



Spices and Herbs for the Home Garden

Guide H-221

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The aromatic, medicinal and flavoring characteristics of herbs have been prized by humans for more than 4,500 years. Wormwood, elderberry, hemlock and other herbs were used by the ancient Egyptians as early as 1600 B.C. Although most herbs are used primarily for cooking and as scents to enhance our environment, a resurgent interest has occurred in medicinal uses of herbs and their decorative qualities in an edible ornamental garden.

HERBS AND SPICE DEFINITIONS

The term “herb” has many definitions. It is often defined botanically as an annual, biennial or perennial that does not produce persistent woody tissue. This, however, would leave out many aromatic trees and shrubs that are often used as herbs. A broader definition might be any plant or plant part that is used for its culinary, cosmetic, medicinal or aromatic qualities. Spices tend to be more aromatic or fragrant than herbs and have a pungent taste. Spices are generally produced from flowers, fruit, seeds, roots or bark, while herbs are generally made of fresh or dried leaves, although there are some exceptions.

GROWING CONDITIONS

Herbs and spices grown in New Mexico are generally limited to those adapted to neutral or alkaline soil growing conditions. A 10 feet by 12 feet area generally supplies ample space for an herb garden for an average-sized family. It's wise to devote one side of the garden to perennials and biennials and the other side to annuals, which need to be replaced each year. Many herbs, however, are well suited to an edible landscape where their dual natures can be exploited. Good examples include perennial sage with its purple flowers and savory leaves, and Florence fennel, whose long, fern-like aromatic leaves surround stems topped with small yellow flowers in an umbel-shaped head.

Soil for an herb garden should be well prepared. Early in the spring, fertilize the soil with a balanced fertilizer and ample quantities of compost. Bed design varies according to the mature sizes of the select plants and the watering technique. Best results are generally achieved with drip irrigation and mulch. Wood shavings, straw, pecan hulls, dry bluegrass clippings or other organic mulches help cool the soil, reduce water evaporation and salt buildup, discourage annual weeds and reduce the amount of soil splashing up on leaves.

Planting depth and distance between plants varies with herbs. Some herbs are best propagated

vegetatively. Insects and diseases are rarely serious problems on most herbs.

PREPARING HERBS AND SPICES

Stems, flowers, and leaves can be tied together for curing in small bundles and hung upside down in a dry, shady location (such as a garage, shed, or kitchen) until dry. Leaves and flowers also can be dried in a shallow tray in the shade. Dry leaves and flowers can then be pulverized by rubbing them between the palms and fingers. Store in airtight glass containers in the dark. Seeds from plants such as coriander, anise and dill can be collected by placing the dry heads in a paper sack and separating the seeds by hand.

DESCRIPTIONS OF HERBS AND SPICES

The following descriptions can be helpful in selecting herbs to be grown in a small area.

Aloe (*Aloe vera*). A perennial plant with light green, fleshy tapered leaves and spiny margins. Leaves form a rosette at the base of the plant. Cultivate in a greenhouse, sunroom or window-sill to keep from freezing (minimum of 41°F). Propagate from suckers that form at the base of the plant. Aloes prefer full sun to light shade and well-drained soils. Leaves exude a gelatinous sap when broken and can be used to treat burns and itchy skin.

Amaranth (*Amaranthus hypochondriacus*). A tall, bushy annual with green to red lanceolate to oblong leaves. Flowers occur in clusters from 6 to 12 in long; prefers well-drained soils and full sun. Leaves high in protein, cooked like spinach. Red to black seeds grind into flour for baking.

Angelica (*Angelica archangelica*). A biennial or perennial plant up to 8 feet tall. Often called wild celery, angelica has purplish hollow stems. Umbel-shaped flower head with small

white to greenish flowers. Prefers moist, well-drained, rich soils and partial shade. Seeds require light (do not cover seed) and 62°F to germinate. Licorice-flavored leaves can be added to soups, stews, salads, teas and fish for flavor. Stems can be candied. Leaves can also be used in potpourri.

