



GROW *your own* HERBS

The **40 Best** Culinary Varieties *for* Home Gardens





SUSAN BELSINGER & ARTHUR O. TUCKER
with photos by SHAWN LINEHAN



GROW *your own* HERBS



The **40 Best** Culinary Varieties *for* Home Gardens





SUSAN BELSINGER & ARTHUR O. TUCKER
with photos by SHAWN LINEHAN



Herbs often complement other plants, and create a fragrant corner for enjoying the garden.

GROW *your own* **HERBS**

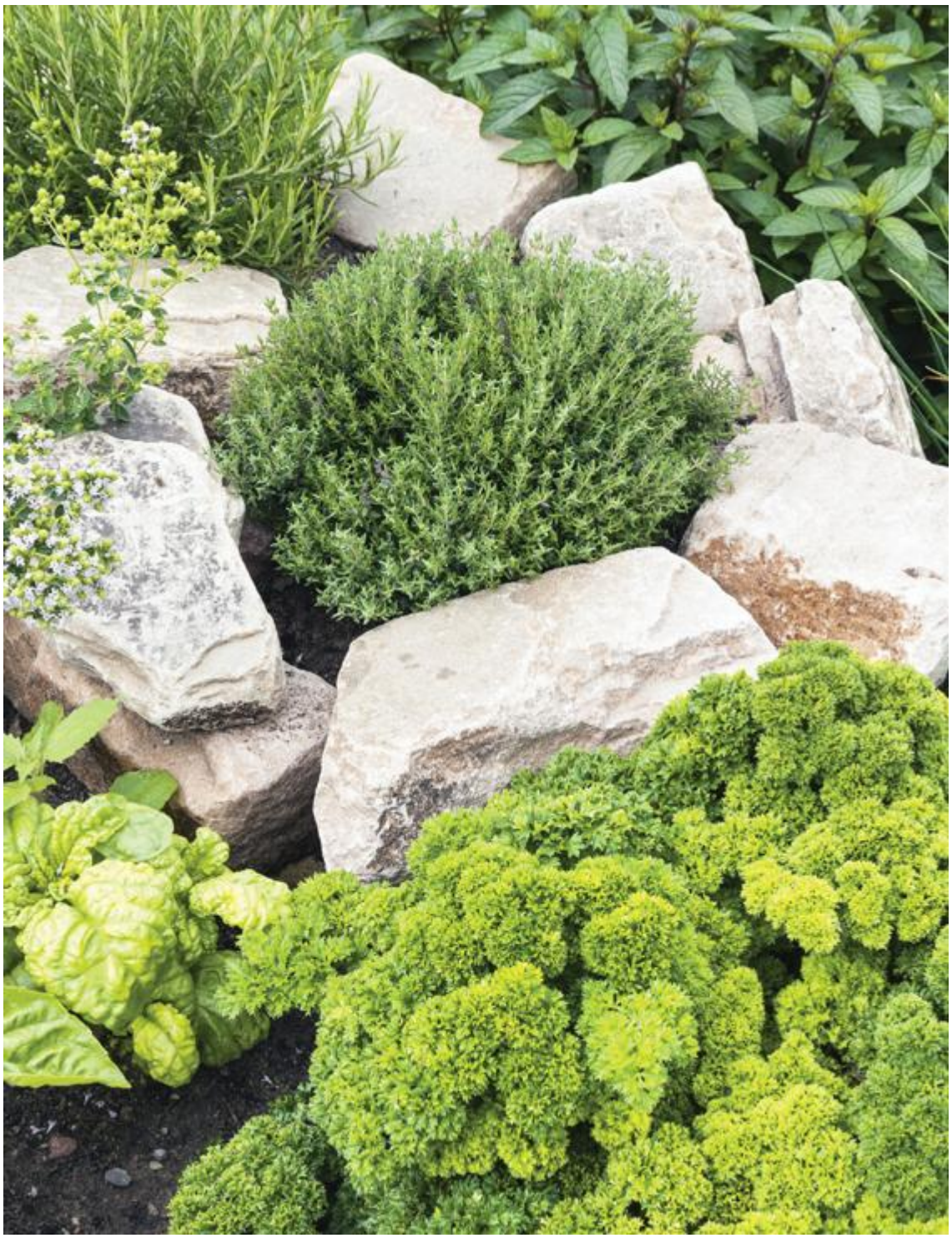
The **40 Best** Culinary Varieties *for* Home Gardens

SUSAN BELSINGER AND ARTHUR O. TUCKER

with photographs by **SHAWN LINEHAN**

Timber Press

Portland, Oregon



Work herbs into land-scape plans that include rocks, to help provide plenty of air circulation and drainage.

To our children and future generations—may you always have herbs in your gardens, kitchens, and medicine cabinets.



Fresh-clipped home-grown herbs add a delicious and rewarding dimension to cooking.

CONTENTS

Preface
Introduction

Growing Herbs at Home
Harvesting and Preserving Your Herbs
Using Herbs in the Kitchen
40 of the Best Homegrown Culinary Herbs

Metric Conversions
Sources
Suggested Reading
Acknowledgments
Photography Credits
Index

40 Culinary Herbs You Can Grow

Anise hyssop

Basil

Bay laurel

Black cumin

Calendula

Chervil

Chives

Cilantro

Dill

Fennel

French tarragon

Garlic

German chamomile

Horseradish

Lavender

Leaf celery

Lemon balm

Lemongrass

Lemon verbena

Lovage

Mexican oregano

Mexican tarragon

Mint

Monarda

Nasturtium

Oregano

Parsley

Roman chamomile

Rosemary

Saffron

Sage

Salad burnet

Scented geranium

Sorrel

Stevia

Summer savory

Sweet marjoram

Thyme

Viola

Winter savory



Thyme, rosemary, and basil (from left) are three popular culinary herbs to cultivate.

PREFACE

HERBS BROUGHT US TOGETHER, first as colleagues, then as friends. We both love growing herbs and other plants, spending time in our gardens, and visiting other gardens. We especially like to prepare and eat good food. Over the years, we have come to respect each other's highly developed sense of smell and taste. When we are together, we go on ad infinitum about botanicals, sensory experience, and cooking—we are flavor and fragrance junkies.

Collectively, we have more than a century of experience in gardening and cooking. Art started growing things when he was six as the child of what would later be called hippies (but in the late 1940s were merely considered poor survivalists), and he has dabbled in herbs ever since. Susan cooked at her grandmother's side, starting as a little girl and throughout her childhood, but she didn't have her first garden for growing herbs until she was twenty, and she taught her first cooking class at that age.

Art, a recently retired professor of botany at Delaware State University, still occasionally teaches botany and horticulture, and he continues to enjoy researching and writing about herbs. He learned to cook when young because, with two busy parents who were just trying to keep the family afloat, he got tired of eating bologna sandwiches. While he grew up on traditional Pennsylvania German dishes, Julia Child on TV was an epiphany, and he hasn't stopped since.

Susan has written countless books and articles on gardening, herbs, and cooking, often focusing on the garden-to-kitchen aspects —grow, harvest, and create recipes. Recently referred to as a "flavor artist," she has shared her passion for herbs and cooking through teaching and inspiring others with sensory experiences. Art has been her mentor, guiding her in the botany, science, and chemistry of all facets of herbs.

We have written this book for new or inexperienced gardeners who like to cook and for cooks who are intrigued by the idea of growing their own culinary herbs. Herbal enthusiasts will enjoy it as

well. We offer our choices of the best herbs for home gardens and share our passion for cultivating and cooking with herbs, in hopes of helping readers understand how easy it is to grow seasonings that can add signature flavor to all kinds of dishes.



A wicker basket can be a good place to house potted herbs.

INTRODUCTION

LIKE ANY ENDEAVOR, growing plants can be intimidating if you're a beginner. Here's the good news, though. We're not beginners, and we're eager to share what we've learned over our decades of experience growing and bringing out the best in herbs. We have sorted through many species and varieties of culinary herbs and have selected forty varieties that we believe are especially good choices for anyone wanting to grow their own culinary seasonings.

We are passionate about using herbs in the kitchen. We know them by their appearance, their leaves, their shapes and colors—and we know them intimately through sensory experience. We've been wooed and enchanted by cultivating these inimitable plants and we hope you will be, too.

One of our favorite things about herbs is the pay-off to effort ratio. Creating delicious foods with herbs from your own yard can bring wonderful rewards and satisfaction—yet growing your own herbs does not require excessive maintenance. Of course, even if growing your own herbs wasn't relatively simple, the aromas and flavors alone might be worth the work. Homegrown herbs add a unique depth of taste and variety of nutrients to countless foods and beverages.



Fresh herbs from the garden, snipped, tied, and ready for drying.

Why You Should Grow Your Own Herbs

If you've grown flowers or shrubs or houseplants, you may have found it enjoyable, but cultivating herbs for culinary purposes provides a level of gratification few other homegrown plants can offer.

SAVE MONEY

Anyone with a spice rack knows the expense of dried herbs. And fresh herbs from a farmers' market or grocery store can run several dollars for one small packet. An herb you grow yourself (even if you start with a plant and not seeds) will likely cost much less at the outset—and provide harvests throughout the growing season. If it's a perennial (comes back year after year), it will stretch your savings

even further. And by preserving your harvest, you'll also reduce the cost of buying dried herbs.

TREAT YOUR NOSE

Growing herbs at home offers an extra benefit that store-bought versions can't: the scents that waft through yards and windows during the growing season. Breathing in the collection of aromas that rise as you gather herbs for supper is immensely satisfying. And besides, you always guarantee that they are organically grown.

Then there are the mouthwatering smells that fresh herbs bring to meals. Did you know that smell is not only a precursor to taste, but actually an integral part of it? Without smell, we can't sense and savor the full flavor of a food. In fact, taste is about 90 percent smell.

Here is a simple experiment to understand this proposition. Pick an herb leaf, but do not rub it or sniff it. Hold your nose closed with your fingers and do not let go. While holding your nose, take a little nibble of the herb leaf. Do you taste anything? No? While still holding your nose, take another nibble to be sure. Same results? Now let go of your nose and breathe. You will be amazed to experience the herb fragrance and flavor filling your nose and mouth. Now you understand how smell and taste together result in flavor.

In the herb profiles, we try to touch on each plant's smell and then describe the flavor, which is the aroma and taste combined. These sensory experiences will help you the reader, gardener, and cook, to imagine the herb flavors and inspire you to use them to create wonderful food and flavor combinations.

In our olfactory memories, we each have tens of thousands of smell memories, beginning when we were born. An infant instinctively knows his or her mother by her scent. We know when our neighbors are grilling outdoors by the odor of lighted charcoal or searing meat. When driving down the road, your nose lets you know when you go by an Italian restaurant or a fried chicken diner. You don't even have to think about it—it is an imbedded olfactory memory. While each individual has innumerable smell memories, we have many fewer taste memories.

DELIGHT YOUR TASTE BUDS

Experts say there is no flavor difference between fresh herbs from the store and herbs harvested from your own garden. We respectfully disagree and encourage you to do your own taste test after your first herb harvest. The difference may only be obvious to those who have done the growing, but to them it is usually significant.



Sprigs of rosemary can be laid in the bottom of roasting pans to add a pungent accent to meat or vegetables during cooking.

What makes up what we perceive as flavor? Most of us have learned that our tongue has four kinds of taste buds—sweet, sour, salty, and bitter. But other cultures add a few more tastes. In India, proponents of the Ayurvedic system include “pungent.” For example, some spicy oreganos and garlic are considered pungent, while chile peppers and horseradish are downright hot. To this taste might be added the opposite “cool,” such as the menthol in mint. And then there is *umami*, a Japanese word that could be translated as a pleasant, savory taste or deliciousness with a complex richness, as in a finely made stock.

So, let’s say we add pungent, cool, and umami to the basic four tastes. When you think about it, that isn’t very many, but every food and every herb that we eat can be categorized into these basic tastes or a combination of them. By adding an herb like French sorrel to a soup or sauce, its tart flavor will bring a lightly sour aspect

to the dish. And adding Greek oregano to a dish will make it pungent. Since herbs contain concentrated flavor and natural minerals, we can often use less salt in herb-infused foods.

Today's society craves sweet and salt, and fast foods have exacerbated the overuse of these two tastes. When we create a dish, we look for a balance of flavors and try to incorporate all of the tastes—sweet and salty, bitter and sour, pungent/cool, and umami—so that we can enjoy the full range of sensory stimuli. With the other dimensions of flavor offered by herbs, we do not need so much sweet and salt in our diets. In addition, bitter and sour stimulate our digestive juices, to aid in digestion.

A SENSORY FEAST

When we smell an herb, we rub its leaves to release the essential oils and inhale deeply, usually with our eyes closed. We do this again and again, so we can capture the bouquet in our olfactory receptors. The same goes for tasting: We take a nibble and let the taste and texture roll across our tongue and permeate our taste buds, and we taste again. We find that the more we do this, the more in tune we are with the sensory experience, and all of our senses become heightened. By taking the time to smell and taste and observe and think about what we're consuming, we create for ourselves the utmost sensory pleasure.



Growing your own herbs means you can create your own herbes de Provence blend for seasoning everything from meats and fish to pasta and vegetables. Blends vary, but can include thyme, basil, lavender, fennel, and savory, as shown here.

About This Book

Even though growing herbs is relatively simple, there are a few important aspects that can make the difference between a passable herb garden and a great one. So we start off with “Growing Herbs at Home,” a chapter on the basics of cultivation that will ensure an optimal herb harvest.

To make that harvest last beyond the growing season, preservation is a time-honored and valuable way to enjoy herbs year-round. In “Harvesting and Preserving Your Herbs” we cover what we’ve found to be the most successful methods of home preservation.

Arguably the most fun aspect of growing herbs is using them in recipes to create signature dishes. Our “Using Herbs in the Kitchen” chapter includes foundational recipes that are the building blocks of distinctive foods and meals. Herb syrups are perfect for glazes, beverages, and desserts. Herb vinegars are delightful in vinaigrettes, marinades, salads, salsas, and pickles. Use sweet or savory herb pastes in cooking and baking, and herb butters to season vegetables, breads, egg dishes, and more.

Finally, “40 of the Best Homegrown Culinary Herbs” offers profiles of forty selected culinary herbs that lend themselves to home cultivation. These detailed descriptions provide tips on growing, harvesting, and preserving each specific herb, along with insights into its aroma and taste. We mention foods or dishes that highlight or go well with that herb, discuss whether the herb is best used fresh or cooked, and offer preparation suggestions. For some herbs, such as chervil and lovage, we recommend just growing the straight species. For others, such as basils and mints, we suggest five or six favorites. We’ve chosen herbs for their culinary charms, but some also have medicinal virtues, so we occasionally mention those attributes.

GENERALLY RECOGNIZED AS SAFE (GRAS)

In the United States, flavoring ingredients are regulated by the Food and Drug Administration. The Flavor and Extract Manufacturers’ Association (FEMA) provides an expert panel to determine those flavors whose use in food is “Generally Recognized As Safe” (GRAS).

In this book’s plant profiles, we have listed the GRAS status for an herb only when we consider it pertinent. What does this mean for you? Sometimes a component of an herb has been found to have detrimental effects in research on lab animals. On the other hand, the effects may have occurred at high levels that would never be

replicated in normal consumption by humans. The herb may have been consumed for millennia by cultures without ill effect, and investigations of the chemistry of these herbs may not reveal any obvious toxic substances. As herbs increase in popularity, some might be nominated for GRAS status someday, but in the meantime, we can only list them as in limbo and point out any concerns.

Hardiness Zones

USDA hardiness zones are based on average annual minimum temperatures. Knowing a plant's hardiness zone rating will help you determine whether it will survive in your climate through the cold winter. The lower the zone number, the colder the winter temperatures. To see temperature equivalents and to learn which zone your garden is in, see the U.S. Department of Agriculture Hardiness Zone Map at planthardiness.ars.usda.gov/phzmweb/.

For Canada, go to planthardiness.gc.ca/?m=1.

For Europe, go to gardenia.net/guide/european-hardiness-zones.



This garden combines herbs and ornamental flowers in locations suited to the plants' needs.

GROWING HERBS *at* HOME

ONE OF THE FIRST rules of gardening is to place plants where they will be happiest. Herbs are no exception. The ideal herb garden will place herbs in individual niches or beds where they are well suited, from full blaring sun in relatively dry conditions to semishade with steady moisture.

Revisiting a plant's origins may be the most important journey a gardener takes. The herb's original environment often reveals the limits of a plant's ability to live on its own. The native habitat also provides important clues to methods of cultivation and to a plant's cold hardiness—environmental information on which the gardener will base many decisions.

The closer we can reproduce the native conditions of culinary herbs, the better the chances of good growth. Plants have only a limited ability to adapt to conditions far removed from their origins, because their genes only allow a limited number of responses. Plants that have been widely cultivated for millennia have a broader ability to adapt. Most culinary herbs do not have millennia of adaptation, so we must pay heed to their origins.

Different Conditions for Different Herbs

Except for some isolated gardens in past times—the Tudor era in England, herb gardens of the North American colonial revival—herbs were not set off by themselves in designated sites. Our ancestors realized that peppermint was happiest next to the water pump in the back of the house, while thyme would thrive in the dry, gravelly edges of the walkways out front. That's not to say that herbs can't

peacefully coexist in a single dedicated site, however putting peppermint and thyme directly next to each other in the same bed may mean neither is able to live up to its full potential.

FULL SUN, LOOSE SOIL, GOOD DRAINAGE

Some herbs, often those perennials with woody stems such as lavender, oregano, rosemary, sage, savory, and thyme, do best in full sun and a loose soil that crumbles easily. Drainage is important for these herbs, and creating raised growing beds can be helpful, as well as a liberal addition of sand and/or gravel to the soil. Consider a light-colored mulch for this group, such as gravel, sand, marble chips, or ground oyster shells, which will reflect light into the plant, rapidly drying them in the morning and helping to deter fungal diseases and insect pests. Avoid dark organic mulches for these herbs, such as wood chips, which foster fungi and do not reflect light into the plants.



Well-drained raised beds with reflective gravel mulch are perfect for growing herbs with origins in the Mediterranean. Ozark Folk Center, Arkansas.

This set of herbs has its origins in the Mediterranean region, and by replicating the conditions there as much as possible, you will help

ensure optimal health and maximum flavor.

FULL TO PART SUN, RICH SOIL, DARK MULCH

Herbs such as chives, dill, parsley, and French tarragon appreciate full to part sun and a loamy, rich soil. Amendments to the soil such as compost or other organic matter can help to achieve this condition. Organic mulches, such as wood chips or cocoa bean hulls, help to contain moisture and control weeds.

These herbs generally hail from northern and central Europe.



Wheat straw is a good mulch for many herbs.

DEEP, ORGANIC SOIL, LIGHT MULCH

For herbs such as chervil and cilantro (coriander), which came from southeastern Europe and southwest Asia, preferred conditions can be variable. Generally, however, all appreciate a deep, organic soil. A light mulch of straw may be beneficial to these herbs to help

control weeds and moisture, plus it breaks down into organic matter. Avoid a heavy, thick mulch of wood chips.

OTHER SPECIFIC NEEDS

Herbs that were originally from Africa, Asia, and the New World require specific cultural conditions, and it is difficult to make generalizations. For example, basil, which is native to the tropics of both the Old and New World, is very sensitive to temperatures below 50°F. So you might plant it at the same time as tomatoes in your vegetable garden. On the other hand, as a native of colder areas in Argentina, lemon verbena will endure heavy frost. The scented geraniums will flower best with a cool (but not freezing) winter, and generally prefer semidry conditions during dormancy. These requirements are covered in the individual herb profiles.

Getting Started

An herb's native environment provides important clues to methods of cultivation and to a plant's cold hardiness—information important to helping herbs thrive. The closer we can reproduce such conditions, the better the chances of good growth.

What characteristics provide key cultivation clues? The essential factors are amount of sun, annual rainfall, soil conditions, and minimum and maximum annual temperatures. Also, an understanding of insects and diseases that a plant may encounter in its hometown is helpful, even when soil and climate seem perfect.

SUN AND AIR

Most of the herbs we grow today benefit from both abundant sun and full air circulation. Overcrowded herbs suffer from not enough air circulation and usually the more tenacious plants survive. For instance, tarragon must have plenty of elbow room or it will just shrivel up and turn brown if it is in the shade of larger, spreading

herbs. On the other hand, some herbs, such as mint, prefer plenty of moisture and will endure some shade.

It is important to note the size of plants included in the plant profiles in this book. You might start with seedlings or small plants in 3-inch pots, and when you transplant them, 1 foot of space between plants might look like plenty. But if the plants grow to be 3 feet tall and 2 feet wide, they will be crowding one another for air, sunshine, and nutrients.

SOIL AND WATER

Before planting, really examine the soil where you plan to place an herb in relation to what that herb prefers. Can you easily break the soil apart with your hands? If it is loose and crumbly, or rich and loamy, you have a good base for many herbs. However, if you initially encounter soil with the consistency of concrete or clay, then you have a job ahead of you. The addition of abundant sand and gravel, and/or plenty of organic matter and mulches (depending on the needs of the herbs you're planting), will usually make your soil workable.



Transplant basil seedlings once the chance of frost has passed.

Heavy, compacted soils will drain poorly, which will kill most of the herbs from the Mediterranean region. If your soil is so compacted it cannot be fixed, consider making raised beds. Some school gardens are built with raised beds on concrete or macadam, which are about as impenetrable as you can get in a garden situation. Building raised beds with workable soil on top of compacted soil has the benefit of encouraging earthworms, which will slowly but eventually do the job of increasing your soil's health.

Many herbs will benefit from the addition of compost to the soil. Not only do you add critical nutrients and organic matter with compost, the accompanying good bacteria will help the future of your soil. Lacking compost, you can choose from a few good manufactured bacterial and mycorrhizal preparations, usually of a pasteurized chicken manure base. These preparations increase the health of your soil and rejuvenate tired soils, especially in large pots.

COOL-WEATHER VERSUS WARM-WEATHER CONDITIONS

Some herbs, such as chervil, cilantro, and dill, are adapted to cool weather. Annual, cool-weather herbs flower and fruit quickly and

then die. When planting these herbs, put in successive plantings at ten- to fourteen-day intervals to extend the harvest in both spring and fall. Other cool-weather herbs are perennial, such as French tarragon and lovage. They just sit back and bide their time, not producing much new growth from June to September, when the weather gets cooler.

Most herbs are adapted to warm weather. When planting basil, wait until the weather reaches at least 60°F and there is no chance of frost. Basil stops growing below 50°F and starts turning black. For the same reason, do not store basil in the refrigerator; instead, keep it in a glass of water on the windowsill until you're ready to use it.

For gardeners with a very short cool season, there are some warm-weather substitutes of the cool-season herbs. For example, Mexican tarragon (*Tagetes lucida*) can serve as an alternative to French tarragon (*Artemisia dracunculus* 'Sativa').

Growing Herbs in Containers

Container gardening can be a useful approach to growing plants for many reasons. One advantage is that it allows you to create the conditions that will best serve your herbs, by tailoring the soil to an herb's liking and placing the container where it will receive the preferred amount of sun or shade. Or perhaps you do not have a backyard, but you have a deck or patio where you can place some pots. Or maybe good in-ground soil is just not available to you, due to contamination or previous uses. For older gardeners or gardeners with disabilities, containers serve to bring the plants closer to hand and eye level. Pots are also a wonderful way to get children involved in gardening: give them their own pots to plant and care for. Tender plants that won't last through the climate of a harsh winter are simply easier to maintain in pots, since you can bring them indoors in cold weather. And sometimes, herbs just look great in that unusual pot you purchased on impulse at the garden center.



Perennial herbs (such as rosemary and thyme) in pots can be easily relocated for protection from winter cold.



This metal frame lined with coir and filled with potting soil allows herbs to grow from the sides as well as the top, and provides good drainage and air circulation.



CLOCKWISE FROM TOP LEFT Bay trees do well in large containers, and can be moved to avoid harsh conditions; a creative cinderblock planter holds rosemary, nasturtiums, and other herbs; colorful pots create a stylish display. Just make sure there are holes in the bottoms of any potted herbs for adequate drainage.

POTS

We have found that very large pots are ideal for growing herbs, from nasturtiums and basil in summer to bay laurel and rosemary in winter. We have used large plastic tubs (the ones often sold for under $10 for collecting building debris), drilled holes in the bottom, placed some broken pottery over the holes, and filled them with porous soil. These may fade in the sunlight over time, but you can easily paint them (Art uses a textured Monet blue paint). If the pots are ceramic, which can crack in the winter from frost expansion, simply turn the pots on their sides to prevent accumulation of water.

Clay pots offer a rustic appeal, but in our experience, they require constant watering, sometimes more than once a day, and gradually flake over time, especially in winter. Concrete pots are ideal: while they are often very heavy, their thick walls, along with evaporation of water from the surface, help the soil to remain cool. But concrete pots will also need to be placed on their sides in the winter where freezing occurs. Wooden whiskey barrels make good containers if you drill extra drainage holes in the bottom. It takes lots of soil to fill one, so we place a broken cinderblock in the bottom (which adds lime to the mix). Mints thrive in barrels and are kept from their habit of spreading. We have also used large metal pots, painted inside and out to prevent leaching of metal ions into the soil. These make it through winter without cracking. Old, leaky, galvanized aluminum washtubs, painted with a satin exterior paint, also make good recycled plant containers.

GROWING MEDIUMS

Soil in pots must be light and airy, since compacted soil will accumulate water and rot many herbs. We routinely use several soil conditioners, from perlite to terra-cotta frit to pottery pebbles. Perlite is steam-expanded obsidian that occurs in natural deposits; it resembles a white sandlike material and is easily crushed by hand to powder. Manufactured terra-cotta frit resembles finely broken pottery that is perhaps more aesthetically acceptable than perlite in a soil mixture. It is widely used by rock gardeners and for golf courses. Manufactured pottery pebbles are small, fired ceramic balls, and are

routinely used in hydroponics. These products lighten up the soil and retain moisture between waterings. Styrofoam beads, while unsightly, can also be used as a soil conditioner and have the benefit of withstanding frost expansion during the winter. Vermiculite is used as a soil conditioner for short-term soils, like those used for germination of seeds. It should be avoided for large pots because it quickly breaks down into slippery individual mica pieces. Sand, chicken grit (ground oyster shell), and gravel are also useful for increasing drainage, but their weight in pots limits their usefulness.

Into the primary soil itself, we work in a range of organic soil amendments, depending on the preferences of the herbs we're planting. This can include everything from sphagnum peat moss to composted bark or household compost, to increase the water-holding capacity, permeability, and soil aggregation. For the majority of herbs—those that appreciate a rich, loamy soil—we like to use 1 part sphagnum peat moss to 1 part pasteurized leaf mold or compost to 2 parts soil conditioner. Finally, similar to taking probiotics for our gut, we add a beneficial bacterial and mycorrhizal fungal product (for example, Espoma's Bio-tone).

Mix the soil ingredients when they are slightly moist but not totally dry or wet. Depending on the size and number of pots, you can mix soils easily in a bucket, but you might use a washtub, wheelbarrow, or even a cement mixer.

NUTRIENTS AND MOISTURE

Herbs of the Mediterranean will often survive with minimal moisture, but those native to other regions will require attention to watering. All herbs require basic nutrients appropriate for a typical vegetable garden. But avoid overfertilization—it often results in reduced flavor in herbs.

For container herbs, we prefer what is commonly called fish emulsion. Studies have compared fish emulsion with inorganic fertilizers and found them rather similar in the nutrition they provide. But with the fish emulsion, you also foster beneficial bacteria and fungi that are not necessarily favored by inorganic fertilizers. If you don't like the odor of fish emulsion, controlled-release fertilizers also

work. Simply sprinkle the pellets onto the soil's surface and water them in. This treatment should last for months.

We also recommend seaweed or kelp extracts in the water at initial planting of seedlings and divisions. Seaweed or kelp extracts contain a number of plant hormones that promote cell division and therefore rapid root regeneration.

If you are buying a manufactured fertilizer, pay attention to the nutrient ratings. Nitrogen, phosphorous, and potassium (NPK) are considered the major primary nutrients for plant growth, so these are the principal materials rated in a fertilizer as percentages. A good balance for herbs is a fertilizer whose NPK is 5-10-5. This means it will have 5 percent nitrogen (N) as nitrate, 10 percent phosphorus (P) as phosphate, and 5 percent potassium (K) as potassium oxide by weight.

Propagation

Many herbs can be grown easily from seeds, but some (like named cultivars of rosemary and lavender) must be propagated by cuttings or other vegetative means. For example, planting seeds of 'Hidcote' lavender will not produce 'Hidcote' lavender. If anything, the resulting product could be described as 'Hidcote'-derived, but it certainly would not be 'Hidcote'. Actually, most offerings of 'Hidcote' seeds currently on the commercial market have a mixture of light to dark flowers, and range from dwarf size to tall growth—in other words, a potpourri of lavenders, not 'Hidcote'.



These dill seedlings are ready to be transplanted.

In addition, some herbs are simply seed-sterile. Peppermint (*Mentha ×piperita*) is a sterile hybrid of two fertile species, sort of a mule among herbs. Yes, you will see offerings of “peppermint” seed in catalogs and at your local garden center, but these germinate to a rank-odored spearmint, not peppermint. Likewise, true French tarragon (*Artemisia dracunculus* ‘Sativa’) was a sterile selection (with an odor a bit like anise) from sometime in the Middle Ages and does not produce flowers or seeds. Again, offerings of “tarragon” seeds from the current commercial market will produce the parental Russian tarragon (*A. dracunculus*), smelling a bit of shoe leather—not what you want for a successful béarnaise sauce.

GROWING HERBS FROM SEED

If you are planning on growing herbs from seeds started indoors, it's important to choose a soilless growing medium or pasteurized soil mixture. Lack of good air circulation and light will promote fungi and bacteria, so the fewer spores that you start with, the better.



Basil sprouts in a terra-cotta pot.

As previously discussed, we generally like to use 1 part sphagnum peat moss to 1 part pasteurized leaf mold or compost to 2 parts soil conditioner. The leaf mold sold packaged at garden centers as "humus" or "garden soil" is generally pasteurized leaf mold from city collections. Perlite is a good soil conditioner to use with this.

There's something sacred to us about the terra-cotta clay pot. Like most home gardeners, we prefer the old-fashioned terra-cotta clay pot over large plastic trays. We do use large plastic trays when we are growing hundreds of plants for sale. But for growing just a few plants for your garden, a terra-cotta pot that is 5 to 8 inches in diameter can't be beat. Start by placing a piece of broken terra-cotta in the bottom of the pot, concave side down. Then fill the pot with the

moistened planting medium. (If you are using seed flats, follow the basic directions for a pot.)

In a separate container, mix sterile play sand, milled sphagnum moss, and fine vermiculite. This mixture provides just the right amount of drainage, and the milled sphagnum moss inhibits fungi such as *Pythium*, which will cause seedlings to wilt just as they emerge. Sprinkle about ⅛ inch of this mix on top of the soil medium, and then sow the seeds. Seeds will need to be covered with about twice the narrow width of the seed: In other words, if the narrow width of your bean seed is ¼ inch, then it will have to be covered with ½ inch of the mix. Very fine seeds can be simply sifted over the surface with no further covering.

