

Saving Your Herbal Harvest

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Introduction

HAPPY FALL!

Are there herbs throughout your garden that you really want to harvest, but maybe you're not quite sure how?

This eBook will walk you through the basics of how to harvest and dry your herbs so you'll have them for use through winter and beyond!

Every year, gardeners and farmers of all types celebrate the harvest season. It can be hard work, but now is the time to reap what you've sown! All your toiling in spring and summer can have you rolling in herbs all winter long!

Don't waste the resources that you've tended all year: After all, its nuts to have your herb garden full of mint get killed by the first frost and then go and buy peppermint tea bags! (Yes, I've done that!!!!)

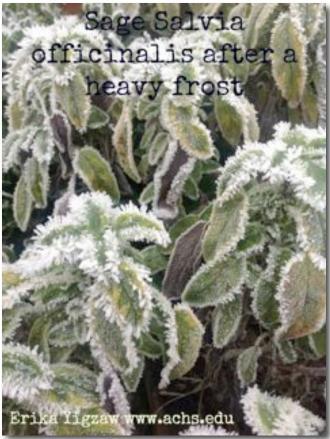
We hold several harvest events here at the College botanical garden here in Portland Oregon in the fall. Our goal is to raise awareness and reach as many people as possible with practical and fun information about how to use herbs today! And, though we DO love to visit with you all in-person, we know not

everyone can make the trip to Portland, Oregon to talk herbs with us at the College's Apothecary Shoppe. So, we've put together this eBook sharing simple, effective, and fun ways you can harvest and store your herbs! Plus, you can use this eBook year-round to learn more about how to harvest and store the herbs in your garden!

Please feel free to share this eBook with your friends and family. Maybe even invite people over for an herbal harvest party. All over the world people are getting back to nature and back to basics. We invite you to spread the health!

Figure 1: Don't let this happen to your herbs! This photograph shows what happens when you misjudge the first frost date and lose all your sage! Photograph by Erika Yigzaw

Enjoy! Ask questions! We'd love to hear how your herbal harvest goes—let's talk herbs on ACHS Facebook at http://www.facebook.com/ACHSedu



Growing Your Own Herbs

Figure 2: Ginger peppermint in the author's garden in Sherwood Oregon. Photograph by Erika Yigzaw

Growing herbs is a natural extension for many of us. Whether you're a beginner or an herbal expert, you've probably found yourself drawn to plant herbs in the garden, whether you have acres to fill, or a simple planter in a window in an apartment! Before you know it, you'll have quite the collection!

With the trend to local seasonal produce continuing to flourish, this is a great time for herbalists to grow, gather, and store their own botanicals for use throughout the year. If you're a practicing herbalist or wellness coach, perhaps you have a small herb garden that clients can enjoy the herbs growing while they wait to see you. Even a few wine barrels planted with your favorite herbs can inspire visitors, family and friends! Perhaps you can even teach clients how to make their own teas and tinctures for use throughout the year showing them that herbal medicine doesn't have to be expensive!



Plus, while it may not be realistic for today's busy herbalist to gather all their own botanicals, many herbalists believe the plants that benefit us most grow in our immediate environment. It's not always necessary to go to the latest trendy herb or supplement from the deep amazon! Perhaps something growing right here can serve the same purpose!

So the question every fall becomes how do you get it all harvested so you can actually use it? In this eBook, we'll look at how to harvest your herbs, and then how dry them. We'll also look at other ways to preserve the active constituents of your fresh herbs by making fresh herbal tinctures! Other methods to preserve your herbal bounty include fluid extracts and essential oils. Since these require specialized equipment, we haven't included them in this eBook but you can find more information about both at our blog, in our YouTube channel, and in our courses.

