

Growing Herbs in the Home Garden

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HISTORY OF HERBS

Herbs have played an important part in man's life for countless years—in his politics, romance, love and religion, health and superstition.

Celery was used by the Abyssinians for stuffing pillows. Ancient Greeks and Romans crowned their heroes with dill and laurel. Dill was also used by the Romans to purify the air in their banquet halls.

Some herbs were given magical properties, probably because of their medicinal uses. The early Chinese considered artemisia to have special charms. In France during the Middle Ages, babies were rubbed with artemisia juices to protect them from the cold. Ancient Greeks used sweet marjoram as a valuable tonic, and parsley as a cure for stomach ailments. Rosemary was eaten in the Middle Ages for its tranquilizing effects and as a cure-all for headaches.

Chives, still a common herb often found growing wild, had economic importance throughout Asia and many Mediterranean countries. Odd as it seems now, the early Dutch settlers in this country intentionally planted chives in the meadows so cows would give chive-flavored milk.

Mint, another popular herb today, also had its beginnings early in history. Greek athletes used bruised mint leaves as an after-bath lotion. In the Middle Ages, mint was important as a cleansing agent and later was used to purify drinking water that had turned stale on long ocean voyages. Mint was also given mystical powers, such as to neutralize the "evil eye" and to produce an aggressive character.

Mustard was lauded by Hippocrates, the ancient Greek physician, and Shakespeare referred to it as a desirable condiment in several of his plays.

Other herbs having importance early in history include basil, saffron, sage, savory, tarragon, and thyme.

Early settlers brought herbs to America to use as remedies for illnesses, for flavoring, for storing with linens, for strewing on floors, or for burning for their pleasant fragrances. Some herbs were used to improve the taste of meats in the days before preservation techniques were developed. Other herbs were used to dye homespun fabrics.

Herb gardens were almost an essential feature around the homes of our pioneers. They were placed in sunny corners near the house to be readily available to the busy homemaker. As the population of the new country grew, people, representing many nations, brought herbs with them and this resulted in an exchange of slips, seeds, and plants.

Many herbs familiar to settlers from other countries were found growing wild in the new country--parsley, anise, pennyroyal, sorrel, watercress, liverwort, wild leeks, and lavender. American Indians knew uses for almost every wild, nonpoisonous plant, but they used the plants chiefly for domestic purposes--tanning and dyeing leather and eating.

DEFINITION, NUMBER, AND TYPES OF HERBS AVAILABLE

Early herb gardens served as the major source of seasonings in the preparation of foods. But the need for homegrown herbs declined with the advent of modern stores. Today, many gardeners are rediscovering the joy and pleasure of producing their own herbs.

Definition of Herb

From the botanical viewpoint, an herb is a seed plant that does not produce a woody stem as does a tree. But an herb will live long enough to develop flowers and seeds—including annuals, biennials, and perennials.

To simplify the definition, consider an herb as a plant which, because of its particular aromatic or healing property, is useful for scenting, flavoring, or medicinal purposes. In addition, some herbs are grown strictly as ornamental plants.

Number of Herbs Available

A true herb connoisseur can select from a wide variety of common and not-so-common herbs. For example, the E & A Evetts Ashfields Herb Nursery of Shropshire, England, lists 57 herbs, 16 mints, 17 thymes in a recent catalog.

The Brooklyn Botanic Garden *Handbook on Herbs* lists 73 different types of herbs.

Some herbs fit into one or more classifications according to use—culinary, aromatic, ornamental, and medicinal.

Culinary Herbs

Culinary Herbs are probably the most useful to herb gardeners, having a wide range of uses in cooking. These herbs, because of their strong flavors, are generally used in small quantities to add flavor. Parsley, produced in the largest amount, is used mostly as a garnish. Next in popularity is sage—an important flavoring in pork sausage. Other popular culinary herbs include chives, thyme, savory, marjoram, mint, and basil.

Aromatic Herbs

Aromatic herbs have some novel uses and are not as popular to grow. Most have pleasing smells from flowers or foliage. The oils from aromatic herbs can be used to produce perfumes, toilet water, and various scents. For home use, the plant parts are used intact, often to scent linens or clothing. When dried, many aromatic herbs will retain their aroma for a considerable period. Some common aromatic herbs include mint, marjoram, lovage, rosemary, and basil.

Ornamental Herbs

Ornamental herbs have brightly colored flowers and foliage. Many have whitish or light-colored flowers. Valerian has crimson blossoms; borage and chicory are blue-flavored forms. Such herbs as variegated thyme, mint, lavender, and chives produce variegated foliage.

Medicinal Herbs

Medicinal herbs have long been thought to have curative powers. But while present medical knowledge acknowledges some healing properties, others are highly overrated. Medicinal herbs should be used carefully. Some herbs are harmless while others can be dangerous if consumed.

Herb Types

Herbs can also be classified as annuals, biennials, and perennials. Annuals bloom one season and then die. Biennials live for two seasons, blooming the second season only. Perennials overwinter and bloom each season once established.

HERBS FOR BEGINNING GARDENERS

Beginning herb gardeners may have a problem deciding which herbs to plant. There are numerous herbs from which to select. A quick check of your supermarket shelf will give some idea of the types of herbs used in cooking and will also serve as a plant guide. Many cookbooks also offer information on uses of various herbs as flavorings.