Place the terra-cotta pot in a saucer of water at least ½ inch deep and gently water, being careful not to dislodge the seeds. (Or water a flat very gently with a fine mist.) Keep the potted seeds at near room temperature and constantly moist. At this stage, until seedlings emerge, a thin cover or plastic wrap will help to retain moisture but should be immediately removed upon germination to avoid fungal wilt.

After germination, seedlings should be carefully separated and planted in new soil. You can transplant seedlings to pots or into warm soil in the garden when the plants' first true leaves are well developed and the second leaves begin to emerge. Crowding prior to transplanting will allow fungi, such as *Pythium*, to grow, resulting in wilted seedlings. We find that seedlings should be "pricked out" in groups of three or more, because less root damage seems to occur when seedlings are transplanted in groups rather than individually. After seedlings show growth in the new soil, a diluted general fertilizer may be used, but make sure to provide even moisture coupled with good air circulation, which are of utmost importance.

GROWING HERBS BY LAYERING AND CUTTINGS

To propagate woody perennials, such as sage, the easiest method is layering. Simply choose a side branch, scrape off some bark, apply a little rooting hormone to the scraped area to hasten rooting, and either weigh the branch down with a rock or brick or hold it down with

a U-shaped hook bent from an old wire coat hanger. Maintain even moisture. This method is slow, however—the production of a good root system will require months before the new plant can be severed and transplanted.



Rosemary is easily started from rooted cuttings.

For quicker propagation of a number of plants, cuttings are the preferred choice. Rooting from cuttings can range from extremely simple to elaborate, from only one cutting to thousands. But first, you should pay attention to the type of parent plant. Plants that grow in very moist situations generally can be rooted in water. Plants that grow in dry environments will rot in water and require more attention.

We have a preference for “heel” cuttings. Choose a side branch near the tip of the plant that is 1 to 3 inches long. With a sharp downward pull, remove the branch, pulling off some older tissue of the parent stem (and the base of the cutting will resemble the heel of a foot). Remove the leaves at the base. Dip the bottom of the branch in rooting hormone, then gently place it into a moist medium.

Perhaps the simplest method we have found for propagation with cuttings is using florist foam. These small blocks of foam can easily be carried in small, clear plastic bags. Merely poke the cutting into wet florist foam and place the cutting and foam in a plastic bag. At home, place the bag on a windowsill that receives full light but no direct sunlight and keep the florist foam moist but not wet. When roots start poking through the foam, gradually peel back the plastic

bag, and eventually transplant to soil. This method works very well with most herbs that require moist soil. Since it uses the essentially sterile medium of florist foam, the chance of fungal rot is severely reduced until transplanting to soil.

For herbs that require drier soil, the growing medium must be carefully prepared. Using lavender as an example, prepare pots or trays with 1 part perlite to 1 part sphagnum peat moss. Moisten the medium and place the pots or trays where they have good drainage in indirect light; either indoors or outside. Place the pots or trays in a spot that is free from strong winds but still has some exchange of air. Gently cover with thin, clear plastic without sealing, to retain some moisture but still allow air exchange. Water frequently, from every day to at least every other day, depending on the temperatures and wind. After about two weeks, gently tug the cuttings to see if roots are forming. When a good, healthy root system has developed, remove the plastic and expose the cuttings to more air and light. Eventually transplant.

Growing Herbs Indoors

If you live somewhere with no access to an outdoor growing environment, herbs can be grown indoors. Unfiltered sunlight and air circulation are difficult to mimic inside, but a bright, sunny, partially heated sun porch is an ideal alternative. Lacking these, the home gardener can often grow some herbs, such as basil, parsley, and chives, on a bright, sunny windowsill. These will never grow as big as those grown outdoors, however.

We are hesitant to recommend growing herbs under fluorescent lights because of the high capital investment necessary and the constantly changing equipment, as well as the increased electric bills. The hydroponic stores that are springing up with the new laws on medical marijuana can be a good source of information on growing some herbs indoors under lights.



Some herbs are happy growing on a sunny windowsill or bright porch.

In all these scenarios, pay attention to air circulation, especially in winter. Stagnant air will foster diseases and insects. We recommend

an overhead fan or several small, strategically placed fans.

Maintaining the Health of Your Herbs

Herbs are susceptible to diseases, insects, and crowding out by weeds, so pay attention to each specific herb's origins and its needs regarding light, drainage, and soil. For example, herbs from the Mediterranean are notoriously finicky about low light, poor drainage, high humidity, and lack of air movement. Any or all of these conditions will encourage bacterial and fungal diseases if they don't kill the plant outright.

TYPICAL HEALTH PROBLEMS AND TREATMENTS

In this section we summarize some of the health problems your herbs might experience, listed by symptoms, diagnosis, and treatment.



Overwatering, underwatering, too much heat or sun

Symptom: **Brown leaf tips and edges**.
DIAGNOSIS Uneven watering, insufficient water, leaf scorch.
TREATMENT Take care to consistently water herbs, especially if they are in full sun during a hot stretch. In excessive heat, provide some protection for plants by moving pots or creating shade.



Powdery mildew

Symptom: **Foliage is covered with a white powdery substance**.
DIAGNOSIS Probably powdery mildew.
TREATMENT Plants are most susceptible to powdery mildew when subjected to high humidity, temperatures below 80°F, and poor airflow. Leaf dampness and low light conditions also promote mildew growth, which is why plants like rosemary can become infected when they are brought into the house for winter. Powdery mildew is usually not a problem when plants are outdoors in the open, especially when afternoon temperatures are above 86°F and air is continually circulating through the foliage. If this problem occurs indoors, install a small fan nearby to increase the air circulation. If changing the growing conditions does not alter the symptoms, combat the infection with sprays of a solution of 2 tablespoons of baking soda in 1 quart of water. It may take two or three applications to completely get rid of the powdery mildew. If this fails, try sprays of garden sulfur. Use caution, though, because high temperatures combined with sulfur sprays can sometimes be toxic to plants.



Bacterial blight

Symptom: **Leaves have an oily, greasy appearance or have water-soaked spots; plant stems wilt and blacken**.
DIAGNOSIS Probably a bacterial disease.
TREATMENT Destroy the infected plants and throw them in the trash. Do not put them on the compost pile or reuse their soil. Space healthy plants so that air can circulate around and through them. Do not wet the foliage when watering. Keep plants in as much sunshine as they can withstand in order to create strong leaf tissue. If this problem occurs indoors, consider placing a small fan nearby to increase air circulation.



Root rot

Symptom: **Plant roots are brown to black instead of their usual firm consistency and light or white color**.

DIAGNOSIS This could be root rot.

TREATMENT Roots need air. When they are irrigated, water fills the small holes in the growing mediums that contain air. If plants are watered too often or given too much water, air cannot reach the roots, and they begin to die. It is sometimes helpful to test how long a plant can go without water before it shows signs of stress, and then adjust the quantity and frequency of watering.



Botrytis

Symptom: **Leaves and stems of new and old tissues are covered with a gray or brown mold**.
DIAGNOSIS Likely culprit: *Botrytis.*
TREATMENT *Botrytis*, a fungus with gray or brown fuzzy growth, is encouraged by cool, damp weather and other conditions that stress plants. Provide plants with plenty of sun or longer hours of indoor plant lights. Be careful not to overwater; instead, toughen plant tissue by withholding water. Do not crowd plants, so that air can circulate through and around them. Indoors, use a fan to gently push air through the plants.



Fungus disease

Symptom: **Dead leaves hang on branches low to the soil, while upper leaves are healthy**.

DIAGNOSIS Probably fungus disease.

TREATMENT The disease is spread by moisture and reduced airflow. Remove infected, dead, yellowing, and damaged foliage and place in the trash. Increase air circulation within and around the plant by judicious pruning and increased spacing. Add a pea-gravel mulch or white sand to reflect heat into the plant and help keep leaves dry.



Fusarium

Symptom: **Lower leaves wilt, yellow, and die. Process works its way up the plant. Plants may suddenly wilt and die**.
DIAGNOSIS There's a good chance the soil is infected with *Pseudomonas*, *Verticillium*, or *Fusarium* fungi that cause the sudden wilting of young, succulent plant tissue.
TREATMENT Remove plants and place them in the trash. Plant resistant varieties or set new, disease-free plants in uncontaminated soil.



Verticillium

Symptom: **Plant suddenly collapses or wilts when adequate irrigation is available**.

DIAGNOSIS Could be infected with *Phytophthora*, *Fusarium*, *Verticillium*, or *Pythium*, which are soil mold diseases that attack many herbs native to the Mediterranean basin and their cultivars. These diseases clog the plants' vascular tissue and reduce the transmission of water. The diseases are often caused by overwatering, poor drainage, and inadequate air circulation.

TREATMENT Copper foliar sprays are sometimes effective. These diseases are often accelerated by overwatering, poor soil drainage, or inadequate air circulation. Changing the plant's location may be helpful, but a fresh start with new plants is desirable. Incorporate abundant sand and gravel into the soil—enough to raise the planting bed's level above the rest of the garden. Consider a light-colored mulch of sand, gravel, marble chips, or ground oyster shells to reflect heat back into the plant. Mycorrhizal (beneficial) fungal dips may be helpful in some instances, if the plants are small.



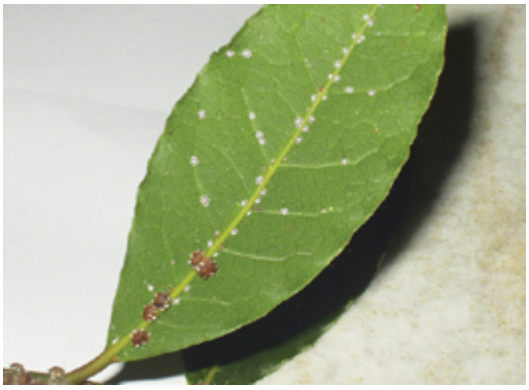
Black aphids

Symptom: **Chive shoots in early spring are covered with black insects**.

DIAGNOSIS Black aphid infestation.

TREATMENT Aphids are among the most common garden pests; there are more than 4400 species. They feed by sucking plant sap, and a heavy infestation can stunt and deform their host. In addition, about 60 percent of plant viruses are transplanted by these little insects. Aphids are often seasonal in the garden, especially during periods of cool nights.

Light aphid infestations in the garden can be handled with a strong spray of water that knocks the insects from the plants. If the garden is overrun, spray a solution of insecticidal soap. Biological controls include ladybugs, lacewings, parasitic wasps, and insect-pathogenic fungi.



Scale

Symptom: **Bay tree leaves feel sticky and are covered with a sootlike substance**.

DIAGNOSIS Most likely an infestation of scale, a tiny sucking insect commonly found on bay plants, especially if the bay tree was summered outdoors and brought in for the winter.

TREATMENT Coating the plant with a fine horticultural oil mixed with water and applied either by spraying or dipping (if the plants are small) suffocates the insects and gives the plant a healthy shine.



Fungus gnat

Symptom: **Tiny flies hover around potted plants**.
DIAGNOSIS Fungus gnats, probably.
TREATMENT In stores and homes where light levels are low and soil moisture is high, fungus gnats are likely inhabitants. The adults are merely unsightly, but their offspring burrow into roots and stems and often transmit diseases such as *Pythium*, *Fusarium*, *Phoma*, and *Verticillium*. Drench the soil with *Bacillus thuringiensis* (BT), a spore-forming bacterium that destroys the larvae of fungus gnats.



Thrips

Symptom: **Green or yellowing leaves show pinhead discolorations**.

DIAGNOSIS Thrips or spider mites. Thrips leave an irregular, discolored pattern that looks like the pigment has been sucked from small areas of the leaves. Spider mites leave many tiny, round marks on leaves from their feeding, where the color has been drawn. Minute webbing with tiny insects scooting over it may be visible during major infestations of spider mites.

TREATMENT Sprays of insecticidal soap and rotenone every three days for two weeks can break the insect life cycle and control the pests, if not totally eradicate them.



Leaf miners

Symptom: **Wiggly discoloration through leaf surfaces**.
DIAGNOSIS Probably leaf miners, the larvae of the flying adult. Little clusters of eggs are often visible on the undersides of leaves.
TREATMENT Create a barrier to prevent the adults from laying eggs by protecting foliage with a floating row cover of spun-bonded polypropylene fabric, especially in spring and fall.



Slugs

Symptom: **Ragged holes in leaves or leaf margins, particularly basil**.

DIAGNOSIS Probably night-foraging slugs, which spend their days under layers of mulch, large stones, and sidewalks—wherever there is darkness and moisture. If you look, there should be a shiny slug trail around the plant. Also look for caterpillars, which usually feed during daylight hours.

TREATMENT Seek out and destroy these pests' resting places. Trap the pests by placing flat pieces of wood or inverted, scooped-out melon shells on the soil—a veritable slug hotel—during the day, and then destroy the guests. Some sprinkle diatomaceous earth around the plants in peril, because the small particles are jagged and sharp so the slugs don't cross over it or it will cut them; it needs to be replaced after rain. A 4-inch-high copper flashing pushed into the soil on its edge makes an impervious slug fence. Some mail-order garden supply companies sell copper material to block slug attacks, and copper flashing is available at roofing supply firms.



Nematodes

Symptom: **Poor growth, yellowing leaves, dying growing tips**.
DIAGNOSIS After ruling out poor drainage and lack of nutrients, consider microscopic soil insects called nematodes. These pests burrow into roots, causing raised nodes, interfering with nutrient uptake, and slowly killing the plant. Nematode-infested roots can spread the critters to previously uncontaminated areas, particularly when field-grown plants are dug and sold or new plants are created from divisions. Nematodes also promote the spread of soil-borne fungi.
TREATMENT Soil enriched with grass clippings destroys most nematodes. If infestation is severe, turn to container gardening, and use a growing medium containing equal parts of peat moss and perlite.



Clip fresh herbs at their peak on a sunny day.

HARVESTING *and* PRESERVING YOUR HERBS

AS GARDENERS AND COOKS, we look forward to the growing season with great anticipation. We celebrate our garden bounty daily. We delight in warm, sun-ripened tomatoes with fresh basil, just-picked green beans with a piquant, savory vinaigrette, and sprigs of spearmint muddled in lime juice with rum for the perfect mojito. Because of the season's abundance, we probably take it for granted. We don't need to bemoan the fact that there are no fresh herbs to brighten our cooking in the cold weather—because we have preserved them during the season.

In this chapter, we share the very best methods and recipes for harvesting and preserving your garden's herbs so you can enjoy them throughout the year. From our years of experience, these simple instructions will guide you in harvesting, drying, and freezing herbs.

Herbs are at their finest when they are fresh and in season. They reach their peak of flavor and essential oil production in summer, especially when flowering. During the growing season, we harvest herbs as needed for whatever dish we might be preparing. We bring fresh herbs into the kitchen, give their stem ends a fresh snip, and put them in a jar of water. They will keep on the kitchen counter out of direct sunlight for at least five days, maybe longer—especially if the water is changed every couple of days.

When you are ready to use the herbs in a recipe, rinse them if needed and pat or spin dry. Often, when we harvest herbs, especially if it has just rained, they don't need to be rinsed. But if they are even slightly dirty or gritty, they must be washed. If herbs are very dirty, put a few tablespoons of vinegar in the washing water and the grit will fall to the bottom of the container. Then dry them well

before combining with oil (oil and water do not mix). We do this in a salad spinner and then place the herbs on a kitchen towel to air dry, or direct a fan on them until all water is evaporated.

To have a year-round supply of herbs, you will want to preserve some of summer's bounty for the winter months. Gather the herbs "while ye may" and preserve them in your pantry and freezer. Take pleasure in the time spent preserving your herbs, knowing how satisfying it will be to have their flavor and nutritious benefits all year.

Harvesting Herbs

For optimal flavor, most herbs should be harvested from just before the plants form flower buds until mid-flowering, unless you want the blooms. Herbs do vary as to when to harvest. Some perennials, like oregano, thyme, and other woody-stemmed herbs, are often harvested about mid-blossom time at the maximum oil production. Basil is best harvested before the bloom, since the leaves tend to become bitter once the essential oils are concentrated in the flowers. On the other hand, you may want dill to flower so that you can save the seed. To know when to harvest, usually you can allow your eyes and nose to be your guide. And in the herb profiles, we recommend individual harvest times.

Ideally, choose a sunny day for harvesting, and cut herbs in the mid-morning after the early dew has evaporated. Avoid harvesting herbs when they are wet, since this can inhibit the drying process and encourage mold. Herb oils are strongest in the leaves on a sunny day; in fact, harvesting on a cloudy day will not yield as much flavor. If the herbs seem gritty or dirty, try to plan ahead, and the day before you want to harvest, rinse the plants with water by spraying lightly with a hose. Both annual and perennial herbs can be harvested at least a few times during the summer season. Pruning them about once a month during the growing season will encourage new growth and yield, maximizing leaf harvest.

A rule of thumb is that annual plants such as basil or cilantro can be cut back to just above the bottom two sets of leaves. This approach results in more stems, new leaf growth, a much larger

harvest the next time, and, if continued, at least a few additional harvests. While harvesting herbs, keep the just-cut stems out of direct sunlight or they will wilt. Take them to a shady place for sorting and picking over or tying into bundles. For the final harvest of the season, you can pull up whole plants if they are annuals, tidying up the garden for winter and gathering the bounty at the same time. Or, cut annuals just above the bottom set of leaves if you are hoping for them to winter over.



CLOCKWISE FROM TOP This thyme is ready to harvest; prune sprigs of summer savory back to above the bottom two sets of leaves; bringing in the herbal harvest is among the greatest pleasures for a gardener.



Hang herbs to dry in small bunches, out of direct sunlight.

Woody-stemmed, perennial herbs like oregano or rosemary can be pruned to about one-third of their height. Do not prune perennials

too late in the fall if you live in the north where the winters are harsh, since this weakens the plants' resistance to cold. Six to eight weeks before a hard freeze, take your last cuttings, so that the plants have time to harden off and put out some new growth.

If it is your final harvest and you have pulled up entire annual plants, trim the roots off. Before bringing any herbs indoors, pick over the leaves and remove any wilted, brown, spotted, or bug-eaten ones. Brush away any dirt or grit and remove webs, insect eggs, or cocoons. If the herbs are dirty and you must wash them, rinse them quickly and pat or spin dry. To remove excess moisture quickly, lay them on a kitchen cloth in front of a fan.

Flowers should be harvested at their peak and, if necessary, swished in a bowl of water to remove any insects or grit. They can then be candied, dried, made into decorative ice cubes, or used in herb butter or herb vinegar.

Plants harvested close to the ground, such as small salad seedlings when you are thinning, carry the risk of bacterial contamination from soil. For the leafy mustards and all harvested salad herbs grown in a highly organic soil, we recommend spritzing with household white vinegar and then household hydrogen peroxide, and then rinsing. This sequence will kill 99 percent of bacteria, but don't combine the two into one disinfectant.

Drying Herbs

Herbs can be dried by hanging them in bunches, or by laying them on screens and in shallow baskets. For hanging them, gather the stems into small bundles and fasten them with twine, string, or rubber bands. Lavender growers routinely use rubber bands because, as the stems shrink from drying, the band tightens, which won't happen with string, so the bunches can slip out and fall to the ground. They also twist a paper clip into a hook to hang the rubber-banded bunch from lines. Don't make too large a bunch or they won't dry: use three to seven stems per bunch, depending on how large the stalks are and how many leaves are on them. Select a well-ventilated place out of the sun and hang them by the stems to dry

from a nail, peg, or hook; even pushpins work. Rafters in the house, an attic, or garden shed are good spots for drying herbs, as long as they are out of direct light.

If you use baskets or screens, the leaves of small-leaved herbs, such as thyme or sweet marjoram, along with savory or rosemary, which have thin, needlelike leaves, can be left on their stems and laid out to dry. For larger leaved herbs, such as basil, pluck the leaves from their stalks and arrange them in a single layer on the screens or in baskets.

When drying flowers, pluck or cut them at their peak and spread them on baskets or trays to dry. We dry some flowers whole, such as chamomile blooms and lavender spikes. Depending on what we are doing with them, sometimes we dry whole calendula flower heads, and we often pull the petals from the center disks of calendula for faster drying. Generally, we remove the delicate petals from calendula and dry them on baking sheets in the oven with just the oven light on (or a pilot light, if it's a gas oven). Ideally, the flowers are dried quickly, so they don't lose their flavor and color. Store the dried flowers in labeled jars in a dark place and use before the next harvest season.

If you are drying herbs for seed, be sure that the seed heads are mature. Dill, fennel, and coriander seeds should be turning from green to tan or light brown. So should nasturtiums; because their seeds are much bigger, spread them in a basket in a warm place until they are dry.

Use the same directions for hanging herbs to dry. However, since the seeds tend to drop as they dry, it is wise to hang the seed heads over a screen or basket that will catch the seed. For tied bunches, place each one in a paper bag with a few air holes cut in it, hang it, and the seeds will fall into the bottom of the bag.



Just-harvested nasturtium seeds are ready for drying.



If you produce more herbs than you can use fresh, try preserving them.



Gently pack completely dried herbs into airtight jars, label them, and store out of direct light.

Depending on where you live, the air humidity, and the weather conditions, it could take a couple of days to a few weeks for the herb leaves, seeds, and flowers to dry. Try to test the herbs daily. In humid weather, if they are left for too long, they tend to lose their green color (as well as flavor) and turn brown. A dried leaf or petal should crackle and crumble when rubbed between your fingers. If a leaf or flower is not crisp and it bends, it still contains moisture. To remove the last bit of excess moisture, place the leaves, flowers, or seeds on baking sheets, and put them in the oven with a pilot light or just the oven light on. This raises the temperature to 110 to 115°F and will remove excess moisture without overheating the plant material.

Alternatively, preheat the oven to the lowest temperature possible, not over 200°F, and turn the oven off. Place the almost-dried herbs on baking sheets and put them in the warmed oven for about 5 minutes. Check to see if they crumble and crackle, and repeat if necessary. Do not overheat them or they will lose their flavor and turn brown.

Although we have practiced these processes of drying herbs for many years, there is more than one way to dry herbs. Our friend, herbalist Tina Marie Wilcox, successfully dries some of her herbs in the refrigerator. Sicilian oregano (*Origanum* × *majoricum*), marjoram (*O. majorana*), thyme, rosemary, dill, and cilantro dry green and fragrant with this method. Here's what to do. Herb sprigs should be completely dry. Put small bunches in labeled, lunch-sized paper bags. Fold the top of the bags down and lay them flat on a free refrigerator shelf. Every day, turn the bags and shake gently so that air will circulate around the leaves. The cool air in the refrigerator keeps the volatile oils from evaporating. Drying time varies; the process can take two to three weeks. This process must be done in a refrigerator that isn't crowded, because it needs some air circulation to work.

We also know some herb farmers, Andrea and Matthias Reisen in New York state, who showed us some bright green, wonderfully aromatic lemon balm they dried in 24 to 48 hours, spread out in sunlight in their greenhouses, covered with a shade cloth, and with a fan running. The quality of their dried herbs convinced us to try that

method, so we dried Italian oregano with great results. Drying in sunlight in such a location protects the plants from burning and losing their essential oils, though it should be done quickly so they retain their bright color and flavor. Drying can be done in an attic, shed, or any place where there is good air circulation; warm temperatures aid in faster drying, while humidity hinders drying.

When the herbs are dried and ready to store, working over a large bowl or newspaper, carefully strip the whole leaves from the stems. Transfer the whole leaves into clean jars with tight-fitting lids, preferably with dark glass. When handling, do not crush the leaves, since this releases their essential oils; take care to gently pack the leaves whole to keep the best flavor. (The idea is to crumble the leaves into a dish when you are making it, then releasing the essential oils and flavor.) Herbs will mold and spoil if they are not completely dried when you pack them in jars. Since dried herbs tend to look alike, be sure to label the jars after they are filled. Stored away from light and heat, home-dried herbs can be kept in jars or tins for a year, or until next season's crop comes in.

Freezing Herbs

Generally, freezing most herbs does not yield great results. When herb leaves are frozen, the low temperature breaks down the cellular structure, and the leaves become mushy and turn dark. We often see recipes for freezing chopped herbs in water in ice cube trays; we do not prefer this method since it accentuates the mushy result. Ice crystals often form on the more tender leaved herbs, which makes them watery after a month or two in the freezer. We prefer to dry the woody-stemmed perennials, such as rosemary and sage, for texture and flavor. Herbs like tarragon are better preserved in vinegar, since tarragon loses its flavor when dried.

We find that for freezing, making a paste with the fresh chopped herb leaves and oil yields a far superior product. The oil surrounds the herb and captures its essence and keeps it from turning dark. This process also has a longer shelf life than freezing herb leaves on their own or in water. (See page 56, Aromatic Herbal Pastes.)

However, if you want to freeze herbs in their naked state, harvest and clean them as instructed for drying. For the best flavor, the easiest method is to “flash freeze” whole leaves. Annual herbs with thin leaves tend to freeze better than woody ones: try parsley, cilantro, dill sprigs, salad burnet, and basil. Remove the leaves from the stems and place them in one layer on baking sheets so they aren’t touching, uncovered. Freeze them until they are hard—usually only 30 to 60 minutes. Then put these in an airtight storage container or bag. Be sure to label the container. Frozen this way, they tend to keep their green color a little better and they don’t stick together in a frozen mass. Remove the leaves as you need them, adding them whole or chopped to your recipe while still frozen. The bright green color will turn dark once they are thawed.



Aromatic herbal pastes are a wonderful way to capture herbal essence.



Growing herbs indoors means they will be close at hand when needed for a recipe.

USING HERBS *in the* KITCHEN

OUR BASIC HERB RECIPES will guide you in using your fresh herbs in inspired infusions such as herbal vinegars for sublime salad dressings and in herb syrups that can be used to fashion a libation or to glaze your favorite cake. We also discuss how to prepare herb butters to have on hand for seasoning winter vegetables or adding a finishing touch to homemade biscuits. And as we just discussed, you can capture herbal essences in aromatic pastes that can be frozen and used as needed to add fresh, bright flavor to sauces (for example, basil paste used in pesto), soups, and baked goods. These easy-to-follow, “building block” recipes will have you enjoying your fresh harvested herbs in every season.

Fresh herbs to use for syrups

The amounts of herbs and flowers used in herb syrups vary, depending on the flavor of each herb. The listed herbs are calculated in sprigs, most 4 to 5 inches long, which will yield the appropriate amount for the Simple Herb Syrup recipe. Sprigs of shorter herbs such as thyme might only be 3 to 4 inches long. These amounts of herbs and flowers will produce a well-balanced, nicely flavored syrup. You can use more herbs or flowers, but you will get a more concentrated syrup, which may need to be diluted, depending on its use.

ANISE HYSSOP: 6 to 8 sprigs with flowers, or a handful of flowers

BASIL: about 8 sprigs of anise, cinnamon, green, or lemon basil, or a handful of flowers

BAY LAUREL: 6 to 8 leaves

GERMAN CHAMOMILE: about 2 tablespoons fresh flowers

HERB SEEDS: about 1 tablespoon bruised coriander or fennel seeds (slightly green are best; they should be simmered gently in syrup for ten minutes)

LAVENDER: 8 to 10 flower spikes, or 1 scant tablespoon fresh flowers

LEMON BALM, LEMON THYME, OR LEMON VERBENA: 10 to 12 sprigs

LEMONGRASS: about ½ cup minced stems

MINT: about 12 sprigs of orange mint, peppermint, or spearmint, or a handful of flowers

ROSEMARY: 5 to 6 sprigs, or a handful of flowers

SAGE: about 4 common sage sprigs, or 6 fruit-scented or pineapple sage sprigs

SCENTED GERANIUM: a handful of flowers, or 12 to 15 leaves (can be bitter)

MEXICAN TARRAGON: 7 to 8 sprigs

VIOLA: violets or pansies, use a large handful of fresh flowers



Herbal syrups are a delightful, sweet way to capture the flavor of herb essences on fruit or in beverages.

Herb Syrups

We have been capturing the essence of herbs in herb syrups for many decades. Syrups are a gratifying and easy way to enjoy seasonal herbs and to preserve them throughout the year. Once you have these syrups on hand, you will find all sorts of ways to use them. We create delightful beverages with them from natural sodas to luscious cocktails, or simply add them to a cup of hot tea or the

iced tea pitcher. Herb-flavored syrups are wonderful in fruit salads or used to perk up a not-so-ripe melon or pineapple. Drizzle these herbal essences over desserts from ice cream to cake, waffles and pancakes, yogurt, or baked goods just out of the oven such as poppy-seed muffins or pound cake. We use them in place of the liquid in cakes, pie fillings, ice creams, and sorbets. Make these syrups when you have fresh herbs in abundance. Their flavor and aroma will bring a brightness to many dishes.

Any kind of sugar can be used in making herb syrups, but we prefer organic cane sugar. Darker sugars, honey, and maple syrup can also be used, but these sweeteners have strong flavors that may dominate the flavor of the herbs. Stevia will sweeten, but it is an herb leaf itself and the result will be more like an infusion than a syrup consistency; it would have to be refrigerated and used within two days.

Simple Herb Syrup

MAKES ABOUT 2 CUPS

A simple syrup is generally made with a 1:1 ratio of water to sugar. For a richer herb syrup, the sugar can be doubled; the ratio would be 1 part water to 2 parts sugar. This will result in a thicker, much sweeter syrup.

1½ cups water

1½ cups organic sugar

8 to 10 herb sprigs or a large handful of herb leaves (see accompanying sidebar for suggestions)

Combine the water and sugar in a small saucepan, and bring to a simmer over medium heat, stirring constantly with a spoon. When the sugar has dissolved, remove the pan from the heat and add the

herbs. Bruise the herbs against the side of the pan with the back of the spoon. Cover the pan and let it stand for at least thirty minutes, or until cool. Using a slotted spoon or strainer, gather the leaves and squeeze them to extract their essence into the syrup, then discard the leaves. Pour into clean, airtight containers and label. This syrup can be kept in the refrigerator for ten to fourteen days.

We often freeze herbal syrups in pint or quart canning jars. When freezing, leave a generous 1-inch headspace in the jar; the liquid will expand when frozen. Label the jars, because the contents tend to look alike once frozen. Store in the freezer up to one year. If using the whole jar, just remove it from the freezer and let it thaw on the counter at room temperature. If you need just a bit (say, enough to glaze a batch of muffins), place the jar in a bowl of warm (not hot) water until the syrup is partially melted. Pour off what you need and return the jar to the freezer.

Herb Vinegars

Creating herbal infusions is a pleasure for the herb gardener, and is a simple, straightforward way to concentrate herb flavor and store it for a year. Harvesting leaves and flowers of homegrown herbs when the plants are at their aromatic peak and soaking them in good-quality vinegar for four to six weeks are all that is necessary to accomplish this agreeable task. Part of the fun of making vinegars is experimenting with different herbs. Often, a combination of two or three herbs offers a pleasant surprise. The herbal vinegars you make will enhance salads and sauces for months to come.

