

WHERE AROMATHERAPY TRAINING IS GOING WRONG - Part 1 of [2.](#)

Written and researched by: Martin Watt

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My response to criticism from the AOC of this article is [below](#).

Those training courses placing great emphasis on the actions of essential oils being caused by single chemicals occurring in the oil, are wrong. Why ?

To attribute the broad spectrum of therapeutic actions inherent in most essential oils, based on individual chemical constituents is wrong. If you say that "because lavender contains linalool (a proven sedative), that therefore the whole essential oil will have the same therapeutic actions as attributed to linalool", is highly misleading and far too simplistic.

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 example is linalool type basil oil. The fragrance is still basil-like and some would say it is a mild *stimulant*. It is also most unlikely that basil (linalool type) will achieve the same kind of mental *relaxation* as a ordinary lavender oil containing similar, or even less volumes of linalool.

Lavender **herb** has long been associated with relaxing treatments when given as a tea, or tincture, and yet the fresh plant contains hardly any linalool. Therefore, any relaxant action in the use of the herb, is NOT related to this crazy theory of "alcohols having relaxant actions where they occur in essential oils". All these actions found in books and on courses where the action of an oil is do to the major chemicals in it, must therefore be considered as ill evaluated theories and not based on facts.

I have seen the following in course notes from so-called 'reputable' & 'recognised' courses:

"aldehydes are anti-inflammatory, alcohols are relaxing, ketones are neurotoxic". This classification system is used on many aromatherapy training courses, and yet it is extremely misleading and frequently potentially dangerous. **As far as I can ascertain, the origin of these crazy concepts are just a couple of French therapists whose work has never been adequately evaluated.**

- Aldehydes are a vast group of chemicals occurring in plants. When they occur in Cinnamon bark oil for example, they are the opposite to the statement above, as that oil can burn the skin.
- Alcohols: See above on [lavender herb](#).
- Our body makes Ketones, they are also in most meats. The only time they cause a problem is if our decontamination mechanisms are disrupted through illness. They are commonly found in everyday foods and flavourings permitted under various National legislation. As with all such statements on toxicity, they are meaningless unless they are qualified by the volume used. For example, drink a bottle of sage oil and you may well get poisoning, on the other hand, the oil used in the appropriate volume in massage or foods should not give rise to neurotoxicity. Misuse of almost anything will lead to problems but the pseudo science articles published on this subject rarely take account of that fact of life.

"aldehydes are more or less skin irritants", **this is wrong**. Some aldehydes are common food ingredients, while others such as cinnamic aldehyde are severe skin irritants.

"Terpenoid groups have particular therapeutic properties"; this is unbelievably silly, as terpenoids are a vast group of chemicals with widely varying properties occurring in thousands of plants and foods.

It is totally wrong to attribute potential actions and adverse effects of essential oils based on broad chemical classifications. Essential oils are complex mixtures of numerous natural chemicals. Many oils are so complex that they cannot be fully re-created by chemists. Many contain unidentified chemicals which by default have unknown actions.

It is often the trace chemicals which contain the most active fragrance and flavour molecules, and it is a fair assumption that many highly active therapeutic substances also only occur in 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.

Compositional variation: Genuine natural oils can have colossal variations in their chemical make up, *and yet there may be little difference in their fragrance*. So again how can you possibly rely on therapeutic actions based on these huge variations in the chemistry of natural oils? The characteristic fragrance of an essential oil is often found in the minute traces of odoriferous chemicals, and not necessarily in the major components. The food and flavour trades are well aware of this, and most of them only use the fractions containing the most potent fragrance or flavour molecules. Frequently these molecules only represent 0.5-5% of the whole oil.

Non specific chemistry: The natural chemicals making up essential oils frequently display isomerism. This is another 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 a lot of the opposite isomer. Therefore, you must know precisely which isomer exists in the respective oil, and what the precise actions of the different isomers are. Even then, you cannot be certain of the effects of a potentially toxic isomer due to the modifying effects caused by the numerous other chemicals occurring in the whole oil.