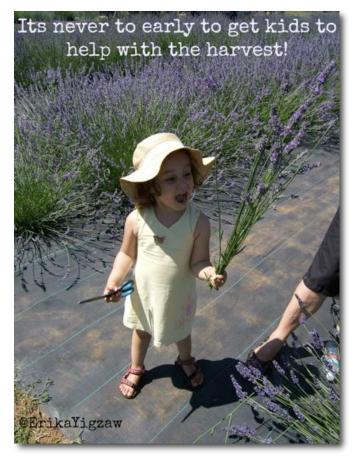
Harvesting Medicinal Herbs

COLLECTING METHODS

It is "best" to collect, harvest, or wildcraft herbs in a methodical fashion. I've put "best" in quotes as I've been known to go through my herb garden like a crazy person, cutting down all the annuals and trimming back the perennials before a predicted cold snap in early fall here in Oregon! At times you can't see the dining table for the herbs piled on top in messy piles! But, yes, adopting a methodical measured approach is probably a good idea. At least label what you have until you can identify by sight and smell!

What Do You Have?

Begin by conducting a preliminary survey of the area and herbs to be harvested. Are there some annual herbs that you want to leave to set seed? I rely on "volunteers" to fill in



my garden each year, so I'm always sure to leave a few plants to set seed for next year. While you're digging up roots, does anything need moved? Have a bit of a plan in your head or on paper. I like to keep a garden journal where I note down thoughts – dig up dahlia tubers in fall and replant in spring somewhere where I can keep them from falling over & move parsley seedlings to vegetable garden – stuff like that. Of course, I often find my journal half buried in the compost pile and have to start over, but it's better than nothing!

What Do You Want to Collect?

Know what you are going to collect and how much you want to collect. Refer to the chart of drying ratios in the section on drying if you need a specific weight of herb for a project. To start with, don't be excessively ambitious: three or four species in one day should be sufficient. This will save inevitable piles of heated or soggy materials and a disappointing result.

Paper Bags

Take an adequate supply of brown paper bags to hold the material you collect. Picking loosely into a brown paper bag will cut down on bruising and crushing your plants. I've also used old sheets for larger harvests.

Do not crush or overfill the bags, otherwise heating will occur.

Be sure to mark each bag indicating its contents.

IDENTIFICATION

When collecting, be absolutely sure you have **identified the plant correctly** and know which part of the plant to collect. Get a good identification book or carry your iPad around the garden if necessary (I strongly recommend one of those waterproof cases if you want to use your iPad!) Being able to identify herbs**Error! Bookmark not defined.** and beneficial weeds develops with experience – don't be afraid to ask a friend or neighbor and remember that Master Gardeners offer identification services through your local extension office.

Note that we look at wildcrafting separately, as there are specific concerns that apply when wildcrafting as opposed to harvesting cultivated herbs.

WHAT PART OF THE PLANT SHOULD YOU COLLECT?

Once you have identified the **plant species**, be sure you know what **part of the plant** to collect. Whether growing wild or under cultivation, only certain parts (or organs) of the plants are collected. These are distinguished as:

- O Underground parts: Roots, rhizomes, tuber, and bulb.
- Everything above the ground: Leaves, flower, fruit, seed, and bark.

In some plants, the whole plant is not collected, as this would dilute the active constituents, which are usually concentrated in one part of the plant. We study that in detail for each herb we study at ACHS. For now, it's sufficient to talk about general principles.



Figure 3: Lavender Lavandula angustifolia harvested in Provence. Photograph copyright Erika Yiqzaw.

WHEN SHOULD YOU HARVEST YOUR HERBS?

The **time of collection** is another factor influencing the quality of the active ingredients. Concentrations vary during the **life cycle of the plant**; a young germinating plant contains the lowest amount of medicinal ingredients. This concentration gradually increases and is usually at its highest around the flowering period, after which it again declines.

The **season** when the herb is collected is also an important factor, as the amount and nature of active constituents vary throughout the year. Turkey rhubarb *Rheum palmatum*, for example, contains no anthraquinone glycosides in winter. In the winter months, it contains substances called anthranols that are converted in warmer weather to anthraquinones.

