

# Portland Dahlia Society

March 2015

## Pre-Starting Tubers

## Taking Cuttings

## Starting Seeds

**WHY:** *Tubers planted in the ground usually come up, grow and bloom just fine.*

*Pre-starting your tubers and taking cuttings both take extra time, effort, space and equipment, so why bother?*

- Pre-starting tubers & taking cuttings are both ways to get a jump on the season, so you can put actively growing plants into the ground when it warms up, instead of unstarted tubers.
- Plants will come into bloom earlier
- Plants are less likely to rot than unstarted tubers if there is a lot of rain around planting time.

### **WHY Pre-start your tubers?**

- You can tell before planting whether your tubers are rotting or blind (no “eyes” to grow into shoots) or diseased.
- Some varieties are slow to “wake up” in the spring, and benefit from the extra attention to get going in time
- Giant and Large varieties that take longer to come into bloom will get a head start on growing
- Thin tubers that are beginning to dry out too much in storage may be saved by starting them early

### **WHY Take Cuttings?**

- To generate more plants from each tuber. Especially useful if you have paid a lot for that tuber, or you only have one and would like more.
- Usually the tuber from which the cuttings are taken can be planted in the garden afterwards, so you are not sacrificing it.
- Backup in case the tuber rots out later
- To make Pot Roots (plants grown in small pots the entire season, to make small tuber clumps that overwinter well)

*Whether you will be taking cuttings or just planting the started tubers in the ground, the first step is getting the tubers growing.*

## **Pre-Starting Tubers**

**WHAT:** Getting the tubers growing in pots before it is warm enough to plant them in the ground.

**WHEN:** Usual planting time is mid-May in the Portland area, so:

- Tubers for cuttings: start 10-12 weeks before planting time, mid-February to early March
- Tubers for plants: start 6 weeks before planting time, early April, to get good size plants by mid-May. Later will do if you just want to make sure the tubers are viable and starting to grow before planting them.

### **WHAT YOU WILL NEED:**

- Tubers
- Potting mix – new and fresh, not used, or growing mold or algae in the bag
- Plant labels
- Pots and/or zip top bags
- Trays/flats to hold pots or bags
- Plastic cover, either a dome made to fit the flat or just plastic wrap – may be needed if your starting area is very dry
- Shelf unit or individual shelves to hold plants and lights
- Light source – usually fluorescent shop light fixtures. For just a few plants, a bright desk light will do.
- Extension cords or power strip to plug in lights
- Electric timer for lights
- Soluble fertilizer such as Jack’s or Miracle Grow

**HOW:** Tubers need two things to begin to sprout and root:

- A small amount of moisture (but not too much or they rot)
- Warm temperatures, between 60 and 80 degrees – average room temperature or a little warmer.
- They don’t need light until the sprouts start to grow.

*Some of the ways growers start their tubers:*

- **One or two in a pot with potting mix** – usually a 4” pot or 6” for big tubers, large enough to contain the entire tuber covered with potting mix. *Advantages:* the plants can grow in the same pots until planting time, though some people move them to gallon pots to grow on; any tubers that rot won’t affect the others; easier to take cuttings without damaging neighboring tubers.

- **Several in a tray with potting mix** – a common way to start tubers to be used for cuttings. *Advantages:* takes less space. Tubers to be grown on to plants will need to be potted up in individual pots, preferably before their roots get too tangled.
- **One or two in a sealed plastic bag with a damp cotton ball or a little potting mix.** *Advantages:* takes little space to get tubers started; any tubers that rot won't affect the others; makes it clear early on which tubers will grow and which will not, no need to clean or sterilize pots. Writing the variety name on the bag means no need for plant labels until you know which ones will grow. Quart zip top bags, especially freezer grade, can be used as pots and potting mix added as the tubers grow into plants. Poke a few holes in the bottom for drainage. If not using the bags for pots, transfer the tubers to pots with potting mix as soon as they have shoots and roots.

As the plants grow, they need *Light, Moisture, and Fertilizer*. They must be kept actively growing and evenly moist and fertilized before planting in the ground. This will keep them from getting hard and woody at the base, which would stunt the growth of the plant.

*Light:* After the shoots have started to grow, they need light, brighter and of longer duration than daylight can give this early in the year. The usual answer is a setup of shelves and fluorescent light fixtures. Ordinary 4' shop light fixtures with standard light tubes will do fine; there is no need for special "grow lights".

*Moisture:* keep the potting mix damp but not wet.

*Fertilizer:* Some potting mixes have a small amount of fertilizer in them, but it isn't much. Use soluble fertilizer, such as Miracle Grow or Jack's, when you water, mixed at half strength.

## Cuttings

**WHAT:** growing shoots are cut from their tubers and rooted to form new plants genetically identical to the parent. These are called *basal* or *shoot* cuttings. *Leaf* cuttings are made in a different way, from node sections of growing plants.

**WHEN:** take cuttings about 8 weeks before planting time, mid-March to mid-April

### WHAT YOU WILL NEED IN ADDITION TO THE TUBER STARTING LIST:

- Sharp knife or scalpel - X-acto knives work well.
- Sterile plastic pots and trays – soak at least 20 minutes or overnight in a solution of 1/2 C regular bleach to 2 gallons of water to sterilize
- OR new paper or plastic cups, or peat pots
- Sterile medium – germination/seedling potting mix, Oasis wedges, rock wool, vermiculite or perlite mixed with peat moss, many other possibilities
- Plastic bags – new clear or white plastic bags big enough to put a tray of potted cuttings into. For just a few cuttings, individual lightweight bags to go over each pot.
- Cleaning & sterilizing solution for knives – hot soapy water or alcohol or bleach solution
- Note: NO rooting hormone is needed – dahlias actually root slightly better without it

### HOW:

<http://www.dahlias.net/dahwebpg/Propagation/Cuttings.htm> articles on the ADS website

<http://cubits.org/Dahlias/articles/view/1597/> short version (Check out the rest of cubits:dahlias while you're there)

<http://portlanddahlia.com/DahliaCulture/CuttingsKennedy.html> Ted's long version, lots more detail

<http://www.scdahlias.org/howto/index.cgi?howto=cuttings> Dick Parshall's take on cuttings

## Seed Starting

**WHAT:** growing new dahlia plants from seed

**WHY:** To grow new varieties. Dahlia plants grown from seed are not the same as the plant they came from, and every seed grows into a new variety. Many are duds, most are merely okay, but you might come up with a real winner!

**WHEN:** 6-8 weeks before planting time, mid-March to early-April

### WHAT YOU WILL NEED:

- Dahlia seeds
- Light
- If you have lots of seeds and are willing to risk losing some to fungus disease, just clean pots and fresh potting mix will do
- If you have fewer seeds and don't want to risk losing seedlings, you will need sterile pots and trays, and sterile germination/seedling potting mix
- If you have very special seeds, you may want to pre-sprout them on damp paper towels or sterile pieces of old bedsheet placed in plastic bags, before moving them into the sterile pots & germination mix

**HOW:** Cover with 1/4" of potting mix, keep moist & at average warm room temperature, 5-10 days to sprout. Give lots of light after they are up. Transplant to bigger pots as needed. Plant in ground when you would plant tomatoes.