The lesson to be learnt from this is 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.

As stated above, students are being told that the action of particular oils are due to this or that chemical. However, 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 unknowingly using semi-synthetic oils such as lavender and geranium, still seem to get good therapeutic results? Is it perhaps because of utmost importance may be what the oil smells like, rather than its precise chemical composition? The client-therapist placebo effect is also of equal importance, but 'placebo' tends to be a rude word in complementary medicine.

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 on their courses have not studied the subjects they are teaching carefully enough. They follow con artist trend-setters like sheep, and employ none specialist chemistry teachers who have never even worked in or with the oils trade. This is often done to fill time and have their courses 'recognised' by trade associations who provide fallacious validation.

Training in chemistry: The seemingly desperate need by training organisations to delve into areas of chemistry which are of little relevance to the use of natural essential oils is a terrible shame. It is leading us down the same paths that conventional medicine and the pharmaceutical trades have trodden. It would be more acceptable if **real** experts in the trades associated with essential oils were used in aromatherapy training. People such as scientists who have proved that

synergistic action really does exist, dermatologist's who work every day with cases of adverse reactions to products including essential oils. No, many course providers would rather stick to the pharmacists and others trained in the chemical sciences, **who are not expert in the specific sciences of essential oils**. "Well they are cheaper aren't they"- "we must bear in mind our training course in Hawaii is going to cost a lot"- "we must get that other house in the south of France this year, and oh yes - don't forget we must go on the French aromatherapy holiday".

Latin naming of oils: Students from well-known schools tell me they were told:"you can't be an aromatherapist unless you know the correct Latin names". This is complete and utter nonsense as I have come across few schools that knows the **correct botanical name** of even a fraction of their oils. Most plants used for essential oil production whether they are wild, or cultivated crops, consist of numerous sub-varieties that can have wildly different chemical compositions. Therefore, if you are taught for example that tea tree oil must be "Melaleuca alternifolia" this is not strictly correct. There are a number of sub-varieties of alternifolia that are used for Tea tree oil. This is why the Australian governments standard for Tea tree oil does not just specify alternifolia but adds "oil of Melaleuca, terpinen-4-ol type".

Commercial developments in essential oil bearing crops have been going on for well over a century, with constant developments of commercially superior clones or natural varieties. Aromatherapy training schools and essential oil importers are often years behind such developments. The names oil importers give are simply the accepted trade norm and are **not** the actual botanical name of the plants used to produce the oil. It is common that even the large essential oil importers cannot find out what variety of plants are being used in the country of origin. Bear in mind that the large customers for essential oils are not particularly interested in such matters. They mainly want to know "what is the chemical composition", "how much is it per ton", "can you keep up regular supplies". For a long time, there has been a total separation between commercial oil production and end users. The producers will often grow their crops to meet the needs of their major customers and these most certainly are not to be found in the aromatherapy trades.

**Why has all this misinformation come about then ?
The reasons are complex, but there are a number of reasons.**

1. Aromatherapy grew as an offshoot of the beauty therapy business, and we all know what that trade is like for inventing 'wonderful' properties for their products.
2. Because of the above, most of the early practitioners trained in France. The tradition developed (as with so many beauty products), that if it has a French name or you did your training in France, then everything is wonderful. **No one bothered to check if the people doing the training really knew what they were talking about and that still applies to this day.** An unfortunate aspect of the French connection was not to bother to investigate the historical uses of essential oils in British, US or other countries medical professions and their flavour and fragrance trades. In fact there is a wealth of information from worldwide sources.
3. Many of the people who have established their businesses supplying essential oils, or in aromatherapy training courses, have had little **if any** relevant training in the science of plants, essential oils, or medicine. Therefore they have had little option but to:
 - a) Trust their suppliers statements about the quality of their oils.
 - b) To pass on to their students everything they themselves have learnt verbatim, because they possess scant knowledge on how to check the accuracy of what they have been told.
 - c) Add to the above, the fact that with the Internet, anyone can set themselves up with a flashy looking web site and immediately make money without knowing anything about what they sell. That is why we are burdened with thousands of web sites selling oils that are dangerous, along with often illegal health care claims **just to sell product to a gullible public.**