Remember that there will be some variation in the active constituents of herbs. Herbs are like wine in that regard – you'll have varying factors each year and each harvest. Factors such as fertility and consistency of the soil, climate, altitude, age of the plant when collected, time of collection, and the drying process will all influence the final strength of the active constituents. Where possible, we study specific information about collecting each herb studied in detail at ACHS, but for now, it's enough to learn the general rules.

So, as a rule, herbs should be collected in **dry weather**, after the dew has dried, and before the sun has risen high in the sky. If any moisture remains on the plant, say from recent rainfall, it will dry slowly and could develop mold, spoiling any medicine made from it. (Never use moldy herbs – put

them on your compost pile!) If the sun has risen too high in the sky, the heat will have evaporated some of the volatile oils. Mid-morning is usually the ideal time. But again, if you work and an early frost is predicted tomorrow, don't be afraid to whip out into your herb garden in early evening to harvest! Herbal medicine should be fun and being too regimented can put one off even starting!!!

When Should I Harvest in Fall?

The first step to successful harvest is checking your dates. Find out when the **average first frost** is in your area. Find out when the earliest frost ever has occurred. And then start keeping an eye on your plants and your weather!

I use the Farmers Almanac:

http://www.farmersalmanac.com/weather/2007/02/14/average-frost-dates/

Keep in mind that while there are ideal times to harvest, it's never wrong to do a big harvest right before your first frost to preserve what you have for the winter!

BASIC RULES FOR HARVESTING HERBS

- When collecting, be absolutely sure you have identified the plant correctly and know which part of the plant to collect.
- O Think about the life cycle of this plant. If it is an annual and you want to encourage volunteers for next year, never completely strip your plant of leaves, berries, or whatever you are gathering. Harvest only what you need, and use scissors so you do not damage the rest of the plant. And of course, if your herb is a perennial, you don't want to kill it by harvesting too much of the plant! Never cut back into the woody part of a perennial! Leaving at least a third of the leafy growth on a woody shrub herb, like rosemary or lavender, is a good rule of thumb. A non-woody perennial, like mint, can be cut back hard almost to the base and should come away next spring.
- Each herb has its own characteristics. Handle each accordingly. Some herbs are delicate and fine, while others are sturdy and more resilient.
- As you are picking leaves, berries and flowers, do so gently so as not to disrupt or disturb the plant unnecessarily.
- Cut branches or stalks from your plants and remove dead or diseased leaves before drying. Keeping herbs on the branches or stalks makes it easy to bundle and hang them for drying.
- O Gather herbs that are free from excessive insects or fungi give your herbs a

quick shake to dislodge spiders and earwigs etc before bringing them inside

- O Again remember to tailor your plan to the plants you're working with! You can cut annuals down to the ground and many perennial herbs will be happiest if you harvest the top 2/3 of their growth before the first frost, including thyme, rosemary, and lavender. Do not cut woody plants into the woody section.
- O Whether to wash the leaves after harvest is a personal choice. Hopefully you don't use chemicals around your herbs (or at all!), but if you suspect your puppy or neighborhood cat has been in your herb garden, it's a good idea to rinse them off then pat them dry with clean soft towels before drying. However, the leaves dry easier if they are not wet to start with, so use your judgment!

COLLECTING SPECIFIC PARTS OF AN HERB

Leaves



Figure 4: You'll be harvesting the leaves of Melissa, or Lemon Balm. It is wonderful in teas and cooking, and a tincture is a wonderful way to ease insomnia.

If I had to pick just one part of an herb to harvest, leaves are probably the most easily harvested part. What's easier than stepping out into the garden and plucking a few leaves of basil, thyme or mint to use fresh in your cooking or to make some herbal tea?

The levels of active substances contained within the leaf are subject to seasonal variations of light, temperature, moisture, and maturity. Accordingly, many of the national pharmacopoeias specify that certain species may only be collected at certain times of the year.

But for the beginning herbalist, as a general rule, gather leaves at the time of maximum growth.

