## **Criteria for Choosing Quality Essential Oils**

By Jennifer Davis

There are many factors that you should consider when looking for a reputable place to purchase essential oils. I have had varied experience when looking for essential oils and I have always been asked, "Where is the best place to buy my essential oils?" Every essential oil company out there is not going to offer the same oils. Many will offer commonly used oils and then there will always be a variation on what else they offer. Some companies cater to just essential oils, other companies cater to aroma therapists or other homeopathic remedies, and a third type of company that we tend to be more familiar with is an MLM (multilevel marketing company) that deals specifically with marketing and sales of their product. The answer is that there isn't just one place or another to buy quality essential oils. One company isn't better than another company just based on reputation. In my experience it is best to look at the product over any claim. When looking for my essential oils here are a few of the things that I ask about a company before using them.

How pure are the oils? There are currently several claims that can be found when looking for essential oils. A few of the common things you will read will say "pure therapeutic grade" or "certified therapeutic grade". Currently there is no governing body regulating the purity of an essential oil under these standards. It's very important to know that and do your homework when choosing a quality essential oil. Make sure that you are buying quality over a trademark or claim. The best way to check your oils and what is in them is testing.

Essential Oil Testing- Gas Chromatograph and mass spectrometry testing are the two most common test forms for essential oils. They are used to identify the different chemical constituents that are found in each essential oil. They are used to analyze the specific amounts of esters, fatty acids, alcohols, aldehydes, and terpenes. They are also used to detect and measure pollutants and possible adulterants that might be found in an essential oil. Some of these might include things that might possibly be harmful or a government controlled substance such as a pesticide. A reputable company is going to regularly test their own product as a standard practice. A good distributor will also do this on a regular basis and be willing to provide you with a batch by batch copy of these tests for their product on their website, via email or by request.

Most companies that are reputable will also have third party testing done as a standard. Some companies have also gotten into the practice of offering a sample of their oil. These I find are a good way to try out new companies before investing in the company's product.

**Distillation procedures**-How and where are these oils being produced? Several different things can contribute to the chemical quality of an essential oil. The time the plant was harvested (was it early or late in the growing season), how long after harvesting the plant matter was it before sending it to be distilled, what was the actual extraction process used in the production of the specific essential oil?

**Steam distillation** is the most common extraction methods for essential oils. Make sure the company you choose uses the most appropriate way to extract the essential oils in the best way possible. Incorrect extraction of essential oils can damage chemical integrity and quality of the essential oil. Too much heat or pressure in steam distillation can damage the molecular structure of the product. Look for places that use low temperature steam distillation. Using proper equipment is also important to the quality of your oils. Steam distillation should be done using a stainless steel chamber.

**Solvent extraction** removes essential oil from the plant using chemicals leaving behind solid plant matter that must be filtered and purified later. The toxic chemical solvents used in this type of extraction may or may not leave unwanted residue and possible irritants that have no helpful value at all. This particular method I do honestly believe comes down to a personal preference on an individual

case basis. I have been told by Shanti Dechen, director of the Aroma Apothecary Healing Arts Academy that quote,

"When I first started studying aromatherapy, I was a purest and did not use any absolutes. However, I have come to value the beautiful fragrances of jasmine, gardenia, jonquil, rose absolute, violet leaf, narcissus, mimosa, tuberose and others that are from solvent extraction. The amount of residue is so small, around .0001% that I found the benefit outweighs any concern."

The country of origin- Climate, altitude and soil conditions are also factors in the quality of an essential oil. The goal with essential oils is to produce the best quality plant matter with the best chemical constituent to follow a base line of quality for the essential oil being produced. Plants grown in their native regions tend to have better results and fewer adulterants and or pollutants.

**Timing of distillation**- With an array of companies now that are offering essential oils you will notice that the sourcing of the oils varies. Some companies grow their own plants and produce the product in the same location. Some companies grow their product and distill in completely different locations, which require transport for that plant matter. This can affect the shelf life of your essential oils.

A company that locally grows in several locations, produces, and distributes will likely grow that product and extract the essential oil from that product in a short amount of time. When this happens there is much less likely opportunity for adulterants and other variants to contaminate the plant matter between the harvesting and the extraction. You are also more likely to have a much fresher plant matter to extract from thus expelling a much more quality product with a longer shelf life once that product is finished and set to market.

A company that for example grows their plants or sources for their plants but does not extract those plants in that location might have variants to consider when producing oils. If it takes a company approximately two months to receive their plant product for extraction that gives two months for that plant matter to have its quality changed in transport. Sometimes just the heat and or cold elements from various transports can affect the quality of the plant matter being used. Different shipping and transportation methods can also expose the plant matter to different metals and chemicals in trucks and shipping equipment. Some organic grown farms will have varied rules for transport, which I will cover later. Always find out as much as you can about the company and where the materials they are using for their essential oils come from.