4. People in the flavour, fragrance and cosmetics trades **who are expert** in the production and chemistry of essential oils, have tended to keep aromatherapy at arms length. Therefore, they have played little part in training aromatherapy teachers. When such experts have taken an active role, it has often been the cosmetic, fragrance and essential oil chemists, rather than the many other experts available on olfaction, dermatology, microbiology, psychology, etc.

5. No one in aromatherapy has been prepared to fund, or share funding, the large investment in time and money necessary to establish the truths or untruths underlying the products and services they provide. Instead, the general trend has been 'let's get qualified and set up our own school or a new association'. So again, they simply end up proliferating the mythology to a new generation of students.

Qualifications.

The trend has been towards the 'leading lights' establishing organisations, so that they can in effect validate their own courses. Organisations such as the old A.O.C., the 'Aromatherapy Consortium' in the UK; NAHA and the ARC in the USA; the CFA and BCRC in Canada, as well as numerous beauty associations around the world, have few members with real expertise on the subjects on which they say they are setting standards. These **trade interests** then form associations to "establish standards" which the poor gullible public, as well as Government educational organisations, then assume are evidence of some kind of expert training. **Such organisations are then upset when people start to question the whole basis of their knowledge, education, and validation systems; anyone who does is left out in the cold, or in the case of some organisations, the individuals are removed from positions of authority.**

The apparent success of these organisations in gaining recognition from governmental and educational systems has little to do with them providing evidence of accurate training standards. It just seems that many governments seem to think that trades can adequately regulate themselves, such political dogma is extremely fault-ridden. Historically, time and time again, many trades have had to be regulated by legislation in order to protect the public from dishonest traders and poor standards of service. It is extremely rare to find a trade association, which puts the general public before its business interests. **So please, bear in mind, that the fundamental interests of trade associations are self-protection.**

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Aromatherapy misinformation continued - Part 2 of 2:

A further problem with aromatherapy education is found in the therapeutic actions attributed to certain essential oils. Common examples are the so-called "diuretic effects" of fennel and juniper oils. In addition the "anti cellulite effects" of grapefruit oil, **(beauty therapy con trick!!!)**

There is no evidence, that essential oils when applied to the skin in the amounts commonly used in massage, can be absorbed into the systemic circulation, in sufficient volume, to be able to cause any diuretic action. These claims originate from two main sources:

1) When these oils are given as internal medication they will stimulate & irritate the kidney thus causing the release of more urine.

2) The traditional use of water or alcohol herbal extracts which are also given **internally**.

On the other hand, there is sound evidence, that diuresis can occur simply as the result of ordinary massage. Haemodilution following massage has been detected, which helps explain the common side effect following massage, of a quick trip to the bathroom followed by thirst and the need to have a drink. Ordinary massage has been shown to produce a number of physiological effects on the body such as increase in b-endorphins, which play a part in pain relief. There are also indications that massage can cause alterations in hormone levels. **Therefore, it may be seen that**

many of the claims made by aromatherapy writers for their therapy can in fact be explained by the effects of the massage, not by the effects of the essential oils used.

So why are aromatherapy books full of so called "researched" information on the use of essential oils which does not stand up to scrutiny ? The answer is that few writers have had any education in the botanical and phytochemical sciences. Due to their weak knowledge of the subjects, they write about, they do not have the ability to differentiate between the use of an herbal extract and an essential oil. Numerous examples can be found in popular aromatherapy books of medicinal claims being made for an essential oil based on information gleaned from old herbals. Such herbal information being mainly on the internal use of water or alcoholic extracts. This type of extract contains hundreds of compounds that do not appear in the same plants essential oil. These water-soluble compounds can exert profoundly **different actions to the essential oil**. See other articles on this site.

