

Aromatherapy Tip of the Week - #15

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How are Essential oils Extracted?

Do you wonder how we get those precious essential oils out of the plants?

Well, they are extracted by several methods. First and most common method is by Steam Distillation. Other methods include Cold pressing, Hydro distillation, solvent (CO₂) extraction and infusion.

Steam distillation is done by placing the plant parts - such as whole flowers, small twigs, stems or in the case of bark (chopped or ground into smaller pieces first) into a vat. Then these large vats have steam forced through the parts. Essential oils are released into the steam and as the steam cools through the cooling tubes the essential oils float on top of the cooled water. The oils are removed and readied for sale. The distillation water is recovered too and is known as a hydrosol or floral water.

Cold pressing is typically done to peels or skins of the citrus fruits. The oils are then filtered to remove other residues or waxes and then readied for sale. Some citrus oils are then processed one step further to make them better and safer by being distilled. Or in the case of bergamot, they have the furocoumarins removed so they can be used safely on the skin. General precaution is to not use any cold pressed citrus oils on your skin if it will be exposed to sunlight or other UV light. This is because a phototoxic reaction could and most likely will occur. (See last weeks Aromatherapy Tip on Phototoxicity).

Hydro Distillation is similar to Steam distillation, except the plant parts are submersed into a hot water bath, and the resulting steam is cooled and the same procedure as steam distillation follows.

When plants are extracted using solvents such as CO₂ (Carbon dioxide) they are exposed to the CO₂ and then the CO₂ is recovered to be used again. This actually produces what is called a concrete. The concrete is then processed further to get what is called an absolute. Because the essential oils are not exposed to outside sources of water etc, these extracts often contain the highest amount of minute constituents available from the plant. Concretes and absolutes are sometimes further processed by distillation.

Infused oils are not very reliable sources of essential oils and can contain many contaminants. Infused oils are made by placing the fragrant plant material in a fixed oil such as almond, olive or any of the many available oils. The plant material is left to sit in the fixed oil for several days, then the old plant material is removed and new is added. Repeating this for several cycles or as desired. Again, this method is not recommended as you can easily get oils contaminated with bacteria, molds and other debris.

Now you know how we get those oils. Some methods are quite costly and along with the small amounts of oils available from the plant material all play into the costs associated with the final product available.

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