

Please note the date of this file which I use as evidence that some of the recent articles on this subject have failed to credit myself with being the first person in aromatherapy to dispute the validity of the chemical groups theories. That issue is also covered in several other articles on this site.

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Where Aromatherapy Training is going wrong

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Those training courses which place a lot of emphasis on the actions of essential oils caused by specific chemicals in the oil are wrong.

Why? **1.)** Natural essential oils can vary tremendously in their chemical composition. How can you say, therefore, that, *"Because lavender oil contains linalool (a proven sedative) that, therefore, the oil will have the therapeutic actions attributed to linalool."* It is never stated 'how much' linalool is required to achieve the stated action and when we look at the number of essential oils containing common chemicals such as linalool, in fact we see that they can have very different fragrances as well as actions. Perhaps the best instance is *linalool type basil*. Its smell is not that different to ordinary type basil and it is extremely doubtful that it will achieve the same kind of mental relaxation as a lavender oil containing similar, or even less volumes of linalool

Compositional variation: Genuine natural oils, as stated, can have colossal variations in their chemical make up even within different sub varieties of the same botanical species and, yet, their may be little difference in their fragrance. This is because the characteristic fragrance of an essential oil is often found in the minute traces of odiferous chemicals and not necessarily in the major components. The Food and Flavor Trades are well aware of this and most of them only use the fractions of essential oils which contain the most active fragrance or flavor molecules. Frequently these fractions only represent 0.5%-5.0% of the whole oil. The balance of the oil is a by-product used in other trades (including aromatherapy.)

2.) Assigning actions to an essential oil based on it's chemical composition, ie. *aldehydes* do this, that, and the other; *alcohols* likewise; *ketones* are neurotoxic [is wrong.] This classification method is used in most aromatherapy training courses and yet, it is extremely misleading and frequently potentially dangerous. I have seen in the course notes from so called "reputable and recognized" training courses, *"Aldehydes are more or less skin irritants."* THIS IS WRONG! Some aldehydes are common food ingredients and others, such as cinnamic aldehyde are severe skin irritants. *"Ketones are neurotoxic."* This is rubbish as ketones are common food ingredients and the essential oils such as sage and pennyroyal are permitted food additives, *"Terpenoid groups have particular therapeutic properties,"* This is unbelievably silly as terpenoids are a vast group of chemicals with widely varying properties.

3.) Students are being told that the action of particular oils are due to "x", "y" or "z" chemicals, and yet, most aromatherapy schools do not have a clue what the oil they are using actually consists of. How is it that some of these schools, who are perhaps unknowingly using semi-synthetic oils such as lavender and geranium, still seem to get good therapeutic results? Is it perhaps because what is of utmost importance is what the oil smells like rather than its precise chemical composition and that the client/therapist placebo effect is paramount? So, why fill students heads with a lot of theoretical chemistry when logic tells us that in practice it can not be correct? I can answer my own question here... It is that the people providing such material in their courses have not studied the subjects they are teaching carefully enough and simply do not know what else they can teach to fill time in their overpriced courses.

It is totally and utterly wrong to attribute potential actions and adverse effects of essential oils based on broad chemical classifications. Essential oils are highly complex mixtures of natural chemicals, in fact, many are so complex that they still cannot be fully re-created by chemists. A fair number contain large amounts of unidentified chemicals and, therefore, the actions of such chemicals are unknown. As already stated, it is the trace chemicals which contain the most active fragrance and flavor molecules and it is a fair assumption that many highly active therapeutic substances only occur in tiny trace amounts. Man can re-create the fragrance of many essential oils, but such a product does not contain the hundreds of trace chemicals (with their synergistic and perhaps potent actions) as the real thing.

The developers of pharmaceutical drugs are well aware that broad classifications of anticipated actions of individual chemicals are highly unreliable. They are well aware that the actions of different isomers of the same chemical can be very substantial and for this reason, when they find a chemical which has promising properties, they have to investigate any isomers which may occur as one may be therapeutically useful and one toxic.

The natural chemicals making up essential oils frequently display isomerism and this is one reason that it is wrong to say that, *"Because an oil contains thujone, that all oils containing thujone will, therefore be toxic."* Thujone does not exist as one chemical. It has isomers, one of which is 4 times more toxic than the other. Some oils contain a lot of one isomer and other oils contain a lot of the other isomer. So, you must know precisely what isomer exists in the respective oil and what the precise actions of the isomers are. Even then, you can not be certain of the effects of a toxic isomer due to the modification to the chemical properties that occur in the whole oil (due to the many **other** chemicals that it contains.)

The lesson to be learned from this is to **consider the known data on the actions of the whole essential oil first.** Chemistry does have its uses when looking at essential oils, but it should always be secondary to the knowledge of the effects of the whole oil.

*Continued...*in the compilation.pdf file for the rest of this article and others on this issue.

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