

## DAHLIAS

C026

Dahlias are among the most spectacular flowers you can grow in your garden. Hundreds of varieties are available, with flower shapes of simple to exotic and sizes ranging from 1 to 14 inches in diameter. Dahlias are members of the *Asteraceae* or aster family. The dahlia is a native of Mexico and Central America where it grows wild, even on mountain slopes at altitudes of 4,000 to 8,000 feet.

In exchange for their beauty, dahlias require dedicated care. Most of them need staking, pinching back, consistent watering, disbudding, deadheading, and pest control. Further, they do not survive Inland Northwest winters, so be prepared to dig up and overwinter the tubers in your garage or basement.

### Purchasing

Dahlias can be purchased as tubers, rooted cuttings or full-grown plants. After 200 years of culture, selective breeding, and hybridizing, dahlia has one of the largest arrays of forms, colors, and sizes of any flower grown. Learning to identify them by type makes it easier to recognize the different varieties and figure out which ones you find most appealing.

### Classification

Since there are so many forms of dahlias, classification codes have been developed to simplify identification. Dahlias are first classified according to form (the arrangement of their shape of the petals); next by size and then by color.

#### Dahlia forms:

There are generally 20 "classes" (Forms) of Dahlias recognized by the American Dahlia Society (ADS), with many sub-types noted. These classes are:

CODE	DESCRIPTION	CODE	DESCRIPTION
<b>AN</b>	Anemone-flowered	<b>BA</b>	Ball
<b>C</b>	Straight Cactus	<b>CO</b>	Collarette
<b>FD</b>	Formal Decorative	<b>IC</b>	Incurved Cactus
<b>ID</b>	Informal Decorative	<b>LC</b>	Lacinate
<b>MB</b>	Miniature Ball	<b>MS</b>	Mignon Single
<b>N</b>	Novelty	<b>NO</b>	Novelty Open
<b>NX</b>	Novelty Fully Double	<b>O</b>	Orchid-flowering
<b>P</b>	Pompon	<b>PE</b>	Peony-flowering
<b>S</b>	Single	<b>SC</b>	Semi-Cactus
<b>ST</b>	Stellar	<b>WL</b>	Water Lily

**Dahlia sizes:**

Dahlias are often grouped by the size of the bloom, giving a letter code to each group. The following table shows the letter codes and their corresponding sizes:

<b>CODE</b>	<b>NAME</b>	<b>SIZE</b>
<b>AA</b>	Giant	over 10 inches in diameter
<b>A</b>	Large	over 8 to 10 inches in diameter
<b>B</b>	Medium	over 6 to 8 inches in diameter
<b>BB</b>	Small	over 4 to 6 inches in diameter
<b>M</b>	Miniature	up to 4 inches in diameter
<b>BA</b>	Ball	over 3.5 inches in diameter
<b>MB</b>	Miniature Ball	over 2 to 3.5 inches in diameter
<b>P</b>	Pompon	up to 2 inches in diameter
<b>MS</b>	Mignon Single	up to 2 inches in diameter

**Color codes:**

Generally, Dahlias are available in almost every color except black and blue. All shades and combinations of pinks, reds, purples, oranges, yellows, and whites exist. Dahlia Color and Code abbreviations are:

<b>COLOR CODE</b>	<b>DESCRIPTION</b>
<b>BI</b>	Bi-Color (EX: BI W/R = Bicolor white & Red)
<b>BR</b>	Bronze
<b>DB</b>	Dark Blend (Deep Multi Colored)
<b>DP</b>	Dark Pink
<b>DR</b>	Dark Red
<b>FL</b>	Flame Blend (Reds & Yellows)
<b>L</b>	Lavender
<b>LB</b>	Light Blend (pastels, Yellows and Whites)
<b>OR</b>	Orange
<b>PK</b>	Pink
<b>PR</b>	Purple
<b>R</b>	Red
<b>V</b>	Variegated (multiple colors on each petal)
<b>W</b>	White
<b>Y</b>	Yellow

**Staking**

Most dahlia varieties need to be staked. The exception are small bedding varieties that only grow to heights of 24 inches or less. Growers will be in for a big disappointment if they don't stake the larger plants because a heavy wind or rain will destroy them. Stakes need to be 4 - 6 feet tall depending on the variety of the dahlia. The easiest and safest time to stake is when you plant.

## Planting

To plant directly outdoors, wait until the soil has warmed and all danger of frost has passed. Most dahlia growers in the Inland Northwest plant their tubers in the garden the third weekend in May. Some gardeners start tubers indoors a month ahead to get a jump on the season.

Select a planting site with full sun. Dahlias grow more blooms with 6 to 8 hours of direct sunlight. They love the morning sunlight best. Choose a location with a bit of protection from the wind. Dahlias prefer a sandy loam soil but will grow successfully in most soils if there is good drainage.

Dig a large hole 4 to 6 inches deep. Your dahlias will do the best when planted in your existing garden or yard soil. Mix organic matter into the soil that was removed from the planting hole in a ratio of 1/3 organic matter to 2/3 soil. The old standby organic matter is well-rotted cow manure. If this is not available, materials such as compost or leaf mold are acceptable substitutes. Set this mixture aside for use in planting.

A dahlia tuber should be planted 4 to 6 inches deep. Except for miniatures, petites and pompons; plant tubers with only one eye. Plant the dahlia tuber on a slight slant with growth bud(s) toward the surface. Put an application of bulb dust around the tuber and sprinkle the bulb dust on the soil surface. Cover the tuber with 2 inches of soil/organic matter mix, filling in the hole as the plant grows. If your plant will mature to taller than 2 feet, pound in a stake about 3 to 4 inches from the eye.

