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# Aromatic Wisdom Podcast Episode #22
# 5 Species of Lavender – Botanical Names Explained!

This is the Aromatic Wisdom Podcast, Episode 22. Today's show is all about the names that we call Lavender. What are the different species? What are the differences between the oils that are produced by the different plant species?

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Hi, Everyone! It is so great to be back. My name is Liz Fulcher and I am a clinical aromatherapist and I have been practicing the art and science of aromatherapy for nearly 25 years; it will be 25 years in May. I am your host for the Aromatic Wisdom Podcast. I have a great show for you today. I am very excited to talk about Lavender.

I do want to start with something really quick, because I don't want it to get buried in the middle of the episode, so I'm just going to do it right now, at the beginning. Many of you know that I am a big supporter of a company called Pompeii Organics. The owner, Jessica Grill, is a graduate of my certification program (I have a school if this is the first time you are listening). Jess graduated from the certification program and started her own line of essential oils and has really gone gangbusters in terms of producing a line of exquisite essential oils that are high in quality. She sources them directly from the distillers; produces GC/MS reports that are extremely detailed; and now, she has over 60 products that are USDA certified organic. She is a very hard worker who is just amazing. I don't sell essential oils, I am an educator plain and simple, but I use her oils in my classroom and we work very well together.


Why I'm bringing this up now is that, Jess and I decided that those of you who listen to this podcast should get a discount when you buy her oils. So "we", but she is offering the discount and I am sharing it—if you would like to purchase any essential oils or any aromatherapy products from the website, you can use a code. Again, this is for my podcast listeners. The website is: www.pompeiiorganics.com. You will find lots of essential oils, lots of aromatherapy items to support the work of aromatherapy (bottles, jars, glass stir rods, and of course beautiful carriers and lotions, and so forth). If you decide to purchase, use the code "podcast16" you will receive a discount of 15% off of your order.

I had forgotten to mention that in my last podcast and so wanted to get that out there right away before I got into the juicy content and forgot again!

All right! How is everyone? Today is March 24 and spring has sprung! I know not everywhere! My brother-in-law lives in Colorado and they are under with snow; I have a lot of friends out there just buried in the snow and we've got flowers coming up and the birds are singing and the sun is shining! I live in Central Pennsylvania and so I am very grateful that I can go outside now without a coat.

It seems like a good time, since it's just before Easter weekend to talk about Lavender and so that is what we're going to cover today: all about Lavender, the plants that produce different species of Lavender and the essential oils that come from those plants, and how different those essential oils are from each other.

Today's episode is about the taxonomy of plant nomenclature and will be generally full of botanical speak—don't run away! Come back, come back! I'm going to admit that I am a bit of a geek when it comes to plant names. I love saying them and I am sure it's because I speak Italian. The plant names are based in Latin and Italian is based in Latin and a lot of the words are very similar. But it is mostly a lot of fun to say like *Citrus paradisi* or *Foeniculum vulgare* or *Lavendula angustifolia*. I feel like I'm speaking Italian. And when my students get the pronunciation right it's just so stinkin' cute. It's really important to understand, for an aromatherapist and an herbalist, as much as we can about the plants that produce our essential oils. Once you understand the plant names it's going to ensure that you know you are using the right oil for the job. I'll be talking about that in a little bit.

When you hear the term "plant taxonomy" or "plant nomenclature"—what does that even mean? We're going to start with the word *taxonomy*.

**Taxonomy**: Basically taxonomy is the science of naming things. It's the science of naming, describing, and classifying plants, animals, and microorganisms--all organic things in the world. It's a system where "like"


things are grouped together and helps to give order to all things organic that exist. So, botanical taxonomy is the grouping of plants with similar characteristics.

What the taxonomists do is look at the morphology (a fancy word for what something looks like), behavior, and the plant's genetic and biochemical profile, getting every single detail about what a plant looks like, what it sounds like, how it grows, it's DNA—and then they classify them together, giving them fancy names called *Latin binomials* because *binomial* means "two names". I'll talk about that in a second.

Carl von Linnaeus developed the system in the 1700s. Since then loads of scientists who have gotten involved in naming the plants (especially since he has passed); names are changing all of the time, there are often new plants that are discovered and therefore new names have to be created. Sometimes you'll see the name of the taxonomist who named it incorporated in the plant in some abbreviated form. For example, von Linnaeus if often abbreviated as *Linn*. If you ever see *Linn* on a plant name you will know that it was named by Carl von Linnaeus. That's taxonomy.