Just before flowering is generally the best time, as the active constituents are highest before the plant has flowered. That said, I often harvest leaves from plants that have already flowered and get very good results, including mint, basil, and rosemary. Many herbs will not last over winter, so harvest before the first frost and dry for winter use!

Roots

Figure 26: Dandelion Taraxacum officinale showing broken immature roots of a one-year-old dandelion. These roots are too young for herbal use. Photograph copyright Erika Yigzaw

Root activity slows down in fall when the soil temperature drops. Food materials are transferred from leaves to roots to be stored to fuel spring growth. The tops die back and the root enters a dormant state. So, in general, dig roots in the fall.

Some authorities suggest that the root can also be gathered in

spring. This practice is questionable, as in early spring the root undergoes a high level of enzyme and hormonal activity that can affect the active constituents.

Identify and mark the plant in spring or summer, as once the leaves die down, it may be difficult to locate and identify. A good example of this is blue camas *Camassia quamash*, a starchy root high in inulin, and white camus *Zigadenus venenosus*, which is also known as "death camas." The plants must be identified while flowering, as the plants in the fall are almost identical!



Roots are said to be most tender when the moon is full.

For perennial plants, collect only well developed roots that are at least two years old. You can identify the age of a plant by how well developed it is above the surface:

- A perennial plant that is only one year old may exhibit only one stem, a small number of leaves or flowers and have one or two developed roots; while
- o An older perennial plant will exhibit more stems, branches, leaves, and flowers.

For annual or biennial plants, you can use first- or second-year roots.

Remember to save some of your root for replanting.

Tubers

Mark the plant for collection in spring or summer and then collect the tubers in fall once the leaves have died down.

Bulbs

Collect bulbs at the end of their growing season once the leaves have withered and turned brown. For example, garlic *Allium sativum* and onions *Allium cepa* should be harvested when the leaves have turned yellow and begun to wither.

Flowers

Gather flowers when fully open. Ignore any damaged or blown blooms. Once a flower is past its prime, the active constituents are not as concentrated. Flowers tend to be very delicate so be careful not to bruise the petals. Place in a basket in a single layer to avoid crushing them as you harvest. If you are planning to make a fresh tincture (outlined later in this eBook), you may wish to harvest directly into your tincture jar and save a step!

Strobile



Figure 5: Hops in the ACHS garden in Portland Oregon. Photographs by Erika Yigzaw

We use the strobili of the hops *Humulus lupulus* vine for herbal remedies. The strobile is a reproductive structure characterized by overlapping scale-like parts, as a pinecone. To tell if hops is ready to be harvested, pull apart the sections of the strobile and look for the yellow lupuline. Once this has worked its way down almost to the surface of the strobile, its ready to be harvested. Hops makes a wonderful tincture for healthy sleep.

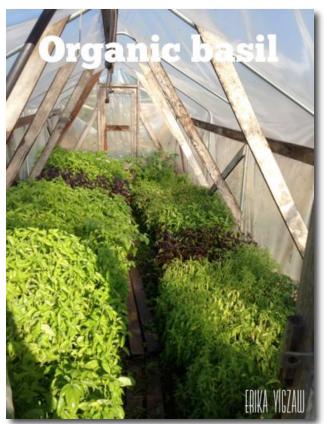
The Whole Herb

If you see references to harvesting the "whole herb," this usually refers to the above ground portions, not including the roots. Collect the whole herb just before flowering at its period of maximum potency. You can also harvest the whole herb before the first frost. You can cut annuals back completely, leaving a few plants to scatter their seeds for volunteers next year if you wish. Do not cut woody perennial herbs back into the woody parts – always leave about a third of the leafy growth on your perennials. Lavender can be pruned back to leave about an inch of leafy growth to keep the plant healthy and compact.

Figure 6: Organic basil is one example where you will be harvesting the "whole herb". Or you could also describe it as harvesting the leaf. Either way, don't leave any to go to waste in the garden! It won't survive the first frost!