Some good choices of herbs for making vinegars are basil, especially the purple varieties since they tinge the vinegar a gorgeous ruby-red color; chive with chive blossoms, since the flowers will also give clear vinegar a lavender hue; dill; lavender flowers (the foliage is not edible); all of the lemon herbs; lovage; mints; oregano; tarragon; and savory. A few favorite combinations are chile peppers with cilantro, oregano, sage, or savory; a blend of some of the lemon herbs including lemon balm, lemongrass, lemon thyme, or lemon verbena with fresh gingerroot; and chives and dill

with nasturtium flowers. Generally, we recommend combining no more than three to four herbs in a vinegar, because the flavors become muddled and you can no longer detect the individual herbs.

We do not use distilled vinegar for making herb vinegars, since it is highly processed. We recommend using vinegars that come from natural food sources, like apple cider vinegar, white and red wine vinegars, balsamic vinegars from grapes, rice wine vinegar from rice, and ume vinegar (from umeboshi plums).

We choose organic apple cider vinegar or good quality white wine vinegar or rice vinegar to make our herb vinegars. To us, apple cider vinegar and umeboshi vinegars are tasty choices, but they are cloudy and do not give the clean, bright colors that some prefer from a clear vinegar. For the clearest vinegars, white wine vinegar and rice wine vinegar are good choices. The strong tastes of red wine and balsamic vinegars generally overpower the flavor of botanicals in a vinegar. Some people, however, prefer robust herbs such as oregano or rosemary combined with red wine vinegar. Experiment with whatever vinegars and herbs appeal to you.



Herb vinegars add brightness to salads, sauces, and pickles.

Herb Vinegar

MAKES 1 QUART

For herb vinegar, harvest the fresh herbs of your choice on a sunny morning, rinse the sprigs if necessary, and pat dry. You will need one clean quart glass jar with a lid or two clean pint glass jars with lids. Use plastic lids; metal lids for vinegar solutions will corrode over time. Or before you screw the metal lids on, cover the mouth of the jars with plastic wrap.

For many years, we as well as other herbalists set the jars out in the herb garden for two to four weeks, and let the sun do its work to infuse the herbs and vinegar. But we have found that the infusion in the dark has a full herb flavor and is less acidic and sharp than the sun-infused vinegar.

2 to 3 cups fresh herb leaves and/or flowers, loosely packed

1 scant quart of your choice of vinegar

Fill one 1-quart jar or 2 pint jars half to three-quarters full with the herbs you have chosen. Pour the vinegar over the herbs to cover them. Cover the jars tightly and put in your pantry or a cool, dark place, and shake them daily, if you think of it.

After two to three weeks, open the jars and taste the vinegar. If you are happy with the flavor, strain the herbs from the vinegar and discard. Or, if you want a stronger flavor, re-cover and leave for another week or so. Pour the vinegar into attractive bottles, adding a fresh sprig of the herb if desired, and label. Store the vinegars in a cool, dark place and use within one year.

Aromatic Herbal Pastes

Many herbs freeze well when chopped and moistened with a little oil. This process is good for preserving savory herb pastes (such as pesto or salsa verde) for cooking and baking. We use this process most often with basil, since fresh basil tastes so different from dried. When dried, basil loses its bouquet—that wonderful aroma—and also loses flavor. We prefer the simplicity of freezing an herbal paste over preparing and freezing pesto, because the ingredients in pesto, like garlic, pine nuts, and Parmesan cheese, do not freeze well. For optimum flavor, add these other ingredients fresh when preparing the final dish. When making herbal pastes, you can add small amounts of other herbs like marjoram or oregano to make a blend of herbs, but we usually just use one herb, and then perhaps combine a few pastes when cooking.

Savory Herb Paste

MAKES 1 TO 2 CUPS, DEPENDING ON HERBS USED

The yield for this recipe varies. Thin-leaved herbs like dill or thyme will process down to a much smaller amount than bulkier leaves like basil or mint. If you have washed the herbs for a paste, they must be completely dried before combining with oil (oil and water do not mix).

About 4 cups herb leaves, cleaned and patted or spun completely dry, stems removed

¼ to ⅓ cup extra-virgin olive oil

Coarsely chop the herb leaves in a food processor (or blender) by pulsing with about 2 tablespoons of the olive oil. Continue pulsing, adding just enough oil to coat the herbs and make a paste, but not so the herbs are floating in oil. There should still be some texture to the herbs and they should not be puréed.

Frozen herb-oil pastes are best stored in airtight, ½-cup to 1-cup freezer containers. Fill containers with the herb paste, leaving a 1-inch headspace for expansion during freezing. We also often use heavy-duty ziplock freezer bags: add ½ or 1 cup of the herb paste, flatten the bag to spread the contents evenly, remove the air, and zip closed. Be sure to label the freezer containers or bags with a permanent marker (they will all look similar when frozen). Place the containers in the freezer and stack. These herbs in oil will keep in the refrigerator up to one week and in the freezer until the next season's harvest.



Herbal pastes are one of our favorite ways of storing summer’s bounty.

When we need some of the herbal paste for a recipe, we take a container or bag from the freezer, and if we’re not using the entire

package, we use a spoon to scoop some from the container or break off a chunk from the bag, drop it into a soup or defrost it to make a sauce, then return the rest to the freezer.

Sweet Herb Paste

To make a sweet herbal paste, use the preceding Savory Herb Paste recipe considering this difference: herbal pastes for sweet recipes vary from savory aromatic herbal pastes only in the herbs chosen and the kind of oil used. For baking, we make pastes of summer herbs, such as the mints, lemon balm, lemon basil, and lemon verbena, to maintain their bright, fresh flavor. Rather than olive oil, choose from more neutral expeller or cold-pressed vegetable or nut or seed oils; we especially like sunflower seed oil. Or you can use softened butter, which will solidify when frozen, or a combination of half oil and half butter, which will not freeze as hard as just butter.

During the cold-weather months, you will have these pastes to use when making freshly baked scones and biscuits, breads, waffles or pancakes, lemon poppy-seed muffins, pound cakes, chocolate mint brownies, butter-mint cookies, fudge sauce, and more.



Herb butters can be rolled into logs, wrapped tightly, and refrigerated or frozen.

Herb Butters

Herb butters are easy to make and can be quite delicious. They can be used to add herbal flavor to vegetables, breads, sauces, egg dishes, and much more. Herb butters are usually made with savory herbs, but they can also be made with the sweeter herbs and used on pancakes, waffles, muffins, biscuits, and scones. Herb butters can be refrigerated, and they also freeze well and don’t take up much room. Be sure to label the herb butters, since they all look alike when wrapped in the refrigerator or freezer.

When making herb butters, keep in mind that less is more. If using more than one herb, use one to three, maybe four, herbs for flavor. Too many herbs will make the taste muddled and dull. Use less of the stronger, perennial herbs such as rosemary or oregano, and more of mild-flavored herbs such as chervil or lemon basil. Herb flower petals add attractive dashes of color.

Some herbs that we like for savory herb butters are basil, calendula petals, chervil, chives and chive flowers, dill, fennel, marjoram, nasturtium flowers, oregano, parsley, rosemary, tarragon, and thyme. We often add a clove of minced or pressed garlic or about 1 tablespoon finely minced shallot to flavor savory herb butters. We also like to add a little lemon or lime zest.

For sweet herb butters, the lemon herbs like lemon balm, lemon basil, lemon verbena, and lemon thyme are quite lovely; bee balm and spearmint or orange mint work well. Colorful flower petals from calendula, lavender, or rose petals are appealing to the eye as well as the palate. Citrus zest also adds a pleasing note.

Herb Butter

MAKES ½ CUP

For herb butter, harvest fresh herbs on a sunny morning, rinse the sprigs if necessary, and pat dry. You will need wax paper or plastic wrap to roll the herb butter logs, or you can use airtight freezer containers.

8 ounces (1 stick) unsalted butter, at room temperature

2 to 6 tablespoons minced fresh herbs and/or flower petals

1 tablespoon olive oil or other expeller or cold-pressed oil (optional)

Put the soft butter in a medium bowl. Add 2 to 6 tablespoons of the herbs, depending on what strength you want, and mix well with a

spatula. If you want to make a butter that doesn't freeze quite so hard, add the olive oil.

On the work surface, place a square of wax paper or plastic wrap. Scoop out the herb butter mixture and put it in the center of the square. Form it into a log, wrapping tightly. Or pack the herb butter into ½-cup glass or ceramic containers and cover tightly with plastic wrap. Store in the refrigerator as is, or put the wrapped butter log or containers into a freezer ziplock bag for storing in the freezer. Be sure to label.

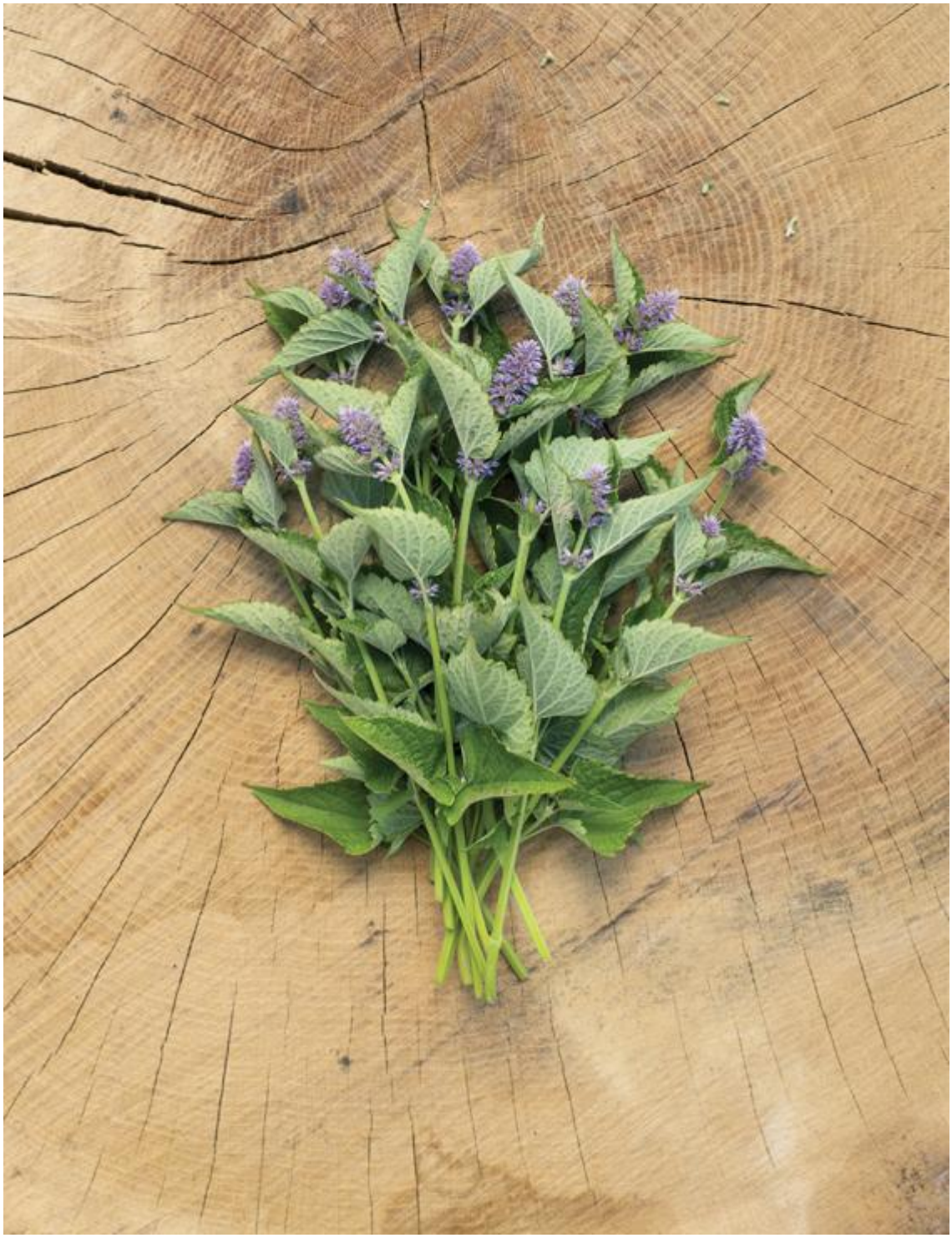
Herbal butters keep for up to two weeks in the refrigerator and six months in the freezer. To thaw frozen butters, put in the refrigerator for a few hours. The log-shaped butter can be sliced once it has hardened. Refrigerate the herb butter for at least ½ hour before using, to allow the flavors to develop.



Herb butters can also be packed into containers.



40 *of the* BEST HOMEGROWN CULINARY HERBS



hardy short-lived perennial, 3 to 5 feet tall

hardy to zone 4, preferring cool summers

full sun to part shade

keep moist but not wet

soil rich in organic matter

ANISE HYSSOP

Agastache foeniculum

Sweet tasting, with accents of licorice, tarragon, and basil

CULTIVATION AND PROPAGATION

Agastache species need little more than partly shaded to sunny, well-drained, slightly acid to near-neutral soil. The seeds (actually tiny nuts, or nutlets) are most easily started by broadcasting; established clumps readily reseed themselves, often in tiny nooks and crannies or the middle of the garden path. Seeds may also be sown in the greenhouse, with transplants in six to eight weeks. Clumps generally last two to three years, becoming very woody at the base and eventually dying. Since reseeding is not a problem, anise hyssop will persist in your garden yet never become weedy; it is easy to move about. The soil should be evenly moist, well drained, slightly acid, and high in organic matter.

Agastache foeniculum is most often grown. *Agastache mexicana*, *A rugosa*, and *A. scrophulariifolia* provide similar flavors to French tarragon and basil, though may include plants scented of peppermint to pennyroyal.

HARVESTING AND PRESERVING

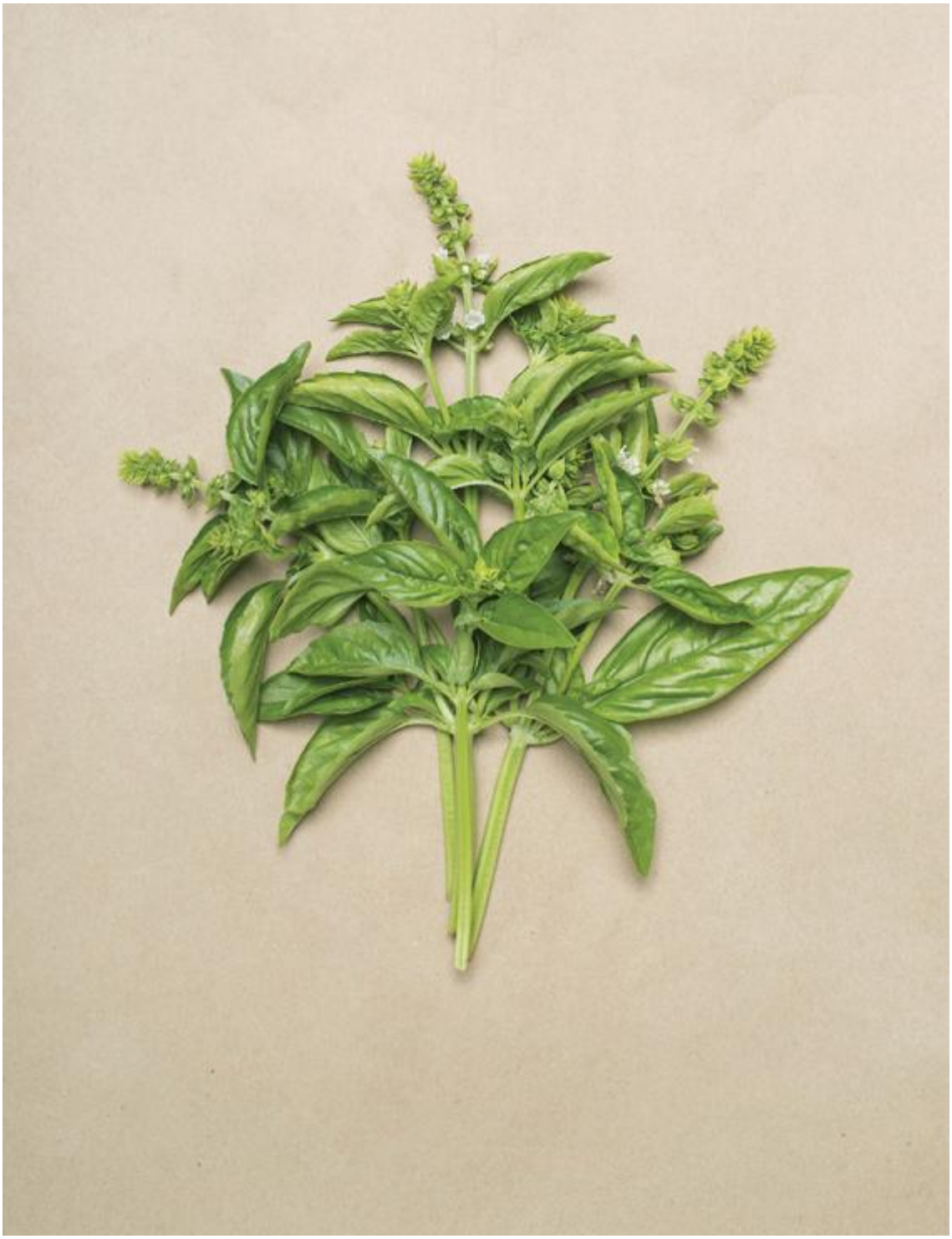
For tea, harvest leaves early in the day during a sunny, rain-free spell close to when the plants will be flowering, then dry the leaves and store them in glass jars. Anise hyssop leaves and flowers make an unusual vinegar for salads and a tempting cordial if you like the flavor of sweet licorice. Our friend puts anise hyssop in his vodka, which he keeps in the freezer, for a preferred libation. Leaves are sometimes candied as a confection for desserts; after the egg white and sugar mixture has set and dried, store them in tightly closed containers at room temperature or in the freezer for three to six months. Flowers are often harvested fresh as edible flowers for salads, beverages, syrups, and desserts.

TASTING NOTES AND COOKING TIPS

While commonly called anise hyssop, the odor is more similar to French tarragon, though sweeter, with a hint of basil. The foliage and flowers taste similar to the aroma—sweet, with the taste of licorice candy, tarragon, and basil—and just a bit floral.

All of the thirty or so *Agastache* species are good for honey production and make great ornamental perennials. The flowering plants go well with the silver-leaved species of mountain mint (*Pycnanthemum* species), which flower about the same time in the July garden and also provide good bee forage. The young, broad, bright green leaves of *A. foeniculum*, tinged purple in cool weather, are attractive with spring bulbs such as yellow daffodils.

Agastache species do not have GRAS status, even though the leaves of many species have been used for centuries as a substitute for French tarragon, infused in syrups and cordials, and brewed into tea, and the flowers have been used with fruit, in desserts and confections, and mixed in salads. Both the leaves and flowers made good additions to potpourri.



Ocimum basilicum ‘Genovese’

shrubby annuals or perennials, 1½ to about 6 feet tall

hardy only in frost-free locations

full sun

keep moist but not constantly wet

friable, porous soil

BASIL

Ocimum species

The king of aroma and flavor

Basil is a spectacular, tender herb with many species that offer an array of sublime fragrances from licorice to lemon, cinnamon, and spice. Though all the basils are wonderfully aromatic and full-flavored herbs, it is the sweet, green *Ocimum basilicum* that is the most beloved. Part of its immense popularity is that as an annual, which we can only experience during the heat of summer like a summer-ripe tomato, circumstances increase its desirability, and so we have to grow and harvest an abundance of it while it is in season. The marriage of basil and tomatoes is transcendent; a handmade pesto is perhaps the best sauce possible; and the sweet lemon fragrance and flavor of lemon basil creates an unforgettable, ethereal gelato.

CULTIVATION AND PROPAGATION

To grow the most interesting basil varieties, start them from seed. Sow seed indoors, four to six weeks before transplanting. This method gives you a head start, compared to direct sowing in the garden, allowing for plants to mature earlier and provide more harvests. Since basil is a tropical plant, it must have sun and warmth from seedling to maturity, and you must provide the seeds and seedlings with the right conditions for germination and growth.

Indoors, it is not hard to provide warmth, but natural light is not enough to develop sturdy seedlings. You will have the best success

if you begin the seedlings under lights.

HARVESTING AND PRESERVING

The most important thing about growing basil is keeping it cut back so that you have a continual harvest of fresh leaves throughout the season. We are diligent about this, so we get a huge yield of leaves throughout the harvest season, and we keep the basil's flavor and aroma at its peak, rather than letting the plants flower and become bitter. In our zone 7 gardens, we set basil out in mid to late May. When we transplant the new tender plants, we cut them back just above the bottom two sets of leaves. This early pruning seems a bit drastic, but it will provide for more growth early on.

Depending on the weather and the growth of the plants, we prune the plants back in this manner about every four weeks, so the next pruning takes place in mid to late June. This pruning and harvesting process is repeated every month—or when the plants show any sign of a flower bud—throughout the growing season. This way, we harvest 15 to 25 cups of basil leaves per plant and have fresh basil in September rather than bitter spent leaves.

People often tell us that they have trouble growing basil successfully. The first thing we ask them is whether they keep it cut back. If you just pinch off the tips or the flowers, the plant will keep trying to make flowers in order to set seed. The leaf yield will be small and the plants will become bitter tasting. So keep those plants pruned, and eat basil. With proper, regular pruning, each basil plant can be harvested five or six times during the growing season.

We like to make aromatic herbal pastes with our basil and freeze them, because that preserves optimum flavor. We also dry basil and make vinegar.

TASTING NOTES AND COOKING TIPS

There are so many different basils to choose from, you'll have to decide how much garden space to allot to these useful culinary herbs. It is challenging to know which basils to choose; the following are some of our favorites.

SWEET GREEN BUSH BASIL If we could only have one basil plant, it would most certainly be *Ocimum basilicum* 'Genovese Verde Migliorato', most often sold as 'Genoa Green', 'Genoa Green Improved', or just 'Genovese'. Susan, having lived in Italy for two years, feels that this basil is closest to the favored basil she cultivated and consumed there in large quantities. It is her number one choice for making pesto and combining with tomatoes.

The fragrance is heady with a clean, green aroma with mint, followed by hints of citrus, cinnamon, and clove. The flavor is well rounded, full of spice, licorice, and mint, and is just slightly pungent.

Besides the traditional pesto and *antipasto di pomodoro e mozzarella*, basil is wonderful with any summer vegetable or salad; on sandwiches and pizza, in soups, sauces, salsas, and vinaigrettes; with pasta or grains; in a Bloody Mary; and in baked goods and even gelati.

Other sweet, green bush basils we recommend are *Ocimum basilicum* 'Italian', *O. basilicum* 'Napoletano', *O. americanum* 'Genoa Profumatissima', and *O. basilicum* 'Italian Pesto'.

LEMON BASIL We really haven't met a lemon basil we didn't like. These basils are predominantly lemon flavored and do not have the anise taste that the others do. *Ocimum basilicum* 'Mrs. Burns' Lemon' is our first choice—a sturdy, dependable plant with lovely lemon aroma and flavor. It grows a bit taller and has somewhat larger leaves than the common lemon basil.

The fragrance is perfumy with a big lemon nose, resinous and oily, with a hint of cinnamon and a floral note. The flavor is clean and assertive lemon zest followed with light spice and a hint of mint.

Lemon basils are delightful in everyday beverages like lemonade and iced tea, as well as in libations and syrups. They make a delicious mayonnaise or vinaigrette; complement summer vegetables, chicken, and fish; are good in any baked good from

cookies, pies, and cakes to puddings; and are perfect with seasonal fruits and in your favorite ice cream.

Other lemon-flavored basils we recommend are *Ocimum* × *citriodorum* ‘Lemon’ and *O.* × *citriodorum* ‘Sweet Dani’. Common lemon basil, which often has smaller leaves, provides a respectable lemon fragrance and flavor, though it is a little dull compared to ‘Mrs. Burns’ Lemon’. ‘Sweet Dani’, with compact, shorter plants than other lemon basils, has a big lemon bouquet and a strong lemon flavor.

CINNAMON BASIL Cinnamon-scented basil plants have bright green leaves with dark purple stems, so they stand out in the basil bed. Although their aroma and taste do not work for pesto, their spiciness is wonderful in baked goods. The aroma is clean and spicy with hints of cinnamon, sweet grass, mint, and a bare whiff of anise. The flavor combines spice with citrus zest, giving a perfumed taste backed by just a touch of anise and mint, resulting in a final warm pungency on the tongue.

Cinnamon basil is perfect in stewed tomatoes, tomato sauces, and some soups; delicious in cinnamon rolls, cakes, cookies, breads—all manner of baked goods where cinnamon would be used; and in beverages, rice pudding, custard, ice cream, and with fruit—especially apples and pears.

Other cinnamon-flavored basils we recommend are *Ocimum* × *citriodorum* ‘Lesbos’ and *O.* × *citriodorum* ‘Aussie Sweetie’. Be sure to sniff and taste them, since some have a dominant licorice flavor.

THAI BASIL These basils are essential to Thai cooking, with their graceful bouquet and assertive licorice taste; they typically have a well-rounded balance of flavors. The plant could be mistaken as an ornamental, with flower heads more like balls than spikes.

The fragrance of most Thai basils is a big aroma of spice that is sweet with licorice and some mint. They have a strong, perfumed flavor with hints of licorice, mint, and spice. These assertive basils stand up to spicy, flavorful dishes from soups and stir-fries to curries and are often used with noodle dishes, vegetables, meat, chicken, fish, and seafood. Whole leaves are frequently served as an accompaniment to many meals.

Other anise-flavored or Thai basils we recommend are *Ocimum basilicum* ‘Thai’ and *O. basilicum* ‘Queenette’.

PURPLE OR OPAL BASIL Because of their extraordinary color, the purple or opal basils are wonderful to add to a green herb garden or to the flower bed. But we find them lacking in flavor for most culinary uses. We do use the leaves to capture the garnet color in opal basil vinegar, while also adding a robust green-leaf basil for flavor support.

A few of the more handsome and sturdy varieties are *Ocimum* ‘Dark Opal’ (*O. basilicum* × *O. forskolei*), and *O.* ‘Osmin’, which retain their true color throughout the season. The dark leaves of *Ocimum basilicum* ‘Purple Ruffles’ have showy, ruffled edges.



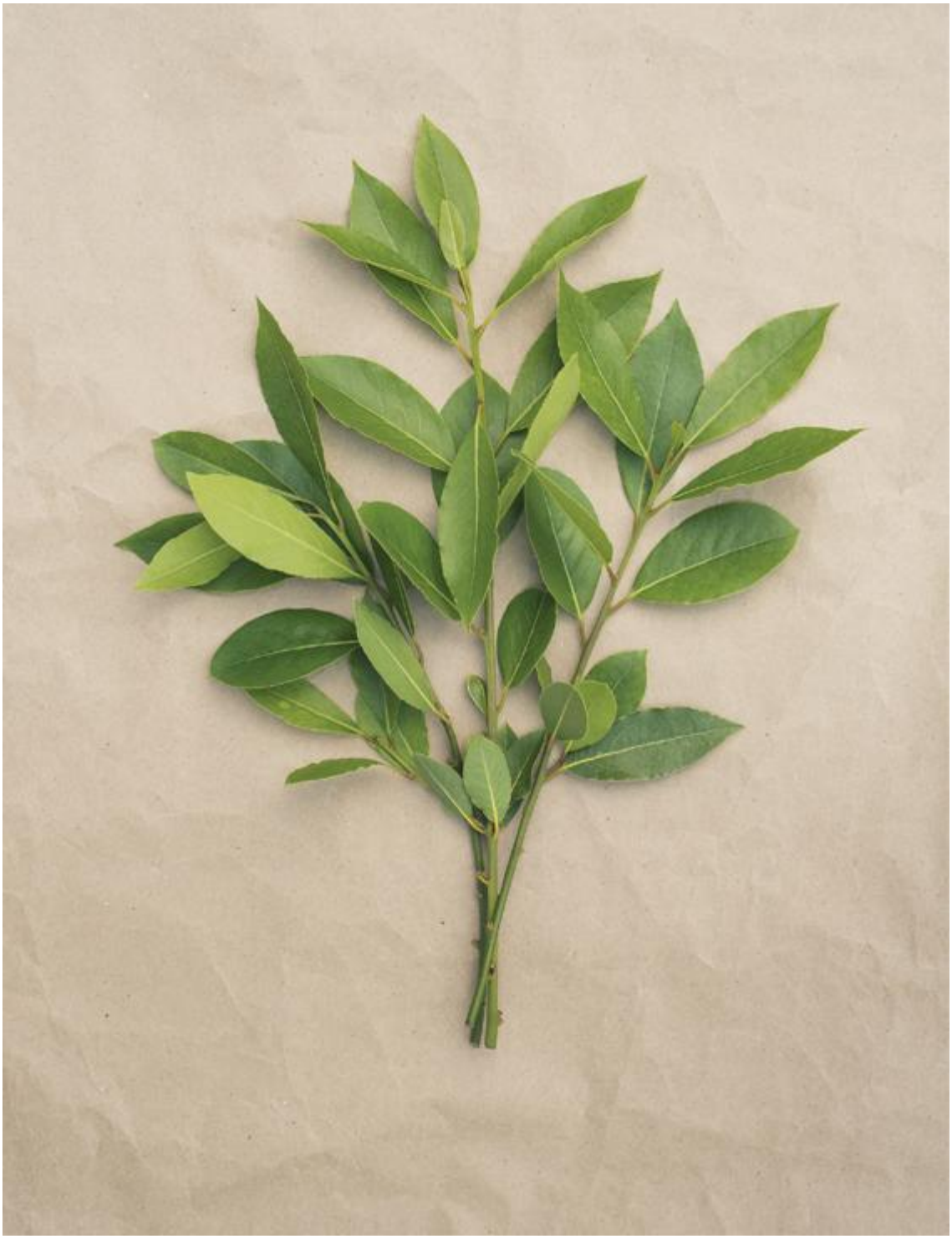






TOP TO BOTTOM ‘Mrs. Burns’ Lemon’ basil is our pick of the lemon-flavored basils; this upright, cinnamon-scented basil is sold as ‘Greek Columnar’, ‘Aussie Sweetie’, and ‘Lesbos’; Thai basils have shiny green leaves and showy dark purple blooms

like those seen here on ‘Siam Queen’; the opal or purple basils add vibrant contrast in the herb garden and their leaves make a beautiful ruby-colored vinegar.



tender evergreen perennial shrub or tree, 10 to 50 feet tall

hardy in zones 8 to 9; needs protection from frost and cold

full sun; can take a little shade in very hot climates

keep moist but not wet

well-drained soil

BAY LAUREL

Laurus nobilis

Aromatic and complex: honey, balsam, nutmeg, clove, citrus, and a note of vanilla

CULTIVATION AND PROPAGATION

Bay is best rooted from suckers or tip cuttings (cuttings from near the base of the plant root are easiest; those from the top can take months). Seed germination has varying results. Although native to Asia, bay laurel grows throughout the Mediterranean region. It likes the good drainage and rocky amendments of the soil there, the hot sun, and consistent moisture. It can get over 50 feet tall, but with regular pruning it can be kept at 10 to 12 feet tall. A row of bay shrubs makes a handsome hedge.

Bay will not get as large when grown in a container. It is a good container plant, which is especially handy for those who live in colder climates; the pot can be moved inside for the winter and back outdoors for the summer. The plant will become potbound and should be transplanted every two to three years.

