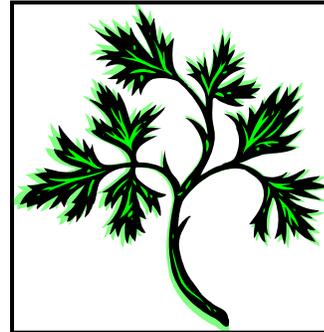
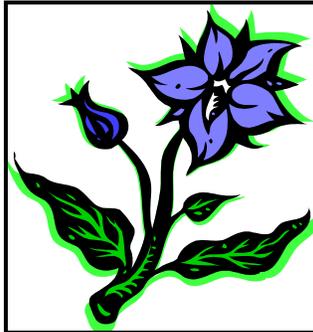
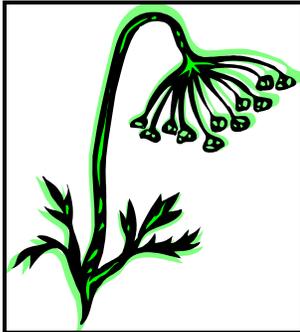




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Herbs in Your Garden

University of California Cooperative
Extension
Stanislaus County



A Guide to the Use, Cultivation &
Selection of Herbs

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Herbs in Your Garden

The word “herb” is used to describe any plant that has fragrance, flavoring or medicinal value. It also includes plants used to make dye or dried crafts.

Many plants can be considered herbs. This publication focuses on herbs that can be grown in the Central Valley for culinary use.

THE HERB GUIDE

The last pages of this publication are a guide to herbs available locally. These local herbs can thrive in Stanislaus County if given proper care.

This guide is broken into categories that contain pertinent information for each herb. The category for “Type” uses the letters A, B and P which stand for annual, biennial and perennial. “Part Used” mentions the herb part needed for culinary, dye, medicinal or craft purposes. The “Growing Tips” category describes the growing conditions needed for the herb.

HERB TYPES

Herb life cycles can be annual, biennial or perennial. Annual herbs such as basil last only one season and then die, although some annuals (like dill) will reseed. Biennial herbs like parsley live for two seasons, blooming and dying during the second season.

Perennial herbs like rosemary or bay live for several years, depending on the life expectancy for that particular plant.

Herbs come in all shapes and sizes. They can be small plants, vines, shrubs or trees.

Some herbs are evergreen, while others are deciduous. Herbs that are evergreen stay green throughout the year by constantly shedding a small amount of leaves. Deciduous herbs lose their leaves in the fall and remain bare in the winter.

HERBAL SCENTS

There are many herbs with fragrances similar to those of fruit, flowers or food. Visit local nurseries and garden centers to peruse their selection. Most carry a wide variety of herbs with aromas sure to delight the senses.

Almond

Almond-scented geraniums have a nutty aroma.

Apple

Apple mint and apple-scented geraniums provide apple fragrances in the garden.

Cinnamon

Cinnamon basil has a surprisingly strong cinnamon scent.

Citrus

Lemon scent comes in the forms of lemon verbena, lemon balm, lemon thyme, lemon basil and lemon-scented geraniums,

to name a few. Lime scents are found in lime basil, lime-scented

geraniums and lime thyme. Orange scents can be found in a scented geranium known as the “mosquito plant.”

Chocolate & Mint

An herb called chocolate mint blends the two fragrances together.

Licorice

Anise basil and anise hyssop are two good choices in this category. Some people say that fennel has a licorice scent. Others enjoy angelica because it adds a pleasant, licorice flavor to food.

Mint

The two classic mints are spearmint and peppermint. Use caution when planting mint in the garden, as it can easily take over an entire bed. Mint-scented geraniums won’t take over your garden beds. This plant has very soft leaves and an intense mint aroma.

Nutmeg

The nutmeg-scented geranium is an unusual and fragrant plant.

Pineapple

Pineapple sage and pineapple mint provide this fragrance.



Rose

Not all roses are fragrant. This is because fragrance can be lost in the rose-breeding process. Roses that are fragrant are mentioned in the guide; note that fragrance depends on the species name. There are also several types of rose-scented geraniums available.

