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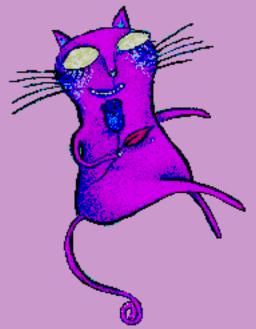
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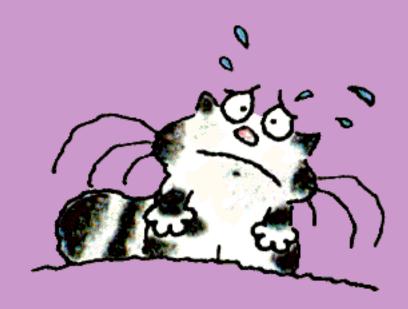
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Aromatherapy & Cats



Essential Oil Safety & Cats

Be Wary of Aromatherapy Claims for Cats

By Sue Martin

Please be wary of any animal practitioner or supplier of essential oils claiming that their products or techniques are completely safe to use with cats: the statement is both inaccurate and unsafe. No matter what their claims say, nothing will change the unique physiology of a cat.

Generally, essential oils consist of hydrocarbons or monofunctional compounds from mono-and sesqui-terpenes, together phenylpropanoids and other volatile aliphatic and aromatic substances.

Many terpenoids are rapidly absorbed orally and dermally by the cat's system and are metabolized in the liver. Due to their volatile nature, inhalation of essential oil components is also possible, and these enter the bloodstream via the lungs, also to be metabolized in the liver. The terpenoids and their metabolites are often conjugated with glucuronic acid (glucuronidation) and glycine depending on the type of terpenoid and animal species involved. The conjugated metabolites are usually more water-soluble and are easily excreted through the kidney and feces.

Cats are known to be deficient in their ability to eliminate compounds through hepatic glucuronidation (they lack enzyme glucuronyl tranferases). Glucuronidation is an important detoxification mechanism present in most animals except cats. Lack of this important detoxification mechanism in cats may result in slower elimination and thus build up of the toxic metabolites in the body causing toxicity problems.

Most people are aware of warnings that focus on the topical and oral administration of essential oils, but they are generally unaware that inhalation of essential oils can also be unsafe for your cat. Oils can affect a cat by absorption and inhalation just like for humans, and precautions should be used when repeatedly diffusing essential oils, since the development of liver damage can be a slow process without any visible symptoms.

When diffusing oils, try not to use excessive amounts of essential oil, and choose oils which have lower volatility's as far as possible. In addition, ensure good air circulation especially during the diffusion process, so that local concentrations of essential oil vapour are not built up in non-airchanged areas inhabited by the cat. Make sure cat can get to 'undiffused' air at any time if possible, and only diffuse in an

individual room if cat does not have access i.e. make it a multi-room location. Toxicology studies show that the feline liver usually needs 48 hours to process and excrete 'terpenes', thus allow 48 hours between end of last diffusion and starting another to avoid repeated exposure by inhalation.

As most of you probably know, humans become quickly used to the intensity of a beautiful aroma ("adaptation") and have the habit of 'freshening it up' and adding more essential oils, definitely not so good for the cat. To test this, leave the area for another area not affected by the diffusion for about 15 minutes, re-enter the room and you will again smell the aroma. Remember cats have many more olfactory receptors than we do and are probably trying to figure out why you use so much oil.

Following is only a very small sampling of the many unsafe applications and untrue claims for cats:

1. "Essential Oils are distilled from plants & through their processing & mixing with vegetable oils, they oxygenate your pets' blood system & soothe their emotions & nerves."

This statement is untrue, essential oils do not oxygenate an animal's or a human's blood, yet a certain multi-level marketing company espouses this myth as proven scientific data, whereas it is actually pure sales hype.

2. "This Essential Oils product has been developed for application in the ears of cats and kittens with ear mite infestation. Recommend daily application to both ears in infected pets to kill mites and control infection in ear canal".

Frankincense and Helichrysum in diluted

vegetable oil base, apply several drops to each ear daily for 2 to 4 weeks.

PRECAUTIONS: Discontinue use if redness, swelling, heat or pain result from application of this product. "

They offer precautions, as reactions will most likely occur. They do not tell you that placing the essential oils and vegetable oil in the ear will actually do more damage than good to the internal ear organs. That the oil blend can build up causing deafness and the cat's system is absorbing enough essential oil compounds to cause permanent liver damage or death.

There is no valid research that shows Frankincense and Helichrysum essential oils kill ear mites in cats, but there is proof essential oils are toxic to cats.

3. A book on animal aromatherapy recommends using peppermint essential oil on a cat or kitten for respiratory problems and runny nose.

The owner of a kitten wrote to me about how her kitten even after applying 2 drops of peppermint on its chest, as the book instructed, would not get better. First, I felt a stab of sympathy for the kitten because her owner had read and applied an unsafe application, and secondly, frustration that authors write such unsafe information. I told her she should have taken the kitten to a veterinarian as some respiratory problems can be life threatening or contagious to other cats. I then suggested she place two drops of peppermint on her cheek, as that is a tender spot but not as tender as the skin of 6-week-old kitten, to feel for herself to a lesser degree what her kitten is feeling. She wrote me back,

"Sue, I thought you were wrong, I placed the two drops and felt nothing, but after about 30 seconds it started to burn and redden my skin, even after trying to wash it off, the burning is terrible. I feel so bad that I did this to my kitten, no wonder he is so upset and meowing so much. I will never put essential oils on my cat again and I am throwing away the book."

- N.B. There are reports of respiratory failure in children when menthol (a major component of peppermint oil) has been applied to the nostrils.
- 4. Another big mistake is to apply the healing benefits of essential oils seen in the human situation to the feline situation.
- 5. Many make the mistake of applying an essential oil dosage suitable for a human baby to a cat, thinking that, due to its small size, if it is safe enough for a baby, it must be safe for cats. Babies do not have a cat's liver!
- 6. There is a debate about the use of hydrosols and cats. Hydrosols also named hydrolats or floral waters are promoted as 100% safe for use with cats, when there is no proof that this is so. Testing is not required* of hydrosols as it is with essential oils, so 99% of the suppliers don't even know what compounds are in their product. No valid information exists to confirm that the use of hydrosols topically and internally with cats is safe, therefore using hydrosols on your cat may have unknown risks. Remember essential oils were once considered safe until cats started getting sick and/or dying due to their special liver physiology!

*There is one exception to testing required; Turkish Rose Hydrosol producers are required by Turkish Law to test and maintain the established high quality standards of their products.

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Dr. Khan, DVM, PhD, DABVT (Veterinary Toxicologist)

National Animal Poison Control Center
College of Veterinary Medicine, University of
Illinois



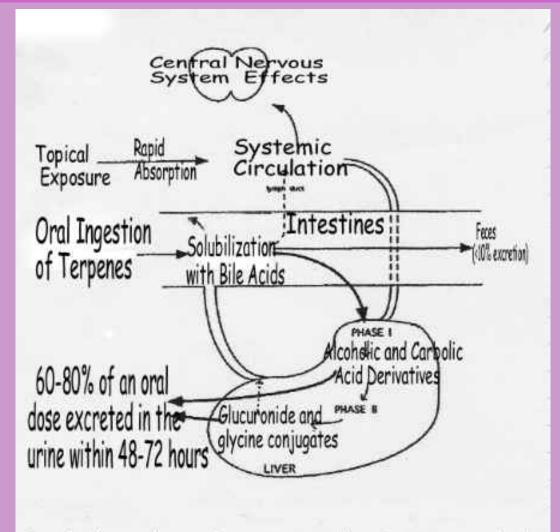
Why the Opinion: Cats and Essential Oils Are Not Suitable?