Following is a good variety of flavors and uses of recommended herbs for beginners:

Strong herbs -- winter savory, rosemary, sage

Herbs strong enough for accent -- sweet basil, dill, mint, sweet marjoram, tarragon, thyme

Herbs for blending -- chives, parsley, summer savory

As your interest and needs increase, you can add to the variety of herbs in your garden. Herbs can be annuals, biennials, or perennials. Keep these classifications in mind when selecting herbs to grow for the first time.

Annuals (bloom one season and die) -- anise, basil, chervil, coriander, dill, summer savory

Biennials (live two seasons, blooming second season only) -- caraway, parsley

Perennials (overwinter; bloom each season once established)—chives, fennel, lovage, marjoram, mint, tarragon, thyme, winter savory.

OUTDOOR HERB CULTURE TIPS

Most commonly used herbs will grow in the Northeast. If you have room, you can make herbs part of your vegetable garden. Or you may prefer to grow herbs in a separate area, particularly the perennials.

Herb Garden Size

First, decide on the size of your herb garden; this will depend on the quantity and variety you want. Generally, a kitchen garden can be an area 20 by 4 feet. Individual 12- by 18-inch plots within the area should be adequate for separate herbs. You might like to grow some of the more colorful and frequently used herbs, such as parsley and purple basil, as border plants. Keep annual and perennial herbs separate. A diagram of the area and labels for the plants will also help.

Site and Soil Conditions

When selecting the site for your herb garden, consider drainage and soil fertility. Drainage is probably the most important single factor in successful herb growing. None of the herbs will grow in wet soils. If the garden area is poorly drained, you will have to modify the soil to have any chance of success.

To improve drainage at the garden site, remove the soil to a depth of 15 to 18 inches. Place a 3-inch layer of crushed stone or similar material on the bottom of the excavated site. Before returning the soil to the bed area, mix some compost or sphagnum peat and sand with it to lighten the texture. Then refill the beds higher than the original level to allow for settling of the soil.

Soil at the site does not have to be especially fertile, so little fertilizer should be used. Generally, highly fertile soil tends to produce excessive amounts of foliage that is poor in flavor. Plants, such as chervil, fennel, lovage, and summer savory, require moderate amounts of fertilizer. Adding several bushels of peat or compost per 100 square feet of garden area will help improve soil condition and retain needed moisture.

Sowing Herb Seed

Nearly all herbs can be grown from seed. Very few diseases or insects attack herbs, but rust infects mints. In hot, dry weather, red spider mites may be found on low-growing plants. Aphids may attack anise, caraway, dill, and fennel.

A few herbs, such as mints, need to be contained or they will take over a garden. Plant them in a no. 10 can or bucket; punch several holes just above the bottom rim to allow for drainage. A drain tile, clay pot, or cement block can also be used. Sink these into the ground; they should confine the plants for several years.

Herbs can also be grown in containers, in window boxes, or in hanging baskets. These methods will require more care, especially watering.

If possible, sow seeds in shallow boxes in late winter. Transplant seedlings outdoors in the spring. A light, well-drained soil is best for starting the seedlings indoors. Be careful not to cover the seeds too deeply with soil. Generally, the finer the seed, the shallower it is sown. Sow anise, coriander, dill, and fennel directly in the garden since they do not transplant well.

Most biennials should be sown in late spring directly into the ground. Work the soil surface to a fine texture and wet it slightly. Sow the seeds in very shallow rows and firm the soil over them. Do not sow the seeds too deeply. Fine seeds, such as marjoram, savory, or thyme, will spread more evenly if you mix them with sand. Some of the larger seeds can be covered by as much as one-eighth inch of soil. With fine seeds, cover the bed with wet burlap or paper to keep the soil moist during germination. Water with a fine spray to prevent washing away of the soil.

Cutting and Division

Cutting and division are also useful in propagating certain herbs. When seeds are slow to germinate, cuttings may be the answer. Division is useful for tarragon, chives, and mint, while cuttings work with lavender. Some herbs spread rapidly enough to make division a main source of propagation.

Harvesting Herbs

Fresh leaves may be picked as soon as the plant has enough foliage to maintain growth. To ensure good oil content, pick leaves or seeds after dew has disappeared but before the sun becomes too hot. For dry, winter use, harvest leaves before flower buds open. Pick seed heads as color changes from green to brown or gray. Wash dirty leaves and seed heads in COLD water; drain thoroughly before drying.

Winter Protection

Perennial and biennial herbs should be winter protected. Many herbs are shallow-rooted, which makes them susceptible to heaving during spring thaws. Mulch with straw, oak leaves, or evergreen boughs 4 inches deep to protect the plants. Apply the mulch after the ground has frozen in early winter. Do not remove the mulch until plants show signs of growth in early spring. Early removal could result in some early frost damage.

INDOOR HERB GARDENING

Herbs also can be grown indoors for year-round enjoyment. Growing herbs indoors is no more difficult than producing them in the garden.

Indoor plants will need essentially the same conditions as herbs grown outdoors--sunlight and a well-drained soil mix that is not too rich.

Select a south or west window. Different herbs have different light requirements but most need a sunny location; in winter, "grow lamps" or fluorescent lamps are helpful in supplementing light.

When planting, mix two parts sterilized potting soil and one part coarse sand or perlite. To ensure sweetness of the soil, add a cup of ground limestone per bushel of soil--or 1 teaspoon of lime per 5-inch pot. There should be an inch of gravel at the bottom of each pot to ensure good drainage.