**Nomenclature**: Nomenclature is another word that we use in aromatherapy. Nomenclature is the term for naming those things we have grouped together. Taxonomy groups them together; nomenclature gives them their names. It's how we distinguish things with differences and similarities. It is such a helpful practice because something like aromatherapy is a global practice isn't it. We have people from all over the world using essential oils, and when we start speaking to each other, we want to be sure we are using the same language and talking about the same thing. A lot of essential oils are referred to by their common name, such as Lavender or Orange or Grapefruit or Fennel. But, it can be really confusing because different people in different parts of the world, let's just go with the English-speaking world, may call Chamomile something different. Somebody may call it English Chamomile while somebody else may call it Wild Chamomile (I don't know why I'm using Chamomile since this is a Lavender episode, but you get my point). Different countries will call plants by different common names. It's only when you refer to the proper nomenclature, the Latin binomial that we know we are talking about the same thing.

These Latin scientific names are given as a universal identifier that enables all of us to be sure we are speaking about the same thing regardless of which language we speak. When I was in Rome I wanted, I think a grapefruit oil, and I didn't know what grapefruit was in Italian back then (it's *pompelmo* which is very different than grapefruit), but(!) *Citrus paradisi* is grapefruit essential oil in English and it is grapefruit essential oil in Italian even if you do not know the common name that is used in that country. The Latin binomials will be very important if you want to be a serious aromatherapist.


**Latin binomials**: I'm going to take Latin binomials a step deeper now. I'm going to talk about the two names that make it a binomial. Each plant is given two parts to its name: a genus and a species.

**Genus**: The Genus is the first part of the name and it is always capitalized. Lavender is *Lavendula*—that's the Genus. It's always a noun.

**Species**: The species is the second part of the name and that often describes a characteristic or some feature of the plant. It could be the way the plant smells, but usually it has to do with its morphology, which is the way the plant looks. It's always an adjective. The species is always spelled with a lower case first letter.

So, we've got *Lavendula* (Genus=capitalized) and *angustifolia* (species=lower case letter). The Genus and the species are what make up the *Latin binomial*. And notice, once I tell you this, you'll probably notice it, the *Latin binomial* is always *italicized*. That's because *Latin* is always *italicized* in whatever your document is or whatever you are writing is in *Latin* it will be *italicized*.

Everyone still with me? No one has dozed off? No "deer in the headlights?" It's about to get interesting as we talk about Lavender.

The taxonomy of Lavender can be confusing. You will hear a lot of different names for Lavender. Not only are there many different species, but there are a lot of different common names for Lavender: you'll hear French Lavender, English Lavender, Spanish Lavender—those are not botanical references, but rather a reference to the country where the plant was grown. Sometimes not even that is correct. Something may be called Spanish Lavender and it was grown in France. It's because of this type of ambiguity that I do not refer to varieties or species by country name but instead look for the essential oil label and the *Latin binomial*.

Also, knowing the *Latin binomial* is a sign of professionalism. Let's talk for a second about this word *Lavendula*. It has a very cool origin. The *Genus* for *Lavendula* comes from the *Latin* word *lavendus* that means to be washed. Or *lavare*, which is Italian for "to wash". Now that I'm thinking about it, I bet that's the origin of the word "lavatory" because *lavare* means "to wash". How cool is that! I love language.

Lavender plants get very large in Mediterranean countries. The ancient Romans were known to take their laundry and drip it across these huge Lavender plants and let it dry. Of course the linens and the clothing would be left with the beautiful scent of the lavender plant. So, *lavare* (to wash), *Lavanda* (Lavender)—do you see where it all comes together? Isn't nomenclature fun!?


In terms of the types of Lavender there are tons of different types of Lavender plants; something like 39 different species? Luckily for us, aromatherapists, they are not all used in the production of essential oils. I'd go nuts if I had to remember 39 different species of Lavender essential oil. In aromatherapy we focus primarily on four species of Lavender essential oil. I'm going to talk about those four and then I'm also going to talk about a fifth one that is brand new to me and I'm excited to share the information with you that I have about that oil. The four species that we primarily focus on in aromatherapy are: Shrew Lavender (*Lavendula angustifolia*), Spike Lavender (*Lavendula latifolia*), Stoechas (*Lavendula Stoechas*), Lavindin (*Lavendula Intermedia*), and finally, I'm going to add to this list *Lavendula spica*, also know simply as Spica. I'm going to tell you all about this oil after I get through this list.