Fruits and Seeds

Fruits and seeds are best harvested when ripe, just before they scatter. You can tie a paper bag over the seed head to protect the seeds from birds and from falling prematurely. Leave the bag over the seed head and allow it to dry for a couple of days. Thresh (shake) the seed from the seed head while still in the bag.



Bark

Collect bark in spring when the trees and shrubs begin to bud and the sap is rising. After a storm is an opportune time to harvest bark as fallen trees or branches are a wonderful source of material. You can also harvest bark whenever you prune a tree. While there are some theories that the active constituents will be lower, its far better to harvest what you can than waste it!

If harvesting from a live tree, take care not to damage the tree. Either remove a few side branches or take bark from only one side of the main trunk of the tree or shrub, preferably the sunny side.

Generally, it is best to collect bark after damp or rainy weather, as it can then be separated from the wood without excessive damage to the tree.

If removing branches, select a couple of young branches and remove with a

pruning saw. Old texts may indicate covering the wound on the tree with pruning paste or paint. However, more recent research has indicated that this is not necessary and may lead to additional damage to the tree, so in most cases it is best to leave the wound bare. Trim off the leaders and twigs from the branches. Scrape off any lichen or rough pieces, and remove the bark in strips.

After pruning each tree, remember to disinfect your pruning tools in a solution of one part bleach to nine parts water followed by cleaning with soapy water and then drying. Tree diseases are easily spread by infected tools.

VIDEO RESOURCES

Check out our YouTube Channel ACHS TV here for lots of videos on harvesting herbs! We also offer the DVD *Wonderful Weeds* at the College store. This will assist you as begin collecting herbs and weeds.

Drying Herbs

Dried and stored with care, herbs can last all year!

Drying is an important process. The purpose of drying botanicals is to remove all the water and moisture from the plants. This prevents your herbs spoiling, going moldy, and otherwise becoming useless! Drying is the simplest method to preserve herbs so you can use them for medicine and cooking throughout the year. Dried herbs can be used to prepare teas, decoctions, infusions, tinctures, compresses, and for culinary use.

DRYING METHODS

Again, methods vary, but for the beginning herbalist, the following general guidelines are helpful:

Drying in Cupboards

 Dry your freshly picked plants or parts in airy, dry, and well-ventilated cupboards away from direct sunlight.

Drying On Racks

- If you can borrow, buy, or make drying racks, it is easier to ensure good airflow.
 Rust-free mesh stretched across wooden frames is ideal.
- When drying on racks, spread the plants out in thin layers to speed drying and prevent mold from forming.

Air Drying Versus Dehydrators

- Air drying preserves most of the nutrients but you can also buy a dehydrator online or at your local farm store to dry herbs as well as produce. These can be very useful for drying smaller quantities of herbs.
- Dehydrators work well for herbs that have a lot of moisture and flesh, such as capsicum peppers.
- Try to get a dehydrator with a temperature control if possible.

Paper Drying

O You can gently separate flower petals and spread them out on paper.



Figure 7: I had a great selection of hot peppers from my garden and a neighbors farm this year. Hot peppers in honey are a favorite for our family for winter colds and sniffles, so I needed to preserve these little beauties! I sliced the peppers are sliced in half (seeds intact in this case) and placed in a dehydrator to be dried for winter. Some of the finished product - nice a dry and ready to be packed into a jar and stored in the pantry. Photographs by Erika Yiqzaw

Drying in Hanging Bunches

• You can tie plants together in small bunches and hang them upside down in the shade. This method works for small amounts but larger bunches can retain dampness and you may find the inside of a large bunch goes moldy so be sure to

- check your bunches.
- When drying lavender bunches particularly varieties intended for stripping you may wish to place the bunches into brown paper bags to catch the falling flower buds.



Drying Roots, Rhizomes or Tubers

 Wash, cut, and dry roots, rhizomes, and tubers on racks in the shade or in a dehydrator. All large roots should be sliced lengthwise to speed up the drying process.

Drying in the Microwave

o Do not use a microwave to dry herbs. Microwaving may affect constituents.