HARVESTING AND PRESERVING

When harvesting bay leaves, which can be done as needed throughout the season as soon as they harden after emerging, do not just pick off a leaf. Plucking single leaves weakens the plant. It is best to snip off the stem tip, or a branch if you need to prune, and then pluck the leaves from that stem.

Keep freshly harvested leaves in a ziplock bag, folded over rather than zipped closed, on the inside door of the refrigerator. They will stay green and fresh for about three months. Even if they dry, they will be far superior to bay leaves bought at the grocery store, which can be up to two years old. Fresh bay leaves make a delectable syrup.

TASTING NOTES AND COOKING TIPS

Bay laurel (*Laurus nobilis*), sometimes called Grecian bay, is the bay to cultivate for culinary uses. Run your thumbnail down the center vein on the underside of a fresh bay leaf, close your eyes, and inhale. The fragrance of fresh bay is heady. In the first inhalation, you smell a combination of honey and balsam with hints of spice like nutmeg and clove. That is followed by a suggestion of citrus, lemon or orange. At second breath, you detect floral notes like vanilla, or perhaps rose. The flavor is similar to the fragrance—aromatic and complex. First you notice balsam and slightly honeysweet tastes, with a slight bitterness. Then you pick up hints of vanilla and spice with a bit of clove, black pepper, and flowers.

Fresh or dried bay leaves can be used in making a traditional French bouquet garni (tied bunch of the herbs parsley, thyme, and bay leaf) used to flavor any savory item from stocks, soups, stews, sauces, and gravies to marinades and stuffings. With the sweet and spicy flavor elements that bay has to offer, it also can be used in desserts: custards, puddings, and sauces as well as sweet doughs, syrups, and cordials, compotes with fruits, and especially with chocolate.

Bay leaves, fresh or dried, are generally removed from cooked dishes before serving because they are thick and leathery and the edges can be jagged and sharp when broken.



Nigella sativa dried flowers and seeds

short-lived annual, to 12 inches tall

does not withstand frost well

full sun

keep moist but not wet

loamy soil

BLACK CUMIN

Nigella sativa

Seeds offer pungent, peppery, nutty accent

CULTIVATION AND PROPAGATION

You can obtain seeds at stores stocking Indian or Middle Eastern foods. Black cumin seeds should be broadcast or sown in rows in tilled garden loam in late spring. Plants should be sown on-site since they do not transplant well. Flowering occurs about two months later, followed by hollow, ½-inch-long, horned seedpods. Native to western Asia, southeastern Europe, and the Middle East, black cumin is easily grown almost anywhere.

In the garden, *Nigella sativa* looks like a dwarf version of its close relative love-in-a-mist (*N. damascena*) or wild fennel. The flowers of black cumin are very similar to those of love-in-a-mist but a paler blue, almost white, carried above finely cut, fennel-like foliage.

HARVESTING AND PRESERVING

When the pods turn tan and are dry, harvest them, and crush them in a large paper bag to release the seeds, about fifty per pod. Gently lower a vacuum nozzle inside the bag until you can pick up the light

chaff and leave the heavier seeds. Store the seeds in labeled jars until the next season's harvest.

TASTING NOTES AND COOKING TIPS

Although the flowers of *Nigella sativa* are delicate and beautiful, they are not eaten nor is the dill-like foliage. Black cumin seeds have a complex flavor that is pungent, peppery, nutty, and sometimes acrid with an aroma reminiscent of lemony carrots or nutmeg. In India, the seeds are widely used in many spice mixtures, such as *panch phoron* (Bengali five spice) and curry blends, masalas, and kormas. When they aren't used in spice blends, they are most often used whole, not ground, and are added to stews, casseroles, and vegetarian recipes like lentil dishes. In northern India, black cumin is used to flavor the traditional naan bread baked in the clay tandoor ovens. In Egypt and the Middle East, the seeds are sprinkled on cakes, pastries, and breads. In Syria, cheese is mixed with black cumin seeds. The wide use of black cumin seed today is tied to its long history of use; it is mentioned in the Bible, Isaiah 28:25 (variously translated as dill, fitch, or fennel).



hardy annual, 8 to 24 inches tall

will perish with heavy frost; can withstand minor frost

full sun; part shade where temperatures are hot

keep moist but not wet

moderately loamy soil

CALENDULA

Calendula officinalis

Mild flavor, like a light herbal tea

CULTIVATION AND PROPAGATION

Calendula is easily sown from seed. Seeds can be started indoors or can be sown directly into the garden soil. Sow or transplant 10 to 12 inches apart. Since calendulas are cool-season annuals, blooms are bigger when grown in cool weather, so plant in early spring; they often have a resurgence of growth in the fall. In hotter zones, calendulas can suffer from too much heat and stop flowering, so plant in part shade with moist soil as a possible counterpoint to the heat. There are heat-resistant cultivars.

HARVESTING AND PRESERVING

Enjoy calendula either fresh or dried. During the summer, to gather calendulas for cooking or drying, visit them at least every other day. Harvest flowers that are in full bloom or that have bloomed the day before. Bring them inside and leave them whole or remove the petals from the center disk (which tastes very bitter). Place the flower heads in a small baking pan or sprinkle the petals in the pan. Place them in an oven with a pilot light or with the light turned on (this will heat the oven to 100 to 110°F, which is perfect for drying flowers). Turn the flower heads or occasionally fluff the petals that are drying,

and add the new batch to dry. Every week or two, put the well-dried petals into a labeled, dark glass jar and store them in a dark place away from heat. They will keep until the next harvest season.

TASTING NOTES AND COOKING TIPS

The aroma of calendula (or pot marigold) flowers is honeylike, followed by a slightly spicy and then a woody odor, and just a little bitter, pungent aroma. If you bury your nose in the blooms, inhale, and think about it, there is a heady suggestion of rhubarb and angelica flowers, fruit, and just a hint of celery seed. The foliage, when rubbed, has a similar though much stronger smell, with concentrated resinous notes. The flavor is a bit challenging to describe; it varies with the cultivar and its cultivation. Petals are mild tasting, herbal, and slightly sweet, and some have just a hint of bitterness. An infusion of flower petals tastes like a gentle herbal tea. (An herbal infusion is the steeping or soaking of an herb in liquid, usually water, although it can be vinegar, alcohol, cream, or milk, to extract its flavor or aroma.) A longer infusion, which turns a golden orange color, is reminiscent of the liquid from cooking pumpkin or winter squash: it's sweet and vegetablelike, perhaps a little woody.

Although the leaves are edible, they are very bitter, so just the flower petals are eaten. Calendula petals can be used in both savory and sweet dishes. Brought to America and used by the colonists to color butter and cheese, dried calendula petals have been called the poor man's saffron, and used in place of the expensive spice for taste and color. The name pot marigold refers to calendula's use in the soup pot; it was often used to flavor and color broths. Infuse fresh or dried flower petals in milk to make puddings and custards; add them to herb butters and cream cheese for their bright yellow-orange color; incorporate them into batters for corn bread, bread, and cakes for color and mild flavor; cook them with grains like rice, in dishes like couscous, or in soups; and add fresh petals to vegetable salads, egg salad, and deviled eggs. Some fresh petals can be a little tough and dried petals, even if cooked or infused, can be chewy,

so you might want to mince or purée them before adding them to a recipe.

There is no better herb for healing the skin than calendula because it helps boost cell growth. An oil infusion or salve made with the dried petals is good to use on dry skin, chapped lips, skin irritations, rashes, or to heal scars, but do not use it on open wounds.

We have grown several cultivars for years with good success: ‘Calypso Orange’, ‘Erfurter Orangefarbigen’, ‘Flashback Mix’, and ‘Pacific Beauty’. We have not grown a calendula that we didn’t like. Mix it up—try blooms with petals in hues of bright orange, tangerine, school bus yellow, pale yellow, cream, pink, and even multicolored.



CLOCKWISE FROM TOP LEFT ‘Calypso Orange’ calendula is compact and valued for its reputedly high anti-inflammatory properties; ‘Flashback Mix’ contains blooms in many shades of cream to yellow to orange, often multicolored; ‘Erfurter Orangefarbigen’ calendula is grown commercially in Europe for its highly regarded medicinal virtues; this old cultivar ‘Pacific Beauty’ is dependable and comes in orange or yellow.



short-lived annual, to 28 inches tall

can withstand frost

full sun to part shade

keep moist but not wet

soil rich in organic matter

CHERVIL

Anthriscus cerefolium

Delicate taste resembles a combo of tarragon and parsley

CULTIVATION AND PROPAGATION

Some home gardeners characterize chervil as finicky. Successful cultivation of the plant depends on timing, because it grows best in cool, moist soil in full winter sun or in part shade in late spring and fall. Chervil also prefers soils that drain well. As far south as zone 7, chervil is best grown as a fall or winter crop. In colder reaches, we advise using a cold frame or similar winter protection.

Chervil flourishes in cool spring and fall conditions, especially when midday temperatures hover between 40 and 50°F, when plants will become lush and richly textured and may reach over 12 inches in diameter. When warm weather arrives, overwintered plants stop producing foliage and send up flower stems 24 to 30 inches high topped by umbels of small, white blossoms that produce seed before the plant dies. In areas where summers are hot, chervil does best in part or full shade, although the combination of heat and shade seems to render the plants weak and susceptible to spider mite infestation.

Chervil produces dark brown, 1-inch, splinterlike seeds (really fruits) that may be sown directly in the garden. When an early start is needed, start plants indoors and transplant into pots. Bare-root seedlings of chervil transplanted directly in the garden often fail, but

pot-grown transplants take hold quickly during cool growing conditions. When starting the seedlings indoors, allow four to five weeks from seeding to transplanting. Chervil seed will not germinate in soil that is too warm; this keeps chervil seed scattered in spring from germinating during summer heat when the plants are most likely to struggle or die. Seeds sown in early spring or late fall when soil temperatures are cooler germinate in about fourteen days.

The straight species Anthriscus cerefolium is the variety most commonly available. If you can find it, the cultivar ‘Brussels Winter’ tolerates cold well.

HARVESTING AND PRESERVING

Drying and the heat of cooking can easily destroy the delicate flavor of chervil leaves and flowers, so the herb is best used fresh from the garden. It makes a tasty herb butter.

TASTING NOTES AND COOKING TIPS

No herb, except perhaps tarragon, is quite as French as chervil. Many gourmets describe the flavor as a refined combination of French tarragon and parsley, with a slight suggestion of pearlike fruit. Fresh chervil is among the four herbs comprising the classic blend *fines herbes*, along with parsley, chives, and tarragon. This quartet is used fresh or briefly cooked. The small white flowers have a similar flavor as the leaves and can be used as a garnish in lighter dishes, salads, and with fruit.



Allium schoenoprasum

COMMON CHIVES
(*Allium schoenoprasum*)

herbaceous perennial, to about 12 inches tall

hardy to zone 5

full sun

keep moist, well drained

loamy soil

GARLIC CHIVES
(*Allium tuberosum*)

short-lived herbaceous perennial, to about 2 feet

hardy to zone 5

full sun to part shade

keep moist, well-drained

loamy soil

CHIVES

Allium species

Popular garnish with distinctive oniony essence

CULTIVATION AND PROPAGATION

Chives grow easily in full sun in a moist, near-neutral garden loam. Chives may be grown from seeds, and clumps should be divided every three to four years. Chives' native habitat is stream banks and damp meadows; the herb will not withstand prolonged drought. Give top dressings of nitrogen during the season, according to the vigor of the crop and level of production you want to get. Organic mulch improves the yield, and wheat straw is particularly recommended.

We usually grow *Allium schoenoprasum* 'Fine Leaf', because of the flavor in the fine, hollow leaves. Other chives cultivars include 'Corsican White', 'Grosser Riesen', 'Mittelgrosser Schnittlauch', 'Feine Schnittlauch', and 'Forescate'. A cultivar of large chives is 'Fruhlau'.

An Asian counterpart to European chives is flat-leaved garlic chives (*Allium tuberosum*). As the name denotes, garlic chives combine the delicate, herbal note of chives with a robust note of garlic. While garlic chives may enliven a dish, they are sometimes unwanted in the garden. The prolific seeds seem to sprout everywhere, and kneeling on a clump of garlic chives will surprise the senses. You can practice deadheading (removal of the blossoms

before seed-set), but because individual clumps are often short-lived, you may want to allow some seeds to form.

The traditional Chinese method of growing garlic chives is to direct-sow fresh seeds into beds 3 feet by 15 feet in 4-inch-deep drills as soon as the ground can be worked in the spring. You will get faster and more even germination from pre-germinated seed: soak seeds overnight in warm water, strain off water, wrap in clean, wet cloth, place them at 65 to 76°F for four to five days, sow, and cover with a thin layer of straw. The following spring, transplant in clumps of twenty to thirty seedlings 4 to 6 inches apart in rows 20 inches apart. In China, the leaves are commonly blanched under clay "chimney pots" and top-dressed with ½ to 2 inches of sand to produce delicately flavored yellow leaves. Garlic chives have white flowers. A well-grown clump can yield more than 8 pounds of chives per year.

HARVESTING AND PRESERVING

At home, harvest both common and garlic chives as needed, taking the outside leaves first rather than shearing the entire plant. Cutting also encourages new bulblets and discourages flowering. Chives may also be forced for fresh leaves during winter. One study in Germany found that the base and center of the forced leaves were "juicier and crisper," while the tips were "strawy/fibrous and drier."

Common chives are best used fresh, although they can be snipped into a freezer container and kept in the freezer for three to four months. Both flowers and foliage make a delicious herb butter, and the purple flowers make a lavender-hued vinegar.

Garlic chives are also best used fresh. The leaves can be harvested the second year, with three harvests per season. After the third or fourth year, chive plants deteriorate. Garlic chives may also be forced for winter production. Garlic chives can be used to make garlic butter or garlic vinegar.

TASTING NOTES AND COOKING TIPS

Common chives (*Allium schoenoprasum*) have a distinctive, herbal, green taste with decided onion overtones. Sometimes, cut onion tops, scallion tops, or Japanese bunching onion tops are substituted for chives, but they cannot match the flavor. Leaves are tubular and hollow and when snipped, appear as tiny circular rings. If your so-called “chives” are extraordinarily large and carry too much leeklike flavor, suspect a substitution. Many plants of genus *Allium* have pungent, tall, narrow, green leaves and similar pink to purple blossoms.

The marriage of chives from the Old World and potatoes from the New World was truly inspired. Baked potatoes with sour cream and chives are a standard offering in North American restaurants. Some potato salad recipes are incomplete without chives. The leaves of chives are used for soups, salads, and vegetable dishes, and are among the traditional four French *fines herbes* along with tarragon, parsley, and chervil. The buds and blossoms are also edible and fairly pungent, and may be pickled in vinegar, used in a flavorful butter, and scattered fresh as a garlic-flavored garnish over any dish from vegetables, grains, and pasta to pizza and meats.

Versatile garlic chives can be used like chives, onions, or garlic, though the taste is most similar to garlic but just a bit less pungent. Garlic chives are especially good in stir-fries. Add them during the last few minutes of cooking to avoid stringiness.

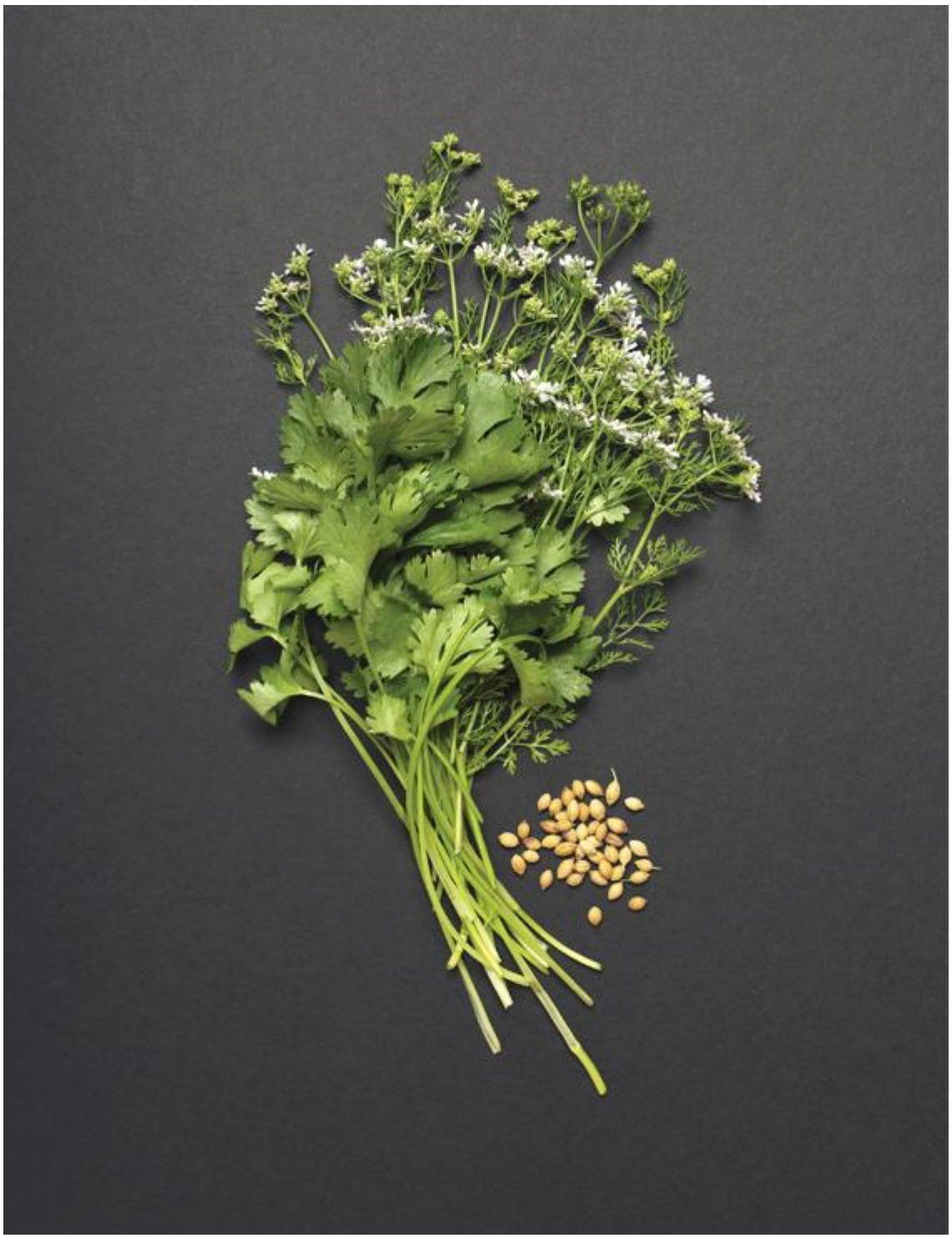
Chinese and Korean growers have a number of different, local cultivars available, but, sadly, the choice in the rest of the world is usually the straight species (*Allium tuberosum*). But if you search in gourmet herb catalogs, you may be able to find our choice, ‘Nira’, which has big, bulky plants for ease of harvesting and is the most attractive for a floral arrangement.



Common chive umbels



Garlic chives have white flowers that bloom from midsummer to late summer.



The five stages of cilantro (*Coriandrum sativum*): cilantro leaves, lacy leaves, flowers, green seeds, and dried seeds. These dried seeds are an Indian type, which are oval in shape rather than round like the commonly found coriander seeds.

annual, to 3 feet tall

seedlings can withstand light frost

full sun

keep moist but not constantly wet

light loamy soil

CILANTRO

Coriandrum sativum

Signature flavor that many embrace, others avoid

CULTIVATION AND PROPAGATION

Cilantro is the Spanish word for the leaves of the coriander plant and is the plant name generally used throughout the United States.

Coriandrum sativum is a crop for cool spring weather. Moderating heat with shade cloth will also extend the period of foliage harvest.

Cilantro is grown from seed sown in near-neutral garden loam where it will receive full sun. Seeds sown directly in the garden have a low germination rate, usually less than 50 percent. Germination can be enhanced above 60 percent by rubbing the seeds until the fruit halves separate, then soaking them for three to four days and letting them dry for eight hours before planting. For the home gardener, the seed can be broadcast or planted in rows or raised beds; allow 9 to 32 inches between rows.

Sow seed as soon as the soil can be worked in spring and after danger of heavy frost is past. Germination begins about four days after sowing when the rubbing and soaking method is used, or after about twenty-five days otherwise. Cilantro does not successfully compete with weeds, so mulch or cultivation is important. Keep evenly moist during growth. Also, early fall cilantro plantings will produce leaves for several weeks, even after the first light frosts.

Use a floating row cover on fall cilantro to extend the harvest season.

We usually grow the species for the leaves, not the seed (or fruits), called coriander, the spice. Therefore, seed lines that have large leaves and are slow to bolt are especially desired. ‘Calypso’ is the slowest to bolt, and the plants provide a high yield of leaves. ‘Santo’ and ‘Slo-Bolt’ are also slow-bolting and bear a good yield of leaves; ‘Slo-Bolt’ withstands warm weather well. These cultivars do not send up their seed stalks as quickly and generally last three to four weeks longer in the garden.

HARVESTING AND PRESERVING

Leaves are harvested about one month after sowing. Foliage is usually hand-harvested by shearing the outermost leaves. New growth will come within a few days from the center of the plant. Leaf harvesting continues until the central flower stem rises and leaf production ceases. The white flowers can be harvested for salads and garnishes. The leaves do not dry well, but can be preserved by freezing or making an aromatic paste.

Harvest coriander stems when about half the seeds have changed from green to tannish gray or when the seeds on the central umbels are ripe, preferably in the morning when dew acts to prevent shattering. Then place in paper bags to dry thoroughly. Shake the bags to remove most of the seeds from the stems; some manual removal may be required. The dried, leafy parts are easily removed with a gentle lowering of a vacuum cleaner nozzle into the bag. Store cleaned coriander seeds in labeled jars out of direct light for a year, until the next growing season.

TASTING NOTES AND COOKING TIPS

This herb has two faces: one is the leaf that smells of stinkbugs to some, and the other the fruit that smells of a flowery, citrus spice.

Green fruits smell and taste of the foliage, along with a resinous citrus endnote, but acquire a spicy, floral aroma and a chestnutlike color when dry. The citrus flavors of the dried fruits are delightful when ground and used in baked goods or herb and spice blends, or crushed and infused in cordials and syrups.

While the inimitable odor of the leaves may be off-putting to some, the taste becomes muted when cooked and provides a deep flavor rather than a sharp accent to accompany food. The leaves are sometimes described as tasting soapy or cloying, but they are better described as green and herbaceous, slightly resinous. The leaves are used in cuisines around the globe, from Latin-inspired recipes like salsa and guacamole to African dishes to spicy Thai foods and Chinese fare. They combine well with spicy and pungent food, especially chile peppers.



Cilantro blooms with green seeds forming.



Dill (*Anethum graveolens*) flowers and foliage

annual, 18 to 48 inches tall

seedlings can withstand minor frost

full sun

keep moist but not wet

garden loam

DILL

Anethum graveolens

A taste combination of parsley and fennel, with a bit of celery

CULTIVATION AND PROPAGATION

Dill responds to cool weather and long days, so as soon as nights reach a minimum 25°F temperature, direct seed in a smooth, well-prepared plot from early spring to late summer. Sow seeds in separate plantings a few weeks apart to have a continuous seasonal crop of dillweed for salads and making pickles.

Soil should be light and neither too sandy nor too stony; a medium to heavy, well-drained, organic soil is preferred. You can enhance germination by soaking seeds for four days with 50 milligrams per quart of ascorbic acid (vitamin C). Seeding after late summer will produce few leaves and mostly seeds.

The home gardener should plant fifteen to twenty seeds per foot in the row, and thin to three or four plants per foot, with rows 1 to 3 feet apart. Use the thinned seedlings in the kitchen. Seed takes seven to nine days to germinate, and flowering begins forty to sixty-seven days after germination, depending on sowing time, soil, and weather.

Young potted plants transplant readily. The age of the plant determines how quickly the plant will end foliage production to begin making seeds.

Dill is sensitive to water stress, so overhead sprinkling may be used from the time of seeding to 2 feet in height. Then switch to soil irrigation to reduce disease and risk of seed shattering. Early fall dill plantings will produce leaves for several weeks, even after the first light frosts. Use a floating row cover on fall dill to extend the harvest season. Late-fall sowings will germinate the following spring.

We prefer three cultivars: ‘Bouquet’, ‘Dukat’, and ‘Fernleaf’. ‘Bouquet’ is the most prolific for bountiful flower production. ‘Dukat’, or its improved form ‘Superdukat’, flowers a week later than ‘Bouquet’ and has high essential oil content. ‘Fernleaf’, a selection by Burpee Seed Company from Turkish seeds, is unique in that it grows to only 18 inches tall, a size that makes it ideal for cultivating in containers. In these cultivars, if you can get the plants to reseed themselves, the resulting plants will be generally stronger than the original ones. The cultivars ‘Mammoth’ and ‘Elephant’ grow 3 to 4 feet tall, with large flower heads, and are recommended for late flowering.

HARVESTING AND PRESERVING

Foliage, known as dillweed, is best used fresh. Harvest it throughout the season. Home gardeners usually snip foliage as needed. Use it to make vinegar and herb butter. And pickles, of course. Harvest seeds as soon as they start to turn brown.

For dillweed, freeze-drying is recommended instead of hot-air drying, but even freeze-drying causes a loss of 75 percent of the aroma compounds. When you have an abundance of foliage, make herb butter or aromatic herbal paste. These can be frozen, which better conserves the flavor of dill than drying. Store dried seeds in jars until next season.

TASTING NOTES AND COOKING TIPS

Dill humbles and mystifies many home gardeners, in large part because of the dual uses of the plant. In young plants, dill's blue-green, feathery foliage with its delicate and perishable aromatic tones is used fresh (as dillweed) to flavor fish and chicken, soups and sauces, egg and potato dishes, cheese and yogurt, and most especially spring green salads. As the herb matures, foliage production ceases as long stems shoot up, edible flowers bloom, and dill's second product, pungent seeds, appear. These enhance vinegars, pickles, breads, crackers, cookies, cakes, and pies.

Dill seeds (actually fruits) and dillweed smell of a spicy caraway and fennel, and are somewhat pungent with undertones of mint and citrus. The fruits smell more pungent than the foliage, which tends to be more "green."

Anyone familiar with dill pickles knows the flavor of dill, which has a pungent bite with a slight burnt taste, especially so in the seed, along with oily resinous overtones.



Harvest edible dill flowers, or wait for the pungent seeds to appear.



Fennel (*Foeniculum vulgare*) fronds with fennel foliage, flowers, and dried fennel seed

herbaceous perennial to annual, 6 to 7 feet tall

perennial hardy to zone 7; often naturalized as an annual farther north to zone 4

full sun

keep moist but not constantly wet

well-drained garden loam

FENNEL

Foeniculum vulgare

Full, earthy, sweet, and aniselike

CULTIVATION AND PROPAGATION

Plants in the garden should be placed 12 to 18 inches apart, and seedlings will need to be thinned to that distance if sown too close together. Soaking fennel seeds in water for five days prior to sowing increases germination.

Some gardeners will find that fennel tends to invade the rest of the garden, but in most gardens, it gently re-sows and does not become a nuisance. Its ability to withstand drought, however, means that it can become an invasive species in some regions. You will often see fennel growing along roadsides in warm, dry areas.

HARVESTING AND PRESERVING

Harvest fennel foliage any time during the season. The many side shoots of fennel complicate the best time to harvest for maximum yield. The highest yields are obtained from two harvests, the first when the umbels reach maturity and another when the umbels have ripened. Fennel foliage and flowers make a delicious herb butter and a zesty vinegar.

For seed, dry the crop under shade for four or five days to preserve the green color, then beat it to release the fruits. Store dried

seed in labeled jars out of direct sunlight until the next growing season. Save dried stems to toss on the grill just before you put on the fish or chicken—fennel imparts a wonderful flavor.

TASTING NOTES AND COOKING TIPS

Fennel delights the herb gardener because it not only provides tasty leaves and fruits but also provides food for the vividly striped caterpillar of the swallowtail butterfly. The aroma is sweet and green and aniselike. The flavor of fennel is similar to anise, though more full and earthy, sweet and herbaceous. The fruits (commonly called seeds) of fennel are traditional in Italian sweet sausage. Northern Italians often add the seeds to their tomato sauce, and it is used in biscotti and other baked goods. The essential oil of fennel seeds is used for flavoring foods, confections, and liqueurs such as anisette and absinthe. It is also used in perfume, cosmetics, and pharmaceuticals. The aromatic blue-green foliage and crisp stems, particularly the bulblike leaf base, are also sliced and used in a variety of dishes, especially seafood preparations, salads, and vegetables. The blooms can be used as a bright yellow garnish on salads or anywhere that the chopped herb is used. We often stuff a whole umbel of flowers or seeds down into the bottom of a quart jar before adding cucumbers for pickles.

Bronze fennel (*Foeniculum vulgare* ‘Rubrum’), with its unusual dark foliage, is a great garnish, especially when the stems are grilled with meats and vegetables to add a hint of flavor. Try both the showy leaves and flowers of bronze fennel with summer-ripe fresh tomatoes instead of basil for a delectable change. Children love the attractive feathery foliage of bronze fennel. Cut and sprinkled over salads, the leaves look like purplish black spiderwebs and smell of licorice candy.



perennial, 1½ to 2 feet tall and wide

hardy in zones 5 to 8

full sun, good air circulation

can withstand dry conditions

keep soil well-drained

FRENCH TARRAGON

Artemisia dracunculus ‘Sativa’

Peppery, aniselike, mildly grassy flavoring

CULTIVATION AND PROPAGATION

French tarragon (*Artemisia dracunculus* ‘Sativa’) should be obtained from a trustworthy source. Since it does not produce flowers and seed, it must be started from a cutting or by root division. It is delicate, relatively short, and has glossy, bright green leaves.

Like rosemary and sage, French tarragon will become a handsome, bushy plant. Frequent cutting, especially in summer, and a mulch of sand and gravel will lessen disease problems. All yellow or brown leaves should be removed from the plant as soon as they appear, to deter the spread of fungus. Tarragon dies back each winter, even in temperate climates. In cold climates, it should be well protected with mulch. We find it slightly finicky, because it doesn’t like much heat in summer and won’t live where winters are too warm.

We suggest buying rooted cuttings or small plants in the spring and planting them 15 inches apart. Tarragon has a shallow lateral root system and must have good air circulation. Two- and three-year-old plants can be divided easily and transplanted back into the garden or containers. The most important tip regarding tarragon is to

give it adequate space. It will not thrive if crowded, so give it good air circulation.

HARVESTING AND PRESERVING

For preserving, make several tarragon cuttings throughout the season. Rinse if necessary. To dry tarragon, place the sprigs on flat baskets or screens in a warm, shady place. The fresh herb has a bright bouquet, whereas we find dried tarragon bland. Small sprigs can be frozen in ziplock plastic bags with reasonable results. Tarragon herb butter is a better option.

