

ENVIRONMENTAL HORTICULTURE

Environmental Horticulture #EH376



BASIL

PRODUCTION AND CONSUMER CARE

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INTRODUCTION

- Common name: Basil or Sweet Basil
- Scientific name: *Ocimum basilicum*
- The word *basil* comes from the Greek *basileus*, meaning “king”
- Native to India and other tropical regions of Asia
- Grows 1-2 feet tall
- Develops opposite, light green, silky leaves
- Large white flowers arranged in a terminal spike appear in July and August

- Fares well in vegetable, herb, and flower gardens
- Over 40 varieties exist

GROWTH AND DEVELOPMENT

- Grows well in hot, dry conditions; very sensitive to cold
- Grows best in a well-drained sunny spot; 6-8 hours sunshine required per day
- Thrives in sunnier climates such as Southern Europe and the southern states of the U.S.
- Grows well in summer in the central and northern United States but dies

out when temperatures reach the freezing point

- Requires soil pH 6.0-7.5
- Appreciates a mulch covering
- Can be grown indoors in a pot; fares well on a south-facing windowsill but a greenhouse is ideal

PROPAGATION

- When basil flowers it may produce seed pods containing small black seeds which can be saved and planted the following year
- Sow seeds evenly, covering with 1/4" of soil
- Germination takes place within 5-7 days
- Soil should be enriched with organic matter before planting
- In warmer climates seeds can be sown directly into the ground
- Seeds also grow well if sown under glass in a peat pot, then planted out in late spring/early summer
- Seedlings should not be set outdoors until the last frost has passed and the plant has four true leaves
- Can be propagated reliably from cuttings; stems of short cuttings should be suspended for two weeks or so in water until roots develop.

DISORDERS

- Fusarium wilt, a soilborne fungal disease, quickly kills younger plants
 - Buy certified clean seed
 - Rotate crops and insure proper drainage and aeration
- Gray mold caused by *Botrytis cinerea* is a common foliar disease
 - Pinch back foliage and insure proper air circulation

- Black spot can be caused by the fungi genus *Colletotrichum*
 - Remove infested leaves and increase air circulation
- Cutworms can kill young plants
 - Add diatomaceous earth to the soil
 - Place a cutworm collar around the base of the plant
- Whiteflies infest young plants in the greenhouse.
 - Very difficult to remove once established
 - Pinch back infested foliage

CONSUMER CARE

- Yellow leaves towards the bottom of the plant are an indication that the plant needs more sunlight or less fertilizer
- If a stem produces flowers, leaf production slows or stops on the stem and essential oil production declines. To prevent this, pinch off flower stems before they are fully mature.
- Frequent harvesting of outer leaves extends the life of the plant
- Leaves have the best flavor just before the plant flowers
- Leaves should be used fresh in cooked recipes and added at the last moment, as cooking destroys the flavor quickly.
- Basil does not keep well in the refrigerator
- When soaked in water basil seeds become gelatinous and are used in Asian drinks and desserts

CULTIVARS AND SPECIES

- *O. basilicum*

- 'Genovese Gigante': Similar flavor to sweet basil
- 'Cinnamon': Purple flowers and a strong scent of cinnamon
- 'Purple Ruffles': Solid purple with an anise-like flavor
- 'Licorice': Silvery leaves and a spicy licorice smell
- 'Mammoth': Very large leaves and a strong flavor
- 'Spicy Globe': Grows in a bush form with small leaves and a strong flavor
- 'Opal': Strong magenta color
- *O. americanum*
 - 'Lemon basil': Lemony smell and sweet taste
 - 'Lime basil': Similar to lemon basil

References

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<http://www.herbsociety.org/basil/bpests.php>

http://www.webindia123.com/garden/herb_spi/basil.htm

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