DRYING TEMPERATURES

Selecting the optimal drying**Error! Bookmark not defined.** temperature is vital to the quality of the active components.

Largely the active constituents and nature of the particular herb govern the drying **Error! Bookmark not defined.** temperature. While comprehensive information is outside the scope of this eBook, the following general tips are helpful:

- The highest-quality dried herbs are obtained by natural drying in the shade, coupled with good air circulation.
- O Plants containing volatile oils, such as lavender *Lavandula* spp. and rosemary *Rosmarinus officinalis*, must be dried at temperatures not exceeding 104°F because the oils vaporize at higher temperatures, causing a loss of medicinal quality.
- o Generally, leaves, herbs, and flowers can be dried between 68°F and 104°F.
- o Generally, barks and roots can be dried between 86°F and 149°F.
- Obviously, some materials will stand or require 5-10°F higher but this knowledge comes with experience.
- Never dry herbs directly in the sun. Excessive heat destroys volatile oils and removes much the plant's color.
- Be sure to check the temperature range on any dehydrator that you use. It may be too hot for delicate flowers.

DRYING TIME

How Long Should I Dry My Herbs?

O Flowers and leaves dry more quickly, while roots, rhizomes, and tubers take the longest. The duration of drying depends on the parts being dried, whether they have high or low moisture content, and the drying temperature. It may vary from a few hours to many weeks. Rapid drying, without excessive heat, helps to retain the color and aroma of leaves and flowers and prevent needless crumbling.

When are My Herbs Sufficiently Dried?

- Roots are sufficiently dried when they break easily. Roots should fracture.
 Flowers and leaves should be crisp and crumble when rubbed.
- Equipment is available to detect moisture in botanical material if you are drying herbs on a large scale.

PRESERVING THE COLOR AND AROMA OF DRIED HERBS

If picked fresh and dried quickly out of the sun, the plant should retain most of its original color. Comparing the color of the dried herb to the fresh is a good way of determining how well plants have been dried.

Slow drying is only used if enzyme action is to be encouraged. Herbs such as the rhizome of the orris iris, the pods of the vanilla orchid and the root of gentian *Gentiana lutea* fall into this category. Usually enzyme action is undesirable and drying should take place as soon as possible after the herb is collected.

DRYING RATIOS

How Much Dried Herb Will I End Up With?

Drying ratios are subject to many variables. Not surprisingly, material collected after a period of wet weather will weigh more and be harder to dry with a greater weight loss.

The following ratios may be taken as average:

- Bark: 2 or 3:1 Two or three pounds of fresh bark to produce one pound of dried bark
- Root: 3 or 4:1 Three or four pounds of fresh root to produce one pound of dried root
- Leaf: 4 or 5:1 Four or five pounds of fresh leaf to produce one pound of dried leaf
- Flower: 9 or 10:1 Nine or 10 pounds of fresh flowers to produce one pound of dried flowers

Storing Herbs

What Do I Need To Store My Herbs?

Figure 2: Glass jars can be useful storage as long as they have an airtight seal. This jar provides short-term storage only, as the cork top will allow some oxygen to penetrate. This clear glass jar should also be stored out of sunlight, in a dark, cool cupboard. Photograph courtesy of the Apothecary Shoppe www.apothecary-shoppe.com



Different herbs do require different storage techniques. But in general, follow the following guidelines.