The best time to shop for herbs is in the spring. If the nursery or garden center does not have the particular plant you are looking for, they may be able to special order it from a local grower.

PLANTING HERBS

Herbs can be planted from seed or purchased as small plants from a nursery or garden center. Our local farmer's market, located near the Stanislaus County Library (May-November) often has a fine selection of herbs. Herbs included in this publication can be found locally as seeds or living plants.

Before planting herbs, amend the soil well. Add compost and till it into to the top 18" of soil in your garden. Most herbs should be planted in full sun, as they need to receive at least 6-8 hours of direct sun daily.

When planting seeds, be careful not to bury them too deeply. When a seed germinates, tiny leaves attempt to push through the

soil to reach the surface.

Seeds buried too deeply will not have enough resources to grow and reach sunlight. Follow planting depth instructions listed on the packet.

New seedlings need constant moisture to germinate and develop. When a tiny seedling emerges, it is very delicate and will need adequate water until it is established. It may also need protection from pests such as snails and earwigs.

PLANTING INSTRUCTIONS

Herbs can be found in 4" containers as well as 6-paks and 1-gallon cans.

Step 1: *dig a hole twice as wide as the container.*

It is not necessary to add fertilizer or amendment to the hole, as the soil has already been prepared.

Step 2: *remove the plant from its container carefully and examine the root ball. If needed, prune the roots.*

The term "root ball" refers to the area of roots inside the container. Sometimes a plant from a nursery or garden center has lived in its container for a long period of time. If the plant has a large number of roots, gently pull them apart. If the container has a lot of roots that are difficult to pull apart,

try using small pruning shears.

Step 3: *place the root ball in the hole so the top is slightly above soil level.*

Fill in around the root ball with remaining soil. Lightly pack the soil around the herb.

Step 4: *water deeply. Use a garden hose or drip irrigation to keep plants well-watered.*

Create a trough around the plant to hold water. Once the plant has been watered, it should sink so the top of the root ball is even with the soil. Make sure not to cover the surface of the root ball with any garden soil. Keep the area around the plant moist as dry soil around the root ball can wick away moisture.

WATERING HERBS

Herbs should be watered deeply enough to wet the entire root system. For deep-rooted perennials, such as rosemary, the soil may need to be wet to 18 inches deep. For shallow-rooted annuals, the soil should be wet to 4-6 inches deep.

Clay soils hold moisture the longest. Its small particles hold onto water as well as nutrients. When irrigating these soils, ensure they dry out slightly between watering.

Sandy soils have large particles that allow water to flow easily between them. Because of this, plants in sandy soils will need to be watered more often, especially during the summer.

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HERBAL “GROUPINGS”

When organizing your herb garden or adding herbs into an existing planting, pay attention to watering needs. Group plants that prefer similar climates together.

For instance, Mediterranean herbs such as lavender, rosemary and sage all have the same requirements. They prefer to be kept on the dry side and need no additional fertilizer.

Herbs that prefer to stay on the moist and shady side like angelica, coriander and horseradish can be planted in the same area.

Keep plants that spread by underground rhizomes contained in pots. These herbs include lemon balm, peppermint and spearmint.

Herbs that seed themselves can become a nuisance, so plant them in places where you can keep an eye on them and regularly prune seed heads before they scatter. Dill, fennel and borage will readily self-seed in your garden.

HERBAL “MAINTENANCE”

To keep your herbs looking their best, prune for shape. Some herbs (like basil or lemon verbena) will tend to be tall and slender. For fuller growth, prune the tops of the tallest stalks. This will

encourage the plant to widen in shape.

“Dead-heading” is a term used to signify the removal of spent flowers. To keep herbs blooming longer, dead-head them after the blooms have died.

DRYING HERBS

Herbs should be harvested before they flower for best flavor. Pick early in the morning just after the dew has dried.

Cut herbs and gather them into bunches and tie them with string. Then hang the bunches upside down and tie a paper bag over the bundle. Wait 2 weeks for most herbs to dry.