So what I'm going to do now is go through each one of these species and talk to you a little bit about the plant, the essential oil, and what makes one essential oil species of Lavender different from the other Lavender species.

1. **Shrew Lavender** (*Lavendula angustifolia*): Shrew Lavender is "true" Lavender and is the most common species harvested for the essential oil. Generally when you buy it, it is not always called "true" Lavender on the bottle, usually its just called Lavender. And when you buy Lavender this is what you are getting. It's been used for thousands of years—sometimes it's called English Lavender, sometimes True Lavender, but again, how do we know what it is? We look at the bottle.

   It used to be called *Lavendula vera* and *Lavendula officianalis*, but those names are defunct now. Both have been replaced with *angustifolia*. The word "folia" is Italian for leaf; "angustifolia" means "narrow-leafed", so it's a narrow-leaf plant. Because it has this beautiful sweet aroma it really is the best one for aromatherapy and also because the chemistry is best for skin care. Also *Lavendula angustifolia* is the best plant if you are going to cook with the flowers. Make sure you are using *angustifolia* because the others will not taste as well. This Lavender grows at levels about 2,000 feet and is native to the Mediterranean. I know that there is a Lavender that grows in Washington State and I wonder if that's *angustifolia*. There is a huge Lavender farm there, so if anyone knows for sure, please let me know. I am curious about that.

   The *Lavendula angustifolia* plant has little purplish-blue flowers that grow on one spike. This is not to be confused with Spike Lavender. The chemical components of *Lavendula angustifolia* are predominantly alcohols and esters, two very lovely families to find in an essential oil; linalool, which is the alcohol, and the ester is linyl acetate makes it a very lovely oil. Skin-friendly and very safe.

2. **Spike Lavender** (*Lavendula latifolia*): It is known as both Spike Lavender, or just Spike. The word *latifolia*—you've got the word *folia* again, meaning, "leaf"; the word *lati* means broad, so these plants have leaves that are broad. The color is different: they are greyer than those of *angustifolia*. It also has taller

flowers and taller flower spikes than *angustifolia* so if anyone grows Spike Lavender, you'll know it by its tall spikey flower. The flowers are bright blue and if you smell it while it's still with the plant, you'll notice that it has more of a camphorous odor rather than the sweet smell. This also means it's not a great plant for cooking because it's high in camphor.

According to the *British Herbal Pharmacopoeia* this plant was used for headaches, rheumatic pain, colic, and dyspepsia. If you understand the chemistry of that oil, it makes sense and is a great remedy for all of those conditions.

*Lavendula latifolia* grows at lower altitudes than "true" Lavender and has a really high yield and so produces a lot of essential oil; it's very generous. It has grey/blue flowers and is primarily grown in France and Spain for essential oil use. The chemistry of Spike Lavender is much different from the *angustifolia*. It can be high in 1,8 cineole (even as high as 25%) and is high in Camphor at about 10%. This chemistry is one of the things that makes it so different from *Lavendula angustifolia.* Therefore, it's going to have some safety features. It's great for colds and pain and so forth, but I wouldn't use it on children under the age of five because of the Camphor content.

3. **Lavender Stoechas** (*Lavendula stoechas*): It is sometimes called Spanish Lavender, but I've often heard it called just Stoechas, just by its species. I don't see this essential oil widely sold and that's probably a good thing because it has some chemistry that could be concerning. Lavender Stoechas has a high camphor content—really high—higher than Spike Lavender and should definitely be avoided by children. Children and camphor do not play well together.

   Physically it is not as pretty as the True Lavender plant, but it is very hearty and it can be seen on the European coastline; it can grow right on the sand and in between the rocks—a really hearty plant.

   The chemistry of the plant is high in ketones, so 50-60% of the chemistry is ketones. It has its place therapeutically. For pain I like to use ketones, but again, not to be used with children or in pregnancy.

