



University of Kentucky
College of Agriculture,
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Cooperative Extension Service

Growing Dahlias In Kentucky

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Dahlia History

- Dahlia is the national flower of Mexico (native to the mountains of Mexico and Guatemala)
- The Spanish conquistadors found dahlias growing in the gardens of the Aztecs
- Botanists with the Spanish found the tree dahlia with single flowers and large stems used for a water source growing over 20 feet tall



Dahlia History

- It took 200 years from the time the Spanish arrived before dahlias made it back to Europe
- Initially interest in dahlias was for food for humans and animals (its edible) but it isn't tasty!
- Between 1810-1840 dahlias were hybridized throughout Western Europe and interest began to wane as it was thought all combinations of flowers and colors had been done



Dahlia History

- In 1872 a box of dahlia roots were sent from Mexico to Holland, only one root survived the journey!
- This single plant bloomed brilliant red with rolled back petals and sparked a resurgence in dahlia interest and the rest as they say, History
- This new variety was named *Dahlia jurazeii* and it was mixed with the existing varieties in Europe and they are the parents of all modern varieties and hybrids



When and Where To Plant

- Plant from Mid April through May
- Ground temperatures should be at least 60 degrees F.
- Dahlias need full sun to thrive (8 hours of direct sunlight gives best flowering)
- Some late afternoon shade is appreciated in July and August in Kentucky (shaded plants will grow taller)

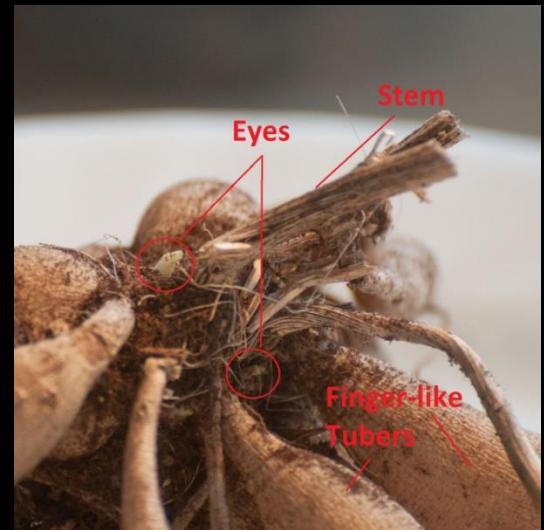
Soil Preparation and Planting

- As always soil test!!!
- Dahlias prefer a slightly acidic soil of 6.5 to 7.0
- Choose warm well drained soil in a sunny location.
- If you have heavy clay add compost, manure, peat, or other soil conditioners to lighten the soil
- Mix a hand full of bone meal into the hole before planting



Soil Preparation and Planting

- Dig hole 4-6 inches deep about 18-24 inches apart depending on variety
- Don't water until sprouts have formed at ground level, natural rain is fine
- Don't mulch until plants are up and growing well, it cools the soil too much and the plants will break dormancy slowly



Container Growing?

- Dahlias work fine in containers, however small or dwarf varieties work best unless you have large containers
- Containers should be no smaller than 12 X 12 inches



Container Growing?

- To help make containers heavier you can use 1 part garden soil and 2 parts potting soil, however 100% potting soil works great!
- Once plants are growing actively fertilize twice per month with water soluble fertilizer and keep an eye on them for water, they will dry out quickly!



Staking

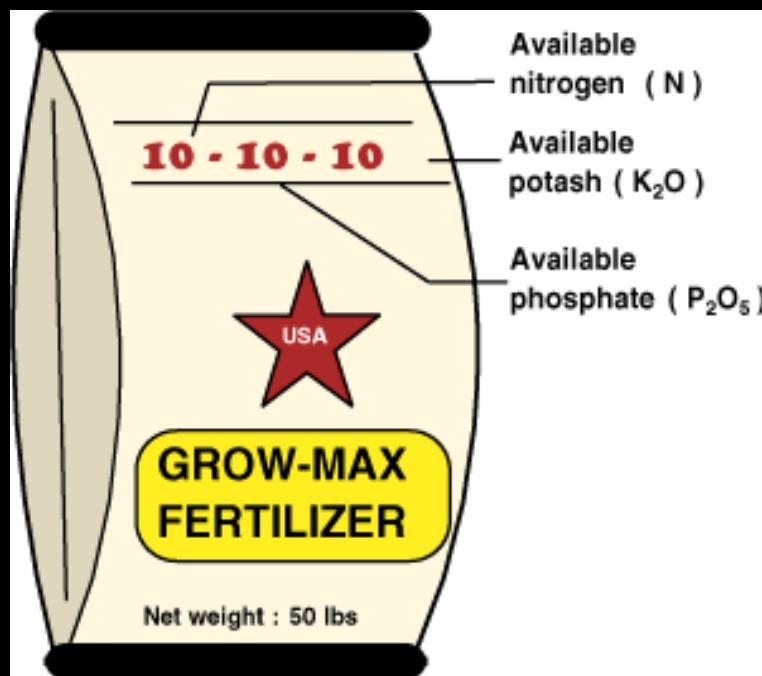
- Most dahlias (unless dwarf) will reach 3 feet or more and will need staking!
- Wind, rain, etc. along with heavy large flowers will cause the plants to fall over
- Tomato cages, metal rods, posts, bamboo stakes anything as long as there is support