Consider the water needs of each herb: a general rule is that growing plants need more water as do plants in clay pots or hanging baskets. Misting and grouping the plants on a tray of moistened pebbles will help keep them in a

humid condition. Don't drench herbs--avoid getting herb roots soggy.

Annual herbs can spend their full life cycle in a pot indoors. Perennial herbs, however, will do better if you place them outdoors during the summer. Plunge the pot in soil up to its rim, or keep it in a protected location on the porch or patio.

Herb plants need sun during the summer months, so place them accordingly. To prevent loss of foliage and plant damage, bring herbs indoors before frost. A light frost is helpful on mint, chives, and tarragon; it tends to induce a rest period and the resulting new growth is firm and fresh.

You can maintain an indoor herb garden indefinitely by periodic light feeding, yearly repotting, renewal of annuals, seasonal moves outdoors for perennials, and occasional pruning. Water plants as needed. Use several planters or a divided one to allow for different moisture needs of plants.

DRYING HERBS

If you have an herb garden, you'll find that home-dried herbs can be just as tasty as those you buy at the store. However, proper handling is as important to the success of your herb harvest as good cultural practices.

Preparation

Most herbs are at their peak of flavor just before flowering, so this is a good time to collect them for drying and storage. To be certain, check drying directions on specific herbs in a reliable reference book. Cut off the herbs early in the morning just after the dew has dried. Cut annuals off at ground level, and perennials about one-third down the main stem, including the side branches.

Wash herbs, with the leaves on the stems, lightly in COLD running water to remove any soil, dust, bugs, or other foreign material. Drain thoroughly on absorbent towels or hang plants upside down in the sun until the water evaporates.

Strip leaves off the stalks once plants have drained and dried, leaving only the top 6 inches. Remove all blossoms.

Natural or Air Drying

Herbs must be dried thoroughly before storing. High-moisture-content herbs, such as mint and basil, need rapid drying or they will mold. To retain some green leaf coloring, dry in the dark by hanging plants upside down in bunches in paper bags. Hanging leaves down allows essential oils to flow from stems to leaves. Tie whole stems very tightly in small bunches—individual stems will shrink and fall. Hang in a dark, warm (70-80 degrees F (21.1-26.7 degrees C), well-ventilated, dust-free area. Leaves are ready when they feel dry and crumbly—in about 1 to 2 weeks.

Drying Seeds

Seeds take longer to dry than leaves—sometimes as much as 2 weeks for larger seeds. Place seed heads on cloth or paper. When partially dry, rub seeds gently between palms to remove dirt and hulls. Spread clean seed in thin layers on cloth or paper until thoroughly dry.

You can also dry herb seeds by hanging the whole plant upside down inside a paper bag. The bag will catch the seeds as they dry and fall from the pod.

Oven Drying

For quick oven drying, take care to prevent loss of flavor, oils, and color. Place leaves or seeds on a cookie sheet or shallow pan not more than 1 inch deep in an open oven at low heat—less than 180 degrees F (82.2 degrees C)—for about 2 to 4 hours.

Microwave ovens can be used to dry leaves quickly. Place the clean leaves on a paper plate or paper towel. Place the herbs in the oven for 1 to 3 minutes, mixing every 30 seconds.

- Silica Gel or Salt Drying

Silica gel or non-iodized table salt can be used to dry or "cure" nonhairy leaves. Clean and blot dry leaves before placing them in a tray or shallow pan of the silica gel or salt. After leaves have dried, approximately 2 to 4 weeks, remove the leaves from the drying material, shake off the excess material, and store in glass containers. Before using, rinse leaves thoroughly in clear, cold water.

Another method of drying herbs is to remove the leaves from the plants, wash them, and spread them thinly on screens to dry, avoiding exposure to bright light. Cheesecloth makes a good screen material and stretches well.

Freezing Herbs

Herbs can also be frozen. Harvest according to recommendations, wash thoroughly, blanch in boiling, unsalted water for 50 seconds, cool quickly in ice water, package, and freeze. Washed, fresh dill, chives, and basil can be frozen without blanching.

Storage

When completely dry, the leaves may be screened to a powder or stored whole in airtight containers, such as canning jars, with tightly sealed lids.

Seeds should be stored whole and ground as needed. Leaves retain their oil and flavor if stored whole and crushed just before use.

For a few days, it is very important to examine daily the jars in which you have stored dried herbs. If you see any moisture in the jars, remove the herbs and repeat the drying process. Herbs will mold quickly in closed jars if not completely dry.

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Revised Slightly 12/94 by Deborah Kavakos - Agricultural Program Manager. - Cornell Cooperative Extension of Greene County.

