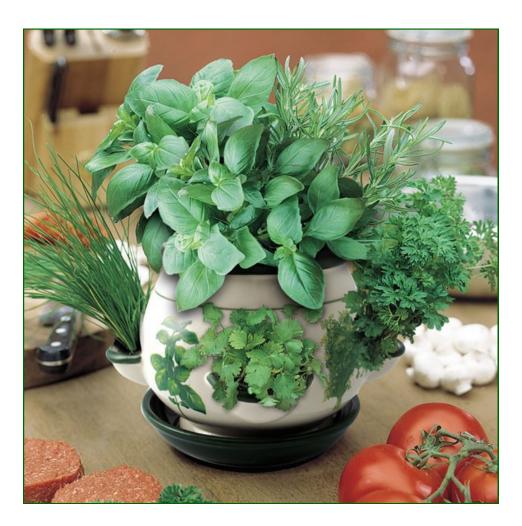




Information Booklet

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Basil

Basil, the common name for *Ocimum basilicum*, is a popular sweet herb of the Mint Family esteemed for flavoring and formerly used for medicinal purposes. An annual of the tropics, it is tender and should not be attempted outdoors until the weather is warm.

Basil grows easily from seed which may be sown in the garden or started indoors. Basil also grows well indoors under fluorescent and HID plant growing lights.

The small flowers are white or purple, but the plant is grown for its some-times purple tinged leaves, which are cut during the growing season and used fresh or dried in bundles.

Growing Basil

Plants should be transplanted or thinned to stand 6 to 10 inches apart; they pre-fer a quick draining, light soil in a warm location.

If the soil is rich, a plant cut back will develop successive crops of foliage until fall. At that time, roots of strong plants can be lifted and potted up to be moved indoors for a winter supply. Although basil will grow best outdoors, it can be easily grown indoors in a con-tainer or hydroponic planter and, like most herbs, will do best on a south-facing windowsill (in the Northern Hemisphere). It should be kept away from any drafts, and must have

plenty of sunlight.

Basil plants whose leaves have wilted from lack of water will normally recover if they are watered thoroughly and immediately placed in a sunny location.

Basil can also be propagated very reliably from cuttings.

Leaf production slows or stops on any stem which flowers, so you should pinch off any flower stems to keep the plant in production, or pinch off some stems while leaving others to bloom for decoration or seeds. Once you do let the plant flower, it will produce seed pods containing small black seeds which you can save and plant the following year. Picking the leaves off the plant helps promote continuous growth, largely because the plant responds by converting pairs of leaflets next to the topmost leaves into new stems.

Growing Cultures—Outdoors, containers (sow direct in final pots, or in plugs and later transplant to final pots), hydroponics. Nighttime temperature must not go below 10° C.

Plant Height—Basil usually grows to a height of 12 to 18 inches (30 - 45cm).

Plant Spacing—Basil plants should be spaced between 9 and 12 inches (22 and 30 cm) apart.

Preferred pH Range—Basil will grow in a very wide pH range between 5.1 (strongly acidic) and 8.5 (alkaline) with a preferred range of 5.5 (strongly acidic) to 6.5 (mildly acidic).

Propagation—Sow seed indoors before last frost or direct sow outdoors after last frost. Basil is easily propagated through herbaceous stem cuttings.

Seed Germination Period—-5 to 10 days.

Seeds Per Gram (Approximate) - 500 - 1000.

Soil Requirements—Well drained, average to rich soil.

Alternative Growing Media—Soilless potting mixes, perlite, vermiculite, rockwool, coco peat, Oasis foam.

Time From Seed to Saleable Plant—Seeds to finished plugs, 8 weeks; plugs to saleable plants, 5 weeks.





Sun & Lighting Requirements—Basil grown outdoors prefers full sun.

Water Requirements—Water on a regular schedule, taking care to not overwater.

Potential Pests & Diseases—Whitefly, thrips, aphids. Fusarium.

