

Growing Lavender in Colorado

Fact Sheet No. 7.245

Gardening Series | Flowers

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Prized for its fragrance, medicinal properties and beautiful color, lavender has been one of the most popular herbs for centuries. Lavender's versatility has made it a valued plant for households across the world. Its fragrance, leaf color contrast, and water-wise properties make it a great choice for Colorado gardeners. Lavender originated in the Mediterranean region of Europe. Today, lavender is grown around the world where the climate conditions are similar to that region. Major commercial growing areas are located in France, England, New Zealand and Australia. Here in North America, lavender is grown as a cash crop in Washington State, New Mexico and Texas.

Selecting Plants

Lavender is a semi-woody perennial sub-shrub. Its grey to green foliage has the potential to stay evergreen throughout the year depending on location and weather. A member of the plant family *Lamiaceae* (mints), it has square stems and distinctive fragrances.

Two types of lavenders grow well in Colorado. The first is *Lavandula angustifolia* or English lavender. It is hardy to Zone 5 and often blooms twice in one season. There are hundreds of varieties of English lavender available depending on the color and size of plant desired. The second is a hybrid of *L. angustifolia* and *L. latifolia*. It is commonly referred to as a lavandin. Lavandins are generally larger plants that bloom only once later in the summer and produce sterile seed. The Lavandins produce larger quantities of essential oil but not as high quality as the English lavenders. Both types of lavenders have a place in landscapes and as a cash crop. In this fact sheet, the word lavender will refer



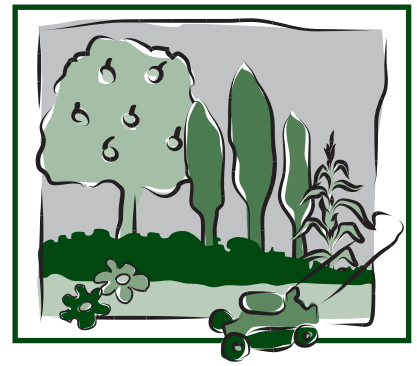
Figure 1: *Lavandula angustifolia* 'Hidcote'.



Figure 2: Various colors of Lavender. Photo courtesy of Sequim Lavender Festival – Don Paulson.

to both types of lavenders. Note that French and Spanish lavenders are not cold hardy in Colorado but can be used as annuals in containers and outdoor beds.

When planting *L. angustifolia* or its cultivars, be sure nursery stock has been propagated vegetatively from cuttings, not started from seed. English lavenders do not always come true from seed potentially resulting in highly variable height, width, color, bloom time and other characteristics. Lavandins are sterile and can only be propagated vegetatively and are much taller than the English as shown in Figures 3 and 4.



Quick Facts

- Hardy lavender varieties thrive in Colorado's USDA Hardiness Zones 5 through 7.
- Lavender grows best in full sun and slightly alkaline soils, which makes it a perfect plant for Colorado.
- Lavender comes in a variety of colors including white, pink, blue, violet and all shades of purple.
- Harvest flowers before they have fully opened for best results when drying.
- Lavender has no major pests in Colorado but can develop root rot if drainage is insufficient.

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Figure 3: Lavandin 'Provence'. Photo courtesy of K. Kimbrough.



Figure 4: The tall white lavandin in the background is 'White Grosso'. In front of it are the English varieties 'Goldberg' and 'Mitcham Grey'. Photo Courtesy of K. Kimbrough.

Planting Lavender

Lavender can be planted from spring through fall in Colorado. Research conducted by New Mexico State University Sustainable Agriculture Science Center in Alcalde, NM has shown that fall-planted lavender survives better, establishes more quickly, and produces more flowers the following season. Choosing the size of plant depends on when planting will occur. Fall planted lavenders should be in 4 inches or larger sized pots with an established root system to ensure survival over the winter. Watering during the winter will increase survival. Spring-planted lavender plants can be smaller as they will have a long season in which to establish the root system.

Lavenders prefer full sun and an alkaline soil with very little organic matter. Heavy soils may need to be amended prior to planting to insure good drainage. The smaller size (one-quarter inch) bark mulch performs well as a soil amendment. Apply 1 inch of this mulch and uniformly till it in to a depth of 6 to 8 inches. The use of sand or gravel as a soil amendment in clay soils may create an even greater drainage problem. See fact sheet 7.235,

Choosing a Soil Amendment, www.ext.colostate.edu/pubs/garden/07235.html, for further information.

When planting lavender as a crop, spacing depends on the size of the cultivars and ranges from 2 to 3 feet within the row and 3 to 6 feet between the rows. Lavender is not competitive and does not respond well to weed pressure. If growing lavender in a field, landscape fabric is highly recommended as a weed barrier. If growing lavender as an organic crop, be sure to check the National Organic Program for the List of Allowed and Prohibited Substances at: www.ams.usda.gov/AMSv1.0/.