KEY

LIFE CYCLE

A = Annual
B = Biennial
P = Perennial
TP = Tender Perennial

EXPOSURE

O = Full Sun
□ = Part Shade
-- = Shade

FLOWER COLOR

B = Blue V = Violet
O = Orange W = White
RE = Red Y = Yellow
P = Pink

USES

X = Culinary
D = Dye
RX = Medicinal
A = Aromatic

HEIGHT

' = Feet
" = Inches

FLOWERING TIME

ES = Early Summer
MS = Mid Summer
LS = Late Summer

FOLIAGE COLOR

GR = Green
G = Gray

PROPOGATION

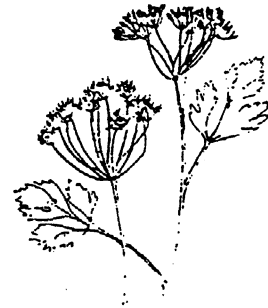
CUT = Cutting
≠ = Division
S = Seed

ANISE HYSSOP (*Agastache foeniculum*)

P 3' O/□ M-LS L GR X ≠,S

A native to North America and will grow in Zones 3-8. Bees are attracted to the flowers. Leaves and flowers are anise-scented and can be used in teas, fruit salads, drinks.

Seeds started inside in spring, flower late summer the same year. Will self-sow and can be transplanted.



ALLIUM

P varies O ES/LS W,V GR. X,RX CUT,S≠

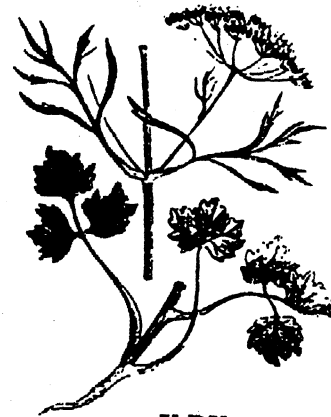
This grouping includes chives, garlic, leeks and onions. Many are grown for their culinary uses but also possess medicinal properties. The long flower stalk is a beautiful cut flower or ornamental addition to the garden. The long thin leaves and clump nature will compliment many of the bushy herb plants. Most are easily grown from bulb, seed or division.



ANISE (*Pimpinella anisum*)

A 1-1/2-2' O MS W GR X,RX S

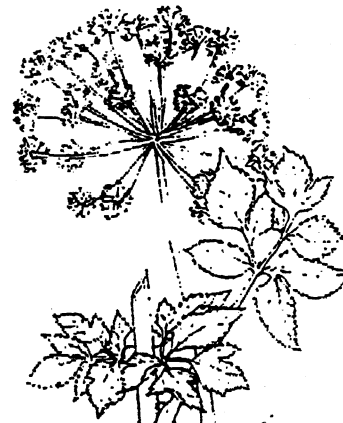
Finely cut, serrated leaves with small, white flowers in flat clusters. Leaves and seeds taste like licorice. Both used in cakes and confections. Oil from seed used medicinally. Will grow rapidly from seeds directly planted after danger of frost. Leaves can be used any time, seeds gathered after about one month after flowering.



ANGELICA (*Angelica archangelica*)

P 6' -- MS W GR X,RX ≠,S

Umbelliferous plant that has hollow stems that are crystallized and used to decorate cakes and sweets. Medicinally the plant is used as a rub for rheumatic conditions. A shade loving plant, Angelica is very tall (6') and should be placed at the back of the bed.



ARTEMESIA (*Artemesia*)

P varies O/□ N/A varies G A,RX C,≠,S

This is a very large group that includes the Wormwood, Southern Wood, Mug Wort, Silver Mound, Silver King. Most are grown for the variation in foliage and the silver to grey color of the foliage. Often used dried as a filler for dried arrangements; many are also used as insect and moth repellents. The medicinal properties are strong and are not recommended for home use. The plants were used to expel internal worms. Some in the group are perennials; some annuals that easily self sow.



BASIL (*Ocimum basilicum*)

A 18" O MS W GR X S

One of the most popular culinary herbs, Basil comes in a wide variety of color, scent and shaped leaf forms (purple ruffles, lemon Basil, Mexican spice Basil, etc.). The small white flowers appear on spikes. Basil is best if harvested before flowers open. Basil grows easily from seed after the ground is well warmed. Use the top portion as the plant grows which will also promote bushy growth.



BAY (*Laurus nobilis*)

TP varies O ES Y GR X,RX CUT

A perennial shrub or tree native to the Mediterranean frequently grown in containers that are over wintered indoors in colder areas. The smooth, leathery leaves are picked from the tree and used fresh, or dried for culinary use. The flavor becomes stronger when the leaves are dried. Medicinally, Bay is used to aid digestion and is said to be good for treating influenza and bronchitis.



BERGAMOT OR BEE BALM (*Monarda didyma*)

P 2-1/2-3' O/□ NS R,P,V GR X,RX S≠

Native to North America, this herb was used by native Americans. As the name implies, bees are also attracted to the flowers. Bergamot is easily grown from division and will flourish in a sunny, rich soil bed.

Native Americans made tea from the leaves or flowers and used it to ease coughs and bronchial complaints. *Monarda fistulosa* has violet flowers; *Monarda didyma*, red; and *Monarda citriodora*, pink.



BORAGE

A 2-3' O ES B G X S

This annual easily re-seeds itself. Borage is a decorative herb with very hairy leaves and sky-blue flowers that look like stars. Borage will grow in very dry, harsh conditions but is not easily transplanted. The young leaves can be added to salads and have a cucumber-like flavor. The flowers are picked and preserved with eggwhite and sugar to be used as confectioner decorations. Bees are also attracted to the flowers.



BURDOCK (*Arctium lappa*)

B 3-7' O MS-LS V GR X,RX S

Often seen now as a troublesome weed pest, Burdock is a nutritious plant that also has medicinal qualities. Medicinally Burdock has been used for centuries for many skin disorders such as eczema, acne, impetigo, herpes, ringworm, measles, boils, bites and bruises. Fresh young stalks can be boiled or served raw.