Special Notes—Basil is known to attract bees, butterflies or birds and has aromatic foliage. Basil plants whose leaves have wilted from lack of water will normally recover if they are watered thoroughly and immediately placed in a sunny location. **Soil Requirements**—Well drained, average to rich soil.

Alternative Growing Media—Soilless potting mixes, perlite, vermiculite, rockwool, coco peat, Oasis foam.

Time From Seed to Saleable Plant–Seeds to finished plugs, 8 weeks; plugs to saleable plants, 5 weeks.

Sun & Lighting Requirements—Basil grown outdoors prefers full sun.

Water Requirements—Water on a regular schedule, taking care to not overwater.

Potential Pests & Diseases—Whitefly, thrips, aphids. Fusarium.

Special Notes—Basil is known to attract bees, butterflies or birds and has aromatic foliage.

Cilantro / Coriander

An annual or biennial herb (*Coriandrun sativum*), of the Parsley Family, grown for it's aromatic seeds which are used for flavoring liquors and confections. The plants, which grow about 2 feet high, are cultivated in rows about 18 inches apart, generally from seed sown in early spring. The seed heads which ripen about midsummer are gathered and dried, then beaten with light rods or flails to spearate the seeds.

The leaves are most commonly referred to as **cilantro** and have a much different taste from the seeds, one that is similar to parsley with a dash of citrus flavor.

Growing Cilantro / Coriander

Growing Cultures

Outdoors, containers (sow directly in pots, do not transplant as root disturbance causes early bolting), hydroponics.





Plant Height

Cilantro / Coriander grows to a height of 18 to 24 inches (45 - 60cm).

Plant Spacing

Cilantro / Coriander plants should be spaced 9 to 12 inches (22 - 30cm) apart.

Preferred pH Range

Cilantro / Coriander will grow in a relatively wide pH range between 6.1 (mildly acidic) and 7.8 (mildly alkaline) with a preferred range between 6.5 and 7.5.

Propagation

From seed. Direct sow outdoors after last frost. Start seeds indoors six weeks before planting outdoors.

Seed Germination Period 7 to 10 days.

Seeds Per Gram (Approximate) Between 110 and 150.

Marjoram

Wild Marjoram (Origanum majorana), and Sweet Marjoram (Origanum majorana).

Perennial herbs usually grown as annuals for their fragrant foliage which is used to flavor dressings and meat dishes.

Sweet Marjoram will grow well in any fertile, well-drained and loamy garden soil. Since the seed is very small, it is best sown in flats in the greenhouse and the seedlings transplanted outside.

Wild Marjoram is thought to smell more like thyme but will grow well even in poor soil. Although it's leaves are used to flavor some dishes, most chefs do not consider Wild Marjoram as useful as Sweet Marjoram in the kitchen. Wild Marjoram is easily started by seed or root division.



Growing Marjoram

Growing Cultures - Outdoors, containers, hydroponics.

Plant Height-Marjoram grows to a height of 24 to 36 inches (60 - 90cm).

Plant Spacing—Marjoram plants should be spaced 15 to 18 inches (38 - 45cm) apart.

Preferred pH Range—Marjoram will grow in a relatively wide pH range between 6.1 (mildly acidic) and 8.5 (alkaline) with a preferred range between 6.5 and 7.5.

Propagation—From seed, sow indoors six weeks before last frost; or direct sow in fall; or winter sow in coldframe or unheated greenhouse. Propagates well through softwood and semi-hardwood cuttings. Propagates well through rootball division.

Seed Germination Period-8 to 14 days.

Seeds Per Gram (Approximate) - 3,500.

Soil Requirements—Rich and well-drained, pH between 6.5 and 7.5.

Alternative Growing Media—Soilless potting mixes, perlite, vermiculite, rockwool, coco peat, Oasis foam.

Time From Seed to Saleable Plant—Seeds to finished plugs, 6 weeks. Plugs to saleable plant, 2 to 4 weeks.

Sun & Lighting Requirements—Marjoram grown outdoors prefers full sun.

Water Requirements—Water on a regular schedule, do not overwater.

Potential Pests & Diseases-Whitefly, spider mites, thrips. Minimal disease issues.