Dr. Khan: My response to why cats may be more sensitive to toxicity/adverse effects from essential oils:

Generally essential oils and hydrosols* have terpenes (along with other things) in them(terpenes are hydrocarbons of plant origin). Terpenes are rapidly absorbed orally and dermally and are metabolized in the liver. The metabolites of terpenes are conjugated with glucuronic acid (glucuronidation) and glycine depending on the type of terpene and animal species involved. The conjugated metabolites are usually more water soluble and are easily excreted through the kidney and feces.

Why Cats Can't Metabolize Essential Oils:

Cats are known to be deficient in their ability to eliminate compounds through hepatic glucuronidation (they lack enzyme glucuronyl transferases). Glucuronidation is an important detoxification mechanism present in most animals except cats. Lack of this important detoxification mechanism in cats may result in slower elimination and thus build up of the toxic metabolites in the body causing toxicity.



Metabolic pathways for terpenes found in essential oils.

Safdar Khan, DVM, PhD, DABVT,

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The ASPCA has many safety articles, the following is one of many PDF documents found on their site.

ASPCA Cats and Potpourri / Essential Oils 2002

* Though hydrosol suppliers are not required to test their product for inert compounds, most hydrosols tested do have some terpenes at a lesser degree in them than essentail oils. When you buy a hydrosol, you along with your supplier do not know the contents of the hydrosol. Is it safe for cats, no one knows!



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Martin Watt, Webguest

Martin Watt

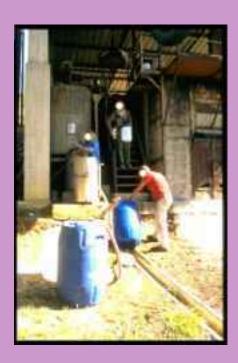
Certified Phytotherapist UK,
Director of Education of the
International Aromatherapists and
Tutors Association (IATA).

"What about using hydrolates on my cats?" Stacey

Tips on Hydrolates

- 1. Can the hydrolate supplier PROVE their product is free of contamination, where are their microbiological test results?
- 2. If so is EVERY batch of the waters tested. Testing the odd batch is NOT acceptable in the same way it would not be acceptable to have bottled drinking water subjected to an odd test.
- 3. Bacterial and or fungal contamination of water is just as hazardous to animals as humans even used externally.
- 4. It is proven scientifically that a simple selfprepared herbal infusion considerably reduces natural bacterial contamination of the plant materials. Therefore, what advantage do these hydrolates have over making them fresh for yourself?
- 5. Anyone that does not believe me about potential contamination of hydrolates, should try doing a web search on cases of contamination of bottled drinking water and see what they come up

with!



"Are most hydrolats produced in the USA?" Tina

Martin: There are several hydrolates that are not produced in the USA. For example Neroli or orange flower water is mainly produced in Tunisia, shipped to France and then sold as "French" hydrolate. These products are shipped around the world; unless they contain a food grade preservative (such as put into the orange flower water sold in health food shops), then they must be a cause for concern regarding microbial contamination. The natural preservative Citrus seed extract will inhibit contamination, however regular laboratory tests should be undertaken on floral waters to ensure the preservative system is working.

"Are aromatherapists trained in animal aromatherapy?" Barbara

Martin: The fact someone is a trained aromatherapist or herbalist should in no way be taken as evidence that they know how to safely administer to animals. In none of the main courses is animal health dealt with. There are a few courses around on things like horse aromatherapy. However, the quality of information is about as inaccurate as that on human aromatherapy.

All that does not mean that some forms of aromatherapy and hydrolates might be useful for some animal treatments. The point is that those that advocate this have not undertaken properly controlled trials and are mainly basing their treatments on effects on humans. Their experience may be useful, but do they keep a record of their failures?

"What about the claim, "We consult a vet who specializes in Aromatherapy?" Barbara

Martin: What vet and where does their knowledge of aromatherapy come? An ordinary aromatherapy course on humans perhaps!

"Can't I just use essential oil and water as a deodorizer for my dog?" Lilly

Martin: You cannot effectively mix essential oils with water. They will separate out into small droplets, which will leave a layer of undiluted essential oil on the skin or fur.

"I love the aroma of cinnamon oil, is it safe to use on my pets?" Julie Martin: If this is cinnamon BARK oil then RIFM (world leading experts) recommend it should NOT be used in any consumer products. Any product that contains cinnamon BARK oil should not be used on humans let alone animals. If this got into a dog's eye, it could cause massive irritation and (depending on the volume) it could cause burning to mucus membranes.

"Bay Laurel oil on cats and dogs?" Marsan

Martin: Laurel oil is hazardous oil on the skin and is a known skin sensitiser, additionally heat and humidity increase dermal absorption and thereby increase the potential for skin sensitization occurring.

"I like the smell of mint; can I use it on my animals to 'freshen them up'?" Tim

Martin: To use Spearmint and Peppermint oils in a spritzer is hazardous, if the spray got into the animal's eye. Even when greatly diluted it causes stinging of the eyes.

"Is grapefruit seed extract a safe preservative in animal products?" Lynn

Martin: While this is an excellent anti-microbial, it does not appear to have undergone formal testing for adverse effects on the skin.

"How valid are claims about aromatherapy on web sites and in books?" Candace

Martin: I do wish people would stop assuming that because someone writes a book, or SAYS they are highly qualified, that they must know their subject. This is far from the truth; numerous books have been published on aromatherapy that are packed with gross errors and some highly dangerous advice. Publishers only care about making money, NOT the truth! So reader beware. As I have said so many times, the aromatherapy trade in all its aspects runs on massive hype and misleading education.

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Martin Watt, UK

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Anthony Burfield, Webguest



Anthony Burfield
A.B.P., M.I.Biol., C.Biol.,
M.I.F.S.T., F.L.S.

Tony has spent over 25 years in the aroma trade mainly working hands-on in the essential oil and perfumery industries, dealing with the production, analysis and applications of essential oils and perfumery materials, work which has often meant extended periods of working abroad on-site. He has worked for major aroma concerns such as H.E. Daniel, CPL, PMS, Robertet UK, GPL and FPI.

After initially qualifying as a food scientist, he returned to academia mid-career to do a further degree in biochemistry, becoming a Chartered Biologist, which was followed by a period of post-doctoral research in the microbiological biotransformation of essential oil components at Cranfield University. Tony currently works as a consultant, writer and lecturer in the aroma

industry and is dedicated to teaching and producing educational materials for both the perfumery, aromatherapy and the natural products trades. Tony is also a Hon. Member (Scientific Advisor) to the RQA and was Co-Chair, and then Chair of the NAHA Safety Committee 1998-2001. He is also on the core editorial board for the International Journal of Aromatherapy.

October/November 2000 saw the publication of the book he had been writing on essential oils and absolutes for over 10 years: "Natural Aromatic Materials - Odours & Origins" which was published by the Atlantic Institute of Aromatherapy (AIA). Tony is now embarked on working on an ambitious series of detailed Essential Oil Monographs in conjunction with AIA.

Tony is also currently involved in a number of radical projects, some shortly to be announced at the time of writing, and to be run on the World Wide Web / Internet. These are designed to elucidate further understanding and co-operation in Aromatherapy at a global level, and to introduce new concepts/models for the way Aromatherapists can further their work in a more useful and focused way. Part of the scope is to look at new experimental designs for trials in Aromatherapy that aim to select from mainstream science what is appropriate to this branch of alternative medicine, whilst embracing its' traditional roots to which we owe much.

Tony's other interests include travelling, jazz and walking. If only he had the time, he says might do more reading, bass playing and the enjoyment of real ales, although everyone has a sneaking suspicion he might actually achieve the latter on a

regular basis!



