

by James Romer

Dahlias are native to the mountainous region of Mexico. The 3-inch specimens discovered by Swedish botanist Anders Dahl most likely consisted of one row of ray florets—mistakenly termed petals—surrounding yellow center disc florets. While this single type dahlia is still grown today, the flowers now range up to 16 inches across and are available in many colors except green, brown, and true blue. The American Dahlia Society recognizes 15 official colors: white, yellow, orange, pink, dark pink, red, dark red, lavender, purple, light blend, bronze, flame, dark blend, variegated, and bicolor. Flower size is distinguished by letter or name as follows.

AA	_Over 10 inches in diameter
A	_ 8 to 10 inches
B	_ 6 to 8 inches
BB	_4 to 6 inches
Miniature	2 to 4 inches
Ball	Over 31/2 inches
Miniature Ball	2 to 31/2 inches
Pompon	_Up to 2 inches
Mignon Single	_Up to 2 inches

# Dahlia types

The American Dahlia Society currently recognizes 18 flower forms or types.

#### **Formal Decorative**

Relatively flat ray florets are uniformly placed in the same direction forming a hollow globe. 'Formby's Perfection'

# **Informal Decorative**

Wavy or twisted ray florets have a random placement. 'Ivory Palaces'





#### Semi-Cactus

Ray florets curl underneath lengthwise for less than half their length. 'Kenora

#### Cactus

The top color of the ray florets roll under to form a point. To be classified a cactus type, the ray floret must curl more than half its length. 'Taratahi Lilac'

#### Laciniated

Ray florets are split, giving an overall fringed effect. 'Al Almand'

#### Ball

Ray florets curl upward to form a tube. Individual flowers are rounded. Blooms range from 3½ inches across and up. 'Puget Joy'

#### Miniature Ball

Same characteristics as the ball, only smaller (2 to 3½ inches). 'Ruddy'

#### Pompon

The smallest dahlia type. These can be up to 2 inches across and resemble the ball dahlias, but differ in size and are more globular in shape. 'Lisamore Moonlight'

#### Stellar

Ray florets are narrow and roll upwards with a slight recurve to the stem. 'Alloway Candy'

#### Waterlily

Florets cup upwards just as true waterlilies do. 'Cream Beauty'

#### Peony

Resembles a double flower having several rows of ray florets, but the yellow disc florets are showing. 'Powder Gull'

#### Anemone

A distinctive dahlia having one row of ray florets surrounding elongated disc florets. 'Alpen Blaze'

#### **Collarette**

A row of ray florets with a collar of petaloids, or half petals, surrounding the yellow disc flowers in the center. 'Mars'

























#### Single

One row of ray florets surrounding yellow disc florets. 'Bashful'

#### Mignon Single

Similar in form to the single but on a much shorter plant (12 to 24 inches) with smaller flowers. 'Rembrandt'

#### Orchid

One row of ray florets curl upward to form long tubes surrounding the center yellow disc florets. 'Honka'

#### **Novelty Open**

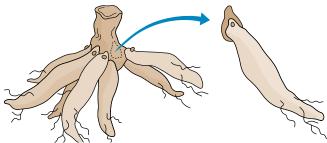
Additional types of open-centered dahlias that do not fit into any established categories. These cultivars will show a yellow disc center at peak stage. 'Christmas Star'

#### **Novelty Fully Double**

Additional types of dahlias that do not fit into any established categories. These cultivars should have no yellow disc florets showing at peak stage. 'Akita'

# **Planting tips**

Dahlias perform best in full sun and well-drained soil; they may rot in wet, poorly drained soils. Tuberous roots radiate out from the dahlia crown like the spokes of a wagon wheel. Viable tubers must have an eye originating from the crown portion, plus a neck that connects the crown to the body of the tuberous root. For earlier blooming, plant dahlia tubers in 8-inch standard pots in



early April. Fill pots about half-full with a commercial, sterilized potting mix or make your own by combining equal amounts of sphagnum peat, perlite, and sterilized soil. Place the tuber horizontally on the soil mix and cover with 1 to 2 inches of soil mix; water thoroughly. When growth emerges, place pot in full sun.Plants can remain in pots or be transplanted to the garden.