Apply a slug and snail bait, trap or barrier to avoid these pests.

Do not cover the dahlias with mulch or bark until the sprouts are a few inches high beyond the filled hole. A small amount of peat moss or coconut coir placed directly over the eye will keep the soil loose and prevent crusting.

Allow all sprouts to come up on pompoms, miniatures, and petites. Cut off any extra sprouts below the ground for all other varieties resulting in a single strong stock.

## Watering

Don't water until you see the sprout above the soil. Dahlia tubers are susceptible to rot after planting, especially in soggy, wet soils.

At first, it's best to keep the soil on the dry side, rather than the wet side. Once the dahlia has sprouted, a deep soaking 2-3 times per week in the summer is sufficient unless it is very hot. The soil should never completely dry out.

Use soaker hoses or drip irrigation to water your dahlias if possible. With drip irrigation, the water goes directly to the root zone and keeps the leaves dry, preventing fungal diseases.

## Disbudding and Disbranching

After the lateral branches of your dahlia plants begin to develop flowering buds at their tips, disbudding and disbranching are two grooming chores that need to be attended to regularly. For all varieties, other than bedding dahlias, disbudding and disbranching will be worth the time and effort.

**Disbudding** is the removal of the two side buds next to the central bud at the end of each lateral branch. By removing these two side buds when they are very small (pea sized), you will find that the center bud, now without competition, will grow a longer and stronger stem. The flower that develops will also be larger because all the lateral branch's energy will be diverted into the single flower instead of three flowers. Those who primarily grow dahlias for beautiful bouquets will especially benefit from disbudding.

**Disbranching** is the practice of removing lateral branches from a dahlia stalk. This is done for several reasons. First, you will get larger blooms on your larger flowering varieties if only three to five flowering branches are left on each plant. Leave five to eight branches on your medium sized varieties. The smaller flowering varieties need no disbranching. A second reason for disbranching is to control the size and shape of the dahlia bush. A third reason is to open your dahlia bush to better air circulation which helps prevent powdery mildew and other fungal diseases. The actual removal of the branch should be done carefully to do as little damage to the plant as possible. First remove the leaf below the branch that is to be removed and then gently bend the branch downward until it breaks away from the main stalk.

### Pinching

By removing the main stem, the plant will to grow two new stems from the leaf nodes below the pinch or cut.

To promote shorter, bushier plants with better stems for cutting, pinch or cut the center shoot just above the third set of leaves, or plant height of about 18 - 20 inches tall.

Pinch higher on the smaller blooming varieties, above the 4th or 5th full set of leaves, when the dahlia is 12 -18 inches in height. This will create a stronger, more manageable plant with more blooms. It will also make the plant less top heavy.



Bedding dahlias need no staking, disbudding or disbranching; just pinch out the growing tip and deadhead regularly (see next topic).

### Deadheading

Deadhead faded blooms to encourage more flowers. Dahlias will reward the grower with blooms from mid-July to first frost if deadheaded.

### Cultivating

After mid-July, do not cultivate more than an inch deep within 18 inches of the plant. Dahlias have shallow feeder roots that will be damaged. Mulch can be applied after the soil is warm to suppress weeds, retain moisture, and protect the dahlia roots.

### Fertilizing

Dahlias require a low nitrogen fertilizer. We recommend high percentage potassium and phosphorus fertilizers such as a 5-10-10, 10-20-20, or 0-20-20. You are just looking for a fertilizer where the first component number is 1/2 of the other two numbers.

Fertilize after sprouting and then every 3 to 4 weeks from mid-summer until early autumn. Do NOT over fertilize, especially with nitrogen or you will risk small or no blooms, weak tubers, or rot.

## Pests

Dahlias are susceptible to a host of problems. Earwigs and slugs are probably the most common and here in the Inland Northwest red spider mites are likely to infest these plants during the hot weather. Thrips, and caterpillars also like to feast on dahlias. Dahlias can be susceptible to powdery mildew and other types of fungus when they are in wet conditions.

## Dividing and saving tubers over the winter

Dahlias are tender perennials native to Mexico and South America and will not survive our winters in the Inland Northwest. Digging up, dividing and storing the tubers in the fall takes some time, but is worth the effort.

Wait for a killing frost, cut the plant off to about 6 inches above the ground and wait a week before you dig up the tubers. A single tuber planted in the spring will multiply into a number of tubers by late summer. Gently dig up the tuber clump, wash off the soil, and carefully cut the tubers apart using a sharp knife. Each tuber must have an eye or growth bud attached located around the crown of the “mother” plant (see illustration). If the tubers are pulled off without an eye, the tubers are worthless. Wash each tuber again and let the cut heal-over for a day or two before you prepare it for storage. Label each tuber if you have more than one variety.



Tubers can be stored in layers of damp (but not wet) sawdust, peat moss, or coconut coir. Tubers should not be allowed to touch each other. Some growers separate each tuber with the filler/storage medium in a plastic or paper bag. Ideally, tubers should be stored in a cool, even temperature of 38 to 40 degrees F. Many growers in Spokane County have success storing dahlia tubers in a cooler in their garage. Check on the plants once a month and spray lightly with water if needed. Tubers should not be allowed to shrivel.

## References:

**American Dahlia Society:** <http://www.dahlia.org/>

**The Inland Empire Dahlia Society:** <http://www.inlandempiredahliasociety.com>