Herbs can also be dried in the oven or microwave. Before placing herbs in the oven, spread them on a baking pan. Set the oven on the lowest setting and leave the oven door open slightly. Stir occasionally. The herbs are dry when leaves can be crumbled with a finger.

In the microwave, place 1 cup of herbs in a single layer between 2 paper towels. Microwave on high for 3 minutes. If herbs aren't completely dry, keep drying them in cycles of 20 seconds, being careful not to scorch them.

Cilantro, rosemary and parsley can be dried in the refrigerator. Put them (unwashed) in a paper



bag and leave them on a shelf for a month.

STORING HERBS

Fresh herbs can be stored as sprigs in jars of water just before you use them. To store for a longer period, cover the top of the herb loosely with plastic wrap and place the jar in the refrigerator for storage of up to two weeks.

For dried herbs, store in a cool, dry place away from your oven. Glass containers work well for storage, but keep them in cupboards as sunlight fades both color and flavor. When needed, herbs can be ground with a mortar and pestle or coffee grinder just before use. Dried herbs should not be kept for more than 6-8 months.

MAKING TEA

These directions were taken from Rodale's Illustrated Encyclopedia of Herbs. First, boil water and use it to rinse your teapot. When making tea with fresh herbs, add 2 tablespoons to the pot. The number of tablespoons corresponds to how many cups your teapot can hold. Add an additional 2 tablespoons of herbs per cup.

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When making tea from dried herbs, add 1 tablespoon of herb to the pot, and then an additional tablespoon of dried herb for each cup of water.

For both fresh and dry herbs, pour the boiling water into the teapot and let it steep for 5 minutes. Keep the teapot covered to retain heat. Strain the herbs once the tea has reached the desired strength. Serve tea with honey, lemon or milk.

For iced tea, follow the same procedure but use 3 tablespoons of fresh herbs or 2 tablespoons of dried herbs. The extra tablespoon allows for the melting of ice.

For herb tea combinations, the Encyclopedia mentions these flavors:

- ◇ *Basil, lemon balm and lemon verbena*
- ◇ *Chamomile and apple mint*
- ◇ *Lemon verbena and borage*
- ◇ *Peppermint and orange peel*

COOKING WITH HERBS

In most cases, using fresh herbs is best for cooking. However, when fresh herbs are unavailable, dried or frozen herbs can be used.

Herbs can be used to flavor vinegars, oils or butter. They can also be used in combination as a salt substitute.

Herb Vinegar

Use 1 cup of herb per 2 cups of white wine vinegar. "Bruise" the herbs before adding to the wine to extract their flavors. Allow to steep for 2 weeks before using.

Herb Butter

1 tablespoon of finely chopped herbs per 1/2 cup margarine or butter.

There are also combinations of herbs that can be used to flavor food. Try experimenting with your own herbs for new combinations.

Soup Seasoning

- 1 1/2 tsp parsley
- 1 tbs thyme
- 1/2 tbs basil
- 1/2 tbs oregano
- 1 tsp rosemary (crushed)

This lavender shortbread recipe was taken from a website called "Desert First."

Lavender Shortbread

Ingredients

- 1 cup (2 sticks) butter
- 2 cups flour
- 1/2 cup sugar
- 1 tablespoon dried lavender (*L. angustifolia*)

Directions

Sift the flour. Beat the butter and sugar in a mixer until creamy. Add flour and beat until combined. Add the lavender and beat just to distribute through the dough. Make the dough into a ball and chill for one hour.

Pre-heat oven to 325°. Roll the dough to 1/4" thickness and cut into desired shapes. Place on greased cookie sheet and bake for 15-18 minutes.

A NOTE OF CAUTION

If you are pregnant or nursing, do not consume any of the following herbs as a tea without first consulting your physician.