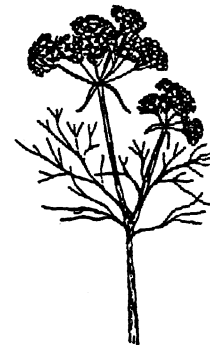


CARAWAY (*Carum carvi*)

B 30" O ES W GR X S

The caraway plant has a flat, white cluster of flowers and finely cut leaves which resemble a carrot plant.

Easily raised from seed, the plant usually bears seed the second season. Roots should be protected with a mulch over the winter. The seeds are picked when they are grayish-brown in color about one month after flowering. Caraway seeds are used in many Hungarian type dishes, coleslaw, cheese, stews and casseroles.



CALENDULA (*Calendula officinalis*)

A 1-1/2' O M-LS O,Y G X,RX S

A beautiful flowering annual that many folklore legends revolve around. The flowers of the Calendula open during the day and close up at night. In German folklore it is a sign of rain if the flowers remain closed after seven o'clock in the morning.

Calendula has a long history of medicinal, culinary and cosmetic uses.

Calendula was cultivated in kitchen gardens and dried to color cheeses and butter. Cosmetically, Calendula is added to skin lotions and shampoo. For cuts and wounds, Calendula is blended with an oil base and applied to the wound.

Flowers to be dried should be picked in mid morning before they are fully opened.



CATNIP (*Nepeta x faassenii*)

P 3-4' O/□ MS V,W GR-G X S, ≠

A hardy perennial that has gray-green leaves. The plant has purple flowers and grows easily from seed. The wild Catnip (*Nepeta cataria*) has white flowers. The plant has an overwhelming attraction for cats. Catnip can be used as a tea beverage. It is used for fevers and colds, nervousness and to induce sleep. The plant is also attractive to bees. Gather leaves and flowers in full bloom to be dried for winter use.



COMFREY (*Symphytum officinale*)

P 1-4' □,-- W,B ES-LS GR RX ≠,S

Comfrey is a spreading perennial that has long been used medicinally. It likes any damp soil in a shady position. For external use only, the leaves and roots are said to help broken bones set, heal wounds, cuts, swellings, sprains and bruises.

Comfrey makes an excellent compost plant that decomposes quickly and helps other material compost down.

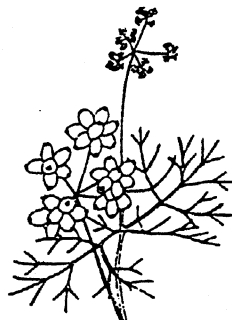
Symphytum officinale has white flowers. *Symphytum caucasicum* has blue flowers.



CORIANDER (*Coriandrum sativum*)

A 2' O ES W GR X S

Easily grown from seed, Coriander leaves are commonly referred to as Cilantro. Cilantro is an ingredient in many chili sauces, curries, salsa and other exotic dishes. The small flowers are formed on flat heads. Seeds ripen mid summer and should be harvested before they fall to the earth.



DILL (*Anethum graveolens*)

A 2-3' O ES Y GR X S

Popular annual that will reseed itself if seeds fall. Seeds can be sown directly in garden after frost has passed as it is difficult to transplant. Pick leaves just as flowers open, seeds when they are flat and brown.



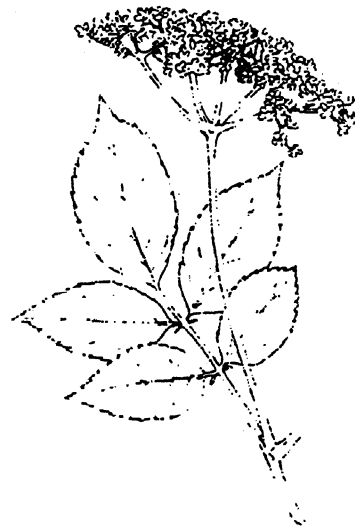
Leaves and seeds are popular for flavoring pickles and sauerkraut.

ELDERBERRY (*Sambucus nigra*)

P shrub or tree O ES W GR X,D,RX S, ≠, CUT

Often found growing along roadsides, Elderberry is a shrub that is at home in the back of a herb garden. The bark and roots produce a black dye. The berries have many culinary uses from wine to jam to pies. Medicinally elderberry has been considered beneficial as a blood purifier.

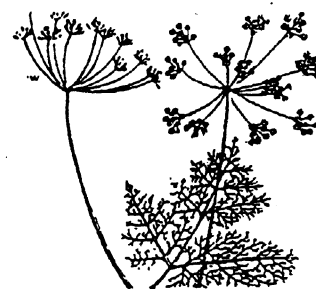
Leaves can be gathered at any time. The berries should be collected when fully ripe in September or October, hopefully before the birds strip them from the plant.



FENNEL (*Foeniculum vulgare dulce*)

P 3-4' O ES Y GR X,RX S

The feathery leaves of the perennial Fennel plant have the taste and smell of anise. Used for culinary purposes fennel is used in marinades, soups, salads and to flavor cakes. The variety *Foeniculum vulgare azoricum* or Florence Fennel, an annual, forms a bulbous base that is sliced and eaten raw. Medicinally Fennel seed is used to make tea said to be an aid for digestion. Cut leaves when plant starts to flower and dry seed collected in September-October when they are gray-green in color. There is also a bronze variety 'Purpurascens' that adds a color variety to the herb bed or border.