Essential Oil Bottling- The packaging of the final product will also greatly impact the quality of the essential oil and also the shelf life of that essential oil. As covered above the time involved in final packaging of the essential oil and the oil reaching its distributor is a factor of how long of a shelf life and essential oil will have after you receive it. If you are purchasing an essential oil that has a shelf life of 9 months at most, you definitely don't want half of that taken up in shipping between the supplier and distributor. Heat, Sunlight and air are all very important things to consider when a company packages their essential oils. Generally oils are kept in a very dark glass container. When they are shipped and stored they are kept in cool dark locations with as little sunlight exposure as possible. A good company will package their oils for maximum expectancy and will take exposure factors into consideration when transporting their product.

**Sampling an essential oil-** There are so many companies out there today and a large bulk of shoppers prefer to do their shopping online. With several reputable companies out there you will find yourself maybe still questioning which company you prefer. Some companies will actually sell sample-sized bottles for you to try and compare before you spend. Other companies might even have a free

sample size. I know from personal experience that even companies which meet my criteria that some of the oils will still have a slightly different aroma. Some will have a sweeter smell and others will have a more herbaceous smell. On occasion I might order a sample size to compare from one company to the next. My personal opinion here is that as long as the testing matches up and all things measured this boils down to personal preference. Sometimes I prefer the herbaceous smell and sometimes the more sweet candy like smell. I haven't personally noticed a difference in how the two have worked. If a company doesn't have a sample size bottle I do know that some have different bottle sizes that are more convenient and economical than ordering in large 15ml sizes or above.

Are the essential oils organic- With organic essential oils there are two types. Essential oils extracted from plants that have been grown organic and essential oils extracted from plants that have been certified organic. It's important to know the difference and find a company that certifies their products. Certified organic standards generally require an authorized regulatory agent to approve or disapprove the agricultural and manufacturing process. Certified companies will be regulated usually by government agencies such as the Department of Agriculture (USDA) in the United States. There is also a program called the National Organic Program or NOP. In each country they have similar programs or third party agencies that make sure each farm and the processing and handling facilities are meeting that specific government's regulation. Each farm and facility is certified itself and not the actual product being produced. I personally try to buy organic oils when possible just for the lack of pesticides being used on the plant being extracted. Pesticides and other nonorganic chemicals can leave unwanted toxic residue that can cause damaging effects to the plant itself, to the environment and our body.

## Does the company use the botanical and Latin name in packaging the essential oil-

The botanical and Latin name of the essential oil will help identify which species of plant the oil comes from. This is important because some oils are extracted from the same plant but different parts of the plant or might be grown in different native regions. Because of these variants the properties of these particular oils can change as well as the precautionary measures that need to be taken accordingly. A common oil this happens with is the cedarwood.

**Atlas Cedarwood** (*Cedrus atlantica*) is originally native to Algeria. This oil is generally non-toxic, non-irritating, and non-sensitizing. It is not suggested use for children. Its steam distilled from wood, stumps and sawdust. Its principal constituents are *altantone*, *caryophyllene*, *cedrol*, and *cadinene* 

**Texas Cedarwood** (*Juniperus ashei*) is native to the southwester USA, Mexico, and Central America. It is botanically related to the Virginian cedar wood. Its steam distilled from heart wood and wood shavings. Its principal constituents are *cedrene*, *cedrol* (higher than Virginian oil) *thujopsen* and *sabine*. It has the same safety precautions as the following."

**Virginian Cedarwood** (*Juniperus virginiana*) is native to North America. It is generally non-toxic. It can cause irritation and sensitization in some people. This oil and the "ashei" variety has to be used in moderation. Its steam distilled from timber waste and sawdust shavings. Its principal constituents are mainly *cedrene* (up to 80 percent), *cedrol* (3-14 percent). And *cedrenol*. The use of this oil has been fatal and should be avoided during pregnancy. This oil is an abortifacient."

**Himalayan Cedarwood** (*Cedrus deodara*) is native to the western Himalayas. It has a recommendation to be used in moderation and should be avoided during pregnancy. It can cause skin irritation in some individuals. It is steam distilled from the inner wood. Its principal constituents are mainly *cedrol*, *g-Atlantone*, *ab-cedrene*, and *himachalene*. This oil is botanically closely related to the Texas Cedarwood and the Virginian Cedarwood."

As you can see with the cedar wood oils they are all similar but they have very different active qualities and chemical constituents. The safety precautions also differ on these different oils. When

buying an essential oil it's very important do know exactly what variation of an oil you are purchasing to get the very best therapeutic value from that oil and prevent any injury to yourself or another person.

