August 2021 Newsletter

Lavender Northwest Invites You To Enjoy Lavender All Year Round!

Norwood Lavender Farm in Tualatin, Oregon

August 2021

We're nearing the end of the lavender bloom season in the Pacific NW. Now is the time we reap the rewards of the hard work we've put in all year long growing and shaping our plants, as we continue distilling lavender flower into essential oil and hydrosol, and drying flowers for sale and for use in our culinary and fragrant bath and body products.

Many farms and shops across the Northwest have fresh-dried lavender bundles and buds, and hand-milled lavender salts to sell. Some farms are also selling lavender plants. Lavender Northwest and other lavender farmers are participating in their host farmer's markets and fairs. Everyone is busy with their own activities, but we're all still offering events and tours at fall and holiday events.

Because there are so many lavender farms and shops to visit in the Pacific Northwest, the best way to find what is available is to visit our **www.lavendernw.org**, browse through the **Destinations** page and the **Lavender Farms** page, and then check out how to find farms and businesses, and the **Events Calendar** for events this summer and fall.

Announcements

Lavender Northwest Summer Quarter Meeting

Our next LNW Summer Member meeting will take place on Zoom on **Tuesday, August 24, 7am - 8:30 pm.**

Save the Date for our **Fall Member Meeting, Friday, October 15th** at Lavender Wind Farm in Wapato, planning **to in-person** another meeting the Fall, with a virtual option for those unable to attend.

UMLA 2021 Conference Videos Are Now Available!

If you participated in the UMLA Conference, you have now published access to the videos on the UMLA Learning Center. You should have received a code via email.

For those who purchased access to the Virtual Conference in March and are a UMLA member, we have also published the videos. If you are a UMLA member and member account, complete the purchase form using your discount code (in a separate email) and you can access the videos.

For those who purchased access to the Virtual Conference in March and are not a UMLA member, you will have to create a new membership account and then complete the purchase form. Note, create a non-member account (email, password, etc.) and then complete the purchase form using your discount code (in a separate email) and you can access the videos.

August Events

Oregon State Fair, Salem, OR, August 13 - September 5

The Lavender Wand Farm booth will be in the North Hall on the 1st entrance "Village first row."

The Lavender Distillation Process

by Dan Hibbitts, H&B Foundry Farms

1. A Brief Overview

At its heart a lavender essential oil flows you a lavender bundle. Yes, it's that simple. But as you know, we don't distill lavender to create the essential oils.

We make bathing a beautiful tube, there is a tendency to look at the finished product and think that's the end of the process. Unfortunately, that is the science behind what happened to the flower. Before the flower can be distilled, it must be dried in order to essential oil distillation as an oil. While drying the flowers, the essential oils are also evaporating. Some of the essential oils components get to an ideal product. This is why I would argue that lavender essential oil is the most difficult oil has little control over the chemical processes inside the plant once distillation has started. This knowing that you can't distill the bathtub, hence we go.

2. Setup

Lavender essential oil distillation happens through a process called steam distillation. Either way the process is very similar. First, you take a pot or kettle and you put a perforated basket in the bottom of the pot. Next, you fill the pot with water about an inch or so above the basket. Then you put the lavender in the basket, we sit our steam top on a lush pieces of copper tubing that will carry the steam and oil vapor from the bottom of the still. Next, fill the kettle with water up to the steam trip line. All of the lavender should be in the steam chamber. Then the top will keep the lavender from touching the water at the bottom of the still.

At this point it is probably becoming more clear why I compare distilling lavender essential oils to steaming vegetables. Now we have our kettle with lavender in the steam chamber and water in the bottom, we're ready to start the heat. On can see on the image above, there is still a lot of room left in the still. This is very important to remember.

3. Filling the still with lavender

Prior to setting up our still I will have cut the lavender and allowed it to dry for about a week. I will add about 20-25 lbs of lavender per 5 gallon pot. For most, still I will send out cuts for distillation. Each cut is a different combination of stems from 6 to 12 lavender plants depending on the size of the plant. The reason I add so much lavender short to avoid packing in too much stem. Stems are the part of the plant that contains the least oil, while the plant is fully flowered is when it has the most oil. Therefore, I want to have a good ratio in the bottle of the still to top of the steaming bay, trying to avoid packets of air between the lavender. I will then put the top on the still and secure it by sealing the still. We let the lavender steam for about 45 minutes to an hour. Depending on the variety of lavender and how much stem is in the still, the steaming time will vary. Some varieties require more steaming time than others.

4. The Process

Ok, I promise more is where it gets exciting. Just like steaming vegetables, the most important part of distilling process now is to boil water and turn the steam into a condensate. Now that we have our pot (steam) so it can you and pass through our kettle that is now stuffed with lavender. As the steam passes through the lavender it will cause the water soluble lavender oils along with the temperature of the steam causes the heat of the lavender oil to evaporate and pass through.

Did you know? The heat of the lavender, not the actual flower, is where most of the oil is held in lavender.

5. Condensing the Steam

Now that we have the right kettle concern to is called the condenser. The condenser is where the steam and oil vapor from the lavender meet the water and oil travels to cool off. The pipe coils very long so that the steam has a chance to cool off. The water will cool to the pipe containing the steam. As the steam cools it goes from its gas state to a liquid state. This is the final process in the condenser and keep on doing this process as we have the hot water rod out of the coils on the top of the condenser. This is where the water and oil separate. Essential oils are lighter than water and will float on top of the water. Therefore, as the water cools down and turns back to liquid, the top level of the condenser into our separation funnel.

6. Separating the Oil and Hydrosol

This was more straightforward than I initially thought it would be. I assumed it would be more complicated. What we have in the separation funnel is the hydrosol, which is the water that

Hydrosol

was condensed with the oil. The oil floats on the water. First, the dispite-dipole bond between the water molecules is stronger than the van der of the reactions happening between the oil and water so the oil will not pull the water bonds apart. Second, the oil is not soluble in water, which is hydrophobic.

7. Essential Oil Yields

Yields depend on the variety. The species *lavandula angustifolia* (English lavender) yields around 1% oil, which is the most common variety. *Lavandula x intermedia* (lavandin) produces around 2%. Spike lavender (*lavandula latifolia*) yields around 3%. Lavender is the most common variety in Bulgaria, Russia, and Ukraine, and is referred to as English lavender, is a low producer of oil at around 0.5%. Lavandin, which is a hybrid between English lavender and spike lavender, is the most common source of lavender. Lavandin is the most popular evaporator in lavender. The highest producing lavender is Grosso and are more desired in the aromatherapy trade.

8. What is Hydrosol?

Hydrosol is the water that comes out with the oil in the separation funnel. Hydrosol is the plant essence extracted from the plant. Hydrosol is the same amount of water in your still just too much so you can't use it for your lavender oil. Hydrosol is also known as plant water, lavender hydrosol. *How can learn more about hydrosol here).* Hydrosol is a great product to use in your skincare routine, as a hydrosol.

9. Copper Vs. Stainless Steel and other Stills.

Why do we use copper stills and distillation? As Benjamin would say, It's Science. We use copper because it is a great heat sink and it is also a great oxidizing catalyst. It is cool to us our still. Copper is also a natural antimicrobial. Stainless steel is much cheaper and durable, but it is a poor heat conductor and a poor oxidizing catalyst. Stainless steel is also a poor antimicrobial. Stainless steel is also