Now, on to the questions....

Is grain alcohol considered a dispersant when added to essential oils and water? Stacey

It is true that many essential oils, especially those containing a high proportion oxygenated substances (like say, Palmarosa oil) will dissolve in certain concentrations of aqueous grain alcohol (ethanol) to give clear solutions at room temperature. Those oils containing a high proportion of monoterpene hydrocarbons, or sesquiterpene hydrocarbons (like say myrrh oil) have a harder time dissolving, and may give opalescent or turbid solutions, or not dissolve satisfactorily at all, even with 96% ethanol. So to sum up we can say that for many oils ethanol is a good solvent, although there will be a solubility limit.

There are a couple of considerations for then using this mixture as a room spray. Firstly, I am not a prude, but the purist in me asks do you really want to be breathing in a foreign material, such as dispersed ethanol, as well as the essential

oil. Secondly, there may be a small risk attached to using materials like ethanol, which has very low flash point in this sort of setting. Thirdly there are a number of chemical reactions which occur between the individual components of essential oil and alcohol itself, which may lead to artifact formation (which for our purposes here we can say is the formation of extra or un-natural substances). This area is a bit of a specialty of mine, and it is true that these reactions tend to occur much more on storage, but nevertheless it is another example of human intervention changing what nature intended. My advice is don't go there!

Why is Benzoin touted as good for skin complaints such as cracked nipples, skin, etc? Is there truth to this although it is a known skin sensitizer? - Stacey

Benzoin is/was used as a sort of glue for wounds, enabling the fusion of torn tissue, acting as an adhesive, reducing the "gaping" tendency and generally facilitating wound repair mechanisms to commence. It is also used as a skin protectant, it reduces inflammation of the gums when applied as a tincture, volatiles from benzoin resinoid are inhaled for respiratory complaints, and it shows general antiseptic effects. With all these positive things going for it, it is a pity that in a small number of cases sensitisation problems can occur. There are tests which have show benzoin not to be a sensitiser, but we have a number of case studies where reactions have occurred possibly due to specific coniferyl esters contained in the resinoid. Since the concentration of these can vary in the product according to source, type and extraction procedure, we may

have some variation in reaction. It may be advisable to carry out a patch test prior to use, but personally I would not like to see the material dropped from the aromatherpists repertoire. After all, we eat enough of the stuff (permitted in flavourings.....!).

What EO's in addition to pine become more irritating to the skin with increased oxidation? - Stacey

The reactions of individuals to potentially irritant chemicals is idiosyncratic and complex. But in general we know that certain essential oil components produce products from oxidative degeneration which cause irritation. We know with certainty that many pines have delta-3carene present and it is the hydroperoxides which are problematic here. So does this also occur in say oxidised cypress oil, or angelica root oil which also contain delta-3-carene? Or in old citrus oils where high levels of limonene is prone to similar oxidation problems? I would say the answer is yes, with the proviso that in many of these oils, there will be an "off" smell present, which would make you think twice about using the oil anyway. The point is to monitor the shelf life of your essential oils, and not to over-order so that stock is hanging around for long periods (say no more than 6 months).

Roughly, what percentage of EO's on the aromatherapy market would you say are adulterated in some manner? - Stacey

Lets put it another way. You are less likely to buy an adulterated oil if you are prepared to pay the market price for the oil, and you ask that it be pure. It never ceases to amaze me how many people are still taken in by the concept of a "bargain offer", or the fact that the oil on offer is both cheap and pure! One of the best tests you can do on an oil is an odour assessment, and to some extent GC/Mass spec is only a confirmatory tool for the latter. Train your nose, get to know what you like and what a specific "good oil" should smell like, and I'm sure you won't go too far wrong. As we have remarked in a previous question, badly kept oils, or aged stock, may be just as harmful in some instances as adulterated oils. There will always be adulteration, but it can be minimised by your vigilance, knowing and visiting the people you are dealing with where possible, and giving them every chance to make some sort of reasonable profit to live on without them having to be forced to cheat. Really this is what happened with lavender oil in the past. The market was never prepared to pay a realistic price for the oil: it was always undervalued, and producers had to sell other oils at better profit to cover production costs for lavender, or adulterate the lavender. It is only in the last few years that the price of lavender oil has risen to a more comfortable price for the producer. If there is a moral to the story here it is that adulteration can only be lessened when the buyers are more sympathetic to the producers situation.

I am curious about sensitization and essential oils. I am wondering if sensitization can occur in a person by diffusion alone? Or does it mainly occur by topical applications? - Dorlen

In fact I have a paper in front of me called "Allergic airborne contact dermatitis from essential oils used in aromatherapy" by M. Schaller & H.C. Korting (1994) Clinical & Experimental Dermatology 1993, 20, 143-45, which covers just this subject, where the subject was found to exhibit sensitisation to a number of previously used oils (lavender, jasmin and rosewood) and other which the subject had not been previously exposed (laurel, eucalyptus and pomerance (?). The bottom line is that once sensitisation occurs, exposure to seemingly minor amounts of substance may initiate a subsequent reaction, and the answer is to totally withdraw from oils for a period (say 6 months or more) before gradually and cautiously re-introducing them individually (with monitoring) to your environment, to see if you can now tolerate them, and hopefully benefit from them

Chemicals are absorbed by the skin into the bloodstream wouldn't essential oils be absorbed and utilized too? Sue

Yes, but this may be a more minor route compared with inhalation. I am always saying this, so please forgive me if I'm repeating myself. The permeation of essential oils through the skin is a diffusion controlled process. It is therefore dependent on a number of factors like temperature, concentration of oil (i.e. 1-5% in carrier etc.), degree of hydration of the skin, time in contact and so on. The fact that it does occur is hardly disputable: wintergreen oil is readily absorbed by the skin for example and can lead to dangerously toxic situations in certain instances. The argument is much more about the clinical significance of the amounts absorbed, and the routes of ingress through the body. Does the localised concentration of e.o. components become significant in promoting physiological changes in nearby tissues or organs or are we considering evenly whole body model dosing effects? There are a lot of unanswered questions, but the answer to your question is that under certain circumstances we would be able to measure individual components of essential oils as markers of permeation in the blood stream, after skin absorption, and to my certain knowledge, this has been carried out.

I love the smell of wintergreen, is it still toxic if I only use it for air freshening in a diffuser and not on the skin? Pat.

Its very much a geographic thing, methyl salicylate the chief component of wintergreen is very much appreciated in birch beer, sarsaparilla, root beer and toothpaste in N. America. Other parts of the world are less keen on the taste and odour! There isn't anything very similar in odour to methyl salicylate either, so I can't suggest a way of weaning you off it! The answer to the toxicity question is a theoretical yes, that methyl salicylate poisoning, chronic and sub-chronic effects are known, and so the golden rule as with everything is, don't overdo it, give yourself a complete break after a few days use, and if you feel unwell: stop. I imagine that using a diffuser for a short period in a large ventilated room is not going to cause problems on a one-off basis however. Lets put it like this: did the budgerigar fall off his perch yet?

Are all essential oils tested for safety? Phillip

No. A number of oils have been tested by RIFM and policy guidelines issued by IFRA, but these are all for oils in fragrance use. Many essential oils that are new, rare, or which exist as chemotypes are untested. Many substances which are used in aromatherapy which are not true steam distilled essential oils (CO2 extracts, hydrolates, etc) are also not tested. Looking globally, it is revealed more and more that many essential oils from different geographic origins have analytical components which may be missing, depleted or emphasised according to source. I am in fact compiling facts about these at present, and the extent to which chemotypes both exist and are used has surprised me.