Does the company provide educational materials and safety labels- One of the final very important things to me when looking for essential oils is how well the bottles are labeled. I want to know two things. What is this essential oil used for and how to safely use that oil? Hopefully, with most companies they will have safety information on the bottle itself. Those types of information labels might include but not be limited to information on the use of that oil with children, information on internal use, information on external use, dilution warnings or skin irritant information, photosensitivity warnings, limited use warnings, medicine interaction warnings, exposure instructions, over use precautions, or do not use warnings.

Most reputable companies will have at least a few of these on the bottle label itself. I also personally look for a company that will provide me with as much data on that specific oil as possible. In detail profiles as to what that oil is used for and how or even how not use it. With several essential oils and the precautions that come with them I would look for a company that provides you with the positive benefits of that oil but also takes care to provide you with some of the interactive or dangerous over use data as well. Some oils just aren't meant to be used at all or are meant to be used in very low quantity due to toxicity. My personal opinion with this is that with all of the companies out there right now with essential oils there are several out there that are definitely not educating people on the proper safety data for the oils they are using. I definitely recommend a finding and using a company that has your safety in mind as well as their product. The more informative a company is about the product they are selling the safer you can be using that particular product preventing accidental injury to you and your family.

Are they cost effective- I know cost is definitely a factor with essential oils when you start purchasing more expensive oils. I think cost is really important however there are ways to be frugal with your essential oil purchases. Obviously a current debate right now is MLM company oils or non MLM company oils. I've been asked which are better. My answer? Both. Neither. Both types of companies out there right now have upsides and down. Cost is a big factor when dealing with MLM companies. If your wanting to save and spend less money on essential oils my recommendation is more often than not go with a non MLM company. I can also say that with some MLM companies that with certain incentives you might save more on promotions than not. The best thing you can do is look at each company individually and start narrowing down this list of picking for quality first and then price compare when you know you are looking at quality over quantity. I personally use 4-5 different essential oils companies currently and frequently. Again, several companies will also sell essential oils in smaller quantity and bulk quantity to save you money in the long run. I really honestly believe that cost efficiency will be more of a case-by-case individual fit.

In closing, I have listed several different criteria for choosing an essential oil. I have two companies in particular that I would like to recommend here. I personally believe they are good companies and each one has a unique reason for why I choose my essential oils outside of the abovementioned criteria.

Mountain Rose Herbs is one of my highly recommended places to look for quality essential oils. I love the website itself for easy navigation and access of data available. The company has a huge variety of not only essential oils, but carriers, packaging supplies, blending ingredients, herbal oils, health items, teas, spices, body care, cosmetic supplies, educational materials etc. Mountain Rose not only has a wide variety of essential oils and carrier oils, but they offer these oils in more than one size. Generally, they often offer their oils in sizes from 1/8oz - 16oz. I really like the cost effectiveness of this option.

Mountain Rose Herbs offers several essential oils that are organic and or kosher certified and some that are also non GMO certified through OTCO & USDA organic program and non GMO project verification. They also participate in several other environmentally conscious programs. Each essential oil listed on their website has data available about the plant part used, chemo type, extraction method, a small general use overview, blending recommendations, safety precaution measures, and the country of origin. Carrier oils on this company website also provide data sheets on typical analysis read outs. Mountain Rose has good customer service and 3 ways of reaching them during business hours.

Barefut Essential oils is another company that I find personally particularly useful in cost effectiveness when looking for my essential oils. Barefut is a brick and mortar store in Utah that has been around for a couple of years. They have absolutely excellent customer service and response time. They guarantee their product. This company does not currently offer organic essential oils however they do provide GS/MS testing results of their oils on their website for download. Also listed with each essential oil is the country of origin, extraction method, plant part used, and essential oil safety data. Barefut has a few small perks that I personally like to take advantage of. They have a rotating available inventory as well as a slowly expanding product inventory. A noted bonus for this company is that they regularly offer sales and comparative pricing. They have a points system and packages for individuals who want to expand a larger cost effective collection of essential oils.

I have purchased essential oils from other various companies but I definitely favor these two companies when it comes to cost efficiency and quality of essential oils. I really hope this criterion helps in choosing quality essential oils.

## Resources:

Julia Lawless, The Encyclopedia of Essential Oils, Conari Press, San Francisco, CA, 2013, pages 66-68.

https://www.ams.usda.gov/rules-regulations/organic

https://en.wikipedia.org/wiki/National Organic Program

http://www.aromaweb.com/articles/therapeuticgradeessentialoils.asp

https://www.naha.org/explore-aromatherapy/about-aromatherapy/how-are-essential-oils-extracted/

http://www.alwaysayurveda.com/cedrus-deodara/ http://www.biosourcenaturals.com/cedarwood-essential-oil.htm

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Recommended Company Websites:

https://barefut.com/

https://www.mountainroseherbs.com/