The next myth is that an essential oil represents "the life force" in the plant. This is complete and utter nonsense, how can any life force reside in a product that has been processed and **cooked to the degree of an essential oil?** If that were the case, how is it that we do not benefit from the "life force" present in the huge volumes of animal fats that are extensively consumed? Any life force, which is inherent in plants, is much more likely to be found in herbs or vegetables from the garden eaten raw. This question of life force being transferable to humans is no different in principal, to the old tribal beliefs, that you could inherit the power of an enemy by eating his brain. I hope we all know now what a load of nonsense that is.

It must be "organically grown". I would always wish to support this method of production, and if you wish to pay the premium to support this method of production, then that is a fine thing to do. However, there are vast volumes of essential oils traded as being "organically grown" that are not. So, make sure your supplier can prove their sources, or you may be putting your money in the pocket of con artists. As with aromatherapy, there are many OG certification organisations which are simply trade associations. Some oil traders pay a membership fee, get a certificate, and use that to fool their customers into thinking the oils supplied are all organically grown - **beware of these scams and ask for proof of claims**. For example, ask the certifying authority what inspections they make of the growers at home and especially oils produced overseas. **If all they do is rely on documents do not trust anything they say.**

The oil is "field distilled". Any such crude methods of distillation, will generally not produce such a good oil, as one that has been produced under the controlled conditions of a modern processing plant. There are of course always exceptions to this general rule, for instance plants such as peppermint and rosemary, where carefully controlled local water and steam distillation is preferable to avoid the volatile 'top notes' escaping.

"It is not an essential oil unless it has been steam distilled". This concept is based on outdated oil trade criteria and not on reality. The best quality essential oils are **cold processed**. Steam distillation destroys or reduces many valuable components in essential oils. Certainly, the highly volatile chemicals that play an important part in the therapeutic effects of freshly gathered herbs are substantially reduced by hot distillation. There are only a tiny number of oils which require hot distillation in order to produce naturally derived beneficial chemicals such as azulenes.

The perfumery and food flavouring trade are well aware that hot distillation damages delicate chemicals in aromatic extracts. Due to this, they are increasingly turning to cold extracted essential oils, in particular carbon dioxide, or molecular extracts.

If the concept of "it must be steam distilled " is followed to the limits, then aromatherapists should not use; rose absolute (commonly sold as rose oil) and jasmine absolute. In addition, according to their own doctrine, they should not use the floral absolutes originally produced exclusively for the fragrance trade, but which aromatherapists are constantly requesting from their suppliers. Absolutes may stand a marginally higher chance of producing skin irritation than the equivalent steam distilled oil. However, due to their price, most people can't afford to use them at levels that

are likely to produce such a response.

So, compare what is written here, on which sound evidence exists, with what is said in aromatherapy books, on courses and in the verbal or printed literature from some essential oil suppliers.

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An unpublished letter in response to a letter from the AOC, following the appearance of my article in The Aromatic Thymes. Vol.3, No.1. 1995 .

A.O.C.=Aromatherapy Organisations Council, UK. (Represented training schools).

A.T.C. =Aromatherapy Trades Council (Represents essential oil suppliers).

Dear Pam,

I have just seen a copy of a letter sent to you by the AOC in response to my article "where aromatherapy training is going wrong". This letter contains several misleading statements and still completely fails to address my contention that the AOC has totally failed to set adequate standards on the QUALITY of aromatherapy education.

Page 1. Para 1. Yes they did send a response to Aromatic Thymes, but that failed to address my challenges as stated above. In addition, I also made another reply to their letters in a subsequent edition.

The AOCs assertions that "they represent the largest slice of the aromatherapy trade in the UK" is simply not true. Therefore, by default, it must be untrue that they have achieved all embracing trade self-regulation. The largest slice of the aromatherapy trade is in fact those numerous courses run by none AOC organisations particularly those in the beauty sector. These appallingly poor courses are subsidised by the UK Department of Education because they are run in establishments built and run from the UK taxpayers pocket. Yet, the AOC claim they deal with the Dept. of Education on "setting trade standards", yes maybe, but for what proportion of the trade?