Anise (*Pimpinella anisum*). Also called aniseed, anise is an annual that grows up to 2 feet tall with small, yellowish-white flowers in an umbel-shaped head. Anise likes relatively dry, well-drained soil and full sun. Seeds germinate in 20 days at a temperature of 70° F. Licorice-flavored leaves can be used to make tea and flavor soups, stews and salads. Seed can be ground or used whole to flavor cheese and eggs. Anise enhances the sweetness of cake, cookies and other pastries. Seeds can be crushed and added to sachets.

Arugula (*Eruca vesicaria subsp. sativa*). Upright annual with toothed leaves and four-petaled, cream-colored flowers. Prefers moist, well-drained rich soil and full sun to partial shade. Leaves are very pungent and used in salads, stir fries, sauces and to flavor soups.

Basil (*Ocimum basilicum*). Often referred to as sweet basil, this annual grows up to 2 feet tall. Leaves are very fragrant with a rich, mildly spicy, mint/clove flavor. Prefers moist, well-drained rich soil and full sun. Germination is optimum at 75 to 85° F. Use fresh leaves for maximum flavor in tomato sauces, salads, vinegars, teas, and eggs, and on lamb, fish and poultry. Add dry leaves to potpourris and sachets. Other species of basil vary in color, form, flavor and fragrance.

Borage (*Borago officinalis*). An annual, 1^{1/2} to 2 feet tall with hollow stems and numerous grayish-green hairy leaves up to 6 in long. Blooms are star-shaped blue flowers. Prefers rich, moist, sandy loam soils and full sun. Grows easily from seed. Add leaves to tea for a crisp cucumber-like flavor. Young leaves can be finely chopped and added to

salads, soft cheeses, sandwiches or cooked as greens. Candied flowers can be used as decorations on pastries. Leaves also have been used by some herbalists as poultices to soothe external inflammations.

Calendula (*Calendula officinalis*). A hardy erect annual covered with fine hairs. Grows to a height of 18 in; likes full sun and well-drained soil. Also called the *pot marigold*, seed should be sown in the garden when soil temperatures are 60° F or higher. The pale yellow to orange ray flowers make it an excellent ornamental. Petals can also be dried and used to color and flavor butter and custards. Petals also add flavor to soups, stews and poultry. Dried flowers can also be used in flower arrangements or as a yellow dye for wool. Reported to be a good antiseptic.

Caraway (*Carum carvi*). Annual and biennial types grow to 2 feet tall with small, white flowers in compound umbels. Prefers sandy loam soils with full sun to slight shade. Easily propagated directly from seed. Seeds commonly used to flavor rye breads, salads, waffles, soups, pork, pastries, cheese and sauerkraut. Leaves also are popular in salads, soups and stews. Roots can be steamed, chopped, and used in soups and stews as well.

Catnip (*Nepta cataria*). Gray-green perennial that can reach a height of 1 to 3 feet. Soft white fuzz covers leaves and square-shaped, ridged stems. Flowers are white with purple-pink markings. Leaves are heart-shaped and coarsely toothed with whitish bottoms. Seed germination takes place in 20 days at 67° F, but propagation is easier using vegetative cuttings. Likes sandy, well-drained soil and full to partial shade. Dry leaves and flower heads can be used to make tea to aid digestion and sleep. Dry leaves can also be used as a favorite stuffing for cloth toys for cats. **Catmint** (*Nepta mussinii*) is an ornamental with lavender blue flowers in loose spikes.

Chamomile, German (*Matricaria recutita*).

