



A POCKET GUIDE TO GROWING

# LAVENDER

IN THE AMERICAN SOUTHWEST

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**COMMON NAME**

*Lavender*

**BOTANICAL NAME**

*Lavandula*

**GROUP**

*Shrub, herb*

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Lavender is a drought-tolerant, perennial herb that can grow well in many parts of the Southwest. It is an evergreen shrub that produces aromatic blooms on stems extending outward from green to silvery-gray foliage. It prefers full sun and nutrient-poor soil that is well draining. Varieties of Lavender can thrive in USDA Hardiness Planting Zones from 5 to 10. Lavender is pest resistant and can live for over twenty years with pruning and ideal soil conditions. The blooms are a valuable food source for many beneficial insects.

# VARIETIES

Lavender (*Lavandula*) has a native concentration extending from Macaronesia across North Africa and the Mediterranean region, Arabia, Western Iran and Southwest Asia. It is now cultivated throughout many parts of the world.

Lavender is an herb in the mint family (*Lamiaceae*) and like others in the mint family, it has a square stem, opposite leaves, and lipped corolla (petals). There are forty-seven species of lavender with over four hundred different cultivars. In 2004, the genus *Lavandula* was re-classified by Upson & Andrews into eight primary sections according to thorough research into their individual characteristics. The most commonly cultivated species and hybrids of lavender belong to the first subgenus, also named *Lavandula*, which is comprised of three sections (Upson and Andrews 114):

## ***Subgenus Lavandula***

### I. Section *Lavandula*

1. *L. angustifolia* (True Lavender)
2. *L. latifolia* (Spike Lavender)
3. *L. lanata* (Woolly Lavender)

Hybrids:

*L. × intermedia* (Lavandin)

*L. × aurigerana*

*L. × losae*

*L. × chaytorae*

II. Section *Dentatae*

*L. dentata*

III. Section *Stoechas*

*L. stoechas*

*L. pedunculata*

*L. viridis*

Due to their vigorous growth and prolific oil yields, the varieties most commonly grown for oil are Lavandins: *L. × intermedia* hybrids created by crossing true lavenders (*L. angustifolia*) with spike lavenders (*L. latifolia*.) There are hundreds of cultivars of Lavandin; those commonly grown in the Southwest include 'Edelweiss,' 'Gros Bleu,' 'Impress Purple,' 'Provence,' 'Super,' 'True Grosso,' and 'Tuscan Blue.'

Though the quantity of oil produced by varieties of *L. angustifolia* is lower than that of lavandins, the quality of the oil is often considered to be the finest. *L. angustifolia*'s lack of camphor makes it ideal for use in culinary applications. *L. angustifolia* cultivars commonly grown in the Southwest include 'Betty's Blue,' 'Buena Vista,' 'Folgate,' 'Hidcote,' 'Melissa,' 'Miss Katherine,' 'Royal Velvet,' 'Munstead,' and 'Wycoff.'

The remaining forty species of the genus *Lavandula* belong to five sections (in two subgenera) and include a huge diversity in growth habits, leaf and flower shapes, and fragrances, but are not as commonly cultivated.

## **HARDINESS**

Lavender can also be organized into groups by its USDA Hardiness. Hardy Lavenders are the most commonly cultivated varieties for commercial use.

### ***Hardy Lavenders - Zone 5+ (Lows from -4° to 5°F)***

*L. angustifolia*, *L. × intermedia*

### ***Frost-Hardy Lavenders - Zone 6+ (Lows from 14° to 23°F)***

*L. stoechas*, *L. pedunculata*, *L. latifolia*, *L. × chaytorae*  
cultivars

### ***Half-Hardy Lavenders - Zone 6+ (Lows from 23° to 32°F)***

*L. lanata*, *L. viridis*, *L. dentata*, *L. × heterophylla*,

*L. × gingsinii*, *L. viridis* × *L. stoechas* hybrids

### ***Tender Lavenders - Zone 7+ (Lows above 32°F)***

Sections *Pterostoechas*, *Subnudae*, *Chaetostachys*,  
*Hasikenses*, and *Sabaudia*

(Upson and Andrews 52)

# **PROPAGATING**

Lavender can be propagated by cuttings, layering, and seed. The best technique to use is dependent upon the variety and the time of year. Most lavender varieties can be propagated from cuttings or layering techniques. Many of the hardy lavenders are hybrids and are not viable from seed.

## **CUTTINGS**

Lavender varieties can be cloned from hardwood or softwood cuttings. A softwood cutting is the soft, pliable tip of new growth that is often taken in the Spring. A hardwood cutting is a thicker, woody section that is no longer green or pliable. Hardwood cuttings can be taken in the Spring or Fall and are often more reliable than softwood cuttings.

For both softwood or hardwood cuttings, you will take a 3-4 inches cutting from a straight stem without bud growth. Remove all the leaves from the lower section of the stem and cut the bottom of the stem at an angle. Lavender can grow without a rooting hormone but if you decide to use one it can be added to the lower stem before placing into soil. A good soil mix for cuttings should be sterile and be able to remain moist but also be able to be free-draining. A commercial seed starting mix is often a good choice.