4. **Lavindin** (*Lavendula x intermedia*): If you've ever seen the Latin binomial for Peppermint—*Mentha x pepperita* is another big one—that "x" means it's a hybrid. Lavindin is the newest addition, let's say, to this family of Lavenders that use essential oils. It's a hybrid of *Lavendula angustifolia* (True Lavender) and *Lavendula latifolia* (Spike Lavender). Lavindin is a hybrid of True Lavender and Spike Lavender. It first appeared in the early 1900s, grows at a low altitude, is also very hearty, and produces a lot of essential oil.


This is what is grown in big, big commercially in France. When you see photographs of the class French (Provence) with the fields of rows and rows of Lavender—that's Lavindin. The flowers are big and the plants are easy to harvest, it's hearty and produces a lot of oil so it is wonderful for production. It is generally regarded as a lower quality essential oil than *angustifolia* and it does not smell quite as sweet. I'm guessing it is because of the hybrid with Spike Lavender, which has camphor in it.

If you grow Lavender and you're not sure which type you might have, True Lavender has a single stem with flowers whereas Lavindin has a three-pronged stem. So, go out and look at your plants and see which one you've got.

The chemistry of Lavindin is primarily alcohols and esters, which makes it very gentle, but again it just doesn't smell as great. I think it's used a lot in soap-making and perfumes. If anyone knows, out there, what Lavindin is commercially used for, let me know—I'm curious.

Hybrids can't reproduce naturally. They need to be cut and cloned and that is the case with Lavindin. Hybrids generally don't reproduce in nature so they have to be propagated. Another reason it's great to use commercially, is because when it is cloned, it will produce the same essential oil chemistry over and over again and pretty much the same smell.

5. **Spica** (*Lavendula x spica*): This one is new to me and I'm excited to talk about it. The common name, I think, is just "Spica". **Please note**: this is not Spike Lavender, as I have heard it called. *Lavendula x spica* came on my radar last fall. My birthday is in October, and my friend Derek Pearce and his wife Jill, sent me a birthday package. Jill and Derek are Lavender distillers on the island of Crete in Greece and they grow a unique and spectacular Lavender that I am just making friends with and love it! I got this package from Derek and Jill and it had Lavender Hydrosol, that they create, some St. John's Wort Oil, that they make, and a bottle of *Lavendula spica*. I have never experienced an oil like this. When I opened it and smelled it, I immediately thought of Rosemary.

   They sent me the GC/MS report for the oil and it had, in this particular batch over 80% of 1,8 cineole. That's very unusual for a Lavender. 1,8 cineole is a chemical component that gives things a eucalyptus/ camphoraceous kind of smell, so of course you'll find it in Eucalyptus, Raventsara or Rosemary. I've never seen it so high in Lavender. I saw the GC/MS report and would not have believed it had I not seen the report. Jill told me they have been growing this Lavender for a long time and have been having it tested since 2010, maybe longer, but I know she mentioned 2010. She said that the 1,8 cineole has increased since 2014 after several years of drought. In my classroom I stress over and over again through stories like this that this is why you want to buy oils that have been "batch-specific" GC/MS tested. A batch can change


from one year to the next depending on a lot of things: primarily weather, but growing conditions, and so forth, can completely change an oil's chemistry.

She said that from 2014 the 1,8 cineole content has risen. I've never come across a Lavender like this. I with that you could smell it; I wish there was some way I could waft it to you through the airwaves because it is gorgeous! It's a lot like Rosemary but it's softer and has a Lavender aroma around the edges. I took it into Pompeii Organics one day and I let several people there smell it and they all thought it was Rosemary "but there's something else", and were surprised to find that it was a Lavender.

The story around the name of this oil is very interesting. Derek and Jill are British and they have lived on Crete for a very long time and in 2003 Jill got a starter set of plants from a nursery in Greece. She said that in 2003 not much was known about plant classifications so they got these unnamed plants—they just knew they were Lavender. The local people were calling it Spica. Jill and Derek wanted to have a positive identification for this plant, so for years she did research and discovered in a book called The Genus Lavendula, by Upson & Andrews, a monograph to make a positive identification and discovered that *Lavendula spica* is a hybrid between Spike Lavender (*Lavendula latifolia*) and another Lavender species, *Lavendula dentata*. Now, I know nothing of *Lavendula dentata* in terms of its chemistry. I only know that it gets its name from the toothed leaves. *Dente* is the word for tooth and that's where we get "dentist". So, *Lavendula dentata* is toothy leaves.