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Common & Botanical Name	Type	Part Used	Growing Tips
Aloe <i>Aloe vera</i>	P	Sap is applied directly to cuts and burns. Harvest outer leaves first.	Full sun to partial shade; regular water. Grows 1-2' tall in clumps. Does best in a pot that can be moved indoors or to a protected area during winter months. For most of the year, allow soil to dry completely between watering. In summer, take care soil does not dry out. Small "pups" that grow off the side of the plant can be repotted to make a new plant.
Angelica <i>Angelica archangelica</i>	P	Stems can be made into a candied confection. Young leaves can be used in tea.	Partial shade; regular water. Grows 6' tall and 4' wide. Ensure soil is rich in organic matter that stays fairly moist. Flowers are greenish-yellow and umbel-shaped. Short-lived perennial.
Anise Hyssop <i>Agastache foeniculum</i>	P	Leaves can be used in salads; also for tea. Plant can produce a dark green dye.	Full sun or partial shade; moderate water. Grows 3' tall and 2' wide. Has eye-catching, blue colored flower spikes that attract hummingbirds and butterflies. Foliage and flowers are licorice scented.
Basil <i>Ocimum basilicum</i>	A	Use fresh leaves for best flavor in cooking. Save basil by drying it, adding it to an oil or by freezing it as a paste.	Full sun; regular water. Grows 2' tall and 1' wide. Plant basil after danger of frost. Mulch around the plant to retain moisture. For bushier growth, pinch the top of the main stem. Many aromatic varieties exist, including lemon, anise and cinnamon.
Bay <i>Laurus nobilis</i>	P	Leaves added fresh or dried to stews and soups. Remove leaves before serving.	Full sun to partial shade; moderate water. Grows as a shrub or tree 12-40' tall and wide. Responds well to pruning; makes an excellent topiary. Needs good drainage and moderate water. Can be subject to black scale and laurel psyllid insects.
Beebalm <i>Monarda didyma</i>	P	Fresh flowers can be added to salads or as garnishes. Leaves dried for use as a tea; leaves and flowers used in potpourri.	Full sun to partial shade; keep moist. Grows to 3-4' tall. Dark green, 4-6" leaves have a pleasant citrus-mint scent (similar to bergamot). Tubular flowers attract bees, hummingbirds and butterflies. Flower colors vary: pink, rose, red, purple and lavender.
Borage <i>Borago officinalis</i>	A	Add fresh flowers to salads or use as a garnish. Remove flower from prickly sepal.	Full sun to partial shade; moderate water. Grows 2-3' tall and 1' wide. Although an annual, this plant reseeds itself yearly. Thin to keep desired plants. Leaves are prickly. The bright blue flowers are attractive and will draw many bees to your garden.

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Common & Botanical Name	Type	Part Used	Growing Tips
Calendula <i>Calendula officinalis</i>	A	Fresh petals can be added to salads. Dried petals in potpourri.	Full sun; moderate water. Grows 1 1/2' tall and wide. Calendula is tolerant of many growing situations. Reseeds itself each year, but not enough to become a weed.
Catnip <i>Nepeta cataria</i>	P	The leaves and stems are dried for use in cat toys. Cats also enjoy it fresh in the garden.	Full sun to partial shade; moderate water. Grows 1-3' tall and wide. Prefers well-drained soil. Shear plant back after blooms fade to encourage re-bloom. Catnip seeds itself readily and can become a pest in the garden. The plant creates clumps that can be divided in winter or early spring.
Chamomile <i>Matricaria recutita</i>	P	Daisy-like flowers used fresh or dry in a tea for stomach ailments.	Full sun; moderate water. Grows 2' tall and wide. Dead-head (cut off old blossoms) for more blooms. Flowers have a pleasant scent. Another form of chamomile, <i>C. nobile</i> can be used as a lawn substitute. However, all weeding must be done by hand as no herbicides exist that can kill the weeds but not the chamomile.
Chives <i>Allium schoenoprasum</i>	P	Leaves have a subtle, onion-like flavor. Best used fresh. Pink blossoms in potpourri.	Full sun to partial shade; regular water. Grows in 2' tall clumps. Seeds can be difficult to germinate. Snip stems for fresh use only, as chives do not store well in the refrigerator. Chives can be used creatively as a tie to hold together carrots or asparagus during cooking time.
Cilantro & Coriander <i>Coriandrum sativum</i>	A	Leaves are cilantro; seeds are coriander.	Partial shade; regular water, especially in summer. Grows 2-3' tall and 9" wide. Plant seeds in fall after danger of frost is past. For cilantro harvest, select young leaves. To harvest coriander seeds, wait until flowers have bloomed. When seeds start to form, cut stems and place about 6 bunches in a paper bag. Tie the bag and put it in a warm, dry place. Seeds should be ready in 10 days.
Dill <i>Anethum graveolens</i>	A	Leaves used in salads. Seeds used whole or ground in recipes; also for making pickles.	Full sun; regular water. Grows 3-4 feet tall and wide. Has feathery leaves and white umbel-like flowers. This plant will self-sow readily, so be prepared to pull out many seedlings. Wind can destroy stalks; stake the plant or grow in a well-protected area. Harvest dill seeds by picking umbels after bloom and just before seeds are fully dry. Hang them upside down in a paper bag.