- Store your dried herbs Error! Bookmark not defined.as whole as possible to avoid deterioration. Crush or powder them as you use them, not in advance.
- You can store small quantities of herb in dark colored, labeled, glass jars with airtight caps. Canning jars are good as long as they are perfectly clean and dry, with no residual odor from past use.
- Alternatively, herbs can be wrapped in brown paper bags and stored at temperatures not exceeding 64.4°F. This prevents deterioration and evaporation of volatile oils. In warm or subtropical climates, weevils and bugs have a nasty habit of finding their way into paper bags, even if sealed carefully. Clear glass jars can be wrapped in brown paper and stored somewhere cool and dry.
- O Date and label all containers. It is important to label your herbs clearly including the Latin name and the date you picked them. Well-dried herbs may retain most of their medicinal value for up to two years. Other herbs will lose their potency in six months.
- Though they may look nice on display, herbs are best kept in a dark cupboard near the floor (as heat rises) if possible. The better your storage conditions, the longer your herbs will last.
- In humid areas, herbs must be stored in a very dry situation. Mold will spoil
 the medicinal quality of the plant. Some people use desiccant packets to ensure
 that the herbs have no moisture.
- Commercially, large quantities of herbs are often stored in sealed containers with a water-absorbing agent such as quicklime. The quicklime is placed on the

bottom of the container and separated from the herb with sacking or a form of grid.

How Can I Check for Quality?

Check your stored herbs every month for signs of deterioration, particularly mold or insect damage. Insects, particularly weevils, can penetrate even the sturdiest jar. The eggs may also be in the herb when you dry it and then hatch in the jar. Parasites will quickly spoil a large quantity of dried material. Layering herbs with bay leaves helps to keep weevils and moths out.

Signs that herbs have deteriorated include:

- Loss of color
- Loss of aroma
- Any type of webbing (indicates insect infestation)

In all stored medicinal plants, a gradual loss of the efficiency of the active components is inevitable. Do not keep herbs for longer than two years if you want to use them for healing purposes. Any aged dried herbs can be sprinkled on the garden or added to the compost heap.

Don't forget to USE YOUR HERBS (appropriately of course)! Don't feel like you need to save them – use them as needed for health and wellbeing. The sooner you use them, the greater vitality they will have. In many cases, you'll have more fresh herbs in Spring so herb hoarding isn't necessary! Yes, if you run out, you can buy some, but in my experience you're much more likely to arrive at next years harvest with plenty left from the year before. If that does happen, put your old dried herbs in the compost and remember to enjoy this year's harvest this winter.

Fresh Herb Tinctures

Drying is not the only way to preserve the goodness of the herbs in your garden. Fresh herbal tinctures are a great way to create herbal medicines at home!

HYGIENE

Cleanliness is important when harvesting, drying, and preparing herbs, particularly if you intend to store the preparation. Sterilize all jars and bottles. This can be done by boiling them and their lids separately for 20 minutes or putting them in an oven and heating them to 350°F for one hour.

TINCTURES

What are Tinctures?

Tinctures are a concentrated liquid form of herbs and are regarded by many herbalists as the most convenient way to use herbs. Tinctures are an example of maceration, also known as cold collation, and they remain the preferred way to produce herbal extracts. In the old days, chemist shops or pharmacies had a row of herbal tinctures in fancy glass bottles, which were called galenicals.

Why Prepare Tinctures?

Tinctures are invaluable, as water will retrieve only some of the medicinal properties of an herb. In addition, they can be stored for extended periods, allowing you to harvest and tincture herbs in season. If stored correctly, apple cider vinegar tends to last for approximately six months; alcohol-based tinctures will last indefinitely.

Tinctures are extremely useful for the herbalist, as many people do not want to bother with preparing teas. They are simple to dispense and quick and easy to use. They are also useful where an infusion or decoction would taste too bitter to drink.

What Can I Use to Make a Tincture?

Tinctures extract the herb's active constituents using alcohol, vinegar, or vegetable glycerin.

Alcohol is most effective and therefore most commonly used. The type of alcohol used will depend on the intended use of the herbal preparation. Any herbal preparation that will be used orally must used ethyl alcohol, the type found in vodka. Isopropyl (rubbing alcohol) or methyl alcohol (wood alcohol) may be used **for topical preparations only** as these forms of alcohol are toxic if taken internally. In some states, you cannot purchase pure grain alcohol. If that applies to you, use vodka or similar. Some herbalists have

prepared tinctures with white rum, brandy, or even sake! Different botanicals require different alcohol concentrations to extract their active constituents and alcohol percentages can be adjusted for different botanicals. This is something that we study in ACHS herbal classes but it is beyond the scope of this eBook.