FEVERFEW (*Chrysanthemum parthenium*)

P 10-24" O ES-LS W GR RX S

The yellow-green leaves and numerous daisy-like flower heads make this an attractive herb plant for any garden. Feverfew has been used medicinally for centuries as a general tonic for nervous complaints. The leaves have a bitter flavor. Recently much interest has revolved around Feverfew as a relief from migraines. Pregnant women should not use the plant.

Sow the seeds indoors and transplant in the garden bed in June. This plant will self sow once it is established.



FLAX (*Linum perenne*)

P 12-24" O ES B GR RX S

Perennial Flax makes a pretty border plant with pale blue flowers. The seeds contain linseed oil which has a myriad of uses. One of the most historical uses of Flax is for linen production. An annual Flax, *Linum usitatissimum*, has long strong fibers and is the flax that would be cultivated for linen.

Linseed oil has soothing properties and a tea made from the seeds is used to sooth colds, coughs and bronchial complaints.



GERMANDER (*Teucrium chamaedrys*)

P 40" O ES P GR RX CUT, ≠, S

Shiny, dark green leaves help make this a showy edging plant. Sometimes used in knot gardens, Germander can be pruned and shaped into a short hedge. Will grow in almost any soil.



HOREHOUND (*Marrubium vulgare*)

P 16-32" O MS-LS W G X,RX CUT, ≠, S

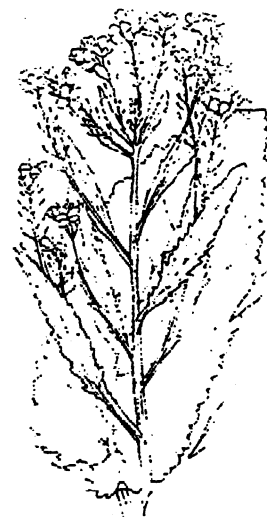
A hairy perennial with crinkled leaves, Horehound will grow in poor soil and full sun. Historically used medicinally to ease coughs; many people are familiar with Horehound cough drops. Somewhat weedy growth, best placed in back of herb bed. Leaves and stems can be cut before plants bloom. The dried flower heads are useful in dried flower arrangements.



HORSERADISH (*Armoracia rusticana*)

P 40-50" O MS W GR X,RX ≠

Horseradish has long, fleshy, white cylindrical roots that are hot, biting and pungent. The roots are sliced or grated and used fresh in sauce or on meats. Medicinally the plant was used as an aid to digestion and as a diuretic. Root divisions should be planted in trenches, and covered with well weeded soil. Trim the lateral roots in spring for a thick strong root for autumn harvest.



HYSSOP (*Hyssopus officinalis*)

P 2' O MS V,P,W GR X S, ≠, CUT

A hardy perennial with a woody stem, small pointed leaves and spikes of purple flowers. There are also forms with pink or white flowers. Hyssop can be pruned and kept as a hedge or for use in a knot garden. Hyssop will grow in poor soil and can easily be grown from seed. Harvest young leaves when needed. Flowers can be clipped and dried for dried flower arrangements. Hyssop should never be used by pregnant women.



LAMB'S EAR (*Stachys byzantia*)

P 2' O MS B G RX S, ≠

This species does best in well-drained soil in low heat and humidity. During periods of high humidity, the leaves and stems can become rotted. Cut back the plant and it will generally rebound in the fall. The leaves add a silvery touch to the garden and few can resist touching the velvety texture. The leaves were used for bandaging wounds. The leaves and stems can be dried and used in wreathmaking or dried flower arrangements.



LAVENDER (*Lavendula vera*)

P 1-1/2-3' O MS V G A S, CUT

A branching, somewhat woody perennial, Lavender is one of the most well known herbs for the fragrance of its dried flowers and leaves. Lavender grows best in dry, rocky sunny sites with abundant lime in the soil. Cut the whole flower stalk just before the flowers begin to open and dry.

Lavandula angustifolia or English Lavender is hardy to our area; *Lavandula stoechas* or French Lavender is not. Placed among clothes or linens, Lavender will help repel insects. Prune the bush after flowering to encourage bushier, more compact growth.



LOVAGE (*Levisticum officinale*)

P 40" O ES Y G X S, #

A hardy perennial with a fleshy tap root and cylindrical, hollow stem. The large green leaves resemble celery but are stronger tasting and sweeter than celery. Lovage does best in rich, fairly moist soil.



MARIGOLD (*Tagetes*)

A Varies O ES-LS Y,O GR X,A S

A multitude of varieties are available of Marigold, one of the favorite annual plants. Easy to grow from seed, Marigolds are available in many color, size and height forms. Often used by organic gardeners for its insecticidal properties, it can be grown to help repel white fly and soil nematodes. Some Marigold varieties are used as edible flowers in salads and as decorations in drinks or on cakes.



MARJORAM (*Origanum vulgare*)

P 1-2' O MS P,W GR X,A, RX S, #

Also known as Oregano, Marjoram has many culinary uses. Marjoram needs to be planted in a dry, sunny location. Gather the plant, leaving the roots in tact, in August-September to dry for the winter. Replant when plants become woody in 3-4 years.