Staking Dahlias



Fertilizer

- Over fertilized or too much nitrogen will cause a lack of flowers, weak plants, tubers to rot etc.
- It is best to use basic fertilizers such as 10-10-10 or the like monthly May, June, July, and August at the rate of half a cup per plant. Do not fertilize after August.
- Work the fertilizer in lightly around the base of the plants about 6-12 inches from the stems



Weed Control

- Dahlia weed control can be managed with hand weeding, preen as a pre-emergent , grass killer if needed, and mulch after plants are up and growing actively and the soil has warmed
- 3-4 inches of mulch is all that is needed
- Avoid landscape fabric, lava rock, plastic etc.



Pests and Problems



- Snails and Slugs – They will munch on dahlias even before they emerge from the ground. They will eat new sprouts, chew holes in the leaves, and even eat the stock.
- Control-Slug bait should be sprinkled around each plant at planting, or beer trick

Pests and Problems



- Spider Mites – This is the most common pest on dahlias. Plants will bronze and look like they need water if infestation is high. Spider mites suck chlorophyll from the plants causing the bronzing and browning. They Thrive in hot dry weather and protected sites.
- Control - If infestation is heavy, spray a swift spray of water on the undersides of the leaves three consecutive days in a row
- Insecticidal soap, malathion, neem oil, or if bad enough a miticide

Pests and Problems



- Thrips and Cucumber Beetles – Mainly a nuisance, eats flower petals causing the plants blooms to look poor
- Control with Malathion, sevin, insecticidal soaps, pyrethrums etc.

Pests and Problems

- Powdery mildew - generally a mid to late summer and fall problem. If infestation is bad a contact fungicide containing chlorothalonil or mancozeb and be used or a systemic fungicide such as immunox or Cleary's 3336.
- Botrytis blight can attack leaves and flowers if the weather is very moist, deadhead and keep the plant area clean, fungicide if needed



Topping or Pinching

- This promotes a shorter, bushier plant with better stems for cutting
- Pinch or cut out the center shoots just above the third set of leaves when plant height reaches 18-20 inches



Cut Flowers

- The best time to cut flowers is early morning while it is still cool
- Place the cut stems in 2-3 inches of very hot water (160-180 degrees F) and allow to cool at least one hour
- This will set the blooms and make them last longer, 4-6 days.
- Be sure to deadhead old blooms to keep new flowers forming



Overwintering Dahlia Tubers

- Dahlias can and have overwintered outdoors in Kentucky but it is a huge risk unless you have exceptionally draining soil and a very protected site.
- Winter will kill most dahlias (freezes deeper than 6 inches and wet soil are deadly to dahlias)
- Storing indoors is your best bet!

Digging and Overwintering

- After the first freeze, cut the dahlia tops back to 3 or 4 inches, dig and shake soil free
- If in containers, just cut tops back and leave in pots and store pots in a cool dark location that doesn't freeze.