The best way to preserve tarragon is in vinegar, which captures and holds its essence. The texture and color of the herb are not the same in vinegar, but the flavor is quite good and more prominent than for the dried herb. Harvest cuttings and rinse if necessary, fill quart jars loosely with the fresh sprigs, and pour in white wine vinegar or rice wine vinegar to cover them, leaving a ½-inch headspace. Place plastic lids on the jars and store in a cool, dark place. In France, jars of tarragon preserved this way are sold in grocery stores and food shops and go for quite a tidy sum. After opening a jar, keep it in the refrigerator. Use the same amount of the preserved herb as fresh for recipes. Use the infused vinegar in salad dressings, marinades, and sauces.

TASTING NOTES AND COOKING TIPS

French tarragon (*Artemisia dracunculus* 'Sativa') is the only choice of tarragon for the kitchen. The first whiff of tarragon leaves picks up a pleasant anise aroma followed by a combination of green grass and freshly cut hay, with a mere suggestion of mint and licorice. French tarragon is a highly esteemed herb in France and is considered essential in many French dishes.

When you bite into a leaf, it numbs the tongue slightly, which is caused by the presence of the chemical methyl chavicol.

Tarragon is used in sauces, vinaigrettes, and especially with shellfish, seafood, and poultry. The French use tarragon in the most elegant ways, in classic sauces like tartar and béarnaise. It also finds favor in Sienese and Russian cookery. Tarragon adds character to green sauces, is good with eggs and cheeses, and is often used with chicken, fish, and grilled meats. Sprinkle fresh, chopped tarragon over simply prepared vegetables, such as peas, asparagus, spinach, cauliflower, beets, and potatoes.



French tarragon does not produce flowers or seeds, so must be started from a cutting or by root division.



Bulbs of cured, softneck garlic (*Allium sativum*)

herbaceous perennial, to 2 feet tall

hardy to zone 5

full sun

keep moist

well-drained loam

GARLIC

Allium sativum

Strong, spicy flavor that mellows with cooking

CULTIVATION AND PROPAGATION

Most herbs are relatively simple to grow. But we've included one—garlic—that requires more than a casual approach if you want to produce high yields and high quality. The process is well worth it, however, if you want to have really good garlic and try unusual cultivars with different tastes.

Selections of *Allium sativum* are generally sterile and are propagated from the cloves (the cloves, or bulbils, are often called seed, while the entire bulbs are called sets). Plant (pointed ends up, root ends down) in the fall in full sun, at least four weeks before the ground freezes. Cover with 1 to 2 inches of soil, and space 3 to 6 inches apart with 12 to 32 inches between rows. Plant in well-drained, highly organic loam. Fall-planted garlic will be ready to harvest the following late spring to early summer, generally 8 to 9 months after planting.

Home gardeners should add 2 to 3 pounds of a common 5-10-5 fertilizer or its equivalent to every 100 square feet of garden area. Alternatively, work in aged manure or compost and greensand. Distribute 1 pound of fertilizer or organic amendments along a 50-foot row as a side dressing. The largest cloves will produce the largest bulbs, so cull out the smallest cloves. Mulch lightly with straw

for winter protection, increased yields, and weed control. Studies done in a cold-winter region show that black plastic mulch produced greater marketable weights and bulb diameters than bare soil–wheat straw mulch treatment. Garlic cloves may also be planted in spring six weeks before the last frost, but the resulting bulbs will not be as large as those sown in autumn.

Just as for onions, temperature and day length are extremely important in growing garlic. Garlic requires temperatures below 40°F for six to eight weeks to vernalize (provide cold for maturation) the plant. Once treated with cold temperatures, the plant initiates bulbing when the day length reaches approximately thirteen hours and soil temperatures are above 60°F. Prolonged temperatures below 32°F cause rough-shaped bulbs and small axillary cloves. Temperatures above 80°F speed up bulb formulation with favorable day length. Warm temperatures continuously above 60°F and days with fewer than twelve hours of daylight prevent bulbs from forming.

Keep plants evenly moist during the growing season, using a mulch if possible. Irrigation should be adequate to moisten the soil to a depth of 12 to 18 inches for proper bulb development. While moisture is critical as the bulb develops from late May until July, withhold additional water two to three weeks before harvest. Vegetative growth is greatest around 61°F on short days, while bulbs are formed and enlarged on long days with temperatures about 68°F.

Early in the spring, when garlic leaves are green and plants are 8 to 12 inches high, we thin some of the new plants in order to enjoy green garlic, which is a gourmet's delight to cook with. Later in the season, the plants send up their flower stalks, which are called scapes. Remove the flowering stalks when they are 6 to 9 inches tall above the foliage, to ensure that growth energy goes to the bulb. Garlic scapes can be finely chopped and used for salads and garlic butter or briefly sautéed in stir-fries.

Softneck garlic (*Allium sativum* var. *sativum*) is the type of garlic that we generally find at the grocery store. It has a stiff but pliable center stem and is often braided. Over the years, we have grown hundreds of different cultivars ranging in heat from mild to wild. A few softneck cultivars we have liked are 'Inchelium Red', 'Early Red Italian', and 'Italian Late'.

HARVESTING AND PRESERVING

In late spring to early summer (eight to nine months after your cloves were planted), the bulbs are ready to harvest when the leaves turn yellow to brown, weaken, and fall over. As a second test of harvest readiness, inspect the leaves at soil level near the bulb. They turn from a succulent, fleshy texture to a dry, papery sheath at harvest time.

Once the bulbs are dug up, or lifted, peel off one or two of the outer leaves to expose the clean bulb and trim off the roots. The bulbs need to be cured before storing: during this step, the outer and inner membranes need to dry so the bulbs will store well. If you wish to braid the tops, leave them on and do so when they are somewhat dry but still pliable. Dry in a shady place with a relative humidity of 60 to 70 percent and temperatures of 60 to 70°F; allow one or two weeks for drying. Large flat baskets, chicken-wire racks, or old screens work well for drying bulbs in a single layer. Finish curing at 80 to 100°F for four to six weeks or until the papery skin changes from pure white to off white and become crisp.

Storing garlic for long periods of time at 39°F and above and at humidities greater than 70 percent will lead to high losses from sprouting and mold, respectively. Optimum storage conditions for garlic are eight to ten days at 68 to 86°F, followed by temperature reduction to 32°F and maintenance at 32°F.

TASTING NOTES AND COOKING TIPS

Cut fresh garlic has an unmistakable smell: it is acrid, nose-piercing, biting, and pungent from sulfur compounds generated from allicin, the active component that offers many health benefits. Fresh garlic produces a burning sensation in the mouth. Cooked or preserved garlic has a reduced, though similar odor and taste. The odor of both fresh and processed garlic is persistent, especially on the hands. If you have never tasted fresh garlic, beware: it may seem like you are having a nasal floss that then deepens to your lungs and penetrates

all your pores! Garlic will also influence your mouth odor, so you can either chew parsley until you can't stand it anymore, brush your mouth, and gargle with mint mouthwashes—or share garlic with all of your family and friends, and embrace it!

Fresh garlic adds a piquancy to any dish, whether it is tossed in a salad or made into a sauce. Once cooked, garlic becomes less assertive, though that inimitable allium flavor is still there; in long-simmered dishes the garlic becomes muted. Oven-roasting garlic with a drizzle of olive oil at a low temperature transforms the hot and spicy nature to sweet and slightly nutty with warm tones of allium, and the texture becomes soft and creamy—quite spreadable.

We like to mince fresh garlic and use it in salad dressings or serve it straight on crackers with a dairy product, such as goat cheese. We pound it in pestos, salsa verde, skordalia, and aioli, and rub it on crusty, toasted bread to make bruschetta. Diced fresh garlic sautéed in virgin oil also is the starting point of so many recipes, from a traditional Italian marinara sauce to a Chinese stir-fry. We rarely make a soup, sauce, gravy, stew, ragout, casserole, or pot of beans without including garlic. This is an herb that we could not live without.

We do not use processed garlic, however, because as seekers of excellent flavor, we want the real thing for culinary and medicinal virtues. Julia Child stated: "Never, never, never use garlic powder."



Garlic is ready to harvest when leaves turn yellow to brown and fall over.



annual, 3 inches to 2 feet tall

seedlings can withstand frost

full sun

keep moist but not constantly wet

well-drained garden soil

GERMAN CHAMOMILE

Matricaria recutita

A pleasant sweetness tempered by a hint of bitter

CULTIVATION AND PROPAGATION

German chamomile grows best in a light, sandy loam with abundant moisture. Additional fertilizers should have a ratio of 1 part nitrogen to 2 parts potassium because potassium advances flowering. The surface of the soil should be firm to ensure good contact with the seeds, in furrows 2 to 4 inches high with plants in rows 4 to 32 inches apart.

Early autumn seeding is best in areas with regular autumn rain. Late-autumn seeding is best in areas with early frost and little snowfall. Spring seeding is best in areas with spring rain. Spring sowings produce a higher content of essential oils, and so we normally seed our German chamomile in spring. Seeds germinate at 43 to 45°F within seven to ten days after seeding.

Leaf rosettes form thirty to forty days after germination and flowers quickly follow. Optimal temperature for flowering is 66 to 68°F. At 82 to 90°F, the flowering time is shortened.

A large number of German chamomile seed lines have been developed, especially by the Hungarians. Some specialty catalogs carry these, but the straight species is what we usually grow.

HARVESTING AND PRESERVING

Under optimal conditions, German chamomile plants flower two to three times per year. Regeneration of flowers after cutting requires ten to twenty days, depending on weather conditions. The highest essential oil content is found in fully developed flowers approximately one week after beginning of flowering. Flowers may be dried with forced hot air or in an oven with a pilot light or oven light on. Store the dried blooms in a dark glass jar, label, keep out of direct sunlight, and use before the next season's harvest.

TASTING NOTES AND COOKING TIPS

German chamomile is also called Hungarian chamomile and is widely confused with Roman chamomile (*Chamaemelum nobile*) and the two have been used almost interchangeably. However, Roman chamomile is a low, ground-hugging perennial while German chamomile is an upright annual, and the essential oils are also vastly different. Consuming Roman chamomile sometimes induces allergic responses in ragweed-sensitive individuals, but these responses are rare for German chamomile.

The essential oil from German chamomile flowers has been used in nonalcoholic beverages, alcoholic beverages, ice cream and ices, candy, baked goods, and chewing gum, although the most popular use of the dried flowers is in teas or tisanes (herbal teas). The aroma of German chamomile tea is like daisies and fresh hay with tinges of apple and perhaps a whiff of sweetgrass. The flavor echoes the fragrance and, although there is a pleasant sweetness, is slightly bitter. Besides having no caffeine, German chamomile tea also has health benefits. Research has shown that German chamomile reduces inflammation, allergies, and muscle spasms, and is effective against certain fungi and bacteria.



The highest essential oil content in German chamomile flowers is in fully developed flowers.



Horseradish (*Armoracia rusticana*) leaves and small roots

hardy perennial, 24 to 36 inches tall

hardy to zone 5

full sun

keep moist but not wet

loamy, well-drained soil

HORSERADISH

Armoracia rusticana

Known for its pungent root, but leaves and flowers are also flavorful

CULTIVATION AND PROPAGATION

Horseradish is easy to cultivate. It prefers cooler weather; fall is the season for the greatest growth and the time to use the fresh roots. In early spring, dig or till the earth 18 to 24 inches deep, working in well-rotted manure or compost. Young root cuttings should be fairly straight, 6 to 8 inches long and about ½ inch across. Purchased roots come trimmed with a sloping diagonal cut on the bottom end; plant with this end down. Make holes in the soil about 12 inches deep and at least 18 inches apart, place a root in each hole, and cover with well-tilled soil.

Horseradish will grow in almost any sunny location (heavy soils tend to promote forked roots), and it will thrive in enriched, well-drained soil that is kept weeded. Roots left in the garden for more than a year tend to be pithy and more prone to disease. We dig horseradish roots every year, store them, then plant root sections in early spring. Generally, plants do not flower the first year but bloom in the spring of the second season.

We grow *Armoracia rusticana* plants that are passed-along roots or divided crowns from other gardeners; most catalogs don't offer cultivars. A standard in the industry is 'Maliner Kren', often referred to as common horseradish. Cultivars 'Big Top Western', 'Bohemian',

and ‘Sass’ are grown because the roots are highly resistant to many diseases.

HARVESTING AND PRESERVING

Harvest early small leaves to eat fresh or dried. The best-tasting and most tender roots come from first-year plants. Roots can be left in the garden year-round and dug as needed, or they can be dug in late fall and kept in the refrigerator or in a cold root cellar so they are available to be grated as needed. Once the root is dug, it must be refrigerated; heat is the enemy of horseradish roots and will cause them to quickly lose their potency. Freshly grated horseradish turns brown after grating and tends to lose its pungency after sitting, so grate the root right before using it unless you make it into a sauce or preserve it with vinegar. Fresh horseradish is hotter and more pungent than commercially prepared versions; substitute 4 teaspoons of prepared horseradish for 1 tablespoon of freshly grated horseradish.

To preserve horseradish root, peel away the tough, brown outer skin. Grate the root or process in a food processor or blender. Take precautions to ensure adequate ventilation in the kitchen, and when you remove the top of the processor, step back for a few minutes to avoid inhaling the fumes. Let the roots sit for about 10 minutes, because processing immediately with vinegar will lessen the potency of the prepared horseradish.

To process, mix ½ cup white vinegar (use white wine vinegar or rice vinegar; apple cider vinegar will work, but the color is a bit darker) with every 2 cups freshly grated horseradish. Several brands of commercially prepared horseradish contain a little soybean oil or lemon juice, and some added salt. To make sure that the mixture is well moistened but not too liquid, stir in a little more vinegar or water if necessary. Pack into sterilized jars, seal, and refrigerate. Use in six months since it will lose its pungency in storage.

TASTING NOTES AND COOKING TIPS

Horseradish also offers the gardener the bonus of early, small, tender leaves and white flowers, which can be added to salads, sandwiches, soups, and butters. The leaves have a pleasant green, herby flavor with just a touch of pungency and the blooms are mildly spicy.

When freshly dug, the root has a nose-tingling aroma. In the kitchen, once cleaned and then chopped or grated, the root's main active component, allyl isothiocynate (mustard oil), is released, and if inhaled directly, can take your breath away and may bring tears to your eyes. The taste of freshly grated horseradish root is equally as incendiary as the aroma, so use caution when processing, and use in small quantities.

The assertive flavor of grated horseradish root enhances all types of dishes from cocktails to desserts. An essential ingredient to a proper Bloody Mary, horseradish adds a kick to this popular drink or to plain tomato juice. It enlivens salads, soups, and sauces, and is often added to mayonnaise and mustard to make them more piquant. Use horseradish-laced mayonnaise in coleslaw and potato salads, on sandwiches, with seafood, and as a dipping sauce for artichokes.

A popular use of horseradish, commercially or homemade, is in cocktail sauce. Prepared by combining ketchup and grated prepared horseradish, sometimes with a squeeze of lemon juice, this zesty condiment is favored for every type of fresh seafood including shrimp, clams, oysters, and mussels and with breaded or battered fried fish. Freshly grated horseradish mixed with cream or vinegar is an excellent pungent accompaniment to raw oysters, clams, roast meats (often served with roast beef), fish, and smoked fish.

When cooked, horseradish root changes from hot to rather earthy, sweet, and nutty, although a slight pungency remains. Enjoy it baked in all sorts of vegetable casseroles with root vegetables, especially carrots, beets, winter squashes, and the brassicas (like Brussels sprouts, broccoli, cabbage).



Dig mature horseradish roots in the fall of the first year; second-year roots can become tough and pithy.



Lavandula angustifolia

perennial shrub, 1 to 3 feet tall

hardy to zone 6; difficult to grow above zone 8

full sun

keep dry to evenly moist

well-drained gravelly or rocky loam

LAVENDER

Lavandula species

Striking small blooms add a floral essence

CULTIVATION AND PROPAGATION

Lavender must have full sun, air circulation, and good soil drainage to produce sturdy plants and maximum fragrance. Light-colored mulches such as sand or gravel will also help produce sturdier plants more resistant to sudden wilts. Lavenders grown in shade or with dark-colored mulches in any climate with consistent cloud cover inevitably succumb to sudden wilts, grow spindly, and give poor fragrance. Mulching with oyster shells has been found beneficial in many climates. Granite and other rock dust, sand, and marble or limestone chips are also beneficial as a light top dressing.

Lavender will reseed in the garden unassisted if growing conditions are excellent. Seed propagation is not recommended for home gardeners. Lavender roots easily with late spring and early summer cuttings treated with rooting hormone and planted in 1 part perlite to 1 part baked cat litter (clay frit) in 50 percent shade. Layerings are very easy to do any time of the year: merely scrape the bark off a long stem near the base, apply rooting hormone, bend the stem down, cover with soil, and peg the stem down with an upside-down V bent from a wire coat hanger.

The numerous cultivars of common lavender vary in flower color, height, vigor, and scent, and more seem to be introduced every year.

‘Royal Velvet’ has lovely dark flowers and is uniquely not shatter prone, so even though it dies out, we constantly replace it. ‘Tucker’s Early Purple’ is a common lavender with an extended growth season.

HARVESTING AND PRESERVING

The leaves are not edible, so use only the tiny flower blooms, which taste strongly of a floral perfume. Lavender flowers produce maximum oil yield when about half of the blossoms are open. Harvest by cutting and hang or spread the stems on screening for a few days until dried. Since most lavender is prone to shattering, it is best to strip off the blossoms and save them separately, using the leftover stems as fire starters. Lavender flowers may also be used fresh or dried for cooking, but use them sparingly, because they are very perfumy and a little goes a long way. Store dried flowers in labeled jars out of direct sunlight for up to a year.

TASTING NOTES AND COOKING TIPS

The smell of fresh lavender flowers is light and clean, though assertively floral and sweet. Fresh or dried flowers are used to flavor chocolates and other desserts often containing fruit or cream, such as cookies, teacakes, custards, and ice cream, as well as syrups and all sorts of beverages. Innovative chefs today are using the dried flowers in an herbes de Provence blend (recipes vary, but can include savory, rosemary, thyme, oregano, basil, marjoram, bay, parsley, tarragon, or fennel) to flavor meats, fish, pasta and pizza, egg and cheese dishes, and vegetables.



annual, 1 to 1½ feet tall

can withstand light frost

full sun

keep moist but not constantly wet

loamy, well-drained soil

LEAF CELERY

Apium graveolens var. *secalinum*

Stronger and more intense than conventional celery

CULTIVATION AND PROPAGATION

Leaf celery grows best in the cooler temperatures of spring and fall. Sow seeds directly in the garden in early spring or late summer, about the same time that you might put out brassica crops like cabbage and broccoli. This is another herb that does well under a floating row cover, which will extend the fall season until it freezes.

Seeds are readily obtainable from catalogs that sell specialized herb seeds or Asian vegetable seeds; there, it is sometimes called cutting celery. We like ‘White Queen’, which has a flavor and aroma that is stronger than Western celery. The long, white stems are much smaller than conventional celery, but the leaves are a must for Chinese food dishes. Alternatively, choose ‘Kintsai’ (dark green) or ‘Nan Ling’ (light green). ‘Kintsai’ makes a good microgreen, while ‘Nan Ling’ has a pungent flavor necessary for Asian stir-fries. ‘Amsterdam’ has been around for years and is a hardy, dark green cultivar.

HARVESTING AND PRESERVING

Harvest leaf celery fresh, just as you would parsley, cutting the outer stalks. Seedlings also make good microgreens for salads. Typically, as leaf celery matures, the flavor intensifies. Leaf celery is more perishable than conventional celery. Harvest, rinse off the dirt, and wrap in paper towels in plastic bags to store it for a few days in the refrigerator. Leaf celery is best used fresh; we do not dry or freeze it.

TASTING NOTES AND COOKING TIPS

Leaf celery has a more intense aroma than conventional celery and is somewhat similar to lovage in that feature. Also known as Chinese celery, it has an intense flavor that is encapsulated in its older English name, smallage or smellage. The flavor of leaf celery also is much stronger, more assertive than that of conventional celery; it tastes very green, somewhat pungent, and slightly bitter. A little bit goes a long way, so chop the leaves and the smallest stems to use in recipes for a strong, green, celery flavor.

Microgreens of leaf celery can add additional flavor to salads, but mature leaf celery is more often cooked. It is used traditionally in Asian stir-fries and is also good in soups and stews. Use it as you would use lovage leaves—or anywhere you might use celery—but in smaller amounts because its strong flavor can overpower a dish. Add to stocks, casseroles, and grain dishes in small amounts.



herbaceous perennial, to 3 feet tall

hardy to zone 5

full sun

keep moist but not constantly wet

well-drained garden loam

LEMON BALM

Melissa officinalis

Full of lemon notes, with a hint of honey

CULTIVATION AND PROPAGATION

Lemon balm is easy to grow from seed—almost too easy. If allowed to reseed, it will be with you forever. Start seeds early for transplanting or sow them directly in the garden. Layerings and cuttings are also possible. Lemon balm grows in any reasonably moist garden loam but be prepared to thin the copious seedlings that will spread.

HARVESTING AND PRESERVING

Leaves of lemon balm may be used fresh but are also easily dried over screens and then stored in sealed containers in a cool, dark cupboard. With summer abundance, make an aromatic herbal paste or syrup to preserve, so you will have this bright lemony herb to brighten recipes during the cold days of winter.

TASTING NOTES AND COOKING TIPS

Lemon balm is sweetly scented of lemons tempered by a citronellalike aroma. The flavor is mild and sweet, full of lemon notes and a hint of honey. The genus name is derived from the Greek *melissa*, or bee, presumably because honeybees are attracted to the flowers. The leaves and tiny flowers can be used in all sorts of dishes from appetizers to desserts. And it is a lemony addition to beverages, syrups, puddings and custards, scones and cakes; it is also good in sauces and vinaigrettes with vegetables, chicken, and fish.

Lemon balm, or simply balm, was once a major medicinal herb. The Swiss-born alchemist and physician Paracelsus (1493–1541) used it to prepare his elixir vitae, *primum ens melissae*, which he claimed would regenerate the strength of man and render him nearly immortal. Lemon balm has been employed in tisanes, wines, and cordials, and we still find it in liqueurs. It has also been used in eau de cologne.



Lemongrass (*Cymbopogon citrates*), showing succulent leaf bases

herbaceous tender perennial, 2 to 3 feet tall

cannot withstand frost, zone 10

full sun

keep moist but not constantly wet

well-drained sandy soil

LEMONGRASS

Cymbopogon citratus

Pungent lemon flavor with a whisper of citronella

CULTIVATION AND PROPAGATION

A single pot of lemongrass will be enough for most home cooks. If your local nurseries do not sell lemongrass, check the Asian food markets for lemongrass pieces with stems. Place the unrooted pieces in pots of moistened, sterile potting soil and cover with a polyethylene bag for about two weeks, or until roots appear. Then gradually remove the bag. Lemongrass, once rooted and placed in optimum conditions, will grow rapidly and will need to be repotted within a few months. Lemongrass is shallow rooted and cannot withstand dry soil. The potted plant should be overwintered indoors.

We grow the straight species. While usually called lemongrass in the American and European herb trade, the commercial common name for *Cymbopogon citratus* is West Indian lemongrass to differentiate it from East Indian lemongrass (*C. flexuosus*) and Jammu lemongrass (*C. pendulus*), which are two species raised for essential oil and normally not found in the kitchen (although they have a similar lemony odor).

HARVESTING AND PRESERVING

Home gardeners harvest fresh lemongrass leaves a few stems at a time by cutting at the base just below the white core as needed. Finely chop the fresh herb to use in your recipe. It makes a delicate lemon syrup. We do not dry or freeze lemongrass.

TASTING NOTES AND COOKING TIPS

At the base of lemongrass's many fibrous leaves, you will find a pale, succulent core that resembles a scallion. This core is sliced into Southeast Asian dishes to impart a pungent lemon flavor with a whisper of citronella. The mildly lemon-scented leaves are also used in broths, teas, and potpourris.



tender perennial shrub, to 8 feet tall

hardy to zone 8

full sun

keep moist but not constantly wet

well-drained, friable soil

LEMON VERBENA

Aloysia citriodora

More intense flavor than real lemons

CULTIVATION AND PROPAGATION

Lemon verbena prefers near-neutral garden loam and full sun if grown outdoors. Most gardeners treat lemon verbena as a tender perennial and grow it as a potted plant that can be wintered in the house or in a cool garage or garden shed. To grow in pots, use a friable, porous soil; a peat and perlite mixture with water-soluble fertilizer works well.

However, the plant is marginally hardy at zone 8; there, it should be protected from excessive frost and wind. Plant it along a south wall. For added winter protection, also cut it back and mulch it with straw. In a cool location during the winter, lemon verbena often drops its leaves and appears dead, but leaves typically reappear when the temperature and day length increase. During this time, watering can be reduced, but the soil should be kept slightly moist. Plants remain evergreen when grown in pots with supplemental light to extend the day to twelve hours during winter. Prune plants to maintain a bushy appearance.

Lemon verbena is best propagated by cuttings from new growth, although it may also be grown from layerings or seeds (in cooler climates, seeds do not always fully ripen). It is highly susceptible to spider mites and white flies, particularly under hot, dry conditions.

HARVESTING AND PRESERVING

Lemon verbena leaves may be used fresh or dried. They make a delightful syrup. Extracts and tinctures of verbena are used in the formulation of liqueurs. They can also be made into an aromatic paste for baked goods. Lemon verbena sugar is easily made by layering a generous handful of leaves in a pint jar of sugar.

TASTING NOTES AND COOKING TIPS

Sometimes simply called verbena in popular literature, lemon verbena is considered among the best lemon-scented herbs. It has a strong lemon bouquet combining sweet floral lemon with that of lemon oil. Victorian ladies used to tuck sprigs into hankies or rub the herb on their necks for its refreshing scent. The flavor of lemon verbena is intensely lemon, even more so than true lemons, and reminds us of candied lemon drops.

The leaves are prized for tea and used in lemonade and alcoholic beverages, cordials, and syrups. Leaves can be chopped and added to vinaigrettes, grain salads, and fruit salads, and added to desserts such as cakes, cookies, muffins, scones, pies, custards, ice cream, and sorbets. Fresh leaves or flowers are used to decorate all sorts of confections from cakes and pies to puddings; they also candy well. Put a few leaves into your next crème brûlée custard or glasses of iced tea or lemonade. Leaves or oil of lemon verbena also add a superb lemon fragrance to potpourri and sachets.



herbaceous perennial, to 6 feet tall

hardy to zone 5

full sun

keep moist but not constantly wet

soil rich in organic matter

LOVAGE

Levisticum officinale

Strong taste of celery leaf—green and pungent

CULTIVATION AND PROPAGATION

You can grow lovage easily from seeds planted in early spring in rich, moist garden soil with good drainage and partial shade where summers are hot and steamy.

Given the proper nourishment and moisture, lovage can be a giant plant with flowering stalks towering to over 6 feet. Lovage responds to rotted manure and other organic applications when deeply dug into the soil. Mulch well to conserve moisture.

HARVESTING AND PRESERVING

One lovage plant usually produces more leaves than a single household can use. Plants are harvested beginning the second year. Seedlings started indoors and transplanted in the garden will produce yearlings larger than giant Italian parsley that can be harvested the first year. Older plants can be cut back to 1 foot tall in mid-season before flowers appear; they will regrow to produce more leaves before frost. When older leaves turn yellow, simply clip them off; more will replace them later.

Use fresh leaves and stems judiciously. Though not quite as tasty as fresh, you can dry lovage leaves, stems, and seeds in a dehydrator or in an oven with the light on or with a pilot light. Store dried lovage in labeled glass jars until the next harvest season.

TASTING NOTES AND COOKING TIPS

Lovage smells and tastes like a strong, concentrated celery leaf. If you find celery hard to grow, lovage is an easily cultivated plant that is a good substitute. Use lovage wherever celery is desired: soups, stews, salads, casseroles, and stuffings. But use about a third to half as much lovage as celery to compensate for the more concentrated flavor. The leaf stalks of lovage were once blanched like celery by piling soil around the base. The large flowering stems can be candied, while the tender young stems are good in salads. The seeds (actually fruits) have been used as an alternative to celery seed (fruits). The essential oil is used in the formulation of sauces, bouillons, preserves, and condiments.



tender perennial shrub, 3 to 9 feet tall

hardy to zone 9

full sun

keep moist but not constantly wet

well-drained soil

MEXICAN OREGANO

Lippia graveolens

Scent of oregano with thyme and eucalyptus undertones

CULTIVATION AND PROPAGATION

Mexican oregano makes a fine potted plant that can be trained into a tight shrub. If you live in a cool climate, overwinter the plant in its container in a cool garage or shed. You can propagate it easily by cuttings, and seeds are also easy to germinate. Beware, however, that the resulting plants from seeds will sometimes smell of eucalyptus and not oregano, so don't propagate from seed if you want the guarantee of true oregano smell and taste. Instead, buy a plant or make a root cutting from one that you can smell and taste and are sure about.

HARVESTING AND PRESERVING

Harvest leaves as needed. The leaves are easily dried on screens. Mexican oregano can be pruned hard to flush out more leaves, but don't do this more than twice in one season or you may weaken the plant. Store dried leaves in a labeled jar out of direct sunlight until the next growing season. Try using Mexican oregano in an herb butter or to make an herb vinegar.

TASTING NOTES AND COOKING TIPS

Mexican oregano has the scent of oregano with thyme and eucalyptus undertones and a slight floral hint. If you want to make authentic Mexican cuisine, you can substitute oregano and most people will not be able to taste the difference. But smelling them side by side, they are easily distinguished. Use the leaves in any dishes where oregano would be used—to flavor tomatoes, salsa, sauces, soups, beans, vegetables, pasta, and cheese dishes.



herbaceous tender perennial, 2 to 3 feet tall

marginally hardy to zone 7b; hardy to zone 8

full sun

keep moist but not constantly wet

light loamy soil

MEXICAN TARRAGON

Tagetes lucida

A twist on the aniselike properties of tarragon

CULTIVATION AND PROPAGATION

Mexican tarragon is easily propagated from cuttings, and branches near the base often have what are called “adventitious” roots: roots not formed from other roots (for example, stems) that are already formed and can be broken off and planted. Seed is difficult to find and often slow to germinate. Plants may be grown in pots, where a soil-free growing medium works well, or in the garden with good, friable, well-drained soil in full sun.

We grow Mexican tarragon in large pots with other tender herbs and bring them indoors for the winter to ensure plants for next year. While French tarragon droops under summer heat, Mexican tarragon luxuriates in high temperatures. Keep the moisture constant, though, to prevent wilting from water stress.

We grow the straight species (*Tagetes lucida*). A few selected forms are gradually appearing in the herbal marketplace.

HARVESTING AND PRESERVING

Harvest leaves as needed for recipes calling for tarragon, such as béarnaise sauce. Leaves can be used fresh or dried, and they make a nice vinegar. Although dried leaves do not have quite the same scent as fresh, they still retain some flavor. Store dried leaves in labeled jars out of direct sunlight and use before the next harvest season.

TASTING NOTES AND COOKING TIPS

Mexican tarragon (also called sweet marigold, sweet mace, and Mexican mint marigold) is a cousin of ornamental marigolds but has an entirely different aroma—superficially similar to French tarragon (*Artemisia dracunculus* 'Sativa'), though without the full, warm herbaceous smell. The flavor has both tarragon and green herb notes with a slight hint of mintiness. The edible yellow-orange flowers of Mexican tarragon, unlike the flamboyant blooms of its bedding plant relatives, are small enough to be overlooked when they appear in late fall. In warm climates with high rainfall or high summer humidity, where French tarragon is difficult or impossible to grow because of its susceptibility to diseases, Mexican tarragon is often grown as a substitute.