MINT (*Mentha*)

P 2' O MS V,W GR X,RX CUT, ≠

Many different Mints are available, spearmint and peppermint being two favorites. Leaves are used as a soothing tea. Mint is easily grown and can become a nuisance. Keep plants in check by pushing bits of slate between beds to keep roots from spreading.



NASTURTIUM (*Tropaeolum majus*)

A 13' O ES-LS O,R,Y GR X,RX S

An annual, vining herb with green-umbrella shaped leaves and bright exotic looking flowers that bloom from June until frost. The seeds, leaves and flowers have a peppery taste and can be used in salads. High in Vitamin C, Nasturtium was prescribed as a general tonic for digestion. Nasturtiums are also available in compact varieties if space does not allow for flowing growth.



ORRIS ROOT (*Iris x germanica var. florentina*)

P 2-1/2' O ES W GR MX,A ≠

The plant has a large white flower like most other iris, but it is the root that is prized. Used since ancient times for making perfumes and medicinally for chest complaints. When fresh the root is bitter, but gradually--after 2+ years, it acquires the characteristic violet odor. Grown in ordinary garden soil the plant can be divided in April. It takes at least three years for the root to reach maturity.



PARSLEY (*Petroselinum crispum*)

B 1' O ES Y GR X S

A favorite culinary herb, often grown as an annual, Parsley can be easily propagated by seed but is slow to germinate. High in vitamins A, C and iron. There are curled and flat forms.

Hamburg Parsley (*Petroselinum crispum 'Tuberosum'*) is grown for the edible root that is cooked or eaten raw. The roots should be harvested during the second year.



ROSEMARY (*Rosmarinus officinalis*)

TP 2' O MS V,B GR X,RX, CUT,S
A

Grows best in well drained soil in sunny locations. Needs to be potted and brought indoors during the winter months.

Rosemary is a culinary, medicinal and cosmetic herb that goes back to ancient times. Traditionally a symbol of friendship, love and fidelity, Rosemary was also used to repel moths. Rosemary can be grown from seed, but only under very warm conditions. Easily propagated from cuttings taken in August, dipped in rooting hormone and potted.



RUE (*Ruta graveolens*)

P 6-18" O MS Y G/GR A S,CUT,≠

An easy to grow perennial, the interesting leaf color and form add interest to an herb bed. The common name, herb of grace, is thought to have arisen because holy water was sprinkled from brushes made of rue. Easily grown from seed, cuttings or root division, rue will grow in poor soil as long as it is sunny.



SAGE (*Salvia officinalis*)

P 2-3' O ES V G X,RX S,CUT

A woody, hardy perennial with wooly gray leaves and purple flowers. Will grow in dry, sunny spots and will appreciate lime or woodash in the soil. Variegated varieties available. An old proverb goes: "Why should a man die who has sage in his garden?" alludes to the wide use of sage for a general tonic and healing plant. Now sage is principally used as a culinary herb to flavor meats. Medicinally sage helps digestion and is used as a mouthwash. Propagation is easiest by cuttings taken in April or May. Woody growth should be pruned back in spring to encourage bushy growth.



SAVORY Winter (*Satureja montana*)

P 6-16" O ES W,V GR X,RX S,CUT

Dark green, shiny leaves, savory is generally used as a flavoring for meat and fish. Medicinally it was highly regarded for its ability to regulate the digestive system. A woody plant, it is easy to grow from seed, root division or cuttings.



SAVORY Summer (*Satureja hortensis*)

A 18" O MS B GR X S

Summer savory is an annual with many of the same uses as winter savory. It is lighter and not as pungent as winter savory. Once plants have flowered they can be pulled and dried in bunches for winter use.



TANSY (*Tanacetum vulgare*)

P 1-3' O MS-LS Y GR RX,A ‡

The alternate feathery leaves and flat clusters of yellow flowers make this a good plant for near the back of the herb bed. Long used to expel worms, chase away ants and moths, Tansy also has a long culinary history. Now considered dangerous taken in large amounts. A good plant to dry and use in dried flower arrangements.



TARRAGON (*Artemisia dracunculus*)

P 2' O/□ Y MS X CUT, ‡

French Tarragon, chiefly known as a culinary herb, is also used medicinally to aid digestion. Grown from cuttings or root division but not true from seed. Do not confuse with Russian Tarragon which is a vigorous form of the same species but has much inferior flavor.



THYME (*Thymes*)

P 6-10" O MS V GR,G X,RX S,CUT, ‡

A low growing perennial, Thyme comes in a multitude of species and garden varieties. Garden thyme (*Thymes vulgaris*) being one of the most popular. Thyme will grow in rocky soil and will spread over rocks and walkways.



WOODRUFF (*Asperula odorata*)

P 8" □ MS W GR X

Sweet woodruff is a low, spreading perennial plant that forms clumps. When the plant is crushed, it has a sweet scent similar to freshly mown hay.

It will thrive in semi-shade and makes a good ground cover under taller plants. Sweet woodruff is used most often in flavoring German May Wine and other drinks.



YARROW (*Achillea millefolium*)

P 18-24" O MS W,P,V RX X,S

Very easy to grow in any kind of soil, yarrow has been traditionally used for medicinal purposes. Yarrow promotes perspiration and so was used historically at the onset of colds and flu. A plant not to be used by pregnant women. Yarrow is a plant that can be dried for use in dried flower arrangements, but loses much of the flower color.