Frost can damage or destroy the plants so do not plant outdoors too early. Wait until May 5 to 10 in southern Iowa, May 10 to 15 in central Iowa, or after May 20 in northern Iowa.

Before planting, drive a sturdy support—such as a metal fence post or wooden stake—into the ground. Doing this prior to planting ensures that the tubers will not be damaged. To plant tubers, dig a hole about 6 to 8 inches deep on either side of the support. Place the tuber horizontally in the ground. Then place soil back in the hole. The dahlias should emerge in about 2 weeks.

# **Growing tips**

"Feeding" dahlias is a 2-step process. About a week before planting, work an appropriate amount of a complete fertilizer (5-10-5 or 5-10-10) into the planting area. Repeat in July.

As the plants grow, carefully tie them to the support with yarn, thick cotton cord, or baling twine. Fishing line, wire, and other narrow materials should not be used.

After the dahlias reach a height of 10 to 12 inches, they need an inch of water per week. Mulching with grass, straw, or pine needles conserves moisture and keeps the developing tubers cooler. Use a soaker hose for efficient watering.

To get the best bloom, remove two sets of axillary buds located beneath the main bud on either side of the stem where the leaves meet. If left on the plant, the axillary buds will develop and flower. However, the quality of the bloom is reduced and weaker stems result. Deadheading by removing spent blooms also promotes additional flowering.



#### Fall care

After a killing frost, remove the brown foliage and stems but leave the tuberous roots in the soil an additional 1 to 2 weeks to "cure." Dig with a potato fork or sand shovel and label each clump.



Disbudding improves blooms

Wash off as much soil as possible and remove the rest of the stalk down to the crown. Washing helps keep the storage media clean and reduces the risk for insect damage. Let the tubers sit until they are dry to the touch (usually about one day), then place clumps upside down in boxes and cover with vermiculite, sphagnum peat, or wood shavings. Store the boxes in the coolest part of the house, preferably between 40° and 55°F.

# **Insect and disease problems**

Dahlias can be bothered by certain insect pests and diseases. However, the damage may or may not be severe enough to warrant control methods, depending on your tolerance for imperfection.

**Aphids**—Curled leaves with a sticky glistening film on the foliage indicates the likely presence of aphids. Plant vigor is reduced. Spray plants with water or check insecticide labels for appropriate rates and application.

#### **Corn Rootworm Beetles** (northern, southern, western)—

Larvae feed on the root of corn plants and emerge in July. Adults feed on corn tassels and silks. Once both sources dry (usually in August), the beetles migrate to other feeding locations, including Southern corn rootworm beetle on 'Edge of Gold'



dahlia petals. In Iowa, the northern corn rootworm beetle is the most common. They are solid green, whereas the western has stripes and the southern has black spots on green. Control is difficult to impossible and is limited to screening or frequent applications.

**Grasshoppers**—Nymphs and adults chew on all plant parts, producing holes in the foliage and flowers. They are easiest to catch in the morning hours when they are less active.

**Japanese Beetles**—These voracious 3/8- to 1/2-inch pests chew on petals. One adult female beetle can lay 200 to 300 eggs in the soil. Japanese beetle is the adult stage of the white grub. Control is the same as for corn rootworm beetle.

**Slugs**—Damage is most likely on new plantings during cold, wet springs. Slug baits are available at garden centers.

**Spider Mites**—Fine webbing on foliage is often the first indication of these barely visible pests. Fine stippling on upper surface of leaves leads to overall bronzing of the leaves. Plant vigor is reduced. Spider mites can be controlled by spraying plants three or four times a week with a forceful spray of water or a soapy water solution (1 tablespoon liquid dishwashing soap to 1 quart water). Miticides are also available; check labels for rates and application.

**Thrips**—Individual thrips are typically barely visible on the blossoms. They can fly and run rapidly, making them very difficult to catch. Damage is noticeable as white flecks on the flowers. Control is possible using contact insecticide.