Special Notes—Marjoram is known to attract bees, butterflies or birds. Evergreen. Aromatic foliage. Suitable for containers

Mint Peppermint Spearmint

Peppermint (*Mentha* × *piperita*), Spearmint (*Mentha spicata*).

Hardy perennial herbs of the Mint Family, grown for their leaves which are used to flavor vinegar and jelly (often served with roast lamb and other meats), and to enhance thirst-quenching cooling beverages.



Mints should be planted where they will not encroach on other plants, as they spread so readily that, unless curbed, they are likely to become a pestiferous weed. It is ideal for container and hydroponic culture.

It revels in deep, rich, moist ground and requires little care except manicuring or fertilizing in the spring. However, as the stems grow rapidly and the leaves become thin and small as the season advances, it is advisable to cut down from a third to a half of the patch when 6 or 8 inches high, drying the leaves and putting them in tight jars for winter use. Then soak the cut over area with liquid manure to stimulate a second crop of foliage. A month later, treat another area similarly. Thus a succession of succulent foliage may be had all season.

Orange spots on the backs of mint leaves are caused by a rust which can be controlled by using an organic garden dust. Pests can be controlled with rotenone.

Growing Mint

Growing Cultures

Outdoors, containers, hydroponics.

Plant Height

Peppermint and spearmint grow to a height of 12 to 18 inches (30 - 45cm).

Plant Spacing

Peppermint plants should be spaced 18 to 24 inches (45 - 60cm) apart. Spearmint plants should be placed 36 and 48 inches (90 - 120cm) apart.

Preferred pH Range

Mints will grow in a relatively wide pH range between 5.6 (mildly acidic) and 7.5 (mildly alkaline) with a preferred range between 6.5 and 7.0.

Propagation

Start seed indoors 8 to 10 weeks prior to last spring frost. Or, sow directly outdoors in partially shaded, moist soil. Propagates best through softwood cuttings. Propagates well through rootball division.

Seed Germination Period 12 to 16 days.

Seeds Per Gram (Approximate) 17,000 to 20,000.

Soil Requirements

Rich, moist, and well-drained, pH between 6.5 and 7.0.

Alternative Growing Media

Soilless potting mixes, perlite, vermiculite, rockwool, coco peat, Oasis foam.

Time From Seed to Saleable Plant Most cultivars grown from cuttings. Seed material not recommended for pot sales. Plugs to saleable plant, 4 weeks.

Sun & Lighting Requirements Mints grown outdoors prefers full sun.

Water Requirements

Water on a regular schedule, do not overwater.

Potential Pests & Diseases

Whitefly, spider mites, aphids, mealybug. Rust.

Special Notes Seeds are poisonous if ingested. Mint may become a noxious weed and invasive. Mints are known to attract bees, butterflies or birds. Aromatic foliage. Suitable for containers

Parsley

A biennial herb (*Petroselinum*) grown as an annual. Its many horticultural varieties are grouped as curled leaved (var. crispum), fernleaved (var. filicinum) and Hamburg or "rooted" (var. radicosum). Though the leaves of all are used for flavoring meat dishes, soups, salads, etc., the curled varieties are most popular in America for this purpose and for garnishing, though the fern-leaved are just as attractive. Hamburg Parlsey is generally cooked like parsnips.

As parsley seed germinates slowly (sometimes taking several weeks), it should be soaked in warm water overnight before planting. Sow outdoors in early spring in rows 10 to 12 inches apart, and cover 1/2 inch deep. Later thin the plants to stand about 6 inches apart.

The leaves may be cut all season for use as needed. In the fall they may be dried and stored in tight jars, or roots may be transplanted into pots or hydroponic planters to be grown on indoors. The following spring remove the flower stems as fast as they appear so as to keep the plants producing leaves until those grown from a newly sown crop are ready

Parsley grows well in a deep pot, which helps accommodate the long taproot. Parsley grown indoors requires at least five hours of sunlight a day.

Parsley grows well in loamy garden soil rich in nitrogen, and does well in full sun or part shade. Parsley can overwinter if lightly mulched during extremely cold weather.



