How to determine Quality and Purity of Essential oils

Recently it came to our attention that many folks have no understanding of the quality of essential oils.

Although there is no classification or grading system in place for essential oils by either the Essential oil industry, the USDA or the FDA or even by any other country. It can make it really hard for someone to determine if the qualities of the oils they are using are safe, unadulterated or altered or changed in any manner.

The only way to really determine the purity and quality of essential oils is by having an analysis done. The most common method is by Gas chromatography (GC) and Mass Spectrometry (MS). But they are not always 100% accurate.

Trained chemists can read the test results and determine if the oil analysis of the chemical constituents percentages fall within those ranges for that particular essential oil botanical name and species. If they have questions or something seems off, they have a large gamut of several other tests that can be performed to determine purity and possible adulteration.

Several of these tests include: Specific gravity, Optical rotation, Infrared spectroscopy, Ultra-Violet-Visible spectroscopy. There are Nuclear Magnetic Resonance, Refractive Index, Ester Values and Acid values. And if necessary there are still more.

What does this all mean to you the consumer, the massage therapist or aromatherapist? Well, when someone says they have HIGH Quality oils then you should find out if the supplier does the minimum testing of GC/MS. If not, then how do they know? You can ask for the test results but unless you are a trained chemist and know the percentages of constituents these results would mean absolutely nothing to you. This is where a little faith has to come into play.

For us here at Birch Hill Happenings Aromatherapy, LLC, we have found several suppliers that test for the basic GC/MS and several also perform up to 6 other tests on the oils they sell to us.

Our main supplier performs the basic GC/MS and up to the 6 other tests. If the essential oil should fail even one of the tests they will not even sell it to us or anyone. They will not even import it into this country! Since we are not chemists, we have to rely on their chemists. Since they are very reputable and have been in the industry for many years, we have to have faith in them. Also, for us, we have seen the difference with their oils when used for therapeutic aromatherapy as compared to others we used in the past. They are to us the freshest, purest and highest quality oils available.

So although there really is no true 'classification' of essential oils there is, to us, a simple way to help you understand how we state the quality of essential oils. Just so you know this is just a helpful guide. You will still need to learn about oils and how they work for you. In any case, for use in Aromatherapy, you will always want to use the highest quality and purity you can find.

We try to explain in layman's terms that essential oils come in various qualities. The very simple method of helping you to understand is by us using terms that you can relate too.

"Food quality" - where a lot of alteration and adulteration occurs, as they try to make the EO's smell and taste just the way they need them to for the food and flavoring industry.

"Perfume quality" - again a lot of adulteration and synthetics are introduced. Smell really great and can give consistent results when you want to duplicate the exact same scent - time and time again.

"Therapeutic quality" - the purist form of essential oil. They are not cut, not added to, not adulterated. The best of the best. If you were to use it as medicine - isn't this the form you would want to use??

Also quality is determined by soil and weather conditions, how and when harvested, length of time and how it is stored after distillation and what species was distilled or extracted.

So when purchasing essential oils for use in Therapeutic Aromatherapy, always try to buy the purist and highest quality oils you can. The results you are trying to achieve with the use of fresh, high quality essential oils WILL make a difference in the outcome.