A softwood cutting can take several weeks to root and a hardwood cutting can take a couple more weeks longer than softwood cuttings. Roots will form out of the leaf nodes on the buried section of the stem. It is best to keep the cuttings in a warm and humid environment during this time. The cuttings will only need partial sun and if they become overly dried out they will not have the ability to root. The soil should remain around 70-75 degrees and moist but not overly wet or they will rot. A heat mat is a good solution for keeping the soil warm.

Once the cuttings are rooted they can begin to be weaned of the humidity and transplanted into a larger pot. The plants will need to be gradually acclimated to the outdoor climate prior to planting outside.

## **LAYERING**

Layering is similar to the rooting process of cuttings where roots grow out leaf nodes on the stem. In this technique, lower stems on the outer edge of the plant are stripped of their lower leaves and pulled down to the ground with additional soil placed over the stripped stem. The end of the stem should have a few inches of leaves remaining above the ground. Adding a rock or landscape staple can help hold the stem to the ground so it remains within the soil. The

section below the soil if kept moist will eventually root out. It is best to perform layering in the Fall.

## **SEEDING**

Seeding can be done with many lavender plants but will not produce a true cultivar. Hybrid varieties are not viable from seed and must be propagated from cuttings or layering techniques. Using a commercial seed starting soil mix filled in a tray you can spread seed evenly approximately every half inch and cover lightly with additional soil. The soil must remain warm (70-75 degrees) and moist but not overly saturated with water. Seedlings can be carefully transplanted once their first true leaves are grown. The plants will need to be gradually acclimated to the outdoor climate prior to planting. It is best to start seeds in the Spring.

## **PLANTING LAVENDER**

It's critical to acclimate young lavender so it's field conditions are not drastically different from the conditions of the starts. This can be achieved by timing the planting with the season and allowing the starts to gradually acclimate. In the Southwest, it's good to plant in the early Spring or in hotter climates (Zone 8-10) it's best to plant in

the Fall so plants can slowly adjust to the conditions prior to the extreme heat of the summer.

## **SOIL & SITE PREPARATION**

Lavender should be planted in nutrient-poor, neutral to alkaline (7-9.0 pH) soil that is well draining and in a site with full sun. Soils with heavy clay content can be amended with small aggregate or replaced by a customized soil mix placed in an 18 inch hole where the root ball will reside. A good soil mix can be made using 25% compost, 25% sand, 25% aggregate, and 25% screened composted mulch.

Lavender fields are often planted 2-3 feet apart and have a row spacing of 5-6 feet. The alleyway between the lavender rows can either be fallow and cultivated regularly, covered with a weed cloth and gravel or it can be planted with a living cover crop. Buffalo grass performs especially well as a cover crop due to its low growing height, nominal water requirements, and minimal competition with the lavender. It stands up well to foot traffic while reducing weed pressure and minimizing soil erosion.

## **IRRIGATION**

It's important to allow soil to dry between watering and

that any drip irrigation is outside of the root ball to prevent problems such as root rot in mature plants. Watering should increase in the Summer and be reduced in the Winter.

Lavender will survive lower temperature in drier soil in the Winter. New plants will need additional water while they get established but should be weened back as the plant matures.

## **HARVESTING LAVENDER**

The timing of harvest is important for the various end uses such as dried bundles, essential oil distillation, or seed.

In the Spring, the lavender will send up spikes of buds and these will need to be monitored periodically as the buds transition from green to colorful buds that then bloom.

If lavender is being harvested for dried bundles or culinary use the stems should be harvested when 25-50% of the buds are blooming. If it's being used for essential oil it should be harvested when 50-100% of the buds are blooming. If harvesting for seed, the buds can be allowed to fully bloom and dry on the plant prior to harvesting. For collecting seed, it is important to harvest over a container since the sesame sized seed will begin to fall out of the buds as they are handled.

Scissors or a hand sickle can be used to harvest being

careful not to cut into the woody base of the plant as it will stunt future growth. Once cut, for drying the stems should be bundled with a rubber band within no more than a two inch diameter of combined stems so the bundles can dry without molding. The bundles should hang upside down in a dark, well ventilated area until they are dried. Sunlight can degrade the essential oil and the color of the buds. Once dried, the buds can be more easily stripped off the stems. Lavender can be distilled freshly cut or after it has been dried. It's best to harvest in the cool morning for optimizing the essential oil content.

## **PRUNING LAVENDER**

Pruning is ideal in the early Spring and helps stimulate new growth. Lavender should be pruned back to 3-4 inches from the bare wood. If pruning extends into the woody base of the plant it will stunt future growth or possibly kill the plant. Pruning should not happen in the Fall or Winter as it triggers a growth response in the plant.

## **PROBLEMS WITH LAVENDER**

Root rot (Phytophthora) is the most common problem with lavender. It's caused from roots being in stagnate water. To help prevent this fungal disease, soil should be draining and

dry between watering.

Lavender is resistant to deer and insects but is susceptible to alfalfa and tobacco mosaic diseases which can spread from insects, soil, and human contact with tobacco or alfalfa with this disease present. It will cause yellowing of the leaves.

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## REFERENCES

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