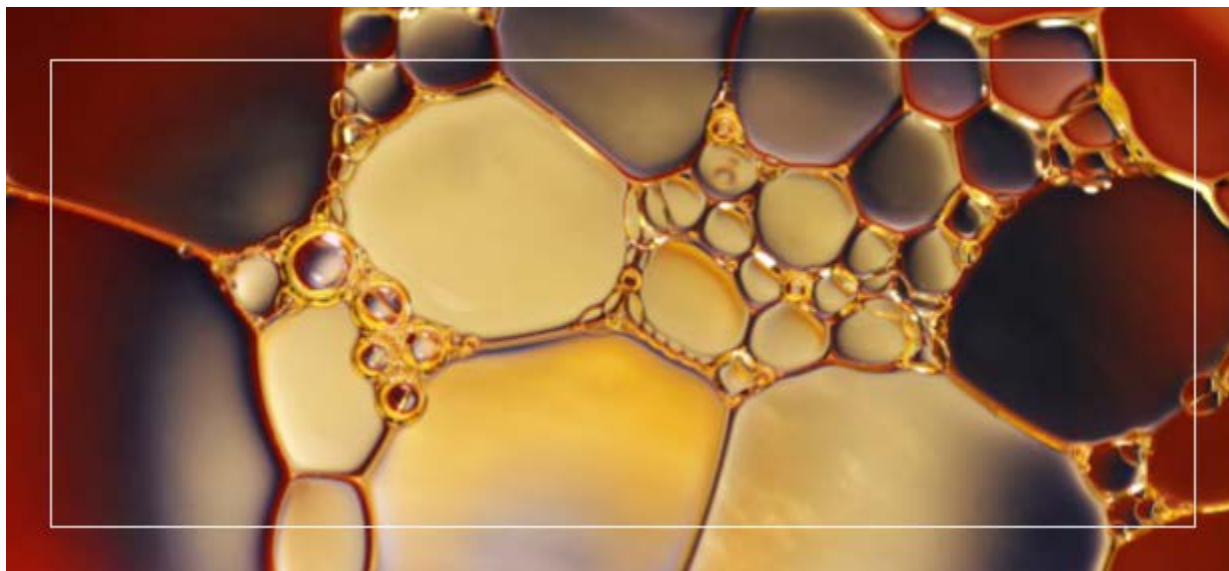
I've recently encountered a number of blog posts, often written by individual distributors working for larger essential oil companies, which spread two myths about essential oils I find particularly dangerous.

The first myth is that pure and unadulterated essential oils don't expire and can last for centuries.

The second myth is that unadulterated essential oils do not cause allergic reactions.

Both of these beliefs can have damaging consequences and can be debunked with a deeper understanding of the properties of essential oils and their constituents.

Let's take a closer look.



Myth 1: Pure, Unadulterated Essential Oils Don't Expire

This first myth claims that essential oils can last indefinitely without degradation.

This claim appears to be based on the articles about the composition of mummy embalming fluids (preservatives) published in the journal *Nature* in 2001 and 2004.

While these and follow-up studies revealed that fragrant plant materials were used in the embalming process, they do not remotely suggest that essential oils do not degrade or oxidize.

Resins of coniferous trees and myrrh, not pure essential oils, were used as embalming materials. A few diterpenoid acids (these compounds are present in resins and are not found in essential oils) and numerous products of their degradation were identified upon detailed chemical analysis of the materials.

Additionally, simple chemistry can show us why and how essential oils degrade with time.

A Little Chemistry Background...

Essential oils are complex mixtures. Their medicinal benefits come from active constituents like monoterpenes, sesquiterpenes, monoterpenoids, and sesquiterpenoids. These are compounds consisting of 10 (mono-) or 15 (sesqui-) carbon atoms that may also have an oxygen atom attached to them in the form of alcohol, aldehyde, acid, or ketone group (-oid). They also always contain a few carbon—carbon double bonds—unstable bonds that are characteristic for unsaturated fatty acids.

When monoterpenoids and sesquiterpenoids are exposed to air, they tend to undergo the following oxidation process: alcohol is transformed to aldehyde, aldehyde may turn into acid. Sound familiar? This is the same process responsible for spoiling wine and turning it to vinegar when it is accidentally exposed to air during storage.

Some monoterpenoids, such as geraniol (which is also an alcohol found in essential oils like geranium *Pelargonium graveolens* (L'Her.) and grapefruit *Citrus paradisi* (Macfad.)) are more prone to oxidation. Others, such as linalool (found in essential oils like immortelle *Helichrysum italicum* (Roth) and lavender *Lavandula angustifolia* (Mill.)), are more stable.