Petroselinum crispum (Mill.) Nyman ex A. W. Hill



Growing Parsley

Growing Cultures

Outdoors, containers, hydroponics.

Plant Height

Parsley plants grow to a height of 12 to 18 inches (30 - 45cm).

Plant Spacing

Parsley plants should be spaced 9 to 12 inches (22 - 30cm) apart.

Preferred pH Range

Parsley will grow in a pH range between 5.6 (acidic) and 7.5 (neutral) with a preferred range between 6.0 and 7.0.

Propagation Sow indoors in sunny location or under plant grow lights six weeks before last frost.

Seed Germination Period 21 to 28 days.

Seeds Per Gram (Approximate)

650 to 1,000.

Soil Requirements

Tolerates most soils, but rich, well-drained, moist, with a pH between 6 and 7 is best.

Alternative Growing Media

Soilless potting mixes, perlite, vermiculite, rockwool, coco peat, Oasis foam.

Time From Seed to Saleable Plant

Sow in plugs or direct in pots, 4 to 5 seeds per plug or 12 seeds per pot. Seeds to finished plugs, eight weeks. Plugs to saleable plants, six weeks.

Sun & Lighting Requirements

Parsley grown outdoors prefers full sun and can tolerate some shade.

Water Requirements

Average water needs. Water on a regular schedule, do not overwater.

Potential Pests & Diseases

Whitefly, spider mites, aphids. Minimal disease issues.

Special Notes

Grown for aromatic foliage. Suitable for containers

Rosemary

Common name for *Rosmarinus officinalis*, a hardy evergreen sub-shrub grown chiefly for its aromatic leaves which are used in culinary seasoning and which yield an oil once used in medicine. Small light blue flowers are borne in April or May, in loose clusters that spring from the leaf axils. The foliage is white and woolly on the under side and dark and shiny above. Plants can grow to a height of 6 feet and last for years if given winter protection.

Rosemary prefers dry, well-drained soil and in the South and Pacific Coast States, where soil is dry and rocky, they are planted as hedges. There is also a low-growing or prostrate variety.

Rosemary grows well with occasional watering, and does much better where the soil is alkaline. All varieties prefer full sun and most can tolerate slightly shady areas.





Rosemary propagates easily by taking six inch long stem cuttings that are stuck in a mixture of sand, loam, and leaf mold, ideally in a controlled environment such as a greenhouse or cold frame.

Growing Rosemary

Growing Cultures

Outdoors, containers, hydroponics.

Plant Height

Rosemary plants grow to a height of 36 to 48 inches (90 - 120cm).

Plant Spacing

Rosemary plants should be spaced 18 to 24 inches (45 - 60cm) apart.

Preferred pH Range

Rosemary will grow in a pH range between 6.0 (mildly acidic) and 8.5 (alkaline) with a preferred range between 6.0 and 7.5.

Propagation

Sow indoors in sunny location or under plant grow lights eight weeks before last frost. Rosemary propagates well via stem cuttings.

Seed Germination Period 15 to 25 days.

Seeds Per Gram (Approximate) 1,000.

Soil Requirements Light and well-draining.

Alternative Growing Media

Soilless potting mixes, perlite, vermiculite, rockwool, coco peat, Oasis foam.

Time From Seed to Saleable Plant

Sow in seed flats 22 weeks before sale in 10cm diameter pots. Seeds to finished plugs, 12 weeks; plugs to saleable plants, 10 weeks.

Sun & Lighting Requirements Rosemary grown outdoors prefers full sun.

Water Requirements Average water needs. Water on a regular schedule, do not overwater.

Potential Pests & Diseases Whitefly, scale, mealybug. Powdery mildew.

Special Notes

Drought tolerant, suitable for xeriscaping. Rosemary is known to attract bees, butterflies and birds. Fragrant flowers. Suitable for containers

Thyme

The common name for Thymus, a genus of aromatic herbs or shrubby plants of the Mint Family, long cultivated and valued as both ornamentals and sweet herbs. They have small lavender or pink flowers and are planted in the rock garden and the border for ornament, or in the herb garden, to be used for seasoning. They grow easily and are easily increased from cuttings or seed.