SHRUBS ASSOCIATED WITH HERB GARDEN PLANTING:

Name	Height	Special Characteristics
Korean abelia-leaf <i>Abeliophyllum distichum</i>	5'	Wh. fls. on arching stems mid-April; blooms with forsythia
Five-leaf Aralia <i>Acanthopanax sieboldianus</i>	6'	Extremely tough; foliage has lemon-rind odor Pest-free plant. Poor dry soil--sun or shade.
Butterfly bush <i>Buddleia alternifolia</i>	10'	Floriferous & wide-spreading; honey-scented fragrance Will die back during winter--cut out dead wood.
Strawberry shrub <i>Calycanthus floridus</i>	4'	Leaves & flowers aromatic, spicy; associated with herbs
Japanese quince <i>Chaenomeles japonica</i>	3'	Spicy fragrance of fruits; dwarf forms available
Summersweet <i>Clethra alnifolia</i>	3-8'	July-August prevailing sweetness of flowers; rosea form. Shady location, moist-acid soil.
Sweetfern <i>Comptonia asplenifolia</i>	3-4'	Leaves richly scented; associated with herbs
Winterhazel <i>Corylopsis glabrescens</i>	15'	Fragrant yellow drooping clusters at narcissus time
Daphne <i>Daphne mezereum; D. burkwoodii</i> 'Somerset'	3-6'	Upright daphnes; very fragrant flowers
Russian Olive <i>Eleagnus angustifolia</i>	10-20'	Fragrant yellow flowers; edible fruit
Mint Shrub <i>Elscholtzia stauntoni</i>	3'	Leaves aromatic, mint-like; purple spikes in late August
Dyer's Greenwood <i>Genista tinctoria</i>	3'	Former use as dye plant; useful on banks
Witch Hazels <i>Hamamelis virginiana, H. mollis</i>		Both desirable for fragrance and association
St. Johnswort <i>Hypericum moserianum</i>	3'	Fragrant yellow flowers late June on; Tri-colored leaves
Spice bush <i>Lindera benzoin</i>	12'	Early spring flowers; association w/colonists & Indians Native shrub. Well suited for moist, partly shaded location.
Tea Crab <i>Malus theifera (hupehensis)</i>	20'	Fan-shaped branching; perfumed flowers in May
Bayberry <i>Myrica pennsylvanica</i>	8'	Aromatic leaves; association with with early uses. Male & female plants required to form berries. Sandy soils.

Dwarf Mockorange	<i>Philadelphus microphyllus</i>	3'	Rich fruit fragrance
Mountain Andromeda	<i>Pieris floribunda</i>	4-5'	Fragrant flowers in April; bronze new foliage - need slightly protected location, soil preferably acid.
Fragrant Sumac	<i>Rhus aromatica</i>	3'	Fragrant foliage; holds dry banks
Sapphireberry	<i>Symphoricarpos paniculata</i>	15'	Fragrant white flowers early June; horizontal branching
Rouen Lilac	<i>Syringa x chinensis</i>	12'	Most fragrant of lilacs - susceptible to borers, scale, mildew, intolerant of urban conditions.
Viburnum sp.	<i>Viburnum fragrans</i>	9'	Buds may be winter-killed; earliest of viburnums to flower
	<i>V. burkwoodii</i>	6-8'	Orange fall color; pinkish-white flowers in mid-May
	<i>V. carlcephalum</i>	6'	Red fall color; clove-scented flowers in mid-May
	<i>V. carlesii</i>	5'	Koreanspice viburnum; still best for fragrance

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Related Resources

Herbs

<u>Title</u>	<u>Item Code</u>
The Cornell Book of Herbs & Edible Flowers	132HB
Pest Management Around the Home Parts 1 & 2	139S74

These titles are available for review and sale at The Resource Center's online bookstore:

www.cce.cornell.edu/store

You may also order titles or a catalog by:

Phone: 607-255-2080

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The Resource Center

Cornell University

PO Box 3884

Ithaca, NY 14852-3884

These titles are also usually available through your local Cooperative Extension association office.

Cornell Website information on **Herbs**

All Cornell website information on gardening is accessible through the Cornell Gardening Resources Website www.gardening.cornell.edu

The following are specific sections of the Cornell Gardening Resources Website as of Dec.15, 2004. New web pages are added regularly. Please check www.gardening.cornell.edu periodically for updates and new information.

<http://instruct1.cit.cornell.edu/courses/hort220/Herbs/Herbs.html>

<http://www.gardening.cornell.edu/factsheets/misc/containers.pdf>

<http://www.plantations.cornell.edu/collections/botanical/plantlist/herblist.cfm>

Cornell Visual Presentation Resources in Herbs

Master Gardeners may borrow resources from the Department of Horticulture's Home Grounds and Community Horticulture Resource Library in Ithaca, NY. MG's should discuss it with their county MG Coordinator and reserve a resource through that staff person. Resources in this library are slides, powerpoint CD-ROM's and videos. They are generally used by Master Gardeners to make presentations to community groups as part of the county CCE's educational mission. The number preceding each resource is its library code number in Ithaca.

Herbs

114. *Introduction to Gardening with Herbs* Slide Set (70 slides & script) J. Mishanec

154. *Herbs & Their Uses* Slide Set (69 slides & script) A. Comfort, CCE/Chenango Co.