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Common & Botanical Name	Type	Part Used	Growing Tips
Fennel <i>Foeniculum vulgare</i>	P	Leaves and stems used in salads; stem cooked as a vegetable. Seeds used whole or ground.	Full sun, moderate water. Grows 3-6' tall, depending on variety. Fennel self-sows and can become invasive. Similar in appearance to dill, fennel has yellow, umbel-like flowers. Bronze fennel has a bronzy-purple foliage. Fennel is best used fresh. Leaves and seeds have a licorice flavor.
Geranium <i>Pelargonium species</i>	P	Leaves can be dried and used to make fragrant sachets.	Full sun to partial shade; moderate to regular water. Grows 1-3' tall. Small flowers are inconspicuous, leaves are extremely fragrant. Numerous scents exist including peppermint, rose, lemon, apple, lime and nutmeg.
Horseradish <i>Armorica rusticana</i>	P	Peel and grate for sauces. Young leaves in salads. Root and leaves used to make a yellow dye.	Full sun; regular water. Grows 3' tall in clumps. Does best in moist, rich soil. Can be purchased bare root in the fall at most nurseries. Pieces of the root can be harvested off the side as the plant begins to clump. Harvest during fall, winter and spring.
Hyssop <i>Hyssopus officinalis</i>	P	Minty leaves and flowers are somewhat bitter; can be used to flavor meat and salads; potpourris.	Full sun or light shade; moderate to regular water. Tolerates dry conditions. Grows 1 1/2 to 2' tall. Makes a nice border or container plant. Hyssop has a medicinal-like fragrance. Flower color can be pink, white or dark blue depending on the plant species. Bees are very attracted to this plant.
Lavender <i>Lavandula species</i>	P	Dried flowers of <i>L. angustifolia</i> used to flavor tea, cookies and jelly; other lavender species used for making sachets. Lavender aroma is said to discourage moths.	Full sun; little water. Very drought tolerant. Height depends on variety. Well drained soil and little to no fertilizer. Prune lavender every year in spring, <u>after</u> danger of frost has passed. In winter, if plant appears to be destroyed by frost, do not prune. Wait until spring to see if new growth appears. Lavender flower color can range from purplish blue to pink or white. To dry lavender, gather flowers just as they open and set them on trays in a dry place or hang them upside down in bunches.
Lemon Balm <i>Melissa officinalis</i>	P	Add fresh or dried leaves to tea. Said to relieve tension headaches. Use fresh leaves in salads.	Full sun to partial shade; regular water. Grows 2' tall and 1 1/2' wide. Can be invasive as it self-sows by seed and replants itself by rhizomes. Makes a good container plant. Shear tops occasionally to keep form bushy; cut off flowers before they go to seed. Honeybees are very attracted to lemon balm. Harvest leaves before flowers bloom for best flavor. Grows very well near faucets where it doesn't mind the extra water.