Jill shared that, where they live in Greece the *Lavendula spica* is generally used in landscaping and, as far as she knows, they are the only ones cultivating it for distillation; cultivating it for the oil. She also said, it's a big world and for all I know, someone else is cultivating it as well. I would be interested to know, because it is a very unique oil with this 1,8 cineole content.

Just some more about the oil: It is a modern hybrid, first spotted in 1952 in Sydney, Australia and it was much later analyzed to confirm its parenthood of *Lavendula dentata x Lavendula latifolia*.

You can find out more information about Jill and Derek's Lavender farm in Crete by going to their website: www.thelavenderway.com. I'm going to put a couple of things in the show notes as well:

- The link to their website—www.thelavenderway.com
- The link to the Lavender genus book that you might find interesting
- And also, I did a blog post a long time ago about taxonomy and nomenclature, so I'll put a link to that as well because sometimes it's just easier to see things written than to hear them. Basically, what I talked about today I talked about in that blog post.


So, today we talked about taxonomy and nomenclature. We talked about taxonomy as the science of classifying plants and nomenclature as the term for naming those things that we have grouped together. We learned what a genus and a species are and that the genus and the species together are a *Latin binomial* and that it is always italicized. Then we learned about five different species of Lavender that produce essential oils:

- *Lavendula angustifolia* (True Lavender)
- *Lavendula latifolia* (Spike Lavender)
- *Lavendula stoechas* (Stoechas)
- *Lavendula intermedia* (Lavindin)
- *Lavendula spica* (Spica)

I hope all of this information has been informative for you and helpful and that you've learned something new. If you have any questions you can always write to me at liz@aromaticwisdom.com.

And now we've reached that portion of the podcast I like to call ***Smell My Life***. If you are new to the Aromatic Wisdom Podcast, ***Smell My Life*** is a segment where I share some way in real life that I have used essential oils.

My story this week isn't how I used essential oils but rather about one of my students who had something pretty dramatic happen with the oils. I'm currently teaching an aromatherapy certification program; I teach this class "live" and one of my students, Helen, has high blood pressure. It's pretty sever and even with medication there are times when her blood pressure will go up. She started working with Ylang Ylang essential oil in a nighttime blend and discovered a dramatic drop in her blood pressure—in a good way, not that she had too low blood pressure, but where her blood pressure was 120/80. She noticed in continually every time she used Ylang Ylang. In fact, that is one of the therapeutic properties of Ylang Ylang essential oil. Ylang Ylang is known as *Cananga odorata forma genuina* and it's a gorgeous flower essential oil, but is very, very sweet. One of the characteristics, or properties I should say, is lowering blood pressure.

So there you have my ***Smell My Life*** for this week.

And at this point I wanted to mention about the Ask Liz segment that I usually have at the end of my podcast. I'm going to be doing something a little different. I'm still going to encourage you to send me questions. I ask people to about essential oils or anything they have and I'll answer it on the podcast. I'm still going to do that; I'm still encouraging you to please write to me and send me your questions about aromatherapy or essential oil use. Instead of answering it at the end of the podcast I'm going to compile them and answer several of them in one episode. I'll probably do that, depending on how many questions I get, from time to time.

If you'd like to write to me, send me an email at liz@aromaticwisdom.com and put in the subject line: ask Liz.


That is a wrap for the Aromatic Wisdom Podcast, episode 22 about the different species of Lavender. I hope you learned something!

And finally, thank you, thank you, thank you for listening to this podcast. Thank you for showing up and for the wonderful feedback that I get from you. And thanks just for being here with me. If you leave a review in iTunes it makes my day and it also helps other people find the podcasts. Go to:

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It'll take you to iTunes and you can leave a review there. The other thing I do is, on every podcast, in the show notes I will leave a link to a tutorial on how to leave a review. Sometimes people want to leave a review and they don't know how, so I have a little tutorial. Just look in the show notes! And you can find the show notes at:
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Don't forget! You can get a discount on essential oils and other aromatherapy goodies at www.pompeiiorganics.com and put in the code **podcast16** in the coupon code for a 15% discount

Until next time, be well. Be happy.

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