An erect annual, German Chamomile can reach a height of 2 to 3 feet. Stems are heavily branched with feathery foliage. One-inch diameter, daisy-like flowers develop in early summer to late fall. Less fragrant than Roman Chamomile, German Chamomile has apple-scented/flavored flowers with hollow, conical-shaped yellow centers with white- to cream-colored petals. Propagated from seed, German Chamomile prefers moist to dry well-drained soils and full sun. Flowers are harvested when fully opened and used fresh or dried. Leaves are somewhat coarser than those of Roman Chamomile. Dried flowers are used to make tea for indigestion and insomnia. Plant extracts also are used in various lotions, ointments and inhalations.

Chamomile, Roman (*Chamaemelum nobile*).

A low-growing perennial that can reach a height of 9 in. Leaves are feather-like with downy fuzz. Daisy-like, 1-inch diameter flowers have yellow solid disks with silver-white to cream colored petals. Seeds require 15 days at 65°F for germination. Easier to propagate from mother-plant offshoots. Prefers a light, dry soil and full sun to partial shade. The fragrance and flavor are stronger than German Chamomile. Flowers are used to flavor tea. Plant extracts also are used in various lotions, ointments and inhalations. Flowers and dry leaves are also used in potpourri.

Chervil (*Anthriscus cerefolium*). A hardy annual (plain and curly types) with fern-like leaves reaching a height of 2 feet. Flowers are small, white and borne on compound umbel heads. Likes moist soils with ample quantities of organic matter. Prefers partial shade. Leaves used as seasoning for salads, soups, stews, vegetables, chicken, sauces, fish, and eggs. Also used in teas to stimulate digestion. Leaves are also used in potpourris, while dried and fresh flowers can be used in bouquets.

Chicory (*Cichorium intybus*). A deep-rooted perennial with dandelion-like blue flowers. Grows to a height of 3 to 5 feet. Propagated

from seed in most soils and prefers full sun. Wild strains are often considered a weed in northern New Mexico. Cultivated varieties like “Witloof” are used for “chicons” or blanched heads that are the result of forcing roots in a dark, warm environment. Fresh leaves can be cooked like spinach, and used in salads or sautéed. Dry roots can be roasted and used as a substitute for coffee.

Chile (*Capsicum annuum*). An annual plant that varies in height from 1 to 3 feet, depending on variety. Fruit exhibit many shapes, colors and tastes. Pungency varies from sweet to extremely spicy, depending on the amount of capsaicinoids in the fruit. Sweet bell peppers can be used in salads, stuffed or to flavor stews and soups. Paprika types are used for food coloring. Pungent varieties can be eaten fresh (green) and dry red pods can be ground and used as a seasoning in various cuisines.

Chives (*Allium schoenoprasum*). This perennial plant has small bulbs and hollow green leaves that can reach a height of 12 to 18 in. Forms clumps of plants that periodically must be separated. Seeds germinate slowly at a temperature of 60 to 70°F. Forms small purple flowers during second year after seeding. Prefers well-drained, moderately fertile soil and full sun. Fresh minced leaves are used to season many cooked vegetables. Also adds flavor to poultry, fish, eggs and cheese sauces. **Garlic Chives** (*Allium tuberosum*) have flat, solid, keel-shaped leaves. White, star-shaped flowers occur in umbels. Has a mild onion/garlic flavor.

Clary (*Salvia sclarea*). A biennial plant with square fuzzy stems reaching a height of 3 to 4 feet. The plant’s pleasant, balsam-like fragrance is popular in both the garden and sachets or potpourris. Prefers sandy loam, well-drained soil and full sun. Flowers vary from purple to white. Tea is used for upset stomach. Fresh or dried leaves can be used to flavor eggs, soups, poultry and salads. Flowers can be used as a garnish.

Coriander (*Coriandrum sativum*). A bright green, hairless annual plant reaching a height of 1 to 3 feet with small, pinkish flowers in short-stalked umbels. Prefers sandy loam soil with ample organic matter and full sun to partial shade. Also called Cilantro (Spanish), minced leaves have a strong sage to citrus taste and are often used to flavor many foods and salsas. Ground seeds are used to flavor gingerbread, cookies, pastries, baked apples, pears, cheese, eggs, and guacamole.