Mentha spicata

herbaceous perennials, from procumbent to 3 feet tall

hardy in zones 5 to 10

full sun to part shade

keep moist but not wet

well-drained loam

MINT

Mentha species

A classic flavor with numerous variations

CULTIVATION AND PROPAGATION

For most people, the problem is not how to cultivate mint but, rather, how to control the plants. Mints are like stray cats: you take them in, feed them a little, provide some conditions to their liking, and they are yours forever.

While some mints will often set seeds, many, such as true peppermint, are sterile hybrids. As a rule, unless you are interested in generating new types of mints (or just want surprises), don't bother with propagation by seeds. Even in those mints that do set seed, the total appearance, from hairiness to leaf shape to odor, will not come true from seed.

Abundant, long, thin stems, called stolons, grow from the base of the plant, either just above the soil level or just below. To propagate, merely snap off some stolons, cover with about 1 inch of soil (with the delicate tips poking their noses just above the soil), and water. Mint is also among the few herbs that will quickly form roots in a glass of water. Mint will gradually form a large colony from the stolons, typically with the center of the colony becoming less and less dense and forming lots of young plants on the periphery. If you have too many plants, share them with friends.

HARVESTING AND PRESERVING

Mint leaves are excellent fresh and also dry well. Harvest mint at the time of flowering by simply cutting the stems near the base and hanging them to dry. Dried leaves may be stored whole, in sealed jars until the next harvest. Try to avoid crushing the leaves and pack them whole, because bruising releases essential oils and flavor is lost. We also preserve our mints by making them into syrups and aromatic herbal pastes and freezing them.

TASTING NOTES AND COOKING TIPS

If there is only one mint plant in your garden, it has to be spearmint (*Mentha spicata*). There are many mint species grown around the globe, yet spearmint is grown on all of the continents, with the exception of the North Pole and South Pole. If a recipe calls for mint and it doesn't specify what kind, assume it means spearmint. While the sweetness of spearmint can be used in almost any dish, the intense, peppery, menthol flavor of peppermint is usually reserved for desserts and chocolate, where a big impact is desired.

Since red-stemmed doublemint combines the characteristics of spearmint and peppermint, it works well where a bright mint flavor is called for. Although there is no mint flavor to orange mint, its flavor suggests Earl Grey tea, so it is perfect for desserts, baked goods, fruit dishes, chocolate, and as a beverage. All these mints, fresh or dried, make lovely herbal teas.

SPEARMINT There are many spearmints on the market, but you can't go wrong with the cultivar *Mentha spicata* 'Kentucky Colonel'. The value of this plant was recognized by the Spanish invaders in the New World. Wherever they went in the sixteenth century, they took what we now call 'Kentucky Colonel' with them, from Guatemala to New Mexico to the Philippines. 'Kentucky Colonel' has that unique fragrance that you expect of spearmint—clean and sticking to the

nasal passages. It has a fresh, sweet mint aroma, and the taste is cool and crisp.

We enjoy spearmint on a hot summer day by placing a few sprigs of fresh ‘Kentucky Colonel’ in a large pitcher of ice water, lemonade, or iced tea. It makes a refreshing contribution to alcoholic drinks, from mojitos to the traditional mint julep, and it is a perfect flavoring for cakes, cookies, and ice cream.

DOUBLEMINT AND PEPPERMINT *Mentha* × *gracilis* ‘Madalene Hill’ is the only true doublemint commercially available, combining the flavors of spearmint and peppermint in one plant. It is also sometimes sold as red-stem apple mint. It brings Wrigley’s Doublemint Chewing Gum to mind. While we have true peppermint in our garden, the sharpness of its cool flavor limits its use to items like peppermint candies, chocolate brownies, and mint chip ice cream. ‘Madalene Hill’ is more versatile, since it combines the sweetness of spearmint and the coolness of peppermint; its use extends beyond desserts and is especially appreciated in both alcoholic and nonalcoholic drinks.

If you want to grow true peppermint and mix it with a spearmint instead, then we recommend ‘Mitcham’, ‘Blue Balsam’, or ‘Chocolate’ (which, by the way, has no chocolate flavor but has a sharp coolness that one might associate with chocolate).

ORANGE MINT We usually grow orange or bergamot mint (*Mentha aquatica* var. *citrata*) in our garden for potpourri (combined with rose petals, rose geranium, and lavender), and use it mostly in desserts and beverages. Orange mint is elegant floating in finger bowls with lemon slices at a dinner with greasy finger foods. While orange mint has notes of lavender and Earl Grey tea, its citrus flavor is bright, and there is no hint of mint whatsoever in the taste. Orange mint works well with the stone fruits of summer—peaches, nectarines, plums, apricots, and cherries—whether it is macerated with them for fruit salad, baked in pies or cobblers or crisps, or made into jam or preserves. It is also delicious when combined with chocolate, especially in bittersweet chocolate truffles.



CLOCKWISE FROM TOP LEFT ‘Kentucky Colonel’ spearmint is a favorite cultivar; ‘Madalene Hill’ has a distinctive bloom; red-stemmed doublemint ‘Madalene Hill’ has the flavor of both spearmint and peppermint; we are fond of orange mint, although it does not have a minty fragrance or flavor; ‘Mitcham’ is a true, peppery peppermint.



Monarda didyma

short-lived annual, to 28 inches tall

seedlings do not withstand frost well

full sun

keep constantly moist but not wet

loamy soil

MONARDA

Monarda species

Try different species for flavors from sweet to savory

CULTIVATION AND PROPAGATION

You can generally cultivate monarda in moist, well-drained garden loam in full sun to part shade, depending on the species. Hybrids with red blooms, derived from bee balm (*Monarda didyma*), can grow in sun or some shade, deep humusy soil, and plenty of moisture; in hot climates they will prefer shade. Hybrids that have light and lavender-to-purple floral shades, derived from wild bergamot (*M. fistulosa*), prefer well-drained, gravelly soil in full sun.

While we love the bright red blooms of ‘Cambridge Scarlet’, most *Monarda* selections are prone to powdery mildew. So choose mildew-resistant cultivars, particularly ‘Colrain Red’, ‘Marshall’s Delight’, ‘Purple Mildew Resistant’, ‘Raspberry Wine’, ‘Rose Queen’, ‘Rosy Purple’, ‘Violet Queen’, and *Monarda fistulosa* f. *albescens*.

HARVESTING AND PRESERVING

Harvest the leaves fresh as you need them. Use the sweet red flowers in beverages and syrups, and butters for baking desserts. Use the savory purple- and pink-flowered cultivars with an oregano

flavor in herb butters and cream cheese. The leaves and flowers are easily dried by hanging or laying over screens. The dried flower heads, sometimes tinged with reds and purples, also make beautiful dried flowers. Dried leaves or flowers can be stored in labeled jars out of direct sunlight until the next harvest season.

TASTING NOTES AND COOKING TIPS

The twelve species of Monarda offer a wide assortment of fragrances and flavors—from lemon to thyme to oregano to rose—produced on annual or perennial plants. The leaves of all monardas offer great relief when rubbed on bee or wasp stings, and thereby the common name, bee balm, is apt. Monarda, also known as bergamot, is a native American herb. Its bristly, colorful ornamental flowers have a shaggy headed appearance. All species attract hummingbirds and bees and are good honey plants.

Monarda cultivars with red flowers tend to have a sweeter, tealike aroma and flavor, suggesting Earl Grey tea and rose geranium. The leaves are more herbaceous, while the flowers are sweeter like honeysuckle. Leaves and flowers can be used for sweet dishes—in syrups and beverages, with summer fruits—and baked in scones and tea breads. The lemony forms, although rare, are delightful in tea and in fruit salads. The more common thyme- and oregano-scented types can be used as substitutes for thyme and oregano, and generally their blooms are shades of purple, pink, and white. Use the leaves and flowers of these strongly flavored, savory monardas wherever you would use oregano. The flowers are fun and flavorful scattered over pasta and vegetable salads, grain salads, and pizza. The flowers and foliage of monarda can be quite different in flavor, so smell and taste before using to see if they belong in a savory dish or a dessert.

Monarda species do not have GRAS status but they lack any potentially harmful chemical components and have been used for millennia by Native Americans.



‘Cambridge Scarlet’ monarda



Variegated nasturtium (*Tropaeolum majus* ‘Alaska’) leaves, flowers, and dried seeds

annual, dwarf bushy cultivars, 8 to 18 inches tall; climbers, 6 to 10 feet tall

hardy in frost-free locations

full sun; can tolerate some shade, which produces more leaves, fewer flowers

keep moist but not wet; will tolerate some drought

friable, porous garden loam

NASTURTIUM

Tropaeolum majus

Both leaves and flowers add peppery pungency

CULTIVATION AND PROPAGATION

Nasturtiums start easily from seed in average soil and full sun. Sow seeds in early spring, about the same time as early greens. Poke the bumpy, round seeds into the cold earth along the edges of the kitchen bed or anywhere you want showy mounds, 8 to 12 inches apart. Use them for borders in flower beds to spill over the edges, plant them in rows between the lettuce and peas in the vegetable garden, and cultivate them in containers as well as hanging baskets. Once they have germinated, keep them well watered and free of weeds. Overfertilization results in considerable leaf growth with fewer flowers.

The species is a vine or mounding annual. The vining forms can easily grow 8 to 10 feet long. You can grow them along a fence or up a trellis for support, or you can do as Monet did, and just let them trail across paths, spill over walls, or hang over the edges of containers. Some of our favorite “nasties” are *Tropaeolum majus* ‘Alaska’ (brightly colored flowers with variegated foliage), ‘Amazon Jewel’ (firecracker colors and a prolific climber); and the bicolor cultivars like ‘Peach Melba’ (pale creamy yellow with orange splotches), ‘Empress of India’ (brilliant orange-red blooms against

blue-green foliage, a knockout), and ‘Whirlybird’ (semidouble flowers in many shades with medium green leaves.

HARVESTING AND PRESERVING

Harvest leaves and remove stems, wash, and use like lettuce. Harvesting leaves regularly will keep plants bushy. Pick the flowers with long stems and put them in a glass of water until you are ready for preparation. Rinse blooms gently and shake or pat dry. Pull the flower from the stem and use whole or gently tear into separate petals. Eat the leaves and flowers fresh or use them to make vinegar or herb butter.

The unopened buds marinated in wine or vinegar make an unusual refrigerator pickle. Green seeds are harvested and pickled and used as a substitute for capers.

TASTING NOTES AND COOKING TIPS

Use both the leaves and flowers to add a pleasant hint of heat and pungency (which dissipates when cooked). Chop the leaves as a topping for pizza, or shred and toss with pasta, rice, couscous, or egg or chicken salad. The foliage lends a peppery, cresslike taste to salads, sandwiches, and green sauces.

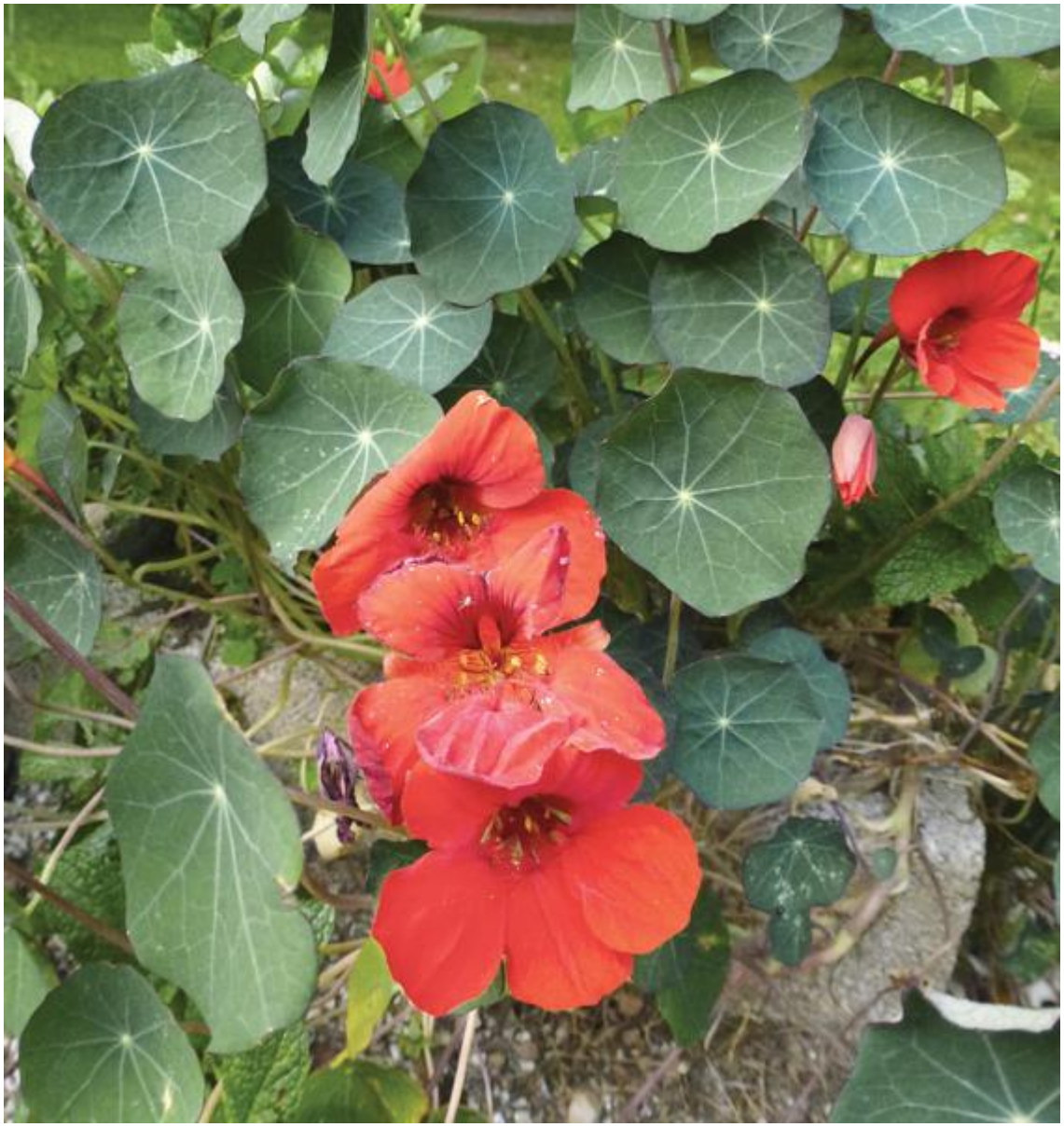
The flowers have a similar pepperiness, though they are a bit milder with a hint of floral scent. They make showy containers for dips or spreads, as well as for cold dishes like egg salad, chicken salad, or vegetable salad. They are slightly fragile when filled, so place them on a slice of bread or vegetable to pick them up easily. Whole blooms can be used in salads or as garnishes. Cut flowers and leaves into thin ribbons and blend with butter, or toss with pasta, vegetables, or fish.



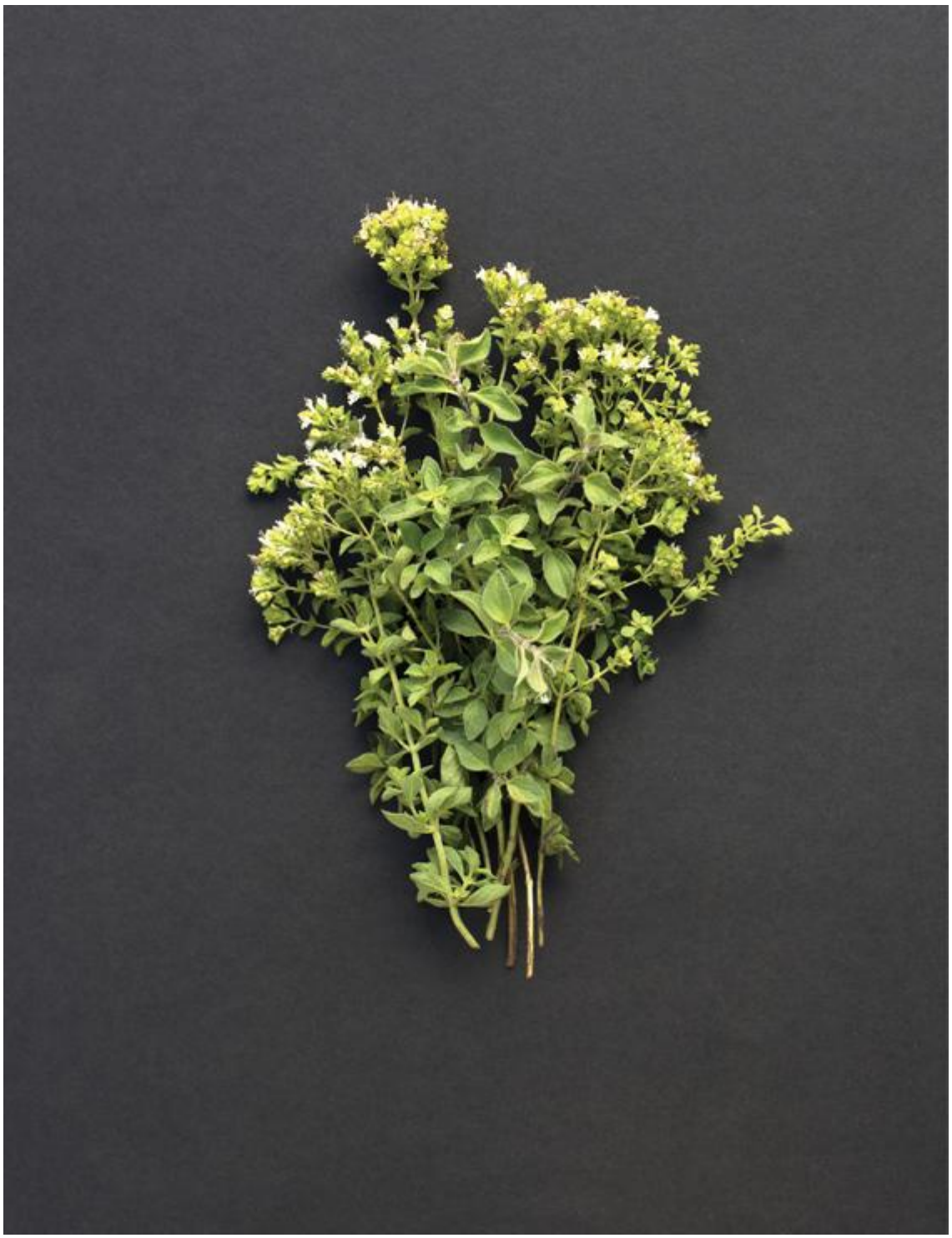
The bicolored ‘Peach Melba’ nasturtium has yellow and orange blooms.



‘Whirlybird’ nasturtium comes in an assortment of colors.



‘Empress of India’ reigns supreme with her scarlet flowers against blue-green foliage.



Origanum vulgare subsp. *hirtum* ‘Greek’

herbaceous perennial, to 3 feet tall

hardy to zone 6

full sun

keep moist to somewhat dry

well-drained gravelly loam

OREGANO

Origanum vulgare subsp. *hirtum*

Signature pungency with a bite to the tongue

CULTIVATION AND PROPAGATION

Grow oregano in well-drained loam in full sun. The addition of a light top dressing of gravel or sand will result in more stout growth that is resistant to disease. For oregano with a full, robust flavor, set out plants in full, blaring sun and give them plenty of room with good air circulation. Oregano is particularly subject to sudden wilts caused by *Fusarium oxysporum* and *F. solani fungi*, which tend to strike in shady, moist, crowded conditions.

To be sure you are getting the real, pungent oregano plant, purchase the cultivar known as ‘Hot and Spicy’. Plants labeled “Greek” are also usually the real thing. Ultimately, you will need to let your nose be your guide; the foliage should smell strong and pungent. Then taste a leaf; it should be hot on the tongue.

HARVESTING AND PRESERVING

The flavor of oregano is most intense in the flowers. Harvest plants when about half the flowers have opened. Use leaves and flowers fresh or dried. Oregano dries quite nicely; dry by hanging for several

days. Then strip off both leaves and flowers, and store in labeled jars out of direct sunlight until next season's harvest.



Italian oregano is a cross between a spicy oregano and sweet marjoram.

TASTING NOTES AND COOKING TIPS

The taste and scent of oregano are particularly evocative of the Mediterranean region. What really defines oregano is a chemical, carvacrol, which has a harsh, nose-prickling, creosotelike odor similar to thyme (thyme is scented with thymol, a related phenol). With the presence of carvacrol, you can be sure that there will be a pungency in taste—a hot bite.

Italian oregano in American herb markets (*Origanum* ×*majoricum*), sometimes sold as Sicilian oregano, has a bit of pungency tempered by the sweetness of marjoram. It is used to create many dishes in Italy, from tomato sauce and marinades to minestrone, and is cooked with vegetables and beans. It is one of Susan's favorites in the kitchen, combining savory and sweet flavors, both fresh and dried.



‘Hot and Spicy’ oregano



Petroselinum crispum var. *neapolitanum*

biennial, to 27 inches tall

can withstand frost

full sun

keep moist but not constantly wet

well-drained garden loam

PARSLEY

Petroselinum crispum

Clean, delicate flavor and high nutritional value

CULTIVATION AND PROPAGATION

Seeds (really fruits) have slow, irregular germination, between 10 and 28 days. Seed started indoors and transplanted into pots has a more rapid and uniform germination without special treatment, probably because of constant moisture levels and warm soil temperatures. Parsley presents no problems as a transplant as long as it is properly hardened off (placed outside for increasing amounts of time so it can acclimatize to outdoor conditions) before it is planted in the garden. A floating row cover will prolong fall harvest. In other aspects, parsley should be treated as a leafy green vegetable and grown in rich, moist soil with good drainage.

Although parsley is a biennial (blooms in its second year), it occasionally blooms the first year, which reduces yields. Parsley subjected to thirty days of temperatures below 40°F will flower. It is usually useless as an herb in its second year because the leaves turn bitter after the flower stems rise from the center of the plant in early spring. When grown for its foliage, parsley is considered an annual.

The bright green, flat or curly leaves provide a delightful accent in the sunny herb garden and make an excellent edging plant. Three types of parsley are grown in the United States: common (curled-

leaf, var. *crispum*), plain (flat-leaved, or Italian, var. *neapolitanum*), and Hamburg or turnip-rooted (var. *tuberosum*). The first two are used in sauces, stews, soups, prepared meat products, and condiments, while the latter's large, edible root is considered a vegetable.

HARVESTING AND PRESERVING

Parsley may be harvested by hand continuously throughout the year as a culinary green. The outer leaves should be clipped 1 to 3 inches above the crown. Up to three sowings of seeds may be possible in some areas for harvests April to December, and the home gardener will find that a cold frame or sunny indoor windowsill will provide fresh parsley all winter. Since dried parsley loses much of its flavor, use parsley fresh. Keep some parsley butter on hand in the freezer.

TASTING NOTES AND COOKING TIPS

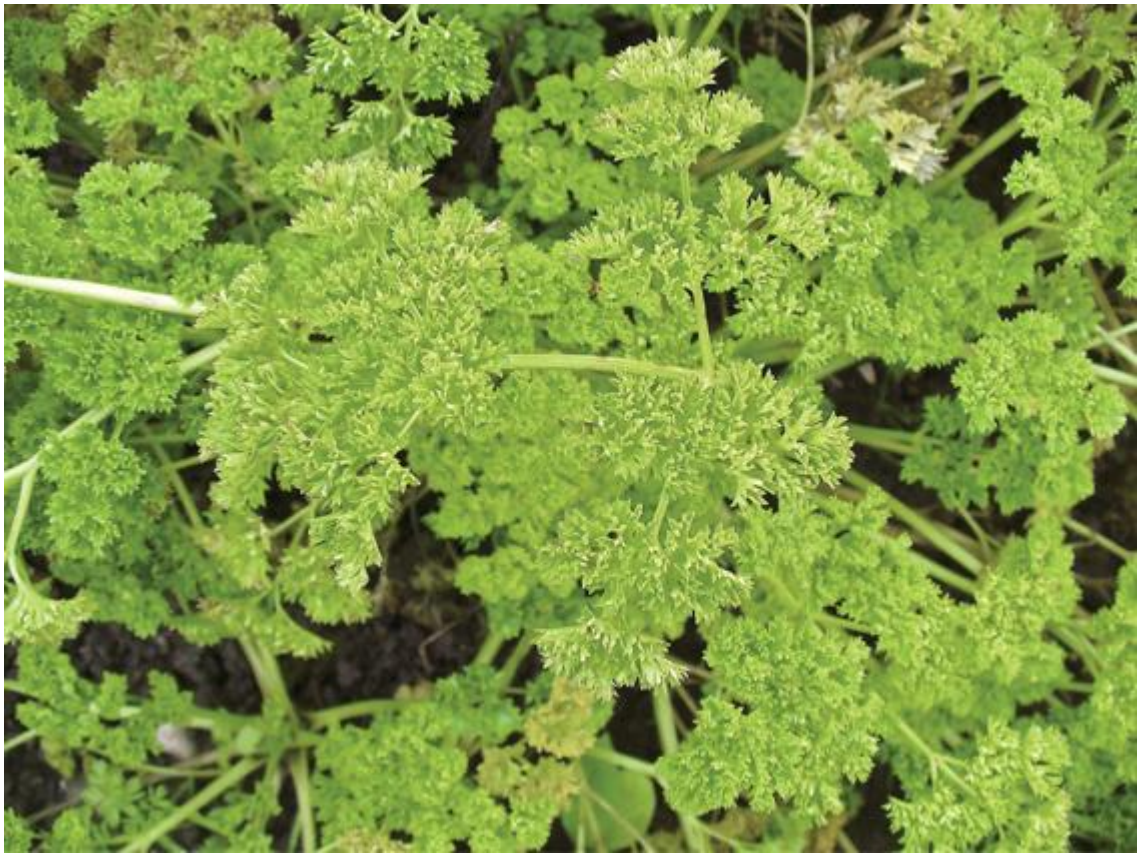
Parsley is an herb that many people recognize quickly. But it may be among the most misunderstood plants in the herb garden. Parsley is often used as a green garnish, especially on restaurant dinner plates, and sometimes it just gets thrown away, which is a shame because the leaves are quite high in vitamins A, B1, B2, and C, as well as niacin, calcium, and iron.

The smell and taste of this vibrant herb are pleasantly green and herbaceous. Throughout the world, parsley plays a starring role in a variety of prepared foods. It is used fresh in salads and sauces and can be added toward the end of cooking to just about any savory dish. Parsley is the main ingredient in salsa verde and can be used as an alternative or supplement to basil pesto. Parsley is a key ingredient in many herbal blends because it combines well with just about all herbs, supporting their flavors—sometimes tempering a strong-flavored herb, or complementing a milder one. All parsleys taste green and herbaceous, a bit grassy with just a hint of

sweetness and tanginess (think mild spinach or strong green leaf lettuce) and a mineral aftertaste. The clean, delicate flavor also acts as a breath freshener.

FLAT-LEAVED PARSLEY Many cooks maintain that Italian flat-leaved parsley has a more pronounced flavor. In reality, this perception is related more to texture than chemistry: the curly leaved parsleys are fluffy and airy, dispersing the parsley flavor into a cotton-candy type of delivery vehicle. Flat-leaf types include ‘Perfection’, ‘Plain’, and ‘Plain Italian Dark Green’.

CURLY LEAVED PARSLEY Curly leaved cultivars include many very similar ones, so take your pick: ‘Afro’, ‘Banquet’, ‘Bravour’, ‘Curlina’, ‘Dark Moss Colored’, ‘Decorator’, ‘Deep Green’, ‘Envy’, ‘Evergreen’, ‘Ferro’, ‘Forest Green’, ‘Improved Market Gardener’, ‘Moss Curled’, ‘Paramount’, ‘Perfection’, and ‘Sherwood’.



Petroselinum crispum var. *crispum* is a curly leaved parsley.



perennial, to 12 inches tall

hardy to zone 5

partial to full sun

keep moist but not constantly wet

garden loam

ROMAN CHAMOMILE

Chamaemelum nobile

Sweetly herbaceous, with notes of green apples

CULTIVATION AND PROPAGATION

Roman chamomile prefers cool, damp summers. Under the best circumstances, the home gardener should be happy to allow Roman chamomile to ramble, cottage-garden style, through moist, organic-rich spaces between and around walking stones. The cultivar ‘Flore Pleno’ will typically grow best for the home gardener.

HARVESTING AND PRESERVING

Harvest flowers from late July to early August. Spread them on baskets or screens and dry them out of direct sunlight in a place with good air circulation, or use a dehydrator. If you are in a humid climate, spread the flowers on baking sheets and place them in an oven with just a pilot light or turn on the oven light and leave for 24 to 48 hours or until completely dried. Store the dried blooms in labeled jars out of direct sunlight and use before the next harvest season.

TASTING NOTES AND COOKING TIPS

Roman chamomile may be every herb gardener's favorite plant to simply walk on. A barefoot sunrise meander through a patch of chamomile on a dewy summer morning may bring to the body a soft tranquility, and to the nose a fruity aroma reminiscent of bananas and apples. The scent has been described as sweetly herbaceous, somewhat fruity, warm and tealike with nuances of green apples, while the taste has fruity, herbaceous characteristics along with a mild bitterness.

Chamomile flowers are most famous for their use as a calming tea. They can be used to make syrups, as a popular ingredient in cocktails and cordials, with fruit, and in desserts from cakes and cookies to puddings and pies. It's best to stick to the flowers for culinary uses, raw leafy branches have been known to induce allergic reactions.

Our favorite culinary cultivar, 'Flore Pleno', has double white flowers rising to about 3 inches; we gather these blooms for the kitchen.



tender perennial shrub, to 6 feet tall

hardy to zones 7 or 8

full sun

keep moist but not constantly wet

light loamy soil

ROSEMARY

Rosmarinus officinalis

Strong flavor of pine, green resin, and hints of eucalyptus

CULTIVATION AND PROPAGATION

Rosemary is difficult to grow from seed because of low seed viability and slow growth, plus named cultivars do not remain true to type when seed-grown. Cuttings root readily in water, in a variety of aggregates, or in a combination of sphagnum peat moss and perlite.

In pots, rosemary is especially sensitive to overwatering; the soil must dry slightly between waterings, though not to the point where the plant wilts. Overwatered rosemary develops brown leaf tips, an indication that some roots may have begun to rot. Clay pots will allow the soil to dry faster, a condition that lessens root-rot problems during periods of low light in winter. Pot-grown plants may become root-bound quickly (yellowing of lower leaves at the base of the plant is an early warning of this stress) and should be repotted during periods of rapid growth—generally spring and summer. If planted directly into the garden, rosemary may be fertilized once in the season with a granular 5-10-5 or 10-10-10 fertilizer during active growth.

Rosemary may be pruned severely to shape the plants or to keep them from interfering with nearby herbs. Pruning is also a good method of maintaining airflow around and through rosemary plants, an important cultural feature that helps prevent foliar diseases that

cause wilt. If you grow rosemary in a cool climate, grow it in pots and bring indoors for the winter.