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Common & Botanical Name	Type	Part Used	Growing Tips
Lemon Verbena <i>Aloysia triphylla</i>	P	Dried leaves make a flavorful tea. Fresh leaves added to salads. Excellent in potpourri.	Full sun; regular water. Grows 6' tall and wide. Can be somewhat leggy. Prune in both midsummer and spring. Can be sensitive to frost. Also sensitive to spider mites, clean with a spray of water to prevent dust-buildup.
Marjoram <i>Origanum majorana</i>	P	Fresh or dried leaves used to season meat and stuffing.	Full sun; little to moderate water. Grows 1-2' tall and wide. This plant is in the same family as oregano and is similar in appearance and scent. Flowers are tiny and white or pink. Marjoram is often used as an oregano substitute.
Mint <i>Mentha species</i>	P	Use young leaves only. Peppermint for tea, spearmint for salads.	Full sun or partial shade; regular water. Grows 1-3' tall and wide. Can be an extremely invasive plant. Keep in pots for best control. Flavored mints include apple mint, pineapple mint, chocolate mint and orange mint. Grows very well near faucets where it doesn't mind the extra water.
Nasturtium <i>Tropaeolum majus</i>	A	Flowers have a peppery taste and can be added to salads or floated in punch bowls for decoration.	Full sun to partial shade; regular water. Grows 1' tall and 3' wide. Both vining and compact forms exist. Flowers come in numerous colors: red, yellow, maroon and off-white. Blooms last from summer to first frost.
Oregano <i>Origanum vulgare</i>	P	Leaves used to flavor sauces.	Full sun; little to moderate water. Grows 2 1/2' tall and wide. Best known for flavoring tomato sauces. Makes a great container plant. <i>O. vulgare</i> 'Compactum' has best flavor for cooking.
Parsley <i>Petroselinum crispum</i>	B	Fresh and dried leaves used in food. Best treated as an annual; replant every year.	Full sun to partial shade; regular water. Flat-leaved Italian parsley grows 2-3' tall and wide and is considered the most flavorful. Curly-leaved French parsley grows 6-12" tall and wide and is used for garnish. To dry parsley, make small bunches and hang them in a shady area, then store in an airtight container.
Rose <i>Rosa species</i>	P	Rose hips are high in vitamin 'C'. Rose petals can be used in potpourri.	Full sun; regular water. Grows to 6' tall and wide. <i>R. rugosa</i> and <i>R. laevigata</i> have excellent for rose hips. <i>R. damascena</i> has intensely fragrant flowers. <i>R. gallica</i> is an old-world rose whose flowers were used in wreath making.

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Common & Botanical Name	Type	Part Used	Growing Tips
Rosemary <i>Rosmarinus officinalis</i>	P	Use fresh or dried sprigs when cooking with meat or vegetables.	Full sun; little to moderate water. Height varies with type of plant. Used as a groundcover or small to large shrub. Tall types make a good hedge. Prune lightly on a regular basis for shape. Flower color can be blue, purple, pink or white. To harvest: remove 4" pieces from the branch tips.
Sage <i>Salvia officinalis</i>	P	Fresh or dried leaves used in cooking.	Full sun to partial shade; regular water. Grows 1-3' tall and 1-2' wide. Replace leggy plants every 3-4 years. Leaves can be harvested anytime but are best used fresh.
Tarragon <i>Artemisia dracunculus</i>	P	Fresh or dried leaves in salads. Avoid over-cooking, as this brings out a bitter flavor.	Full sun; little to moderate water. Grows 2' tall, creeps along the ground. Makes a good container plant. French tarragon is used in cooking, Russian tarragon has little flavor. Hang upside down to dry. Stores well in the freezer.
Thyme <i>Thymus vulgaris</i>	P	Fresh leaves can be used in most dishes; dried leaves make a good tea for sore throat or gums.	Full sun to partial shade; little to moderate water. Grows 1' tall and 2' wide. Makes a good container plant, keep on the dry side. When picking, do so before it begins flowering. Bees are attracted to the small white or purple flowers.
Yarrow <i>Achillea millefolium</i>	P	Flowers yield a yellow dye. Dried flowers make excellent bouquets.	Full sun; little to moderate water. Grows 3' tall in clumps that get larger each year. Divide in spring if desired. Flower colors include white, pink, yellow and red.

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