Curry plant (*Hellchrysum italicum*). Small evergreen shrub with gray to silver leaves. Yellow small, roundish flowers. Aromatic leaves smell like curry and used to flavor vegetables, egg dishes, casseroles, soups and rice. Dried flowers may be used in arrangements and potpourri.

Dandelion (*Taraxacum officinale*). An herbaceous perennial with yellow flowers often found in lawns. Grows ^{1/2} to 1 feet tall. Younger leaves used in salads; older leaves steamed like spinach. Roasted roots may be used as a substitute for coffee, similar to chicory. Flowers can be made into wine.

Dill (*Anethum graveolens*). A biennial plant with a taproot similar to a carrot. Can reach a height of 2 to 3 feet with blue-green feathery bows. Numerous yellow flowers comprise a flat head with compound umbels. Plants are self-seeding. Prefers well-drained, moist soil and full sun. Fresh leaves used in salads, soups, fish, eggs, and potatoes or as a garnish. Seeds can be ground or used whole to flavor meats, fish, eggs, cheese and vegetable dishes.

Echinacea (*Echinacea angustifolia*). A perennial, multi-stemmed plant that grows to a height of 1 to 3 feet. Stems covered with bristly hairs. Flowers are similar to Black-Eyed Susan, with purplish cone-shaped centers and purple ray florets. Seeds germinate best when air temperature is at least 70°F. Likes well-drained, fertile soil and full sun to light shade. Roots are black and contain caffeic acid glycoside, an antibiotic that helps heal wounds. Makes an excel-

lent ornamental for flowerbeds. *Echinacea purpurea*, or **Purple Cornflower**, is another popular ornamental. Varieties range in color from crimson to white.

Elderberry (*Sambucus canadensis*). A deciduous shrub that reaches a height of 12 feet. White flowers in clusters produce purple to black juicy berries. Prefers fertile, moist soil and full sun to partial shade. Tart, purplish berries are popular in jams, jellies and wine. Dried flowers can be blended with other teas. Makes an excellent ornamental shrub.

Fennel (*Foeniculum vulgare*). A perennial plant that is often grown as an annual. The blue-green plant has erect, smooth stems that often reach a height of 3 to 4 feet. Leaves of some varieties can be pink to bronze in color. The small yellow flowers are borne in a compound umbel. Likes well-drained soil and full sun. Taste is similar to anise with a smooth nutty, licorice-like flavor. Fresh leaves are popular in salads, soups, and herb butters; and on vegetables, fish, cheese, and eggs. Tender stems can be eaten like celery. Seeds can be ground or used whole for flavoring. Fennel tea will aid digestion. Flowers can be used to make yellow dyes for wool. Bulbs ("Florence" fennel) can be sliced and used in sandwiches or salads.

Flax (*Linum usitatissimum*). Annual with erect stems and narrow grayish-green leaves. Blue, roundish flowers produce round 3/8-in diameter seed capsules. Flattened oval seeds used in breads, roasted as a substitute for coffee or to make tea. Flax from fibers used to make linen.

Garlic (*Allium sativum*). A cool-season, hardy perennial reaching a height of 2 feet. Produces segmented bulbs with flat solid leaves. Bulbs are composed of 5 to 16 cloves enclosed in a white or purplish parchment-like outer sheath. Prefers well-drained, rich soil and full sun to partial shade. Used as an antibiotic and as seasoning to flavor various foods including herb butters, cas-

seroles, stews, soups, meats, fish, poultry, pickles, and vinegars.

Horehound (*Marrubium vulgare*). A perennial plant that reaches a height of 2 to 3 feet. Stems are square-shaped, wooly and bushy. Likes deep, sandy loam soils and full sun. Used in candies and teas to soothe coughs.