In addition, carbon-carbon double bonds can also open into single bonds and grab oxygen atoms forming oxides, epoxides, and peroxides. Have you ever had a bottle of unsaturated vegetable oil go rancid in your cupboard? Did you notice the “off” odor of the oil? It’s the same chemical process. Since nearly all essential oil constituents are unsaturated compounds containing carbon,

essential oils can undergo this same reaction and spoil or oxidize. While in the case of essential oils, this process does not usually produce the unpleasant odor (though oxidized citrus and other essential oils rich with limonene develop a rather unpleasant smell), and oxidized essential oils should be avoided.



Essential oils can undergo this same reaction and spoil or oxidize.

Dangers of Using an Oxidized Essential Oil

With the rare exception of patchouli *Pogostemon cablin* (Blanco), sandalwood *Santalum spp.*, and vetiver *Chrysopogon zizanioides* (L.), oxidation spoils essential oils and degrades their aromatic quality and therapeutic properties. In addition, it leads to the formation of skin irritants and potent allergens. Exposure to spoiled essential oils may cause skin rashes and more serious allergic reactions, which I discuss below. Drastic change in the aroma and consistency (thickening or clouding) of essential oil are good indicators that your oil has oxidized and spoiled.



Myth 2: Essential Oils Do Not Cause Allergic Reactions

Another myth circulating the Web is that essential oils do not cause allergic reactions. A fact often used to support this myth is that essential oils do not contain proteins.

It is true that essential oils do not contain large molecules such as proteins and amino acids, which typically trigger allergic/immune system responses. However, essential oils contain a large number of small molecules (called haptens) that can bind to proteins present in the body. Upon binding, these complexes (called haptenated proteins) will initiate an immune system response and cause allergic reactions.

An example of how exposure to haptens can cause an immune response is the well-known allergic reaction to poison ivy caused by the hapten urushiol. Penicillin is another example of a hapten that can cause anaphylaxis. Even some elements, such as nickel, act as haptens and can trigger an immune response when they bind to proteins.

While allergic reactions to essential oils are somewhat rare, there are well documented reports of these reactions, including some commonly used essential oils, such as tea tree Australia *Melaleuca alternifolia* (Cheel), and lavender *L. angustifolia*.

Another study suggested that 35 different essential oils, including bergamot *Citrus aurantium* (L.) var. *bergamia*, chamomile German *Matricaria recutita* (L.), geranium *P. graveolens*, and ylang ylang *Cananga odorata* (Lam.) var. *genuina*, may trigger allergic reactions.

This is why it's recommended to do a skin patch test prior to the use of a new essential oil to rule out the possibility of an allergic reaction. The importance of skin patch testing is stressed by the National Association of Holistic Aromatherapy (NAHA) and is also mentioned in the nursing textbook, *Foundations of Nursing*.

Oxidation & Allergic Reactions

Circling back to the myth we debunked earlier, there is also a connection between the oxidation of essential oil constituents and their ability to trigger allergic reactions.

For example, it was shown that geranial—a product of the oxidation of geraniol (found in geranium *P. graveolens* essential oil)—is much more likely to cause an allergic reaction than the parent compound.

In the case of tea tree Australia *M. alternifolia* essential oil, epoxides forming upon exposure to the air were identified as allergens. Not surprisingly, allergic reactions to stored/oxidized tea tree Australia *M. alternifolia* essential oil were stronger than reactions to the fresh oil. Similarly, when lavender *L. angustifolia* essential oil is exposed to air, linalyl acetate is oxidized to hydroperoxides and epoxides that are potent allergens.

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To put it simply, spoiled (oxidized) essential oils have a greater risk of triggering an allergic reaction.



To put it simply, spoiled (oxidized) essential oils have a greater risk of triggering an allergic reaction.

Oxidation requires oxygen, so it's important to store your essential oils in a cool, dark place (away from light sources) with a tightly closed lid. Oxidation occurs much faster at higher temperatures and upon exposure to light. Shelf life varies for different essential oils, with citrus essential oils being more prone to oxidation (nine to 12 months of shelf life), so I recommend keeping those oils in the fridge.

In general, it is not recommended to keep essential oils for more than three years. There are a few exceptions to this rule such as patchouli *P. cablin*, sandalwood *S. album*, and vetiver *C. zizanioides*, which actually improve with age. Because oxidation can lead to the formation of potent allergens, using spoiled or oxidized essential oils can cause adverse reactions. ACHS Founding President Dorene Petersen gives a useful demonstration of how to properly store your essential oils in the YouTube video, "[How to Correctly Store Essential Oils for Optimal Therapeutic Quality](#)."

Essential Oil Safety

Essential oils are incredible plant compounds when used safely and properly. If you have any questions about the chemistry or information in this article, please let me know in the comments.

And if this is a topic that interests you, ACHS Founding President Dorene Petersen gave a fantastic talk on essential oil safety in this Master Lecture webinar: [The Ultimate Essentials of Essential Oil Safety with Dorene Petersen](#).

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