Clearly we need a new policy on this now. By saying that we, as a profession, are unable to use

certain oils because there is no formal safety testing is not coming to grips with the reality of aromatherapy practice, which is already out there using many untested oils. Also the profession stagnates if new materials are denied. The counterbalance to this is that regulation and a code of practice on raw materials of the trade is a must for any serious minded profession, not the least to protect the practitioner from lawsuits! I think the answer must be a predictive assessment of some of these (new) materials, gathering as much information as is possible, pending ultimate testing. Hopefully as the year 2000 proceeds, we will see some initiatives on this (watch this space!). I know we wandered a long way from the question, but at least we have covered some of the current issues around the subject.

If essential oils can be toxic then why is the FDA allowing them on the market? - Kathy

The FDA has to balance traditional use, and personal freedom against other issues like public safety, judicious use application. Any government department can only expect co-operation if the policies they propound are sound and reasonable, otherwise there is a public backlash, as recently happened with their unpopular stand on ginger extracts. It has been said that the potato would never get through as a newly introduced food material if traditional use had not been established (for example green potatoes are linked with spina bifida etc.). So in reality the FDA has to take a view that in proper use many seemingly toxic oils benefit mankind enormously when used in the appropriate dilutions for flavourings, in perfumes, in aromatherapy, and in herbal medicine and a multitude of other areas.

Does the medical field know how to treat toxic reaction to essential oils? Do aromatherapists? - Cindy

By toxic reactions I assume you mean health- or life-threatening situations. Many hospitals and some trade unions and other bodies have their own data-bases or access to national data-bases on chemical substances and poisons. In an emergency situation it may be possible to glean data from these, but many cases of poisoning are treated asymptomatically anyway. In the UK we have the COSHH regulations which split substances into a number of categories for handling: sensitisers, irritants, marine pollutants, toxic, very toxic, carcinogenic, inflammable etc. with the idea of minimising risks by sensible handling in the first place. All deliveries of essential oils from suppliers are legally required to have health and safety data sheets accompanying them, and if you think the data is insufficient you have the legal right to demand full and proper information. Use this right! The real answer to your question is that in practice health and safety information is poorly available, in many companies chasing invoices seems to take priority over composing good health and safety documents for individual materials! Aromatherapists have access to information through their professional bodies, and should agitate to see that the information supplied is to a high standard (often it isn't). It is my opinion that in general, detailed information on the toxicity of essential oils is sparse; for example the effects of inhalation, sub-chronic toxicity etc. are virtually uncharted territory in the literature. But by all means keep asking questions!

What chemical reaction takes place in the skin to cause certain essential oils to make the skin photosensitive? - Lianna

Basically we are looking at compounds which are absorbed into the epidermal layer, absorb ultraviolet light, and them re-transmit the energy to the lower epidermis at a later time causing an excessive tanning reaction. New studies on rue oil being currently carried out, for example, show psoralens to be involved in this process. The answer is that if photo-toxic materials must be used, keeping out of sunlight, or preferably any light and keeping the affected area totally covered up for 12-18 hours is vital, longer if possible. A better policy is not to use phototoxic materials at all, but to find substitutes! Many severe phototoxic oils are now effectively removed from the market: verbena oil and fig leaf absolute are rarely seen now, but many which can provoke strong reactions are used extensively: for example tagettee, expressed lime and expressed bergamot oils.

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Anthony Burfield, UK

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Tea Tree Hazards

Tea Tree Oil & Cats

I bring this information to your attention as a concerned cat lover and cat owned certified aromatherapist*; not to devalue the use of essential oils but to emphasize the importance of researching information and claims about essential oils, all products containing essential oils and hydrosols that are advertised for use with your cats. Please be cautious of suppliers claiming their products are completely safe to use with cats that do not have scientific facts to back that claim.

Following is one of many toxicological reports on an essential oil marketed for use on animals; Melaleuca alternifolia also known as Tea Tree oil:

Knowledge of the toxicity of Melaleuca oil is variable among the public. Veterinary and natural health care practitioners tend to be aware that Melaleuca alternifolia (tea tree oil) can cause serious side effects, and some have had clinical experience with tea tree toxicosis (any diseased condition due to poisoning) or hypersensitivity. Cats may be more susceptible to tea tree oil toxicosis than dogs. At this time, there is no antidote for tea tree oil toxicosis.

The following is a true case of Australian tea tree (Melaleuca alternifoila) oil poisoning in three cats:

A breeder shaved three Angora cats as they were severely infested with fleas. No nicks caused by shaving were visible on the cats, only

numerous fleabites.

The breeder then used a product labeled for use as a spot treatment for skin lesions, but a catalog advertised that it would repel fleas when diluted and used as a dip. The product contained oil of Melaleuca alternifolia and 60ml (2 ounces) of oil was diluted as per recommendation and applied directly to the skin of all three cats.

Within 5 hours of treatment, cat #1 was taken to the veterinarian. It was hypothermic, uncoordinated, and unable to stand but was alert. Cats #2 and #3 were admitted later in the day. Cat #2 was comatose with severe hypothermia and dehydration. Cat #3 was alert, nervous, trembling and slightly ataxic (failure of muscular coordination). All cats had a strong odor similar to that of the tea tree oil product.

The cats were bathed in warm water and mild detergent to remove any remaining oil from the skin. Cats were treated for any possible oral consumption of oil, re-hydrated with isotonic saline solution and body temperatures raised using heat lamps and warm water bottles.

Gas chromatography -mass spectroscopy testing of urine and tea tree samples results: tea tree oil contained 42% terpinen-4-ol which is consistent with M. alternifoila oil and the cat urine also contained terpinen-4-ol and unidentified metabolites.

Cat #3 recovered within 24 hours of being admitted to the veterinary hospital, and cat #1 recovered after 48 hours. Both cats were sent home to the cattery and no problems have been reported since. Cat #2 improved over days 2 and 3 but remained uncoordinated and dull. Although

cat #2 was being treated with aggressive fluid therapy, it remained dehydrated. On day 3, it began regulating its own body temperature, but was found dead late that evening.JDVBischoff/Gual

The information I provide is not rumor and is based on reputable and verifiable facts, please email me with any questions or comments regarding the information on my site.

Thank you

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Tony Burfield - More Info

Many essential oils have more than 10% of hydrocarbons. This is not a complete list of all oils and does not mean that if the oil is not on this list, that it is okay to use, this is a small example only:

Angelica 95% Bay 30% Bergamot 55% Cajuput 40% Carrot Seed 50% Cascarilla 30% Cedarwood 60% Celery Seed 80% Cistus 10% Copaiba Balsam Oil 90% **Chamomile 15%** Citronella Sri Lanka 15% Clove Leaf 15% Clove Stem !5% Costus 30% Cubebs 70% **Cumin 50%** Cypress 70%

Oils containing Methyl Salicylate are toxic to cats.

Loosely think of methyl salicylate oils as aspirin to your cat. However unlike aspirin, methyl

salicylate rapidly permeates the skin and can potentially constitute a risk situation in cases of high levels of exposure. The amounts resulting from exposure to floral oils and absolutes containing methyl salicylate is more insignificant e.g. ylang ylang and gardenia compared to those which mainly comprise methyl salicylate such as Wintergreen and Birch oils. Use caution when these or any essential oil is used around cats.

²Methyl Salicylate occurs in several essential oils and absolutes e.g. ylang-ylang, gardenia absolute and is a major component of wintergreen and birch oils.

²Natural Aromatic Materials - Odours & Origins, by Tony Burfield.

Tony, What really is in the hydrosol you buy?

With regard to hydrosols, the position is further complicated. Where the pure hydrosol is taken, only the water soluble components of the oil should be present. Since monoterpene hydrocarbons have a very low water solubility, and oxygenated materials are slightly more hydrophilic ("water-loving") you would expect to see more of the latter compounds present unless there are complicating factors operating.