Even though lavender is drought tolerant, adequate supplemental irrigation is required for optimum establishment, satisfactory landscape quality and maximum production. Irrigation amounts and scheduling will vary according to soil type, climatic zone, and weather patterns. Because of Colorado's low humidity, overhead watering works just as well as drip irrigation. In general, water once or twice a week immediately after planting, until plants are established. Water mature plants every two to three weeks until bud formation, then once or twice weekly until harvest. The use of landscape fabric will also cut down water requirements significantly. Apply rock or bark mulch over the landscape fabric but away from the crown of the lavender plant. The root zone should not be allowed to dry out during winter. Fabric row covers can be used during the winter to protect the new plants from wind and heavy snow. See factsheet 7.211, *Fall and Winter Watering*, www.ext.colostate.edu/pubs/garden/07211.html for details on winter watering in Colorado.

Propagation

The best time to take cuttings from lavender plants is right after they have bloomed. Take cuttings from stems with no flower buds on them. Remove leaves from the bottom half of the cutting and insert it into well-draining sterile potting soil or horticultural vermiculite. Rooting hormones are not necessary. Be sure the cuttings are labeled as to cultivar name and date the cutting was collected. Water well and mist regularly. They should root in about three weeks. Transplant rooted cuttings into pots 2 to 4 inches in diameter. Once the plants have developed a vigorous root system they can be planted in the garden.

Pruning and Harvesting Lavender

Lavender responds well to pruning. It flowers on new growth so plants should be pruned every year after it's established. Pruning should take place when green leaves start to emerge from the base of the plant in the spring. Remove approximately one third of the top. Pruning keeps the plant from splitting open and becoming too woody. Harvest the lavender stems in the morning hours when the oils are the most concentrated and when approximately 50 percent of the flower buds have opened.

Use a sickle or pruning shears to cut stems as long as possible. Form bundles of 50 to 100 stems and secure them with rubber bands (Figure 5). Rubber bands will contract when the stems dry out. Dry the harvested lavender in a cool, dark place where there is good air circulation (Figure 6).



Figure 5: Photo courtesy of Lavender Wind Farm.



Figure 6: Photo courtesy of Lavender Wind Farm.

Table 1: Cultivars that perform well in Colorado.

Name	Height	Width	Zone	Flower color/comments
Lavandula angustifolia				
Betty Blue	24"	24"	5	Dark purple
Blue Cushion	16"	16"	5	Deep blue
Buena Vista	18-24"	18"	5	Bi-color deep purple & dark blue
Coconut Ice	16-18"	18"	6	White and pink
Hidcote	12-16"	18"	5	Deep violet blue
Hidcote Superior	16"	18"	5	Deep violet blue
Hidcote Pink	18"	24"	5	Light pink
Jean Davis	18-24"	24"	5	Light pink
Lady	16"	18"	5	Soft blue/ true from seed
Lavance	10"	18"	5	Purple
Miss Katherine	24"	24"	6	Pink
Mitcham Grey	20"	20"	5	Deep violet blue
Munstead	12-18"	18"	5	Lavender blue/highly variable
Nana	10"	16"	5	Blue
Premier	24"	24"	5	Dark purple
Royal Velvet	24-36"	24"	5	Dk. navy blue/lavender/blooms 2x yr.
Sarah	12-18"	18-24"	5	Deep lavender
Sharon Roberts	24-30"	24"	5	Bi-color deep lavender & dark blue
Thumbelina Leigh	12-15"	18"	5	Deep purple and blue
Twickle Purple	18-24"	24"	5	Deep purple
Lavandula x intermedia				
Alba	24"	24"	6	White
Dilly Dilly	18"	24"	6	Violet blue
Dutchmill	24"	24"	6	Deep violet blue
England	15-18"	18"	6	Dark blue
Fred Boutin	30"	36"	6	Violet
Grappenhall	36-48"	36"	6	Light lavender
Grosso	30"	24-30"	5	Dark lavender blue
Hidcote Giant	30-36"	24"	6	Light Blue
Provence	30"	24"	6	Lavender blue
Silver Frost	24-36"	36"	6	True blue flowers/silver foliage
Super	36"	36"	6	Violet

Pest and Disease Problem

Lavender has very few pest or disease problems, but it is susceptible to soil diseases such as Phytophthora. Do not over-water or allow water to stand around plants. Heavy infestations of grasshoppers can reduce yields but will probably not kill plants outright. In some areas, deer or elk may damage plants by browsing or trampling.

Reference Books and Articles

- Upson, T. and Andrews, S. 2004. The Genus Lavandula. Timber Press, Inc.
- McNaughton, V. 2000 - Lavender, the Growers Guide. Timber Press, Inc.
- Kourik, R. 1998. The Lavender Garden – Beautiful Varieties to Grow and Gather. Chronicle Books.
- Eveleigh, T. 2001. Lavender; Practical Inspirations for Natural Gifts, Country Crafts and Decorative Displays. Lorenz Books.
- Beus, C. 2006. Growing & Marketing Lavender, Washington State University Extension, June 2006
www.attra.org/attra-pub/PDF/lavender.pdf