Vinegar can be used where there is a reason not to use alcohol, such as for children. However, vinegar tinctures do not store as long as those made from alcohol.

 Vegetable glycerin can also be used but remember that it does not extract as many constituents as alcohol. Like vinegar, glycerin based tinctures do not last as long as those prepared from alcohol.

What Part of the Herb Can Be Tinctured?

You can tincture any part of the herb, including the roots, leaves, flowers, or seeds.

How Can I Tincture Fresh Herbs?

If you use fresh herbs to prepare a tincture, **double the quantity** of dried herbs so you are using 2-oz for every 1-oz of dried herb called for in your recipe. An alternative formula is to add one part herb to five parts of alcohol.

Basic Tincture Recipe

- o 1-oz dried powdered or chopped herb or 2-oz fresh
- o 1-pint alcohol, such as vodka (or cider vinegar if you simply cannot have alcohol
 - keep in mind that tinctures prepared with vinegar or glycerin extract less active consitutent and have a shorter shelf life than those prepared from alcohol
 - this is the type of thing you learn in herbal classes at ACHS)

Mix your herb with alcohol or cider vinegar in a glass jar with a tight fitting lid, such as a canning or preserving jar. This mixture is called the menstrum.

Keep the menstrum in a tightly closed jar in a warm spot (but not in the sun), for approximately two weeks.

Shake the tincture 2-3 times every day. I leave my tincture on my kitchen windowsill, which gets no direct sunlight, and shake it whenever I see it.

After two weeks or more¹, strain the tincture through pharmaceutical filter

¹ The general consensus is that the minimum time to leave your menstrum so as to properly extract herbs into a tincture is two weeks, and the maximum time is three months. Extraction time also depends on the plant material and the percentage of alcohol needed. Most above

paper, a coffee filter, cheesecloth, or muslin. You may need to strain your tincture two or even three times to remove all of the herb solids. Leaving solids in your tincture may lead to mold and spoilage.

Store your tincture in a dark bottle or cupboard.

Half a pint of tincture should equal the medicinal potency of one ounce of the fresh herb, so approximately 1-t will equal the medicinal strength of 1-cup of infusion.

The dose is small, approximately 20-40-drops three times a day, although this varies with each herb. Dilute in approximately ¼-cup of water to take.

Tinctures can be used topically in water for bathing wounds, soaking feet, in the bath, or as a household disinfectant.

I often use tinctures to bathe wounds on my farm animals – calendula tincture is lovely and soothing for minor wounds without any infection.

Fresh Yellow Dock Root Tincture

This fall, I harvested some yellow dock roots and prepared fresh yellow dock root tincture.

It was a simple process: I simply dug up some yellow dock I'd been saving in the garden, chopped off the best looking bits of root outside, brought it in, washed it. Then I peeled the root because the outside was pretty nasty and I was unable to wash it clean, and cut it into pieces.

ground plant parts only need about 40% alcohol and will extract very quickly. Tougher roots and rhizomes typically need a higher percentage of alcohol and longer time to extract. These are the types of details you learn in herbal classes at ACHS. For now, its perfectly fine to stick with the basic rule – two weeks for flowers and leaves, and six weeks for roots and bark.



Next, I simply placed the chopped yellow dock root into a sterile jar, covered with alcohol (vodka in this case), put the lid on the jar and left it on the windowsill for two weeks, giving it a shake whenever I remembered.



Once its ready, I'll strain it through sterile cheesecloth like I did the calendula tincture (below) and store it in a sterile bottle or jar.



Figure 8: Fresh Calendula tincture being strained. Photographs by Erika Yigzaw

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Extend your learning with ACHS on our YouTube channel, <u>ACHStv</u>, including this short video on how to make healthy herbal sun teas! Find this video, and dozens more on how to identify, grow, harvest, and use herbs at: http://www.youtube.com/ACHStv

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