Para 4. The standards promoted by the AOC have been those accepted as the norm by the trade. That is where the heart of the problem lies in that 'trade standards' do not by any stretch of the imagination represent truth or honesty in educational matters. They are simply standards that an extremely poorly educated (in aromatherapy) majority are happy to accept. Of course it was "trade interests" that set the standards, that is the very nature of the AOC, their members all run training courses, so is that not a trade interest?

The fact the UK Department of Education seem prepared to accept standards set by a trade body should be no surprise to anyone. Their civil servants have always had a leaning to accepting standards set by trade organisations, provided 'procedures and protocols' are followed! One must wonder how many students in other trades are similarly burdened with lousy quality of education because of trade standards being generally accepted as "good enough".

I would challenge the AOC that "their members are well-qualified in the art and science of our therapy". If their members were so well-educated, then why did many of their members need to purchase my safety data manuals, (around 2000 copies sold starting around 1992). Why was it (if their members were so well educated), that it was in fact a trade organisation that first asked to me research toxicity issues?

Why, if their members were so expert, was it that it was **me** writing about the dangers of cinnamon bark, expressed bergamot and verbena oils, that persuaded many of their members to stop promoting those oils in their courses and in some cases suppliers from selling them. If their

members were truly well-educated on essential oils, then all my work on safety issues would not have been needed. Regretfully, due to the huge fallout rate of therapists in the trade, many of those I helped educate have dropped out. Due to this, we once again have emerging the kind of idiotic advice from trade approved teachers that I had hoped had been put a stop to years ago.

Page 2. Para 1. All these quoted standards accepted by these various organisations can in no way be deemed to mean that the material being taught is accurate. The main activity of the AOC has been to promote PROCEDURES, CODES OF CONDUCT, METHODOLOGY, ETC. **It has never examined in any depth if the teaching materials being used, or if the basic concepts underlying the therapy are founded in truth or fiction. Most are the later.**

Para. 2. It is absolutely useless to insist that a teacher is trained in teaching, if the material being presented by the teacher is packed with factual errors. Certainly this is the case with many of the members of the AOC and I have their course notes to prove it.

Para. 3. The ATC has historically never attempted to protect the consumer from the commonest form of fraud propagated in the trade, which is the sale of phoney essential oils. After many years of dragging their heels, it seems some kind of analytical scheme may now be up and running, but doubtless any results will be kept confidential and away from public scrutiny. They should however be applauded for insisting member companies packaging is adequate and safe, but that's about all. They claimed in their literature to be an appointed agent on behalf of the UK Medicines Control Agency to police the literature of essential oil traders. Yet, at one time, one of their leading members was making totally unfounded and illegal medicinal claims in her literature while at the same time telling other traders they could not do that.

Para. 4. The 1968 Medicines acts and subsequent legislation were in fact enforced by the Royal Pharmaceutical Society acting as agents for our Medicines Control Agency. Any "code administration" undertaken by the ATC is without any force of law behind it and can only apply to those companies in the ATC. Please don't forget that the vast majority of people selling essential oils in the UK are **not** members of the ATC.

Please note that it was not my doing in putting details about my training activities at the end of my article. All of my articles are always written as separate items and it is usually the editors of the respective journals who insist on providing a bibliography. The final part of this paragraph is scurrilous, I have never set myself up as an expert in essential oils or aromatherapy (I need 5 more lifetimes to be that). My activities are aimed at seeking out accurate verifiable information about our trade and then publishing it or teaching it. If that activity has proven what a load of rubbish is being taught within main stream aromatherapy, then I will do all in my limited means to disseminate that knowledge and expose the people teaching nonsense. If that means indicting a very large part of the trade, then so be it.

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