Hyssop (*Hyssopus officinalis*). A compact perennial growing to a height of 2 to 3 feet. Upright square stems are very aromatic. Stems terminate in blue to purple flowers occurring in spikes. Flowers can be used to make a mild expectorant tea. Minty leaves and flowers are used to flavor soups, salads, stews and poultry. Makes an excellent ornamental.

Lavender, English (*Lavandula angustifolia*). A bushy, perennial shrub that grows to a height of 3 feet. Purple flowers occur in spikes. Prefers well-drained sandy loam soil and full sun. Generally propagated from cuttings but can be grown from seed which need 30 days to germinate at 65°F or higher. Seeds should be stored moist in a refrigerator for three days before germination. Leaves and flowers can be used as condiments and for teas. Can also be used in wreaths, dried flower arrangements, sachets and potpourris. Excellent ornamental in the garden. Other popular species of lavender include **Spike Lavender** (*Lavandula latifolia*) and (*Lavandula intermedia*).

Lemon balm (*Melissa officinalis*). A perennial plant with square stems. Reaches a height of 2 feet. Prefers well-drained soil and full sun to shade. White to yellowish tubular flowers occur in clusters on axils of leaves. Fresh leaves are used in salads, vegetables, poultry, stuffing, punch and on fish. Dried stems and leaves are used in teas.

Lovage (*Levisticum officinale*). A perennial plant with hollow, ribbed stems like celery, growing to a height of 5 feet. Prefers fertile, well-drained soil and full sun to partial shade. Its celery-flavored leaves are used fresh in salads or dry in soups, stews and sauces. Stems can be

candied or used fresh in salads. Seeds can be ground or used whole for pickling, cheese spreads, sauces and salads.

Marjoram (*Origanum majorana*). A tender perennial, usually propagated as an annual. Square, bushy stems are usually covered in hairs. Reaches a height of 1 feet. Knot-like flower buds produce small, white to pink flowers. Prefers sandy loam soil and full sun to partial shade. Seeds germinate in 25 days at 65°F. Also called **Sweet Marjoram**, leaves and flowers can be used fresh or dried with meat, fish, poultry, salads, eggs, stews, soups and vegetables.

Mint (*Mentha spp.*). A perennial with square stems and spreading roots. Mint grows to a height of 2 feet. Tiny purple to white flowers occur in terminal spikes. Usually propagated from vegetative cuttings. Used to calm upset stomach and relieve muscle spasms. Leaves are used in jellies, sauces, teas and to flavor various candies. Numerous species with various scents. More popular mints include **spearmint** (*M. spicata*), **peppermint** (*M.x piperita*) and **apple mint** (*M. suaveolens*).

Mustard (*Brassica spp.*) Annual with branched stems and yellow flowers. Prefers well-drained, neutral to alkaline soils. Young leaves of **brown mustard** (*Brassica juncea*) and **black mustard** (*Brassica nigra*) are pungent and used to flavor salads. Seeds are grown to make mustard powder.

Nasturtium (*Tropaeolum majus*). A low-growing, viney annual that reaches a height of 1 foot. Leaves are saucer-shaped, red to yellow flowers. Prefers moist, well-drained soil and full sun. Grown from seed planted in early spring. Fresh leaves and flowers give a peppery taste to salads. Excellent ornamental in the garden.

Onion (*Allium cepa*). Generally considered a biennial plant that is propagated from seed, sets, or transplants. Forms a bulb with hollow leaves. Prefers rich, well-drained moist soils and full sun. Cured bulb used raw, steamed, boiled,

stuffed, fried, in soups and stews and with steamed vegetables.

Oregano (*Origanum vulgare*). Woody-based perennial with square, purple-brown, hairy stems. Plants can vary from upright to spreading, with purple-pink to white flowers. "**Greek**" **Oregano** (*Origanum vulgare* subsp. *hirtum*) is one of the most popular culinary varieties, with bright green leaves and white flowers. Leaves used to flavor tomato sauces, cheese, eggs, quiches, vegetables, beef, pork, poultry, beans and shellfish. Dried flowers can also be used in flower arrangements.