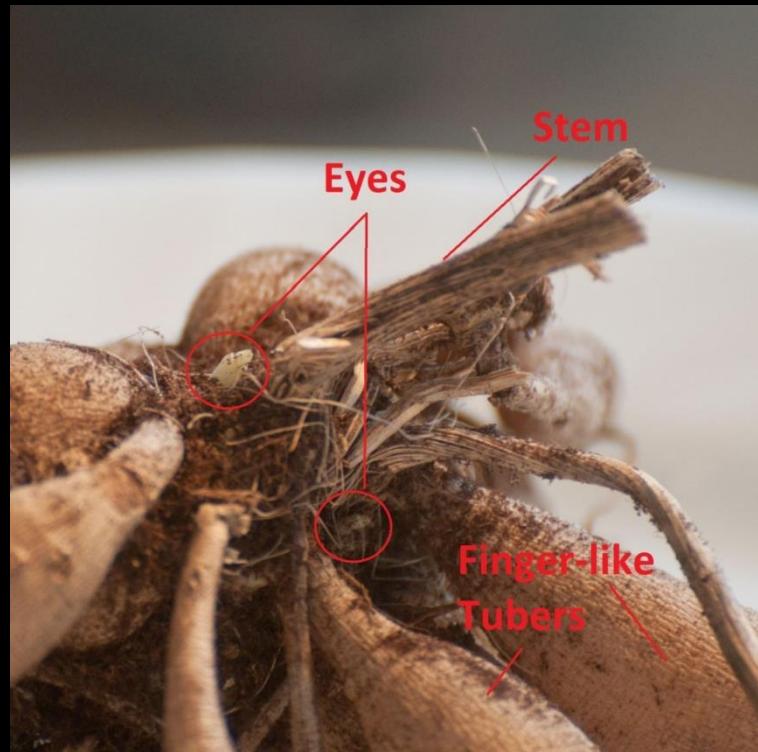
Winter Storage

- A covering of slightly dampened peat moss, sand, sawdust, or shavings works great
- Good idea to line the container with several layers of newspaper (absorbs excess moisture, especially if one rots)
- Never store in sealed plastic bags!
- Store in a cool dark place at 40-50 degrees
- If it is too warm they will wrinkle and shrivel, if too cold they will freeze and rot (good idea to check on them once per month during winter)



Dividing

- Dividing can be done in the spring or fall. (I prefer spring)
- If eyes are hard to see just cut the clump in half or quarters, use a sharp knife or pruning shears
- WARNING-These are not like potato tubers eyes are only had the stem end, each tuber must have a stem with an eye or you will not be successful!!!
- Allow cut surfaces to dry overnight before storage or planting.



Dahlia Types

- Single Flowered - Blooms with a single outer ring of florets, which may overlap, the center forming a disc
- Anemone - Blooms with one or more outer rings of generally flattened ray florets surrounding a dense group of tubular florets, and showing no disc.



Dahlia Types

- Collarette – Blooms with a single outer ring of generally flat ray florets, which must overlap, with a ring of small florets (collar) in the center forming a disc
- Water lily - Water lily dahlias have fully double blooms characterized by broad ray florets that are slightly involute along their length (longitudinal axis) giving a saucer shaped appearance to the bloom. The depth should be not more than one third of the diameter of the bloom.



Dahlia Types

- Decorative - Decorative dahlias have fully double blooms showing no disc. The ray florets are generally broad and flat and may be involute for no more than 75% of their length (longitudinal axis) or slightly twisted, and usually bluntly pointed.
- Ball - Ball dahlias have fully double blooms, ball shaped or slightly flattened. The ray florets rounded at the tips, with margins spirally arranged and involute for at least 75% of the length of the florets



Dahlia Types

- **Pompom** - Pompon dahlias have fully double spherical blooms, with florets largely involute along their length (longitudinal axis).
- **Cactus** - Cactus dahlias have fully double blooms, the ray florets are usually pointed, the majority narrow and revolute for 65% or more of their length (longitudinal axis) and either straight or incurving.



Dahlia Types

- Semi-Cactus - fully double blooms; the ray florets are usually pointed and revolute for more than 25% and less than 65% of their length and broad at the base and either straight or incurving.
- Fimbriated - Fimbriated dahlias have blooms where the tips of the ray florets should be evenly split or notched into two or more divisions, uniformly throughout the bloom to create a fringed overall effect. The petals may be flat, involute, revolute, straight, incurving or twisted.



Dahlia Types

- Miscellaneous - Any dahlias which do not fall into types. Thistle Dahlias, etc. This group includes species dahlias



Dahlia Types

- Star - Star dahlias have blooms with a single outer ring of florets surrounding the disc. Ray florets are uniformly either involute or revolute.
- Double Orchid - dahlias have fully double blooms showing no disc and have triangular centers. Ray florets are narrowly lance shaped and either involute or revolute.



Dahlia Types

- Paeony - Paeony dahlias have multiple outer rings of ray florets surrounding a disc, ray florets are flat or slightly involute at base and are flat or are to some extent revolute.



Questions?

- Information for this PowerPoint came from:
- <http://www.kvbwholesale.com/>
- <http://www.dahlias.com/images/growing.pdf>
- <http://www.dahlia.org/guide/>
- <http://www.dahlia.org/>
- <http://www.dahliaworld.co.uk/dahlia.htm>
- <http://www.dahlias.com/>