

BioBites: Medicinal Herb Gardening

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Presentation

Why grow medicinal herbs? One of the main reasons is for medicinal use: "A single herb is a medicine cabinet unto itself" (Maurice Mességué). Herbs are also an easy way to add nutrition and flavor to your food. Herbs also make great pollinator habitats and are pest resistant and protective. Medicinal herbs make for climate resilient plants - great for our changing climate. They're often perennial or self-seeding. And they're beautiful!

Herbalism and modern medicine. Herbalism is not the antithesis of modern medicine - these complement each other. We need modern doctors and western medicine. But it's also time to bring back herbalism and remember how powerful it is to have a form of medicine that's integrative, holistic, cooperative, alive and responsive to our bodies.

Chamomile. Chamomile is a very easy plant to grow. There are several different varieties. The German chamomile is most medicinal and the one that you'll find most readily at local greenhouses or in seed form. Chamomile is a very prolific self-sower. You can direct seed chamomile after the danger of frost has passed. To harvest, you remove the top flowers - you can do this with your fingers or with a rake. The more you harvest Chamomile, the more it will grow.

Chamomile is great for digestive and nervous system support. For gastrointestinal support, Chamomile has a lot of volatile oils and it's quite bitter, which helps digest food, expel gasses, and resolve cramps in the stomach. As a calming nervine, it's great at night; it's best known for addressing restlessness and insomnia.

You can use chamomile as an infusion or tea. You can harvest the fresh flowers and steep them in hot water. You can also dry them and save them for tea. Or you can make a glycerite with the chamomile, which you can use any time of the day.

Yarrow. Yarrow can be found in the wild in southeastern Massachusetts. You can easily start seeds or go to a local nursery or greenhouse and purchase plant starts for transplant. Once established, yarrow is a very resilient plant that needs little care. Its roots are shallow and mat-like, allowing it to out-compete weeds easily. And roots expand easily, sending out new shoots and flowers each year. If you're looking for a medicinal variety, select white flowers. There are hybrids in other colors, but they won't have the same medicinal properties. Also, when searching for yarrow in the wild, take note that you are selecting yarrow and not a flower that looks similar, such as wild hemlock or Queen Anne's Lace..

Yarrow is well known for wound-healing. It has compounds that help a cut clot and stop bleeding. It's also anti-microbial and helps wounds heal. You can infuse yarrow into a tea and wash wounds out with yarrow. In terms of using it internally, yarrow is most known for healthy fever support. Yarrow is a diaphoretic - it brings blood flow to the surface of the body so the body can expel excess heat but not get rid of the fever, as the fever is what helps the body rid itself of harmful pathogens.

You can infuse yarrow into an oil for wound-healing or a strong tea for a wound wash. You can also drink strong tea with a fever to gain the diaphoretic benefits.

Mullein. Mullein is found in the wild in North America. Bees are obsessed with mullein. It's a biennial - it will grow for two years. The first year it will produce a basal rosette of fuzzy leaves on the ground; in year two it will shoot up to 5' or 6' tall and produce beautiful yellow flowers. You can transplant or save seed from mullein to be planted yourself. If you don't have any at home but want some, look for mullein in the wild, note it; and in the fall, go back and gather some of those seeds. The top becomes a seed pod that can be cut off, split open, and the seed tamped into the soil.

Mullein is known primarily as a respiratory tonic. It is great for the lungs. It strengthens lung function; and if you have a cough or a cold, mullein is an expectorant and can help ease a cough. Mullein tea can deliver these benefits. Another common use involves the flowers. The flowers, as they're blooming, can be plucked off and infused directly in a jar of oil left in the sun – a high quality olive or sunflower seed oil. Once you've strained the flowers out, the oil can be used in the ear for ear infections. Processed three times with flowers, the oil can be applied to the chest for coughs.

Rosemary. Rosemary is a perennial in warmer climates. It's very easy to grow. You can take a cutting and propagate it just by placing it in water and getting it to grow roots. You can also start seeds early, though they do take a long time to germinate (several weeks). You'll want to harvest rosemary above the woody stem (stem is softer and leaves are green and bright). Rosemary is a great circulatory stimulant, bringing blood flow to the brain. For this reason, rosemary tea with honey makes a nice pick-me-up. It's also supportive of our cardiovascular system. Whether consumed as tea or in a prepared meal, it delivers the same benefits. It's also an antispasmodic that can ease gas and digestive spasms.

Rosemary is commonly used in a tea or infusion. You can also make a glycerite with rosemary by infusing the top of the plant in glycerin.

Elder. Elder is a plant that has been around and used by humans for a very long time. There are two different kinds of elder - *sambucus canadensis* is native to North America and *sambucus nigra* native to Europe. The European variety grows taller and the North American variety grows more like a shrub, but they'll produce the same berries with similar compounds. There are many methods for propagating and maintaining elder. I recommend propagation from cuttings. You'll want to clip a piece of elder that is about 6" in length and that has three nodes in it - three places where the branches will grow from. You'll plant that cutting in a pot with at least one node under the soil; from that node, roots will grow. Keep the plant watered and protected until May when it can be replanted outdoors. Elder has shallow roots and can be taken over by grasses when it's young, so weeding is essential.