This herb is subject to attacks from spider mites, mealy bugs, whiteflies, and thrips, as well as attacks by fungi and stem galls. Organic mulches near the base of the plant often hold water and moisture near low-lying foliage, which provides a home and pathway for water-borne fungi and bacteria. Mulches of pea gravel, ground oyster shells, or sand, which dry rapidly and radiate drying heat into the interior of dense rosemary plants, help to reduce diseases.

HARVESTING AND PRESERVING

Harvest plants fresh as needed. The flowers are edible too, and are best eaten fresh. Rosemary sprigs may be easily dried by hanging or by placing the leaves on screens, and storing them in labeled jars out of direct sunlight until next season's harvest.

TASTING NOTES AND COOKING TIPS

Rosemary has long symbolized remembrance, and for good reason. After we work with rosemary plants or even brush against them, the invigorating, piney fragrance clings to wool, hair, and skin. Rosemary scents can be varied, but good culinary rosemary is deeply resinous, scented of pine with nuances of eucalyptus. The strong taste echoes the aroma, with pine, green resin, and sometimes just a hint of bitterness.

Rosemary is used in kitchens throughout the Mediterranean region, especially in France, Italy, and Spain. Rosemary goes well with fatty foods—many meats, from chicken to pork to beef, and also cheeses. It is excellent with seafood, and pairs well with many vegetables, especially grilled potatoes. Rosemary branches, left over from stripping the leaves, also make great skewers for grilling. A bit of caution for those who have not cooked with rosemary before: use

sparingly at first until you are used to the flavor and its intensity, then gradually try recipes with more rosemary.

Sometimes, a few whole sprigs of rosemary can be added to a dish, perhaps laid in the bottom of a roasting pan for potatoes, chicken, or a roast. The foliage on rosemary is tough and needlelike, so use the whole sprigs for flavoring, and remove them before serving, or finely mince the rosemary leaves before adding them to a recipe.

Many cultivars of rosemary are available, but we prefer those that do not smell of camphor but have the aroma of pine with nuances of eucalyptus and lemon. ‘Shady Acres’ is particularly pleasant-tasting and low in camphor. ‘Tuscan Blue’ is a handsome specimen with blue flowers, and the camphor content is very low. Flowers on different cultivars range from lavender, blue, and deep purple to white and pink, while growth can be upright or sprawling.

Although needles vary in thickness, most upright rosemary bushes look similar except for the blooms. If you are in doubt, reject any rosemary with an overpowering scent of camphor and steer toward those with a piney-eucalyptus aroma. For example, ‘Arp’ is routinely hardy to zone 7, but it contains 19 percent camphor in its essential oil.



Rosemary appreciates ample drainage, which is enhanced by a mulch of pea gravel and rocks.



Dried “threads,” or stigmas, of saffron crocus (*Crocus sativus*)

cormous perennial, to 6 inches tall

hardy to at least zone 6

full sun

keep well-drained

basic garden loam

SAFFRON

Crocus sativus

Only spicy, mildly pungent flower stigmas are edible

CULTIVATION AND PROPAGATION

In Spain, saffron planting traditionally begins during the feasts of Saint John and Saint Peter at the end of June. Corms are planted 5 to 7 inches deep, 6 to 8 inches apart, and 4 inches between rows, in well-drained, loose, sandy soil that has been well dressed with rotted manure before planting. Blossoms are fewer when corms are planted at shallower depths. The corm lies dormant from about May to September, then autumn rain causes blossom production.

The home gardener can plant a few dozen saffron corms and gather enough stigmas to make a few culinary creations. It is fun to see how the plants grow and experience why the stigmas are so prized. Every three years, dig up the corms, separate them (each corm produces four to ten daughter corms each season), high-grade for size and health, and transplant to avoid disease and crowding.

HARVESTING AND PRESERVING

Gather flowers in the morning. Spread the lavender-colored flowers on a table and split the blossom down the stem. With your fingers,

remove the burnt orange, three-part stigma, which is the only edible part of the plant. Place the fresh saffron stigmas onto a fine-meshed screen and dry over gentle heat or in the oven with just the pilot or oven light on. The final product will be dry to the touch, with its distinctive flavor intact. Saffron should be stored in tightly sealed glass jars out of direct light, at a relative humidity not exceeding 57 percent.

TASTING NOTES AND COOKING TIPS

Ounce for ounce, saffron is one of the most expensive herbs or spices in the world, second only to natural vanilla. Saffron has an unusual, intensely sweet, somewhat spicy, flowery-soapy aroma with a slightly fatty-herbaceous undertone. In the kitchen, saffron imparts a distinct, floral perfume and mildly pungent taste that is slightly bitter (similar to blackstrap molasses in the most minute amount), and an exotic richness to a wide array of dishes, as well as a bright, orangish yellow color.

Many cultures consider saffron's inimitable bouquet and taste essential, for both color and flavor, in the best-loved, traditional dishes. It is especially paired with all types of seafood, as well as rice, pasta, grains, and breads. It is added to Spanish paella, a seafood and rice casserole; Italian risotto, a rice dish; Provençal bouillabaisse, a fish stew; Russian *kulich* or Easter bread; Pennsylvania Dutch *bot boi*, or chicken noodle stew; and Swedish *lussekatter*, or Saint Lucia's cakes. Saffron also is used to color cheeses and liqueurs such as Fernet-Branca.



Saffron flowers with precious stigmas.



Salvia officinalis

shrub, 2 to 3 feet tall

hardy to zone 6; pineapple sage hardy to zone 9

full sun

keep moist but not constantly wet

well-drained garden loam

SAGE

Salvia species

Warm-spicy, herbaceous notes of camphor and eucalyptus

CULTIVATION AND PROPAGATION

The home gardener will usually be satisfied with one or two large plants of *Salvia officinalis* ‘Berggarten’, a cultivar of common or garden sage. Pinch the growing tips of any of the culinary salvias regularly throughout the first summer to create many branches. Also cut back the plant about one-third before new growth starts in the second year. Give a side dressing of fertilizer six to eight weeks after planting. When plants are established, fertilize in spring when growth starts and again about the first week in June.

Named cultivars of garden sage are easily propagated from cuttings 1½ to 2 inches long dipped in root hormone. If taken in late fall to early winter, the cuttings will establish ample roots in a sunny, protected location for transplanting in the garden by spring. Take cuttings from new growth of nonflowering stems, preferably from the base of the plant if available.

HARVESTING AND PRESERVING

Harvest fresh leaves of culinary sage as needed. Only fresh, not dried, garden sage leaves can be sautéed for the popular garnish for pasta. Sages are easily dried by hanging or by placing the leaves on screens, and storing the dry leaves in sealed, labeled jars out of direct sunlight until the next harvest. The flowers of *Salvia officinalis* are edible, too. They can be used fresh as a garnish or in an herb butter. Use *S. officinalis* blooms in savory dishes.

TASTING NOTES AND COOKING TIPS

Salvia officinalis has a unique, assertive, warm-spicy herbaceous note of camphor and eucalyptus. This feature is evident in both the bouquet and the taste, along with a musky characteristic and just a bare suggestion of lemon as the endnote. Slightly bitter and resinous, sage is particularly associated with sausage and poultry stuffing and is widely used in flavoring condiments, meats, beans and stews, cheeses, grain and pasta dishes, root vegetables, sauces, liqueurs, and bitters. Fresh garden sage leaves are especially attractive when pressed onto turkey, chicken, and ravioli. The flowers can be used as a savory garnish on grain dishes, pasta, or pizza. Use sage in small quantities at first, since it has a strong flavor.

Salvia officinalis ‘Berggarten’ is the best aromatic plant and strongest tasting of the numerous cultivars of garden sage. It has large, rounded leaves, few flowers, and a fragrance that matches the imported Dalmatian sage (the commercial dried sage that is most often encountered by cooks). We also like the diminutive-leaved ‘Nana’, since the small, whole leaves can be used in cooking. We enjoy the garden aesthetics of ‘Purpurascens’, which has lovely leaves tinted lavender and gray-green, and ‘Woodcote Farm’, which has foliage in mottled shades of sage green, although these are not quite as big in flavor.

PINEAPPLE AND FRUIT-SCENTED SAGE Both pineapple sage and fruit-scented sage can be grown in the garden and treated as annuals.

We prefer to grow these tender perennials in large pots so we can enjoy them into winter and the next year.

Pineapple sage (*Salvia elegans*) is a vigorous, strongly stemmed plant with red-tinged green leaves scented of pineapples, providing the common name. Think of the cream-colored Lifesaver in the five-flavors roll you ate as a kid—this is what *S. elegans* smells and tastes like. It is pleasantly fruity and sweet in aroma and flavor, and does not have the camphor or muskiness of *S. officinalis*. Pollinators, particularly hummingbirds, are attracted to pineapple sage.

We grow the straight species of *Salvia elegans*. 'Honeydew Melon' is an attractive selection with a melonlike scent, scarlet flowers, and lime-green foliage.

In the kitchen, use *Salvia elegans* in desserts, syrups, and beverages. We also like to use fruit-scented sage (*S. dorisiana*), which is sometimes called peach sage because of its large, bright green, peach-scented leaves and fuchsia flowers. These are often used to line cooking pans for peach cobbler to enhance flavor. The red blooms of pineapple sage and the fuchsia-colored flowers of fruity sage can be dried for tea. The young shoots of pineapple sage are used to flavor drinks, and its fresh leaves and scarlet-red flowers have been used as garnishes for desserts. The showy flowers, leaves, or the syrup made from them can also be used to echo the pineapple flavor in pineapple sorbet, piña coladas, and pineapple upside-down cake.

Hands down, peach sage (*S. dorisiana*) is the herb that kids will always choose to use in scones; it's often called tutti-frutti sage. The flavor and fragrance of the leaves and flowers of all the fruit-scented sages are best captured in baked goods, ice cream, sorbets, and infusions. They are good in tea, fresh, or dried.



CLOCKWISE FROM TOP LEFT *Salvia officinalis* ‘Berggarten’ has more rounded leaves than the other sages and a more robust flavor; common garden sage in bloom; bright red blooms of pineapple sage (*Salvia elegans*) appear late in the season; *Salvia officinalis* ‘Purpurascens’ brings a striking purple hue to the herb garden;

the variegated leaves of *Salvia officinalis* ‘Woodcote Farm’ are subtle shades of gray-green; the bright green leaves of *Salvia elegans* are sweet and scented of pineapple; the diminutive leaves of *Salvia officinalis* ‘Nana’ make it a good choice for cultivating in containers.



short-lived herbaceous perennial, to about 18 inches tall

hardy to zone 5

part to full sun

keep moist but not constantly wet

well-drained garden loam

SALAD BURNET

Sanguisorba minor

Light cucumber flavor makes it a kitchen favorite

CULTIVATION AND PROPAGATION

You can easily grow salad burnet from seeds planted in fall or spring. It will freely reseed, and the reseeded plants are often healthier than the original plants. Provide light, well-drained, organic soil with good moisture retention in full sun. Only the straight species is available.

HARVESTING AND PRESERVING

Start cutting one-year-old plants in early spring through early summer. The plant grows 12 to 18 inches tall when flowering, but normally exists as a tight rosette of leaves. Flowers are minute and green in small, tight heads, and the fuchsia-red stigmas are often visible. To keep the plants vigorous and limit self-seeding, cut the flowers as they appear. They are good to eat but can become fibrous if cut too late. Leaves are best fresh because they lose much of their flavor when dried. Salad burnet leaves make mild-flavored, though tasty, herb vinegar or herb butter.

TASTING NOTES AND COOKING TIPS

Salad burnet is one of those herbs that can shine in the garden as well as in the kitchen. Considered a landscape plant, it has unusual accordionlike, bright green leaves, which are somewhat lacy and ferny in appearance, providing texture and contrast in the herb garden. In the kitchen, salad burnet's light cucumber-flavored leaves are useful in several ways. In France and England, the leaves are used for dressings, salads, soups, and sauces—wherever a light cucumber flavor is needed. The decorative leaves make it especially useful as a garnish for pâtés and aspics, and folded into a butter spread for a cucumber sandwich. Its serrated leaves are often used to echo the flavor of the cucumber and citrus slices in the traditional Pimm's Cup, a refreshing summer cocktail. Most often, salad burnet is used fresh rather than cooked and makes a good alternative to decorative sprigs of parsley for many dishes.



This oak-leaved *Pelargonium* variety has a piney scent

tender perennial shrub, 1 to 30 feet tall

hardy to zone 9

full sun

keep moist but not constantly wet; can withstand drought

light, loamy soil

SCENTED GERANIUM

Pelargonium species

A scented geranium to match most flavors and fragrances

CULTIVATION AND PROPAGATION

Scented geraniums are selections of the genus *Pelargonium*, especially those native to South Africa. Because most species are not hardy below freezing, they are best raised as potted plants and overwintered indoors or in a cool greenhouse. Cuttings may be easily rooted in late summer to carry over through the winter. Scented geraniums (nicknamed pellies because of their genus name) do best in full sun in near-neutral garden loam in places with relatively cool, dry summers. Most flower best in late winter to early spring after a cool but not freezing winter.

Propagation by cuttings is important for preserving the unique characteristics of individual cultivars. While many geranium cultivars root easily and quickly in water this is not usually recommended. Use more traditional rooting methods for best results.



Rose-scented geraniums are the most popular pelargoniums.

Our first choice of a scented geranium used frequently in cooking is the cultivar ‘Graveolens’, sometimes called ‘Old Fashioned Rose’ geranium. It is often sold as *Pelargonium graveolens*, which it closely resembles but which is not in common cultivation. The fragrance is definitely roselike but with lemony undertones and touches of lavender and a somewhat green leafy rose. It has a nice flavor in pastries (with the whole leaf baked on top or diced and incorporated within) and also in teas. ‘Rober’s Lemon Rose’, with its asymmetrical leaves, combines the aroma and flavor of roses and lemon that is a favorite of Susan’s in baked goods and tea, as well as with poached fruits.

Our second choice would be the lemon-leaf pellies, either *Pelargonium citronellum* ‘Mabel Grey’, with its large, jagged leaves, or the smaller leaved *P. crispum*, or selections like ‘Variegated Prince Rupert’. These leaves have an intensely sweet, lemon perfume and flavor, so they make excellent syrups, infusions for custards, puddings and dessert sauces, or cake decorations. And the smaller leaves can simply be floated in punches or added to fruit salads.

HARVESTING AND PRESERVING

As the season progresses, scented geranium leaves and flowers may be harvested fresh. The leaves may also be dried for teas, but they tend to lose their color and bouquet when dried. Pellies make a lovely jelly (pelly jelly). Even better ways to capture their essence are to make a syrup or scented geranium sugar—both are easy to make and are quite flavorful—which you can use in baked goods and teas, and to poach fruit.

TASTING NOTES AND COOKING TIPS

Name a delectable fragrance—rose, lemon, orange, lime, strawberry, peppermint, nutmeg, spice, apple, apricot, coconut, filbert, ginger—and there's a scented geranium to match. With such a palette of flavors, it is difficult to select just a few favorites, but here we are focusing on those with culinary uses. Most of the scented geraniums taste like they smell. But since some are a little bitter or astringent, be sure to taste a leaf before using it in a recipe. Also, because many of the leaves can be fibrous or tough, remove the tough stems and chop the leaves finely, or make an infusion with the leaves and then discard them.



Pelargonium citronellum ‘Mabel Grey’ has a dynamite lemon fragrance and flavor.



Rumex acetosa

hardy perennial; garden sorrel 20 to 50 inches tall; French sorrel 8 to 20 inches tall

hardy to zone 3

full sun to light shade

keep moist but not wet

prefers rich, loamy soil

SORREL

Rumex species

Sour with a lemony zest

CULTIVATION AND PROPAGATION

You can grow sorrel easily from seed or propagate it by root division in spring or fall. Both *Rumex acetosa* and *R. scutatus* are hardy perennials, somewhat frost resistant. They prefer rich, well-drained soil and full sun, though they will grow in partial shade. Sorrel tends to look a bit weedy. The leaves appear on tall stems in dense clusters, sending up a flower spike with tiny greenish flowers, which form small, yellow-brown seeds. Cut back flower stalks continually so leaves can be harvested throughout the season. Sorrel does not like hot weather; the leaves become more bitter tasting and may die back if it is very hot and humid. But the plant will put out new growth in the fall and grow new leaves until a killing frost. In temperate climates, the herb may stay green all winter, though growth is limited.

We cultivate both garden sorrel (*Rumex acetosa*) and French sorrel (*Rumex scutatus*). Garden sorrel has arrow-shaped leaves and is sometimes called broad-leaf or common sorrel. French sorrel's leaves are more shield-shaped, and it is sometimes referred to as buckler-leaf sorrel.

HARVESTING AND PRESERVING

Harvest leaves when they are small and tender to use in salads. Once leaves get larger, use them in cooked dishes or with other foods; remove the center rib if it is stringy or tough. Sorrel is best eaten freshly picked. It has thin leaves and does not freeze or dry well.

TASTING NOTES AND COOKING TIPS

Sorrel's culinary laurels rest on the French classics: sorrel soup and sorrel sauce. Renaissance herbalist John Gerard complimented sorrel when he said, "It is the best of sauces not only in virtue, but in pleasantness of taste." Leaves smell herbaceous and perhaps with a hint of lemon. The flavor is indeed sour with a lemony zest, providing a clear, tart accent to any recipe. This feature comes from the presence of oxalic acid, which also means sorrel should not be consumed in large quantities or too often, especially by those inclined to kidney stones. Sorrel is considered a spring tonic by the French and is a welcome harbinger of spring—among the first green herbs to appear in the garden.

When small, this tender-leaved herb is used in salads, especially in England; its lively taste is best combined with other salad greens. If leaves are large, remove the tough center ribs and tear the leaves into bite-sized pieces. Salads containing sorrel will require less lemon juice or vinegar, or none at all, in the dressing. It is good with potatoes, beets, or other vegetables, in egg dishes, and in sauces or mayonnaise. It is a perfect addition to salsa verde. Sorrel sauce is often paired with seafood—for all types of fish, or scallops—and also is a nice accompaniment to poultry. To retain the bright green color in soups and sauces, cook it briefly or blanch for about a minute and then shock it in cold water.



Common garden sorrel has elongated leaves.



The leaves of young French sorrel (*Rumex scutatus*) are shorter and wider than those of garden sorrel (*R. acetosa*).



shrubby perennial, 18 to 28 inches tall

hardy to zone 9

full sun

keep moist but not constantly wet

well-drained garden loam

STEVIA

Stevia rebaudiana

Sweeter than sugar

CULTIVATION AND PROPAGATION

Stevia (*Stevia rebaudiana*) is easily cultivated in pots or good garden loam in full sun. This species is normally found in moist to wet areas, and it does not tolerate drought well. Seeds may set after flowering in late fall to early winter, but these inevitably fail to germinate. Propagation is best from cuttings during active growth in summer.

HARVESTING AND PRESERVING

Leaves can be used fresh, infused to sweeten tea or other beverages. Dry leaves during the growing season and before a frost. Harvest leaves on a sunny, dry day, then rapidly dry them in a low oven (110 to 158°F). Leaves should be kept dry and stored in labeled jars out of direct sun until the next growing season. Crumble or crush dried leaves as needed.

TASTING NOTES AND COOKING TIPS

The leaves of stevia have been used by native populations for centuries as a sweetener. Stevioside, the active sweet component, is

100 to 300 times sweeter than sucrose, so can sweeten foods and drinks in much smaller amounts. It is noncaloric, anticariogenic (inhibits tooth decay), and nonfermentable; it does not darken upon cooking and is highly stable when exposed to both acids and heat. Stevioside has a detectable taste at a threshold of 0.002 percent, and large amounts taste bitter.

Stevioside is commonly used as a sweetener in Japan, China, Korea, Israel, Brazil, and Paraguay. In North America, stevia has been used as a natural sweetener for years.



annual, 12 to 18 inches tall

full sun

keep moist but not constantly wet

light loamy soil

SUMMER SAVORY

Satureja hortensis

Pungent taste similar to thyme and oregano

CULTIVATION AND PROPAGATION

Summer savory is an annual; sow the seeds in spring and they will germinate in two to three weeks. Seeds older than one year quickly lose their viability. Light is necessary for germination, so sow seeds at a shallow depth. For best growth and development, thin plants to about 6 inches apart. This 15- to 18-inch-tall herb has narrow, bright green leaves with light pink flowers. Summer savory grows rapidly.

HARVESTING AND PRESERVING

Harvest young, tender shoot tips when the plant reaches 6 inches in height, to slow flower production and encourage branching. Otherwise, summer savory has a tendency to get leggy and flop over. As the season progresses, continue to harvest regularly to retard flowering.

Before the first autumn freeze, cut the entire plant for drying. Store the dried leaves in a labeled jar out of direct sunlight until next season's harvest. Savory-infused vinegar, a pantry staple, is a

perfect condiment for dressing green beans and three-bean salad, as well as taco salad and other Mexican dishes.

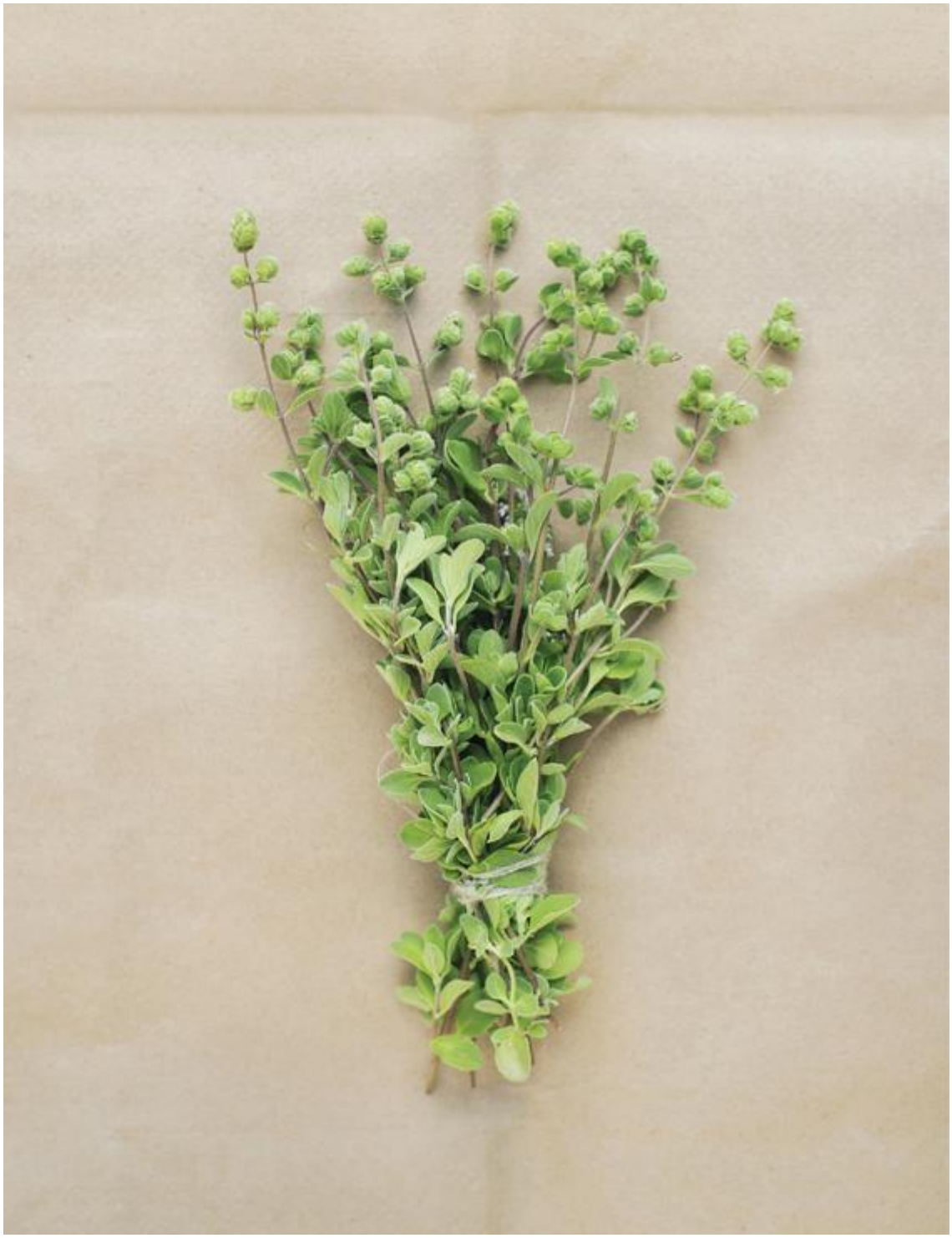
TASTING NOTES AND COOKING TIPS

Savory lets you know its flavor just by its name. Its pungent, thyme- and oreganolike taste goes well with stuffings, sausages, stews, and meats, as well as vegetable dishes, especially beans. In Germany, it is known as *Bohnenkraut* (bean herb), and its flavor complements both fresh and dried beans. Savory is among the main herbs in the traditional French blend herbes de Provence, which is used to flavor everything from game and pasta to eggs and cheese dishes. The oregano odor in savory is more muted, not as harsh, as in Greek oregano, though its spice can be hot on the tongue.

Summer savory is preferred over winter savory for culinary purposes in most cuisines. For the average palate, it is milder, with hints of citrus, though it still has a bite. Summer savory is used commercially in the formulation of vermouths and bitters, sauces, soups, and prepared meats.



Summer savory (*Satureja hortensis*) is easily grown from seed.



tender perennial, 12 to 18 inches tall

hardy to zone 9

full sun

keep moist but not constantly wet

well-drained gravelly or rocky loam

SWEET MARJORAM

Origanum majorana

Combines sweet and savory, with hints of spice

CULTIVATION AND PROPAGATION

Sweet marjoram is a tender perennial that is treated as an annual in most northern gardens. It can be grown from seeds or cuttings, but cuttings are less vulnerable to root and stem diseases that can result from seeds grown under lights.

HARVESTING AND PRESERVING

Harvest fresh leaves during spring and summer. Sweet marjoram leaves are easily dried on screens or when the stems are hung up. Convection drying at about 113°F preserves the best flavor for marjoram. Store dried leaves in labeled jars out of sunlight until the next season's harvest. Sweet marjoram makes a delicate herb butter and well-rounded vinegar, alone or combined with other herbs.

TASTING NOTES AND COOKING TIPS

Perfumers describe the clean smell of sweet marjoram as a warm-spice, aromatic, and woody scent reminiscent of nutmeg and cardamom. The small, gray-green, felty leaves and terminal heads of white flowers make the plant a delight in pots on the patio. It is also a kitchen favorite, combining a sweetness suggesting mild spice and green herb with savoriness akin to oregano though not as pungent. It has a well-rounded, pleasant flavor that is good in just about any dish; it also works well with most other herbs. Use it in soups and sauces, with vegetables, pasta, grains, legumes, and vinaigrettes, or with poultry, seafood, or meat.

Sweet marjoram is widely used in beverages, meats, baked goods, and condiments. The essential oil of sweet marjoram shows antimicrobial activity and is among the few oils from *Origanum* plants that can be used in perfumery.



Thymus vulgaris

erect subshrub, to about 1 foot tall

hardy to zone 6

full sun

keep moist but not constantly wet; can withstand drought when fully established

light loamy soil

THYME

Thymus species

Warm, somewhat sweet, and slightly biting

CULTIVATION AND PROPAGATION

All thymes require well-drained, near-neutral soil and a position in full sun. At least 50 percent sand, gravel, or similar aggregate in the soil is beneficial because water is not retained for long periods of time and so the roots are less likely to rot. While common thyme may be directly seeded, the process is slow. You will gain much time the first year by setting out transplants. Reproduction of favored thymes requires vegetative propagation by cuttings, layerings, or divisions.

HARVESTING AND PRESERVING

Harvest thyme as a fresh herb throughout the growing season. Thyme is easily dried over screens or by hanging. Store whole thyme leaves in labeled jars out of direct sunlight until the next season's harvest. Thyme makes a full-flavored herb butter and combines well with other herbs. Lemon thyme makes a delightful vinegar or syrup.

TASTING NOTES AND COOKING TIPS

Common thyme or garden thyme (*Thymus vulgaris*), native from the western Mediterranean to southeastern Italy, is widely used in cooking. *Thymus vulgaris* has much variation, often not characterized by cultivar names, in its native range. Individual plants exhibit a large assortment of growth habits, leaf sizes, leaf colors, and scents. For culinary purposes, we prefer the ones that are high in thymol, which causes a smell that is similar to oregano, though subtler. The scent should be distinctly aromatic—warm-herbaceous, somewhat spicy, with perhaps just a hint of citrus. The flavor should be warm, somewhat sweet and slightly biting but not bitter, well rounded and pleasant.

Common thyme is indispensable in egg dishes, marinara sauces, and most foods of the Mediterranean. Its balanced flavor rounds out soups, sauces, vinaigrettes, ragouts, and marinades. It goes well with mushrooms, vegetables, grains, and beans, as well as poultry and meat. If you are looking for an herb to add to a dish and not sure what to choose, use thyme; its taste works well with everything. The tiny purplish flowers are also edible and add an extra visual appeal when used fresh.

The flavored thymes, like lemon, caraway, and orange, have various levels of the flavor for which they are named, while the creeping and woolly thymes are not good culinary choices.

COMMON THYME ‘Narrow-Leaf French’ thyme is the name given to the seed strain high in thymol, which is often offered as ‘German Winter’, ‘French Summer’, or ‘Greek Gray’. In common parlance, this is *the* garden thyme or common thyme. ‘Broad-Leaf English’, which is often sold as common thyme, is attractive and will work in the kitchen, but we much prefer the aroma and flavor of French thyme. Many forms of ‘Narrow-Leaf French’ will not come completely true from seed. If you find a particularly favorable clone, propagate it by cuttings or layering. We also particularly like the culinary cultivar ‘Provençal’, which flowers more profusely than the French.

Many gardeners prefer *Thymus pulegioides*. Called wild thyme, mother-of-thyme, or Pennsylvania Dutch tea thyme, it superficially

resembles pennyroyal (*Mentha pulegium*). Wild thyme is variable in height, leaf shape, and flower color, so, again, choose ones with a typical thyme odor, since you have to like the smell and taste if you are going to cook with it. This thyme is also more easily cultivated in a general vegetable garden and even reseeds itself into nearby flower beds and lawns, something that common thyme usually does not do.

LEMON THYME Lemon thyme (*Thymus* × *citriodorus*) comes in green-leaved and golden-leaved forms with pink or lavender blooms. Rub the leaves and taste to see which one you prefer, or grow both. Expect a thymelike aroma and taste with overtones of sweet lemon that can enhance vinaigrettes, vegetables, salads, poultry, and fish, and can also be used in breads, muffins, cakes, and cookies.