To achieve optimum results, plant the seed indoors or in a greenhouse. Thyme is very hardy and will grow under most conditions. It prefers full sun and a soil that is light and sandy, or loamy. Thyme requires minimal fertilization unless the soil quality is of extremely poor quality, or when grown via the hydroponic method.

Thyme propagates easily from tip cuttings or crown division. Since it grows slowly, especially early in it's life, weed-control is essential. Mulching with straw is helpful.

Thyme is usually harvested just prior to flowering. Secondary growth will continue to occur.



Growing Thyme

Growing Cultures Outdoors, containers, hydroponics.

Plant Height

Thyme plants grow to a height of 12 to 18 inches (30 - 45cm).

Plant Spacing

Thyme plants should be spaced 18 to 24 inches (45 - 60cm) apart.

Preferred pH Range

Thyme will grow in a pH range between 6.5 (neutral) and 8.5 (alkaline) with a preferred pH range between 6.5 and 7.0.

Propagation

Sow thyme seed indoors in sunny location or under plant grow lights six weeks before last frost. Thyme propagates well through stem cuttings.

Seed Germination Period 8 to 20 days.

Seeds Per Gram (Approximate)

3,300 to 4,000.

Soil Requirements Light, well-draining, poor to fertile.

Alternative Growing Media

Soilless potting mixes, perlite, vermiculite, rockwool, coco peat, Oasis foam.

Time From Seed to Saleable Plant

Sow in plugs 12 to 14 weeks before sale. Seeds to finished plugs, 6 to 8 weeks; plugs to saleable plants, 4 to 6 weeks.

Sun & Lighting Requirements

Thyme grown outdoors prefers full sun.

Water Requirements Average water needs. Water on a regular schedule, do not overwater.

Potential Pests & Diseases

Whitefly, spider mites. Minimal disease issues.

Special Notes

Drought resistant and ideal for xeriscaping. Suitable for containers and indoor cultivation. Attracts butterflies, birds, or bees

Herb Facts

Did you know that...

- Fresh herbs contain more antioxidants substances that fight cancer and heart disease than some fruit and vegetables.
- Rosemary is rich in antioxidants which help to maintain vitality & slow the ageing process.
- The Romans believed that the consumption of mint would increase their intelligence and the smell of mint in their houses was also a symbol of hospitality.
- Growing a pot of basil in the kitchen may smell good to us but it doesn't to nuisance flies and mosquitoes who are repelled by the aroma.
- Mint leaves or oil deters ants and so a few scattered leaves in your cupboards can prove a useful, natural solution.
- Fresh herbs aid the digestion of food especially fat and help with the elimination of toxins from the body.
- A Royal Herb-Strewer was a popular profession in England in the days before proper drainage and medicines were the norm. Back then, herbs were used for their deodorising and healing properties. A herb strewer's primary duty was to distribute herbs and flowers throughout the royal apartments in order to mask the rather unpleasant aromas of the city.
- Today we use the majority of the traditional 'strewing' herbs to make scented sachets to deter moths, for pot pourri to sweeten the room and a variety of other aromatic uses.
- Herbal seeds have been found in pre-historic cave dwellings dating back as far as 500,000 years ago. Our ancestors have always used herbs in cooking and health remedies.
- The discovery of America is linked to Western civilisation's search for easier access to rare spices and herbs. Columbus was, in fact, hoping to open trade routes for these substances when he blundered into the West Indies and the Age of Exploration unveiled the New World.
- The Egyptians studied herbs and used them in medicinal and religious functions as far back as 3500 B.C. The Chinese began the organised study of herbs in 2500 B.C. Written records in China have survived enumerating the uses of herbs that date from 100 B.C.
- Parsley is a natural breath freshener, particularly in combating the potency of garlic.
- Ancient records reveal recipes for herb infused oils and creams in the tombs of legendary beauties such as Cleopatra.