Thus in lavender hydrosol, we would expect plenty of linalol, linally acetate, terpinen-4-ol, and enhanced quantities of lavanduly acetate, octyl acetate etc. at the expense of say limonene, paracymene etc. Amongst the complicating factors are the occurrence of micro-emulsions and

solublilised oil droplets in the hydrosol itself, in other words the essential oil may not be homogenously dispersed in the separated distillation water, but present as a minor continuous oil (undissolved) phase, the composition of which which is more representative of the whole oil than a truly solubilised oil.

Complex micro-emulsion formation and other physio-chemical phenomena may further complicate the issue. In addition after a few days, microbiological and chemical changes will occur and may affect this balance to a limited extent.

Also bear in mind some hydrosols on sale are not true hydrosols, they are essential oils solubilised in water with a surfactant. Obviously the composition of these fake hydrosols will bear no relationship to true hydrosols.

Notes on one type of hydrosol

Hydrosols are a by-product of the production of essential oils, but often find their own local uses. For example, in the processing plant where production of Kewda (Champaca) otto and Kewda attar is manufactured in villages such as Paralakhemundi which are near to the coast bordering the Bay of Bengal in India, it is possible to produce some 18 litres of Kewda hydrosol by water distillation (known as Kewda water) for every 1000 blooms. In fact the male spadices of the Champaca flower (generally Pandanus odoratissimus L., or Pandanus fascicularis Lam.)

only are employed, since these are the fragrant parts of the blooms. The resulting Kewda hydrosol is used to flavour confectionary, sugar syrups and local non-alcoholic beverages. Other examples of hydrosols produced include those from Rose Rosa damascena and Lavender Lavendula angustifolia, although the employement of water distillation to produce hydrosols in the latter case causes loss of linally acetate, with a corresponding rise in linally and alpha-terpineol contents.

TB/SM©

Click here to review more about essential oils by

Tony Burfield

Note from Sue, The Lavender Cat: A reputable supplier will supply testing results, be cautious, as not all suppliers are ethical in their presentation of products or tests.

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Case Study - Tashan

Tashan's Case

Tashan's Experience Part 1

My Bengal cat, Tashan, underwent extensive veterinary testing last week as I recently noticed subtle changes in his behavior and a decrease in his energy. He was examined and evaluated as being in perfect health with one exception; his liver enzyme was elevated to the very high end of normal.

I shared the information from Dr. Khan's page on your website with my veterinarian who also believes my long-term daily use of essential oil diffusion may be the culprit of Tashan's liver problem (I never use essential oils or hydrosols on my cats).

The treatment plan is to forego all uses of essential oils for two months and then retest Tashan. If the liver enzyme value goes down, that should be conclusive that the essential oils were the culprit.

I am thankful for the information on your website, now I may be able to get my precious critter back to good health because of that information before permanent damage was done. I will let you know what we find out in two months.

DL, Tashan's Human

Tashan's Follow-up Two Months Later Part 2

Two months later the follow-up liver profile rated a decrease in enzyme values. For two months, no other changes were made in household routine or Tashan's diet only that I did not use aromatherapy. Nothing else was different, so it seems that was the probable culprit.

We are going to re-introduce aromatherapy into the home, but instead of daily diffusion, it will be periodic applications (when I need to use it for myself). I hope that with moderate use, it will not re-elevate Tashan's liver enzymes. If it does, then I will have to stop altogether, but only time will tell. At any rate, now, he is a healthy Bengal cat. With aromatherapy limited to periodic diffusion, the veterinarian will re-test Tashan's enzymes in 6 months.

Thank you again for your care and concern. I am so thankful to The Lavender Cat for reporting the aromatherapy warning with kitties. Had it not been for that, I would never have made that connection.

DL, Tashan's Human

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Dogs & Birds

Canine Aromatherapy

I receive many inquiries regarding dogs and I always recommend Sevi Kay at Cybercanine. Please visit her site for aromatherapy information regarding dogs, birds and other animals.

Cybercanine

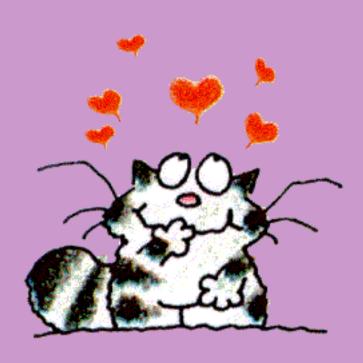
Enjoy your visit!

Note: This is not an affiliate web-site, I recommend Sevi Kay as she has a wealth of knowledge and emphasizes safety with essential oils.

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Purrrty Comments



Sue,

Thank you for providing such valuable information on the dangers of aromatherapy and cats. You've done some hard work here and I for one truly appreciate your efforts and your continued involvement.

As one in the veterinary profession, I salute you in your efforts to educate and to call attention to these dangers for cat owners the world over. It was refreshing to read the toxicology reports, the information is well presented and validated, refreshing to see this in an uncertain future of the net...

Thank you, Sue, keep up the excellent work, you are an angel!

Sincerely, Traci, ER-AHCVT CatHelp-Online.Com 08/22/01

Dear Sue,

Outstanding info!

I just went through every page on your site and found it super educational. I've had several emails in the past asking about aromatherapy for cats. I had done some research and could truly find nothing conclusive to comfortably pass along as advice other than to please check with the person's vet before having their cat ingest or in giving topical applications. This clarifies several qualms I personally had about essential oils, hydrosols and cats.

I have a large "resources" page on my site as a reference guide for people looking for information about cats. I've added your link to it. You can find your site under the topic "Convalescence, Medications, and Treatments."

I must state up front, every word spoken is the truth, or I would have *never* placed your link on that resources page.

Thank you so much! Purrs and headbonks,

Susie

Pawprints and Purrs: www.sniksnak.com



Sue.

Your creation of this website for the love of the feline critters is heart warming.

I have a question concerning essential oils used for aromatherapy with diffusers. Your warnings appear to be focused on topical and ingestible uses. I have been using oils daily in diffusers, with four cats under foot for years. Although I have never noticed any signs of discomfort by the cats, I do want some assurance that this use is okay - or that I should be exercising some precautions. Will appreciate your feedback.

Hi DT,

Thank you for the compliment and your interest in your cats' safety. As oils can affect a cat by olfactory and lungs just like humans, precautions should be used. Liver toxicity can be a slow process without any visible symptoms.

This is what I do: try to choose oils in lower terpene volumes, keep air circulating especially during diffusion so that molecules are not heavily concentrated in the area a cat is in. Make sure cat can get 'undiffused air at any time if possible, do not diffuse in an individual room make it a multi-room location and wait 48 hours between end of last diffusion and starting another diffusion.

As you probably know, humans become desensitized to the intensity of a beautiful aroma and have the habit of 'freshening it up' and adding more essential oils, not so good for the cat.

Thank you for writing, Sue

Dear Sue, Many thanks to you for your speedy and thorough

reply. It appears I've been pretty OK to my family of animals with my practices. My daily use of essential oils has been in a large, high ceiling area that incorporates office, living room, kitchen & dining; and a door to a large screen porch which is almost always open while diffusing; and they roam here and there during that period. Typically (albeit on a few occasions it's not true), I have quit diffusing before closing doors & taking the cats & myself to the bedroom for the night. However, I never thought about the longterm subtle effect of terpene on them before visiting your website, and will definitely start making a point of getting only low terpene oils. Your advice is VERY much appreciated by me, my family of four felines and two dogs. You have chosen a very honorable path in helping humans who love all critters and have information to help protect their welfare. I will be recommending your site to all my caring friends. **Peace and blessings. Danelle**

Dear Danelle,

Your conscientious use of essential oils in your cats' environment is to be commended. Thank you, your comments are appreciated.