**Powdery Mildew**—While unsightly, powdery mildew is seldom fatal. It thrives in stagnant air with relative humidity levels above 60 percent and is more prominent late in the season. Leaves have a whitish-gray appearance and become distorted, then wilt, and drop. Fungicide sprays act as a preventative, not a curative solution. If



Powdery mildew on dahlia foliage

growing plants for show, it may be necessary to spray every 10 days from the end of June through the middle of September.

**Virus**—Diagnosing a virus problem is often misleading if based on symptoms alone. Plants may show a variety of leaf mottling patterns, necrotic and ring spots, and bubbling or distorted leaves, stem streaking, stunting, and wilting. Infected plants also can be carriers without showing any symptoms. Viruses cannot be controlled with pesticides.



Virus on dahlia

Remove infected plants and discard away from the site. Do not add infected plants to compost pile.

# **Enjoying dahlias as cut flowers**

For longer vase life, cut dahlias in late evening or early morning. Choose flowers that are fully open and do not show a green center. Do not cut if back petals are starting to turn brown. Remove any leaves that would be under water. Blooms may last up to a week if vase water is changed every three days.

Smaller dahlias, such as pompons and miniatures, hold their shape and color after drying. Use silica gel and follow package directions.



A green center is a sign of immaturity.



petals are starting to



The ideal dahlia has a good, tight center (top). A blown center indicates overmaturity

# Tips for showing dahlias

- Fill containers with water the day before show. "Dayold" water is closer to air temperature and also loses some fluoride that may be present in tap water.
- Include two sets of leaves with flower.
- Position the stem in a narrow-necked container so the bloom shows at a 45° angle. Plastic wrap, wooden wedges, newspaper strips, Styrofoam, or other materials can help anchor the stem in the bottle neck.
- Stem length should be in proportion to flower size; thus miniatures are shown with shorter stems and larger flowers are shown with longer stems.
- If growing a variety specifically for show, consider removing misshapen buds because they will develop into misshapen flowers.







shapen bud Missl

# Check these Web sites for more information American Dahlia Society— www.dahlia.org

# **ISU Extension Distribution Center**—www.extension.iastate.edu/store

#### www.exterision.lastate.edu/store

#### ISU Horticulture—

www.yardandgarden.extension.iastate.edu

Questions also may be directed to ISU Extension Hortline by calling (515) 294-3108 during business hours (10 a.m.–12 noon, 1 p.m.–4:30 p.m. Monday–Friday), or by contacting your local ISU Extension office.

If you want to learn more about horticulture through training and volunteer work, ask your ISU Extension office for information about the ISU Extension Master Gardener program.

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# Sources

Alpen Gardens 12010 N.E. Flett Road Gaston, OR 97119 (503) 662-3951 www.alpengardens.com

Arrowhead Dahlias P.O.Box 814 Platteville, CO 80651 (970) 785-6014 www.arrowheaddahlias.com

Clack's Dahlia Patch 5585 North Myrtle Road Myrtle Creek, OR 97457 (541) 863-4501 www.cruger.com/cddahlia.html

Connell's Dahlias 10616 Waller Road East Tacoma, WA 98446 (253) 531-0292 www.connells-dahlias.com

Dan's Dahlias 994 South Bank Road Oakville, WA 98568 (360) 482-2406 https://www.shop.dansdahlias. com **JS Dahlias** 57295 CR 35 Middlebury, IN 46540 (574) 825-5132 <u>www.jsdahlias.com</u>

Mingus Dahlias 7407 N.E. 139th Street Vancouver, WA 98662 (360) 573-2983 www.dahliasuppliers.com/ mingus/index.htm

Mohawk Dahlia Gardens P.O. Box 898 Marcola, OR 97454 (541) 933-2733 www.dahlias.net/htmbox/ mohawk.htm

Swan Island Dahlias 995 N.W. 22nd Ave. Canby, OR 97013 (800) 410-6540 www.dahlias.com

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