In terms of cultivating and harvesting elder, you can use the flowers though it's primarily the berries that are used. If you harvest the flowers, you won't get berries there; so if you want berries, make sure you leave some flowers to turn into berries. There are many cultivars; choose your cultivar based on what you are looking for. Some have bigger, sweeter berries; some grow lower; some are better at attracting birds and pollinators, etc.

Elder is well-known for immune support. Elderberries have compounds that help our immune system detect pathogens early and keep them out of our cells and keep them from replicating. There is a lot of science to show how elderberries accomplish this. The flowers are diaphoretic, like

yarrow, and support a healthy fever. Making the berries into a syrup is an easy way to use the berries and preserve them into the winter. The berries and flowers can also be made into tea.

Drying the herbs. You can use a paper shopping bag to dry herbs. Light and fluffy plants or plant parts - leaves and flowers - dry pretty well with this method. You'll want to put them in the paper bag, close it, and shake it pretty often to ensure air flow. Keep the bag in the shade and don't over-fill otherwise the plants may become moldy. If you have a laundry drying rack, you can use repurposed screens to dry herbs. In this case, spread herbs into a single layer so that they don't become moldy. Leave the rack in the shade with a cross breeze. And lastly, you can use a pop-up herb-drying hanging rack in the same manner as the laundry drying rack.

Processing. A garbling table can be made pretty easily with a wooden frame and wire mesh. Rubbing the dried herbs over the wire mesh breaks the herbs into small enough pieces to be used in teas or infused oils and allows you to easily pick out stems and parts that you don't wish to use. If you don't feel like making a garbling table, you might put the dried herbs in a mixing bowl, crush them up with clean hands, use scissors to further chop them up, and remove stems. Store herbs out of direct sunlight and in an airtight container. Sun and air destroy the nutrition and the flavor of herbs. If herbs still smell and taste good in the winter, that's the best way to know that they're still good and have medicinal compounds.

Q&A Synopsis

Is it okay to take a plant from the wild and plant it in your own herb garden? Yes, people have been doing that for a long time. But before you go and harvest or transplant from the wild, do a little research or ask around to get a sense for the state of that plant. There are a lot of medicinal plants that are endangered, like lady slipper - a flower that was over harvested. There are some thoughtful foragers' guidelines you might consider: never take the first plant that you see, never take the last plant that you see, and never take more than you need. If you know the plant is not endangered and is growing prolifically where you live, you can transplant the plant. You might also consider how the plant has been affected by its environment to date (i.e. chemicals, toxins, etc.) and allow the plant to grow and reproduce in healthy conditions before utilizing it for medicinal purposes. *Braiding Sweetgrass* by Robin Wall Kimmerer is a great read that speaks more on this subject of our relationships with plants and foraging.

Can these plants be planted near each other or are there some that make better companions? A good way to think about companion plants is as plants that share a similar environment - perhaps full sun, sandy soil, good drainage. These plants will likely have similar nutrient requirements and pollinators. Find plants that are well suited to a particular environment and they'll probably all be happy together. Paying attention to the conditions that plants enjoy might suggest to you the types of plants that will grow well there.

Is there a good place to take an herbology class? Farmacy Herbs in Providence, Rhode Island is run by Mary Blue and is an excellent place to learn about herbs.

With respect to rosemary, are the flowers used as well as the needles? Yes. You can make a flower essence with the flowers. With most plants you're using for a tea or infused oil, it's fine to harvest the flowers along with the leaves.

Are there any herbs that shouldn't be planted near each other and/or will affect the taste of surrounding herbs? I have heard that garlic, because it is so pungent, can affect the taste of other

herbs. Otherwise, a significant consideration is size and what plants will look like when they're full grown - overcrowding is a common problem.

Do herbs have any major pests, and what's a natural way to deal with them? Herbs, in general, create essential oils which are a natural deterrent to pests and which are medicinal to us. A lot of these plants are thus pretty resilient and resistant to pests. Beyond this, having healthy soil is the best thing you can do to ensure healthy plants.

Can you grow herbs indoors? I'm not the best with indoor plants, but my grandmother has grown herbs, including rosemary, in a south-facing window indoors here in New England. In general, just make sure plants grown indoors are watered well.

Which specific herbs help our bodies to reduce and eliminate our toxic load, including something like cholesterol that has been accumulated over a lifetime? When I hear this question, I'm thinking which systems of our bodies are responsible for eliminating toxins and let's support those systems. Herbs aren't like pharmaceuticals - this does this and that does that. Herbs work more holistically and systemically. If you want to support detoxification, we want to support the organs that do that, which includes the liver. The liver filters every ounce of blood in our body, denaturing harmful compounds that are in there, balancing hormones. Herbs that are bitter and typically grow in the spring support the liver - dandelion, red clover, milk thistle (a bitter seed). With cholesterol, we're thinking about our circulatory system. Garlic, oats and oat tops, cayenne are all supportive of the circulatory system.