Sue

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Cat on Vine Grahic compliments of Glenda Moore

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Contact Us

Hello,

Thank you so much for popping in to The LavenderCat. Over the years I have received lots of questions and comments from visitors, please keep them coming!

My main focus is education on essential oils and cats but as you can see, I have a soft spot for any animal.

Please send inquiries on any topic or organization on my site and I will get back to you.

Kindly,
Sue Martin
Certified Aromatherapist

Please pick a subject:

Please enter your email address:



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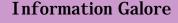
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Useful Links



The Guide To Aromatherapy

Quality products & service!







Webguest Martin Watt's Homepage

Webguest Anthony Burfield's Homepage

The above 4 Links will supply you with a wealth of information and links, please visit them all. There are suppliers, education, debunkers/defenders and a new ezine; AromaticSage; Making sense of scents.

Stop the Violence in Its Tracks Make Animal Cruelty a Felony

Please click to visit ParrotParrot to learn more

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Redwings Horse Sanctuary is a non-profit 501 c (3) organization whose mission is to educate the public about the care and plight of equines and to protect them from abuse and slaughter. The Sanctuary is supported entirely by individual donations and a few foundation grants. Because they do provide a permanent home for the equines they rescue, your support is always tremendously helpful. Donations, sponsorships, memberships and volunteerism are all ways that you can make a difference in someone's life. Please help them to stop the abuse and slaughter (no longer legal in California only) endangering horses today...

Please join The Lavender Cat, a member, in helping our other four legged friends. Please visit the Redwings site and help if you can. Clicking on the link below will take you to their site. Thank you, Sue Redwings Horse Sanctuary

All veterinary itmes soon to be added.

26" x 20" Flexible plastic lamination with metal eyelets in each top corner for convenient wall hanging or for a chart stand, markable(write-on/wipe-off) 15.95ea. plus tax and shipping.

Email me at sue@thelavendercat.com with any questions. Thank you, Sue Order Form







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Redwings/Lavender Cat Merchandise Form

Please, completely fill out the form provided below. When you have finished filling out the form, print it out and mail it to Redwings Horse Sanctuary at the address listed below.

Or fax it to them at (831)386-0138.

You can also call in your order! To do so please call the number listed below.

P.O. Box 58 · Lockwood · CA · 93932 · (831)386-0135

Direct Donation Pro	gram of the Lavender Cat	
Check one: Mr. Mrs. Ms.	Address	
Please indicate: Residence Commercial	City	
Telephone Email	State Zip	
Quantity Description Siz	ze Color Price Total	
CA residents add 7.25% sales tax		
Packing & Shipping(Continental U.S.	Packing & Shipping continued	
only)	Canadian ShipmentsPlease call/or email us	
Up to \$25.00\$6.95 \$25.01- \$50.00\$7.95	AK & HIPlease call/or email us Outside U.SPlease call/or email us	
\$50.01- \$75.00\$9.95	Orders are shipped by The Anatomical Chart	
\$75.01-\$100.00\$12.95	Company. All guarantees and policies are	
\$100.01-\$150.00\$18.95	backed by The Anatomical Chart Company &	
\$150.01-\$200.00\$24.95 Over please call	The Lavender Cat. Buying through The Lavender Cat benefits our special friends.	

Merchandise Total: \$ CA Tax (if applicable): \$ Packing & Shipping: \$ Total Enclosed: \$	Check/Money Order MasterCard Visa Card# Expiration Date
Send me a receipt: Yes No Cardholder Name:	Signature

Thank you so much, now back to The Lavender Cat...

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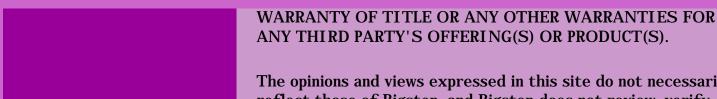
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Aromatherapy & Cats



Essential Oil Safety & Cats

Be Wary of Aromatherapy Claims for Cats

By Sue Martin

Please be wary of any animal practitioner or supplier of essential oils claiming that their products or techniques are completely safe to use with cats: the statement is both inaccurate and unsafe. No matter what their claims say, nothing will change the unique physiology of a cat.

Generally, essential oils consist of hydrocarbons or monofunctional compounds from mono-and sesqui-terpenes, together phenylpropanoids and other volatile aliphatic and aromatic substances.

Many terpenoids are rapidly absorbed orally and dermally by the cat's system and are metabolized in the liver. Due to their volatile nature, inhalation of essential oil components is also possible, and these enter the bloodstream via the lungs, also to be metabolized in the liver. The terpenoids and their metabolites are often conjugated with glucuronic acid (glucuronidation) and glycine depending on the type of terpenoid and animal species involved. The conjugated metabolites are usually more water-soluble and are easily excreted through the kidney and feces.

Cats are known to be deficient in their ability to eliminate compounds through hepatic glucuronidation (they lack enzyme glucuronyl tranferases). Glucuronidation is an important detoxification mechanism present in most animals except cats. Lack of this important detoxification mechanism in cats may result in slower elimination and thus build up of the toxic metabolites in the body causing toxicity problems.

Most people are aware of warnings that focus on the topical and oral administration of essential oils, but they are generally unaware that inhalation of essential oils can also be unsafe for your cat. Oils can affect a cat by absorption and inhalation just like for humans, and precautions should be used when repeatedly diffusing essential oils, since the development of liver damage can be a slow process without any visible symptoms.

When diffusing oils, try not to use excessive amounts of essential oil, and choose oils which have lower volatility's as far as possible. In addition, ensure good air circulation especially during the diffusion process, so that local concentrations of essential oil vapour are not built up in non-airchanged areas inhabited by the cat. Make sure cat can get to 'undiffused' air at any time if possible, and only diffuse in an

individual room if cat does not have access i.e. make it a multi-room location. Toxicology studies show that the feline liver usually needs 48 hours to process and excrete 'terpenes', thus allow 48 hours between end of last diffusion and starting another to avoid repeated exposure by inhalation.

As most of you probably know, humans become quickly used to the intensity of a beautiful aroma ("adaptation") and have the habit of 'freshening it up' and adding more essential oils, definitely not so good for the cat. To test this, leave the area for another area not affected by the diffusion for about 15 minutes, re-enter the room and you will again smell the aroma. Remember cats have many more olfactory receptors than we do and are probably trying to figure out why you use so much oil.

Following is only a very small sampling of the many unsafe applications and untrue claims for cats:

1. "Essential Oils are distilled from plants & through their processing & mixing with vegetable oils, they oxygenate your pets' blood system & soothe their emotions & nerves."

This statement is untrue, essential oils do not oxygenate an animal's or a human's blood, yet a certain multi-level marketing company espouses this myth as proven scientific data, whereas it is actually pure sales hype.

2. "This Essential Oils product has been developed for application in the ears of cats and kittens with ear mite infestation. Recommend daily application to both ears in infected pets to kill mites and control infection in ear canal".

Frankincense and Helichrysum in diluted

vegetable oil base, apply several drops to each ear daily for 2 to 4 weeks.

PRECAUTIONS: Discontinue use if redness, swelling, heat or pain result from application of this product. "

They offer precautions, as reactions will most likely occur. They do not tell you that placing the essential oils and vegetable oil in the ear will actually do more damage than good to the internal ear organs. That the oil blend can build up causing deafness and the cat's system is absorbing enough essential oil compounds to cause permanent liver damage or death.

There is no valid research that shows Frankincense and Helichrysum essential oils kill ear mites in cats, but there is proof essential oils are toxic to cats.