Parsley (*Petroselinum crispum*). A biennial plant growing to a height of 1^{1/2} feet. Leaf blades can be flat (*Italian*) or curled, depending on variety. Prefers fertile, well-drained, moist soil and full sun to partial shade. Soak seeds in water and germinate at 70°F for 25 days until emergence. Leaves and stems are used as garnish in salads and as a condiment. Parsley is an excellent source of vitamin C, calcium and iron.

Purslane (*Portulaca oleracea*). Annual with spreading thick stems and fleshy leaves up to 1^{1/4} in long. Small yellow flowers. Prefers well-drained soils and full sun to partial shade. Rich source of omega-3 fatty acids. Raw leaves used in salads or cooked as a vegetable.

Rose (*Rosa spp.*). A deciduous perennial with thorny stems usually grown for its ornamental flowers. Prefers well-drained soils and full sun to partial shade. The tart, cranberry-like rosehips are a rich source of vitamin C. Used in teas, jellies, wines and muffins. Petals popular in potpourris and sachets.

Rosemary (*Rosmarinus officinalis*). A perennial evergreen that varies in height from 2 to 5 feet, depending on cultivar. Has green, needle-like leaves and pale blue flowers. Plants are generally propagated from cuttings or by layering. Can be propagated from seed, but germination is very slow (25 days at 65°F). Leaves used for tea and as flavoring for beef and pork. Popular in xeriscape landscapes.

Sage (*Salvia officinalis*). A hardy 2^{1/2} feet perennial with woody stems and white to purple flowers. Leaves look pebbly and grayish-green in color with velvet-like texture. Seeds require 20 days at 70°F to germinate. Leaves are used to flavor soups, stews, sausage, roaster meats, poultry, pork and vegetables. Attracts bees and makes an excellent ornamental in the garden.

Salad Burnet (*Poterium sanguisorba*). Perennial with a loose mound of pinnate leaves, with 4 to 12 pairs of leaflets. Prefers well-drained soil and full sun to partial shade. Young leaves taste like cucumber and can be used in salads, butters and as garnishes. Seeds can be used in cheese spreads and vinegars.

Savory (*Satureja spp.*). The most popular species are *S. hortensis* (**summer savory**) and *S. montana* (**winter savory**). Summer savory is an annual with fuzzy stems. Winter savory is a semi-evergreen perennial with a woody base that forms a compact bush. Both reach a height of 1^{1/2} feet and prefer full sun. Winter savory is strongly aromatic, while summer savory has a slightly sweeter aroma. Both are used as potherbs to flavor beans, soups, eggs, cabbage and other vegetables. Summer savory can be used as a tea and to flavor herb butters and vinegars.

Sunflower (*Helianthus annuus*). Annual with thick, erect, hairy stems and sizable ovate leaves. Large daisy-like flowers range in color from yellow to orange. Seeds may be eaten raw, roasted or added to cookies, pastries, candy or bread. Oil used for cooking or in salads.

Tarragon (*Artemisia dracunculus*). A perennial plant that reaches a height of 2 feet. Leaves are very aromatic. Prefers well-drained, fertile, sandy loam soil and full to partial shade. Use fresh leaves sparingly in salads or combine with various French sauces. Also used to flavor meat, fish, poultry, various vegetables, vinegars, soups, cheeses, eggs and herb butters.

Thyme (*Thymus vulgaris*). A perennial plant reaching a height of 12 to 19 in. Many-branched, aromatic shrub with lilac to pink flowers. Prefers sandy loam soil and full sun to partial shade. Seeds should be sown indoors at 70°F for optimum germination, then transplanted to permanent location. Often used to flavor cough medicines. Leaves are used in salads as garnishes and as flavoring for poultry, fish, beef, lamb, soups, herb butters, vinegars, beans and vegetables. There are many different species and varieties that vary in shape, color and aroma.

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