CLOCKWISE FROM TOP LEFT ‘Provençal’ thyme looks and tastes similar to French thyme; wild thyme (*Thymus pulegioides*) is easy to grow; ‘Broad-Leaf English’ thyme is a handsome and popular herb; ‘Golden Lemon’ thyme; ‘Green Lemon’ thyme



Viola tricolor

biennials to perennials, 4 to 12 inches tall

violets hardy to zone 5; Johnny-jump-ups and pansies hardy to zone 8

sun, part shade; Johnny-jump-ups and pansies need part shade in hot climates

keep moist but not wet

fertile, well-drained soil

VIOLA

Viola species

Mild and sweet; some varieties are more flavorful

CULTIVATION AND PROPAGATION

Viola species grow best in a woodland environment. They favor shade to partial shade, though they will perform well in a sunny, herbaceous border with proper moisture and organic matter. Plants do not get much larger than 6 to 12 inches tall. The violet is a hardy perennial with large heart-shaped leaves and blooms in various shades of purple and white with purple veins. They are naturalized in lawns, fields, and woodland edges and will spread if allowed to do so.

Pansies and johnnies can be started from seed, and plants are widely available at garden centers and nurseries. Pansies are biennials to short-lived perennials, but are most often treated as annuals. Their blooms come in many colors, from white, yellow, orange, pink, lavender, and purple, to bi- and tri-colored. The short-lived perennial Johnny-jump-up or heartsease is usually lavender, purple, white, or yellow, or a combination thereof; their flowers are about the size of violets. They often self-sow and will reappear in your garden or lawn every spring.

HARVESTING AND PRESERVING

Leaves of violets (not johnnies or pansies) can be harvested, washed and spun dry, and used as a salad green or cooked. They can also be dried for use in tea or soups. Pick viola flowers and put their stems in water until ready to use. Pinch the flowers from the stems and use small flowers whole. Use pansies whole as a garnish or separate the petals to scatter them. Violets and Johnny-jump-ups are ideal for candying—which is the best way to preserve the bloom for eating—although they do press well in a flower press for crafting. Store candied blooms in a tightly closed container between layers of wax paper or parchment paper up to about six months. Violet syrup and butter can be made with fragrant violas.

TASTING NOTES AND COOKING TIPS

Happy little faces of viola blossoms are harbingers of spring. These common European wildflowers are traditionally used to garnish the May wine punch bowl and other beverages, desserts, tea sandwiches, and salads. They are used in making jellies, butters, and fancy desserts. The wild violets are separated in this discussion from the Johnny-jump-ups (*Viola tricolor*) and pansies, since they are generally found naturalized in the wild, in contrast to cultivated perennials. While all the colorful little blooms in this genus are safe to eat, the foliage of wild violets is edible whereas the leaves of johnnies and pansies are not eaten.

WILD VIOLETS Violet (*Viola* species) most often refers to the wild purple-blue violets and white-flowering wood violets, sometimes called confederate violets (*V. sororia*, or *V. papilionacea* in the older literature), birdfoot violets (*V. pedata*), and sweet violets (*V. odorata*). Wild violet leaves are usually heart shaped, except for the birdfoot, whose leaves look like what its name suggests. Violet blooms have five petals, which are held up on long, thin stems above the foliage. The first two violets just mentioned have a mild scent, slightly sweet, and the taste is also very mild, sometimes a touch acidic. Sweet

violet (*V. odorata*), however, is very fragrant with a strong, sweet perfume and tastes much more flowery. Generally, flowers with the stronger fragrance have more flavor, so they are used in beverages, syrups, cordials, ice creams, and confections. They are also often candied and used to garnish fancy desserts.

Violet flowers and young leaves are eaten raw in salads; they contain a good amount of vitamins A and C. Leaves are cooked with other spring greens or added to stews as a thickening agent, since they have a slight mucilagenous quality. If eaten in large amounts, because of the saponin content, viola may cause nausea and a tonic cleansing effect.

JOHNNY-JUMP-UP AND PANSY Generally, the blooms of all the Johnny-jump-ups (*Viola tricolor*; also called heartsease) taste like a mild salad green, some with a hint of perfume. Both Johnny-jump-ups and pansies (*V. ×wittrockiana*) have a pleasingly mild, sweet taste like baby lettuce. Some of them have a slight, mild hint of wintergreen, and a few bring bubblegum to mind. Smell and taste the blooms before using. We love the faces of these flowers and the huge variety of color combinations. Use them on salads: the whole bloom of Johnny-jump-ups and pansies can be used, or pull the petals from the calyx and sprinkle them on salads or canapés. The colored petals are lovely in herb butter, floating on a beverage, or scattered on frosted cakes or cupcakes. The flowers can be candied and used as a fancy edible garnish on desserts or as a confection. They are also quite lovely floating in May wine or embedded in an ice ring.



Viola sororia



We delight in the whiskered faces of pansies.



perennial, 12 to 18 inches tall

hardy to zone 6

full sun

keep moist but not constantly wet

light loamy soil

WINTER SAVORY

Satureja montana

Oregano-thyme-eucalyptus aroma and taste

CULTIVATION AND PROPAGATION

Winter savory, a perennial, is more commonly grown from young nursery plants set in spring, but seeding is also possible. Long-term growing conditions of winter savory are similar to those of other semiwoody plants of the Mediterranean (think hot sun and dry conditions), like lavender, oregano, sage, and thyme, and all benefit from a gravelly or sandy, light-colored soil with good drainage.

HARVESTING AND PRESERVING

Winter savory can be cut back by about one-third, like most other perennial plants. The thin, needlelike leaves dry fairly quickly. Store the dried leaves in a labeled jar out of direct sunlight until next season’s harvest. Savory-infused vinegar, a pantry staple, is a perfect condiment for dressing green beans and three-bean salad, as well as taco salad and other Mexican dishes.



Given the right conditions, winter savory (*Satureja montana*) can get quite bushy and woody.

TASTING NOTES AND COOKING TIPS

Savory lets you know its flavor just by its name. Its pungent, thyme- and oreganolike taste goes well with stuffings, sausages, stews, and meats, as well as vegetable dishes, especially beans. Savory is among the main herbs in the traditional French blend herbes de Provence, which is used to flavor everything from game and pasta to eggs and cheese dishes.

Perennial winter savory (*Satureja montana*) is quite pungent, with a somewhat bolder oregano-thyme-eucalyptus aroma and taste than summer savory. The leaves are also thicker and tougher. Winter savory is stronger and hot to the tongue, while summer savory is milder and has a hint of citrus. In Germany, the savories are called *Bohnenkraut* (bean herb), and their flavor complements both fresh and dried beans. Winter savory is especially good in a pot of old-fashioned baked beans, chili beans with or without meat, and black beans; it goes well with meats and game and mellows in long-simmered ragouts and stews.

Most seed catalogs only list summer savory. However, specialized herb nurseries will carry the winter savory. Both are commonly

available as the straight species, although there is a creeping winter savory.



METRIC CONVERSIONS

LENGTH

INCHES	CM
¼	0.6
½	1.0
1	2.5
2	5.0
3	7.5
4	10
5	12
6	15
7	17
8	20
9	23
10	25
12	30.5
15	38
20	50

FEET	M

1	0.3
2	0.6
3	0.9
4	1.2
5	1.5
6	1.8
7	2.1
8	2.4
9	2.7
10	3
12	3.6
15	4.6
20	6

TEMPERATURES

°F	°C
10	−12.2
20	−6.6
30	−1.1
40	4.4
50	10
70	21
80	27

100	38
200	95
300	150
400	200

°C = 5/9 × (°F − 32)
°F = (9/5 × °C) + 32

VOLUME

1 teaspoon	5 milliliters
1 tablespoon (3 teaspoons)	15 milliliters
¼ cup (4 tablespoons)	60 milliliters
1/3 cup (2⅓ fluid ounces)	75 milliliters
½ cup (4 fluid ounces)	125 milliliters
1 cup (8 fluid ounces)	250 milliliters
1 pint (2 cups)	500 milliliters
1 quart (4 cups)	approx. 1 liter

WEIGHT

0.002 ounce	50 milligrams
½ ounce	15 grams
1 ounce	30 grams
2 ounces	60 grams
3 ounces	85 grams

½ pound (8 ounces)	225 grams
3/4 pound (12 ounces)	340 grams
1 pound (16 ounces)	454 grams
2 pounds	910 kilograms
8 pounds	3.6 kilograms
10 pounds	4.5 kilograms

SOME FOOD ITEMS, VOLUME/WEIGHT:

1½ cups sugar/300 grams
1½ cups water/340 grams
2 tablespoons minced herbs/5.3 grams
½ cup minced lemongrass stems/55 grams
2 cups grated horseradish/200 grams
4 cups herb leaves, loosely packed/180 grams

SOURCES

These sources are herbal businesses that we have used throughout the years. Some sell just plants, others just seeds, and some both.

W. ATLEE BURPEE & CO.

300 Park Avenue
Warminster, PA 18974
800-888-1447
FAX 800-487-5539
burpee.com
(herb seeds)

BAKER CREEK HEIRLOOM SEEDS

2278 Baker Creek Road
Mansfield, MO 65704
417-924-8917
rareseeds.com
(heirloom seeds)

DEBAGGIO'S HERB FARM & NURSERY

43494 Mountain View Drive
Chantilly, VA 20152
703-327-6976
debaggioherbs.com
(wide selection of herb plants; does not ship)

FOREST FARM

PO Box 1
Williams, OR 97544
541-846-7268
FAX 541-846-6963
forestfarm.com
(herbal trees and shrubs)

J. L. HUDSON, SEEDSMAN

PO Box 337
La Honda, CA 94020-0337
jlhudsonseeds.com
(wide selection of seeds)

JOHNNY'S SELECTED SEEDS

955 Benton Avenue
Winslow, ME 04901-2601
877-564-6697
FAX 800-738-6314
johnnyseeds.com
(wide selection of herb seeds)

KITAZAWA SEED CO.

201 4th Street, #206
Oakland, CA 94607
510-595-1188
FAX 510-595-1860
kitazawaseed.com
(Asian herbs and vegetables)

NATIVE SEED/SEARCH

526 North Fourth Avenue
Tucson, AZ 85705
520-622-5561

nativeseeds.org
(herb seeds)

NICHOLS GARDEN NURSERY

190 Old Salem Road NE
Albany, OR 97321-4580
800-422-3985
nicholsgardennursery.com
(herb seeds, some plants)

PARK SEED

One Parkton Avenue
Greenwood, SC 29647-0001
800-845-3369
FAX 800-275-9941
parkseed.com
(herb seeds)

RENEE'S GARDEN SEEDS

6116 Highway 9
Felton, CA 95018
888-880-7228
reneesgarden.com
(herb seeds)

RICHTERS HERBS

357 Highway 47
Goodwood, ON
L0C 1A0 Canada
905-640-6677
FAX 905-640-6641
richters.com
(herb plants and seeds)

SEEDS OF CHANGE

PO Box 152
Spicer, MN 56288
888-762-7333
FAX 320-796-6036
seedsofchange.com
(heirloom seeds)

SEED SAVERS EXCHANGE

3094 North Winn Road
Decorah, IA 52101
563-382-5990
FAX 563-382-6511
seedsavers.org
(heirloom seeds)

TERRITORIAL SEED CO.

PO Box 158
Cottage Grove, OR 97424-0061
800-626-3131
FAX 888-657-3131
territorialseed.com
(herb seeds)

WELL-SWEEP HERB FARM

205 Mount Bethel Road
Port Murray, NJ 07865-4147
908-852-5390
FAX 908-852-1649
wellsweep.com
(herb plants)

ZACK WOODS HERB FARM

278 Mead Road
Hyde Park, VT 05655
zackwoodsherbs.com
(certified organic herb plants)

SUGGESTED READING

In this reading list, you will find books both new and old. Some we reach for often on our reference shelves, and some are just old favorites. These books have influenced our lives as herbalists, gardeners, and cooks.

Arndt, Alice. *Seasoning Savvy*. Binghamton, NY: Haworth Herbal Press, 1999.

Belsinger, Susan. *Flowers in the Kitchen*. Loveland, CO: Interweave Press, 1991.

Belsinger, Susan, and Carolyn Dille. *The Greens Book*. Loveland, CO: Interweave Press, 1995.

Belsinger, Susan, and Tina Marie Wilcox. *The Creative Herbal Home*. Brookeville, MD: Herbspirit, 2007.

Bown, Deni. *Encyclopedia of Herbs and Their Uses*. New York: Dorling Kindersley, 1995.

Crocker, Pat. *The Healing Herbs Cookbook*. Toronto: Robert Rose Inc., 1999.

DeBaggio, Thomas, and Susan Belsinger. *Basil: An Herb Lover's Guide*. Loveland, CO: Interweave Press, 1996.

Elliott, Doug. *Wild Roots*. Rochester, VT: Healing Arts Press, 1995.

Falconi, Dina. *Foraging and Feasting: A Field Guide and Wild Food Cookbook*. Accord, NY: Botanical Arts Press, 2013.

Foster, Steven, and James A. Duke. *A Field Guide to Medicinal Plants: Eastern and Central North America*. Boston: Houghton Mifflin, 1990.

Foster, Steven, and Rebecca L. Johnston. *National Geographic Desk Reference to Nature's Medicine*. Washington, DC: National Geographic, 2006.

Gladstar, Rosemary. *Family Herbal: A Guide to Living Life with Energy, Health and Vitality.* North Adams, MA: Storey Books, 2001.

Hill, Madalene, and Gwen Barclay. *Southern Herb Growing*. Fredricksburg, TX: Shearer, 1987.

Johnson, Wendy. *Gardening at the Dragon's Gate*. New York: Bantam Dell, 2008.

Kallas, John. *Edible Wild Plants: Wild Foods from Dirt to Plate*. Layton, UT: Gibbs Smith, 2010.

Larkom, Joy. *The Salad Garden*. New York: Viking, 1984.

Laws, Bill. *Fifty Plants that Changed the Course of History*. Buffalo, NY: Firefly Books, 2010.

Madison, Deborah. *Vegetable Literacy*. Berkeley, CA: Ten Speed Press, 2013.

———. *Vegetarian Cooking for Everyone*. New York: Broadway Books, 1997.

Peterson, Lee Allen. *A Field Guide to Edible Wild Plants: Eastern/Central North America*. Boston: Houghton Mifflin, 1999.

Phillips, Roger. *Wild Foods*. Boston: Little, Brown, 1986.

Rose, Jeanne. *Herbs and Things*. New York, NY: Grosset & Dunlap, 1974.

Soule, Deb. *How to Move Like a Gardener*. Rockport, ME: Under the Willow Press, 2013.

Thayer, Samuel. *Nature's Garden: A Guide to Identifying, Harvesting, and Preparing Edible Wild Plants*. Birchwood, WI: Forager's Harvest Press, 2010.

Traunfeld, Jerry. *The Herbal Kitchen: Cooking with Fragrance and Flavor*. New York: William Morrow, 2005.

Tucker, Arthur O., and Thomas DeBaggio. *The Encyclopedia of Herbs*. Portland, OR: Timber Press, 2009.

Wood, Rebecca. *The New Whole Foods Encyclopedia*. New York: Penguin Books, 2010.

ACKNOWLEDGMENTS

WE BOTH THANK our respective families and friends for their continued patience and support while we pursue our herbal passions. Verily, we are passionate about what we do, because we get to share our findings with our herbal cohorts and colleagues. We appreciate the continued enthusiasm and assistance of our friends who garden and grow the herbs for and with us. Many thanks to Pat Kenny, for taking the authors' photo; she is truly one of our herbal heroes. And we'd like to thank folks at Timber Press—Andrew Beckman, and Julie Talbot for her editing expertise.

PHOTOGRAPHY CREDITS

All photographs by Shawn Linehan, unless otherwise noted here.

ALAMY
Digital-Fotofusion Gallery: page 2; Anjo Kan: page 24 bottom

SUSAN BELSINGER: pages 15, 20, 21, 23 top and right, 27, 29, 41 bottom left, 44 top

BUGWOOD.ORG
Bruce Watt, University of Maine: pages 32 bottom; 33 center; Elizabeth Bush, Virginia Polytechnic Institute and state University: page 33 top; Rebecca A. Melanson: page 34 top; Florida Division of Plant Industry, Florida Department of Agriculture and Consumer Services: page 34 center; Whitney Crenshaw, Colorado State University: page 36 top; Gary Bernon, USDA APHIS: page 37 top; Gerald Holmes, California Plytechnic State University at San Luis Obispo: page 37 bottom

DAVID DEARDORFF AND KATHRYN WADSWORTH, from *What's Wrong With My Vegetable Garden?*: pages 32 top, 33 bottom

GAP PHOTOS
Gary Smith: page 46; Rice/Buckland: page 24 top left; Victoria Firmston: page 97

ANNETTE GUTTIEREZ, from *Potted*: page 24 top right

ISTOCKPHOTO
michael1959: page 5; MKucova: page 8; merc67: page 12; mtreasure: page 18; StephaneHachey: page 28; grandriver: page

31; botamochi: pages 62–63; chang: page 91; Esipov_Mihail: page 101

SHUTTERSTOCK
marcin jucha: pages 6–7; Magdalena Kucova: page 10; Natasha Breen: page 12; Geshas: page 22; QiuJu Song: page 35 top; Sentelia: page 48; pilialoha: page 105

WIKIMEDIA COMMONS
Used under a Creative Commons Attribution–Share Alike 2.0 Generic license
John Tann: page 35 bottom

Used under a Creative Commons Attribution–Share Alike 3.0 Unported license
Howard F. Schwartz: page 34 bottom; Wim b: page 35 center

Used under a Creative Commons Attribution–Share Alike 4.0 International license
Kenraiz Krzysztop Ziarnek: page 36 bottom

Released into the Public Domain
Maria Chantal Rodriguez Nilsson: page 135; Stephen Ausmus, USDA ARS: page 203

INDEX

Page numbers have been removed from the index for this electronic edition. To locate any of the following terms, please use the search feature of your e-book reader.

A □B □C □D □E □F □G □H □I □J □K □L □M □N □O □P □R □S □T □U □V □W □

A

Agastache foeniculum
Agastache mexicana
Agastache rugosa
Agastache scrophulariifolia
air circulation
in cultivation
in disease control
in drying
Allium sativum
Allium sativum var. *sativum*
‘Early Red Italian’
‘Inchelium Red’
‘Italian Late’
Allium schoenoprasum
‘Fine Leaf’
Allium species
‘Corsican White’

‘Forescate’
‘Fruhlau’
‘Grosser Riesen’
‘Mittelgrosser Schnittlauch’
‘Nira’
Allium tuberosum
Aloysia citriodora
Anethum graveolens
anise hyssop
annual herbs
cool-weather
cutting back and harvesting
freezing
Anthriscus cerefolium
aphids
Apium graveolens var. *secalinum*
‘Amsterdam’
‘Kintsai’
‘Nan Ling’
‘White Queen’
Armoracia rusticana
‘Big Top Western’
‘Bohemian’
‘Maliner Kren’
‘Sass’
aromas
aromatic herbal pastes
Artemisia dracunculus
‘Sativa’

B

Bacillus thuringiensis (BT)
bacterial and mycorrhizal soil preparations
bacterial blight
bacterial contamination when harvesting
basil
- ‘Aussie sweetie’
- cinnamon basil
- cutting back
- ‘Greek columnar’
- harvesting
- herb profile
- lemon basil
- ‘Lesbos’
- pests
- planting / transplanting
- preserving
- purple (or opal) basil
- in recipes
- ‘Siam Queen’
- storing
- sweet green bush basil
- Thai basil

bay laurel
bay trees
bean herb
beds, raised
bee balm
Bengali five spice
bergamot. *See* monarda
bergamot (or orange) mint

birdfoot violets
black aphids
black cumin
blends / combinations
  bouquet garni
  fines herbes
  for herbal vinegars
  herbes de Provence
  herbs used, generally
  potpourri
  sachets
Bohnenkraut (bean herb)
Botrytis
bronze fennel
butters

C

calendula
  ‘Calypso Orange’
  ‘Erfurter Orangefarbigen’
  ‘Flashback Mix’
  ‘Pacific Beauty’
Calendula officinalis
Canadian hardiness zones
ceramic pots
Chamaemelum nobile
chamomile blooms, drying
chervil
chili peppers
chives

cilantro (coriander)
'Calypso'
in combinations
cutting back
growing conditions
herb profile
preserving
'Santo'
seeds
'Slo-Bolt'
clay pots
cold hardiness
common chives
common horseradish
common lavender
common parsley
common (or garden) sage
common (or garden) sorrel
common (or garden) thyme
companion plants
compost
container growing
advantages
growing mediums
nutrients and moisture
pot types and sizes
cool-season and warm-season herbs
cool-tasting herbs
copper flashing
copper sprays
coriander. *See* cilantro
Coriandrum sativum

costs and growing herbs
Crocus sativus
cultivation. *See herb profiles*
Cymbopogon citrates
Cymbopogon flexuosus
Cymbopogon pendulus

D

Dalmation sage
diatomaceous earth
dill
- ‘Bouquet’
- in combinations
- drying for seed
- ‘Dukat’
- ‘Elephant’
- ‘Fernleaf’
- growing conditions
- harvesting
- herb profile
- ‘Mammoth’
- preservation
- ‘Superdukat’
- transplanting

diseases and pests
drainage
- in pots
- soil conditions

drying and storing

E

East Indian lemongrass
essential oils
European chives
European hardiness zones

F

fabric for pest protection
fennel
fertilizers
fines herbes
fish emulsion
Flavor and Extract Manufacturers' Association (FEMA)
florist foam
flowers
  drying
  harvesting
  in recipes
Foeniculum vulgare
  'Rubrum'
Food and Drug Administration
French cooking
French sorrel
French tarragon
French thyme
fruit-scented sage
fungi, inhibiting
fungus disease

fungus gnat
Fusarium
Fusarium oxysporum
Fusarium solani fungi

G

garlic
garlic chives
German chamomile
gingerroot
GRAS (“Generally Recognized As Safe”) status
Grecian bay
Greek oregano
growing conditions
  dedicated sites
  deep organic soil, light mulch
  full sun, loose soil, good drainage
  full to part sun, rich soil, dark mulch
  reproducing native conditions
  spacing
growing conditions for specific herbs. *See herb profiles*

H

hardiness
harvesting. *See also herb profiles*
health / medicinal uses
health problems of herbs
heartsease

heat, excessive
“heel” cuttings
herbal infusions
herbes de Provence blend
horseradish
horticultural oil
hot herbs
Hungarian chamomile

I

indoor growing
indoor seed starting
insecticidal soap
insect-pathogenic fungi
insects, beneficial
Italian oregano

J

Jammu lemongrass
Johnny-jump-ups

K

kelp extracts
kitchen uses and cooking tips
    butters
    pastes

syrups
vinegars
See also herb profiles

L

lacewings
ladybugs
Lavandula angustifolia
Lavandula species
'Royal Velvet'
'Tucker's Early Purple'
lavender
drying
growing conditions
herb profile
'Hidcote'
propagation
in recipes
leaf celery
leaf miners
leaf mold
leafy mustards
lemon balm
lemongrass
lemon herbs in combinations
lemon thyme
lemon verbena
Levisticum officinale
Lippia graveolens
lovage

love-in-a-mist

M

marjoram
Matricaria recutita
Melissa officinalis
Mentha aquatica var. *citrata*
Mentha ×*gracilis* ‘Madalene Hill’
Mentha ×*piperita*
Mentha pulegium
Mentha species
Mentha spicata
‘Kentucky Colonel’
Mexican mint marigold
Mexican oregano
Mexican tarragon
mint
‘Blue Balsam’
‘Chocolate’
doublemint
growing conditions
herb profile
‘Mitcham’
orange (or bergamot)
peppermint
in recipes
spearmint
Monarda didyma
Monarda fistulosa
Monarda fistulosa f. *albescens*

monarda / *Monarda* species
‘Cambridge Scarlet’
‘Colrain Red’
‘Marshall’s Delight’
‘Purple Mildew Resistant’
‘Raspberry Wine’
‘Rose Queen’
‘Rosy Purple’
‘Violet Queen’
mother-of-thyme
mountain mint
mulches
in disease control
light-colored
organic (wood chips, cocoa bean hulls)
straw
types for specific growing conditions
mycorrhizal fungal products

N

nasturtiums
native habitats
clues for cultivation methods
Mediterranean region
northern and central Europe
southeastern Europe and southwest Asia
nematodes
Nigella damascena
Nigella sativa
NPK (nitrogen, phosphorous, and potassium) ratios

O

Ocimum
- ‘Dark Opal’
- ‘Osmin’

Ocimum americanum
- ‘Genoa Profumatissima’

Ocimum basilicum
- ‘Genoa Green’
- ‘Genoa Green Improved’
- ‘Genovese’
- ‘Genovese Verde Migliorato’
- ‘Italian’
- ‘Italian Pesto’
- ‘Mrs. Burns’ Lemon’
- ‘Napoletano’
- ‘Purple Ruffles’
- ‘Queenette’
- ‘Thai’

Ocimum basilicum × *Ocimum forskolei*

Ocimum × *citriodorum*
- ‘Aussie Sweetie’
- ‘Lemon’
- ‘Lesbos’
- ‘Sweet Dani’

oregano
- ‘Hot and Spicy’

Origanum

Origanum majorana

Origanum ×*majoricum*

Origanum vulgare subsp. *hirtum*

‘Greek’
ovens for drying

P

panch phoron
pansies
parasitic wasps
parsley
parsley, curly leaved cultivars
‘Afro’
‘Banquet’
‘Bravour’
‘Curlina’
‘Dark Moss Colored’
‘Decorator’
‘Deep Green’
‘Envy’
‘Evergreen’
‘Ferro’
‘Forest Green’
‘Improved Market Gardener’
‘Moss Curled’
‘Paramount’
‘Perfection’
‘Sherwood’
parsley, Italian flat-leaved cultivars
‘Perfection’
‘Plain’
‘Plain Italian Dark Green’
pastes

peach sage
Pelargonium citronellum ‘Mabel Grey’
Pelargonium crispum
‘Variegated Prince Rupert’
Pelargonium graveolens
Pelargonium species
‘Graveolens’
‘Old Fashioned Rose’
‘Rober’s Lemon Rose’
‘Variegated Prince Rupert’
pellies
Pennsylvania Dutch tea thyme
pennyroyal
perlite
pests and diseases
Petroselinum crispum
Petroselinum crispum var. *crispum*
Petroselinum crispum var. *neapolitanum*
Petroselinum crispum var. *tuberosum*
Phytophthora
pineapple sage
pot marigold
potpourri, herbs for
pots. *See* container growing
pottery pebbles
powdery mildew
preserving. *See also herb profiles*
propagation
cuttings
layering
from seed
seed-sterile herbs

See also herb profiles
pruning
Pseudomonas
pungent herbs
Pycnanthemum species
Pythium

R

raised beds
recipes
Herb Butter
Herb Vinegar
Savory Herb Pastes
Simple Herb Syrup
Sweet Herb Paste
See also kitchen uses and cooking tips
red-stem apple mint
red-stemmed doublemint
refrigerators for drying
Roman chamomile
'Flore Pleno'
root rot
rose geranium
rosemary
'Arp'
in cooking and recipes
drying
growing conditions
herb profile
propagation

pruning
‘Shady Acres’
rose petals
Rosmarinus officinalis
rotenone
Rumex acetosa
Rumex scutatus
Rumex species
Russian tarragon

S

sachets
saffron
sage
salad burnet
salad herbs
salt
Salvia dorisiana
Salvia elegans
‘Honeydew Melon’
Salvia officinalis
‘Berggarten’
‘Nana’
‘Purpurascens’
‘Woodcote Farm’
Salvia species
sand in soil amendments
Sanguisorba minor
Satureja hortensis
Satureja montana

savory. *See also* summer savory; winter savory
scale
scented geranium
seaweed
seed, drying for
seedlings
  harvesting
  planting in containers
  spacing
  transplanting
seed oils
seeds in recipes
seed sterility
Sicilian oregano
slugs
smallage (or smellage)
smell, sense of
soil
  bacterial and mycorrhizal preparations for
  bacterial contamination and harvesting
  compacted
  conditioners and amendments
  conditions and native habitats
  drainage
  growing medium for pots
  for indoor seed starting
  mold diseases
  workability
sorrel
spacing
spearmint
sphagnum peat moss

spider mites
stevia
Stevia rebaudiana
styrofoam beans
succession planting
sulfur sprays
summer savory
sunlight and harvesting times
sun requirements
sweet mace
sweet marigold
sweet marjoram
sweet violets
syrups

T

Tagetes lucida
tarragon
taste, sense of
tasting notes. *See herb profiles*
terra-cotta frit
terra-cotta pots
thrips
thyme
  as a container herb
  drying
  growing conditions
  harvesting
  herb profile
  lemon thyme

Thymus ×citriodorus
Thymus pulegioides
Thymus species
‘Broad-Leaf English’
‘French Summer’
‘German Winter’
‘Golden Lemon’
‘Greek Gray’
‘Green Lemon’
‘Narrow-Leaf French’
‘Provencal’
Thymus vulgaris
Tropaeolum majus
‘Alaska’
‘Amazon Jewel’
‘Empress of India’
‘Peach Melba’
‘Whirlybird’
tutti-frutti sage

U

UK hardiness zones
umami
USDA hardiness zones

V

vermiculite
Verticillium

vinegars
Viola odorata
Viola papilionacea
Viola pedata
Viola sororia
violas / *Viola* species
Viola tricolor
Viola×wittrockiana
violets

W

warm-season and cool-season herbs
watering and health problems
watering container herbs
West Indian lemongrass
wild thyme
wild violets
windowsills
winter savory
woody-stemmed perennials
  drying
  growing conditions
  harvesting
  propagation
  pruning



Sage is a staple of many home herb gardens.



Pat Kenny

SUSAN BELSINGER has been teaching, lecturing, and writing about gardening and cooking for more than forty years. As a food writer, editor, and photographer, she has written and edited more than twenty-five books, hundreds of articles, and numerous calendars. Described as a flavor artist, Susan delights in kitchen alchemy—the blending of harmonious foods, herbs, and spices—to create real, delicious food and libations that nourish our bodies and spirits and titillate our senses. Her website is susanbelsinger.com

ARTHUR O. TUCKER has spent more than fifty years using, researching, and publishing on herbs in both popular and scientific media. His book *The Encyclopedia of Herbs*, co-authored with Tom DeBaggio, was published by Timber Press in 2009. This update and the previous edition, *Big Book of Herbs*, were the first books that

attempted to digest the voluminous scientific information on herbs for the general public. His cottage garden was featured on the cover of *Southern Living* for April 2003. Now emeritus professor at Delaware State University, he continues to love herbs and has started a second life as a concrete artist.

SHAWN LINEHAN photographs small farms and farmers mostly around the Portland, Oregon, area. With a journalist's sense of narrative and an artist's eye, she creates intimate, authentic images that celebrate the lives of our environmental stewards.

Copyright © 2019 by Susan Belsinger and Arthur O. Tucker.
All rights reserved.

Photography credits appear on page 193.

The information in this book is true and complete to the best of our knowledge. All recommendations are made without guarantee on the part of the authors or Timber Press. The authors and publisher disclaim any liability in connection with the use of this information. Please do not attempt self-treatment of a medical problem without consulting a qualified health practitioner.

Published in 2019 by Timber Press, Inc.

The Haseltine Building
133 S.W. Second Avenue, Suite 450
Portland, Oregon 97204-3527
timberpress.com

Text and cover design by Kim Thwaits
“Herb” symbol on cover by BomSymbols from thenounproject.com.

eISBN: 9781604699463

Catalog records for this book are available from the Library of Congress and the British Library.