3. A book on animal aromatherapy recommends using peppermint essential oil on a cat or kitten for respiratory problems and runny nose.

The owner of a kitten wrote to me about how her kitten even after applying 2 drops of peppermint on its chest, as the book instructed, would not get better. First, I felt a stab of sympathy for the kitten because her owner had read and applied an unsafe application, and secondly, frustration that authors write such unsafe information. I told her she should have taken the kitten to a veterinarian as some respiratory problems can be life threatening or contagious to other cats. I then suggested she place two drops of peppermint on her cheek, as that is a tender spot but not as tender as the skin of 6-week-old kitten, to feel for herself to a lesser degree what her kitten is feeling. She wrote me back,

"Sue, I thought you were wrong, I placed the two drops and felt nothing, but after about 30 seconds it started to burn and redden my skin, even after trying to wash it off, the burning is terrible. I feel so bad that I did this to my kitten, no wonder he is so upset and meowing so much. I will never put essential oils on my cat again and I am throwing away the book."

- N.B. There are reports of respiratory failure in children when menthol (a major component of peppermint oil) has been applied to the nostrils.
- 4. Another big mistake is to apply the healing benefits of essential oils seen in the human situation to the feline situation.
- 5. Many make the mistake of applying an essential oil dosage suitable for a human baby to a cat, thinking that, due to its small size, if it is safe enough for a baby, it must be safe for cats. Babies do not have a cat's liver!
- 6. There is a debate about the use of hydrosols and cats. Hydrosols also named hydrolats or floral waters are promoted as 100% safe for use with cats, when there is no proof that this is so. Testing is not required* of hydrosols as it is with essential oils, so 99% of the suppliers don't even know what compounds are in their product. No valid information exists to confirm that the use of hydrosols topically and internally with cats is safe, therefore using hydrosols on your cat may have unknown risks. Remember essential oils were once considered safe until cats started getting sick and/or dying due to their special liver physiology!

*There is one exception to testing required; Turkish Rose Hydrosol producers are required by Turkish Law to test and maintain the established high quality standards of their products.

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References

Consultants and References:

Dr. Khan, DVM, PhD, DABVT -National Animal Poison Control Center - Professional Consulting Service. Toxicology Specialist. Professional Consultations and Interviews.

Anthony Burfield, A.B.P., M.I.Biol., C.Biol., M.I.F.S.T., F.L.S. Professional Consultant to The Lavender Cat/Sue Martin. Author of "Natural Aromatic Materials - Odours & Origins - Tony Burfield pub. AIA, Tampa."

Martin Watt, Cert. Phyto. I ATA Professional Consultant to The Lavender Cat/Sue Martin. Author of "Plant Aromatics - Martin Watt, Cert. Phytotherapist 2001."

Toxicity of Melaleuca Oil and Related Essential Oils Applied Topically on Dogs and Cats.Villar DVM, Hansen DVM, Buck DVM. National Animal Poison Control Center. College of Veterinary Medicine, University of Illinois at Urbana.

Journal of Veterinary Diagnostic Investigation 1998 (2): 208-10; Bischoff, K.; Guale F.

Turkish Rose Hydrosol. Published in the Resmi Gazete (Official Turkish Government News) on 7 June 89, No. 20188.

Mr.Owen, world-wide wholesaler/distibution of essential oils.

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The Lavender Cat - References - The Lavender Ca	at - Essential Off Safety For Cats

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Useful Links

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Dr. Khan DVM, Webguest

Dr. Khan, DVM, PhD, DABVT (Veterinary Toxicologist)

National Animal Poison Control Center
College of Veterinary Medicine, University of
Illinois



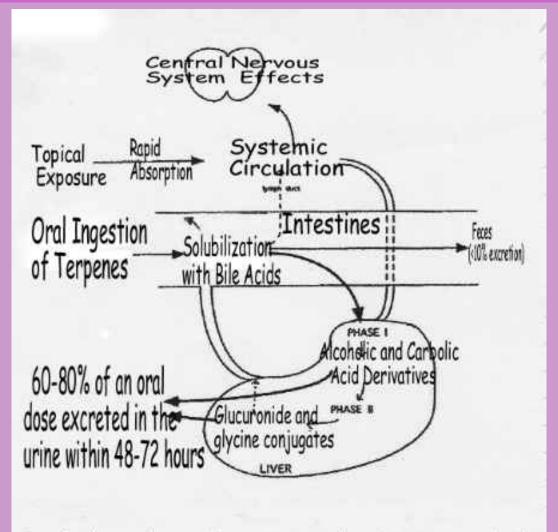
Why the Opinion: Cats and Essential Oils Are Not Suitable?

Dr. Khan: My response to why cats may be more sensitive to toxicity/adverse effects from essential oils:

Generally essential oils and hydrosols* have terpenes (along with other things) in them(terpenes are hydrocarbons of plant origin). Terpenes are rapidly absorbed orally and dermally and are metabolized in the liver. The metabolites of terpenes are conjugated with glucuronic acid (glucuronidation) and glycine depending on the type of terpene and animal species involved. The conjugated metabolites are usually more water soluble and are easily excreted through the kidney and feces.

Why Cats Can't Metabolize Essential Oils:

Cats are known to be deficient in their ability to eliminate compounds through hepatic glucuronidation (they lack enzyme glucuronyl tranferases). Glucuronidation is an important detoxification mechanism present in most animals except cats. Lack of this important detoxification mechanism in cats may result in slower elimination and thus build up of the toxic metabolites in the body causing toxicity.



Metabolic pathways for terpenes found in essential oils.

Safdar Khan, DVM, PhD, DABVT,

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The ASPCA has many safety articles, the following is one of many PDF documents found on their site.

ASPCA Cats and Potpourri / Essential Oils 2002

* Though hydrosol suppliers are not required to test their product for inert compounds, most hydrosols tested do have some terpenes at a lesser degree in them than essentail oils. When you buy a hydrosol, you along with your supplier do not know the contents of the hydrosol. Is it safe for cats, no one knows!



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Martin Watt, Webguest

Martin Watt

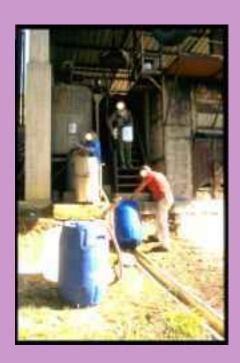
Certified Phytotherapist UK, Director of Education of the International Aromatherapists and Tutors Association (IATA).

"What about using hydrolates on my cats?" Stacey

Tips on Hydrolates

- 1. Can the hydrolate supplier PROVE their product is free of contamination, where are their microbiological test results?
- 2. If so is EVERY batch of the waters tested. Testing the odd batch is NOT acceptable in the same way it would not be acceptable to have bottled drinking water subjected to an odd test.
- 3. Bacterial and or fungal contamination of water is just as hazardous to animals as humans even used externally.
- 4. It is proven scientifically that a simple selfprepared herbal infusion considerably reduces natural bacterial contamination of the plant materials. Therefore, what advantage do these hydrolates have over making them fresh for yourself?
- 5. Anyone that does not believe me about potential contamination of hydrolates, should try doing a web search on cases of contamination of bottled drinking water and see what they come up

with!



"Are most hydrolats produced in the USA?" Tina

Martin: There are several hydrolates that are not produced in the USA. For example Neroli or orange flower water is mainly produced in Tunisia, shipped to France and then sold as "French" hydrolate. These products are shipped around the world; unless they contain a food grade preservative (such as put into the orange flower water sold in health food shops), then they must be a cause for concern regarding microbial contamination. The natural preservative Citrus seed extract will inhibit contamination, however regular laboratory tests should be undertaken on floral waters to ensure the preservative system is working.