How do you create tinctures? A tincture is basically an herbal extract. A tincture is herbs plus a solvent plus time. You'll use whatever herbs you want to make an extract of. Your solvent is traditionally spirits - grain alcohol, vodka, brandy - these are common solvents because they're good at pulling out the phytochemicals we're looking for. You'll take a jar, fill it with herbs, cover it with alcohol, seal it with wax paper and a hard lid, let it sit for a month (one moon cycle), and then strain it well. This is the folk method; it's not super scientific but works well - this is a method I like.

If you're not wanting to use alcohol, you can use glycerin as a solvent. Glycerin is a syrupy liquid. You'll use the same process; except instead of sitting it for a month, you'll double boil the glycerin and strain it that day. You can also use apple cider vinegar if you don't wish to use alcohol. Certain solvents will extract certain compounds. If you're looking to get a bit more into herbalism, you'll want to learn more about what compound you desire and how to best extract them. For most common herbs, you'll be able to get what you want with vinegar or alcohol.

Are there any herbs that are less-rabbit-friendly? Yarrow, lavender, rosemary, lemon balm, bee balm, St. John's Wort, peppermint, and thyme are all plants that rabbits and groundhogs seem to stay away from. These animals seem to prefer juicier plants - calendula, marshmallow, angelica. At night, I put a five-gallon bucket over the plants I don't want animals to eat and in the morning I take it off; and I do this until the plants are hopefully grown enough that the animals won't be able to get to them anymore.

How does one know what herbs they're sensitive or allergic to? If you have any concerns - if you typically have allergies or sensitivities - work with one herb at a time. A lot of teas and tinctures have multiple herbs in them. A lot of times you don't need a lot of herbs; and, in fact, a lot of herbalists believe in using simples, which is one herb at a time. And using one at a time is a good way to determine whether you're allergic or sensitive. Sensitive isn't necessarily a bad thing -

people often need different dosages of an herb to experience the benefits. For this reason, you may also want to start with a small dose. If you're concerned about a serious allergy, do a little research into plant families. If you know you're allergic to one plant, check out what family that plant belongs to and consider all the other plants in that family. For example, the Aster family - many people are allergic to plants in that family, and there are a lot of plants in that family, including, for instance, chamomile.

Is there an herb that can be applied directly to skin or clothing to repel ticks? If you find yourself in the woods and find that you didn't bring tick or bug repellent, mugwort is great. It grows prolifically in New England and it's really rich in volatile oils; those compounds that deter pests for the plants are also great at deterring pests for humans. You can crush it up and rub it on your legs and pants. You can rub the stalks and stick it in your shoes, if you need to. Other plants rich in volatile oils - lavender, rosemary, mint-family plants - can also help. Keeping ticks off of us is important, so I'd suggest buying a really good natural tick repellent. These are usually composed of grain alcohol, water, and essential oils.

Can you treat tick bites with herbs? If you get a tick bite, your primary goal should be to reduce inflammation because any kind of tick-borne illness will thrive in an inflamed, acidic environment. If you get a tick bite, the first thing you should do is cut out sugar and processed foods and eat as much fresh, green, whole foods as possible so that your body is not an environment those viruses don't want to live in. From Stephen Buhner I learned that you should apply andrographis tincture, a strong, anti-viral, bitter herb, to a tick bite. As soon as you remove the tick, apply a few drops of the andrographis tincture to the bite until it stops itching.

Anything to help prevent the spread of poison ivy? The herb that's traditionally used for poison ivy is jewelweed, which grows wild around here. You'll usually find it in a wet area. If you're in an area that's raised and you see a low-lying area, look and mid-summer you'll often see jewelweed growing. It looks like an orchid and the leaves sparkle when wet. Jewelweed often grows near poison ivy, which is its signature, telling us what it's good for. If you have poison ivy, crush jewelweed up and rub it wherever you think the poison ivy was to remove that oil. You'll also want to wash yourself when you get home. As with a tick-borne illness, poison ivy will be worse in a body that's acidic and inflamed, so eat alkaline foods, cooling, balancing foods like fresh greens, cucumber, etc.

How effective are live versus dried herbs? I'm a big fan of using live herbs, especially tincturing live herbs. The alcohol really preserves the living essence well. You just want to make sure you're using a stronger alcohol, like a vodka or a brandy, because if the alcohol content is too low, the herbs could mold while tincturing. To know whether the herbs are still potent, use your organs of perception - do they smell good, taste like they're supposed to taste, do they look vibrant? This is the way labs distinguish the potency of herbs, as well.

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