"Are aromatherapists trained in animal aromatherapy?" Barbara

Martin: The fact someone is a trained aromatherapist or herbalist should in no way be taken as evidence that they know how to safely administer to animals. In none of the main courses is animal health dealt with. There are a few courses around on things like horse aromatherapy. However, the quality of information is about as inaccurate as that on human aromatherapy.

All that does not mean that some forms of aromatherapy and hydrolates might be useful for some animal treatments. The point is that those that advocate this have not undertaken properly controlled trials and are mainly basing their treatments on effects on humans. Their experience may be useful, but do they keep a record of their failures?

"What about the claim, "We consult a vet who specializes in Aromatherapy?" Barbara

Martin: What vet and where does their knowledge of aromatherapy come? An ordinary aromatherapy course on humans perhaps!

"Can't I just use essential oil and water as a deodorizer for my dog?" Lilly

Martin: You cannot effectively mix essential oils with water. They will separate out into small droplets, which will leave a layer of undiluted essential oil on the skin or fur.

"I love the aroma of cinnamon oil, is it safe to use on my pets?" Julie Martin: If this is cinnamon BARK oil then RIFM (world leading experts) recommend it should NOT be used in any consumer products. Any product that contains cinnamon BARK oil should not be used on humans let alone animals. If this got into a dog's eye, it could cause massive irritation and (depending on the volume) it could cause burning to mucus membranes.

"Bay Laurel oil on cats and dogs?" Marsan

Martin: Laurel oil is hazardous oil on the skin and is a known skin sensitiser, additionally heat and humidity increase dermal absorption and thereby increase the potential for skin sensitization occurring.

"I like the smell of mint; can I use it on my animals to 'freshen them up'?" Tim

Martin: To use Spearmint and Peppermint oils in a spritzer is hazardous, if the spray got into the animal's eye. Even when greatly diluted it causes stinging of the eyes.

"Is grapefruit seed extract a safe preservative in animal products?" Lynn

Martin: While this is an excellent anti-microbial, it does not appear to have undergone formal testing for adverse effects on the skin.

"How valid are claims about aromatherapy on web sites and in books?" Candace

Martin: I do wish people would stop assuming that because someone writes a book, or SAYS they are highly qualified, that they must know their subject. This is far from the truth; numerous books have been published on aromatherapy that are packed with gross errors and some highly dangerous advice. Publishers only care about making money, NOT the truth! So reader beware. As I have said so many times, the aromatherapy trade in all its aspects runs on massive hype and misleading education.

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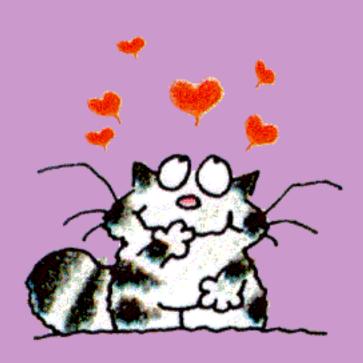
Martin Watt, UK

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Purrrty Comments



Sue,

Thank you for providing such valuable information on the dangers of aromatherapy and cats. You've done some hard work here and I for one truly appreciate your efforts and your continued involvement.

As one in the veterinary profession, I salute you in your efforts to educate and to call attention to these dangers for cat owners the world over. It was refreshing to read the toxicology reports, the information is well presented and validated, refreshing to see this in an uncertain future of the net...

Thank you, Sue, keep up the excellent work, you are an angel!

Sincerely, Traci, ER-AHCVT CatHelp-Online.Com 08/22/01

Dear Sue,

Outstanding info!

I just went through every page on your site and found it super educational. I've had several emails in the past asking about aromatherapy for cats. I had done some research and could truly find nothing conclusive to comfortably pass along as advice other than to please check with the person's vet before having their cat ingest or in giving topical applications. This clarifies several qualms I personally had about essential oils, hydrosols and cats.

I have a large "resources" page on my site as a reference guide for people looking for information about cats. I've added your link to it. You can find your site under the topic "Convalescence, Medications, and Treatments."

I must state up front, every word spoken is the truth, or I would have *never* placed your link on that resources page.

Thank you so much! Purrs and headbonks,

Susie

Pawprints and Purrs: www.sniksnak.com



Sue.

Your creation of this website for the love of the feline critters is heart warming.

I have a question concerning essential oils used for aromatherapy with diffusers. Your warnings appear to be focused on topical and ingestible uses. I have been using oils daily in diffusers, with four cats under foot for years. Although I have never noticed any signs of discomfort by the cats, I do want some assurance that this use is okay - or that I should be exercising some precautions. Will appreciate your feedback.

Hi DT,

Thank you for the compliment and your interest in your cats' safety. As oils can affect a cat by olfactory and lungs just like humans, precautions should be used. Liver toxicity can be a slow process without any visible symptoms.

This is what I do: try to choose oils in lower terpene volumes, keep air circulating especially during diffusion so that molecules are not heavily concentrated in the area a cat is in. Make sure cat can get 'undiffused air at any time if possible, do not diffuse in an individual room make it a multi-room location and wait 48 hours between end of last diffusion and starting another diffusion.

As you probably know, humans become desensitized to the intensity of a beautiful aroma and have the habit of 'freshening it up' and adding more essential oils, not so good for the cat.

Thank you for writing, Sue

Dear Sue, Many thanks to you for your speedy and thorough

reply. It appears I've been pretty OK to my family of animals with my practices. My daily use of essential oils has been in a large, high ceiling area that incorporates office, living room, kitchen & dining; and a door to a large screen porch which is almost always open while diffusing; and they roam here and there during that period. Typically (albeit on a few occasions it's not true), I have quit diffusing before closing doors & taking the cats & myself to the bedroom for the night. However, I never thought about the longterm subtle effect of terpene on them before visiting your website, and will definitely start making a point of getting only low terpene oils. Your advice is VERY much appreciated by me, my family of four felines and two dogs. You have chosen a very honorable path in helping humans who love all critters and have information to help protect their welfare. I will be recommending your site to all my caring friends. **Peace and blessings. Danelle**

Dear Danelle,

Your conscientious use of essential oils in your cats' environment is to be commended. Thank you, your comments are appreciated.

Sue

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Cat on Vine Grahic compliments of Glenda Moore

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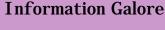
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Useful Links



The Guide To Aromatherapy

Quality products & service!







Webguest Martin Watt's Homepage

Webguest Anthony Burfield's Homepage

The above 4 Links will supply you with a wealth of information and links, please visit them all. There are suppliers, education, debunkers/defenders and a new ezine; AromaticSage; Making sense of scents.

Stop the Violence in Its Tracks Make Animal Cruelty a Felony

Please click to visit ParrotParrot to learn more

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Redwings Horse Sanctuary is a non-profit 501 c (3) organization whose mission is to educate the public about the care and plight of equines and to protect them from abuse and slaughter. The Sanctuary is supported entirely by individual donations and a few foundation grants. Because they do provide a permanent home for the equines they rescue, your support is always tremendously helpful. Donations, sponsorships, memberships and volunteerism are all ways that you can make a difference in someone's life. Please help them to stop the abuse and slaughter (no longer legal in California only) endangering horses today...

Please join The Lavender Cat, a member, in helping our other four legged friends. Please visit the Redwings site and help if you can. Clicking on the link below will take you to their site. Thank you, Sue Redwings Horse Sanctuary

All veterinary itmes soon to be added.

26" x 20" Flexible plastic lamination with metal eyelets in each top corner for convenient wall hanging or for a chart stand, markable(write-on/wipe-off) 15.95ea. plus tax and shipping.

Email me at sue@thelavendercat.com with any questions. Thank you, Sue Order Form







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