**TUBEROUS BEGONIA**

*Begoniaceae* is a large, flowering plant family found wild in South and Central America; are native plants in India; and includes about 1,500 different species and hundreds of hybrids. *Begonia Tuberosa*, is one hybrid type containing different types of summer flowering, tender plants which are considered the most stunning due to both flower and leaf color. Tuberous begonias give colorful, showy flowers which bloom from summer to fall, providing all-season color when planted in containers and shady beds.

Types of tuberous begonias include upright or trailing varieties with single, double, or ruffled blooms. When you consider tuberous begonia color choices, think 96-color crayon box (less true blue). Perhaps their greatest feature is that they bloom all season in the shade.

**Purchasing**

Once you decide to add tuberous begonias to your indoor and/or outdoor garden, you’ll have lots of options to choose from. Be aware, tuberous begonia cultivars tend to be expensive when compared to other plants. However, tuberous begonias offer a truly wonderful value for money, especially when you consider how much of a show they give year after year if properly cared for.

**Starting/Waking up**

Tuberous begonias are frost-tender and should not be set out until danger of frost has passed. Check your average last frost date prior to starting your plants. Tubers should be started indoors in February for bloom in June, or in March for bloom in July.

1. Position tubers hollow side up in flats of peat moss or vermiculite deep enough to allow planting medium to cover the tuber one half inch.
   a. Your begonia tuber looks like a shriveled up little potato with a dent on top. Find the upper surface of each tuber, the side with the depression or hollow, as that is the surface which should be up when planted.

2. Keep flats moist, not soggy, as tubers are very susceptible to rot. Water just enough to keep the potting mix moist.
   a. Many growers water flats from the bottom.
3. Preferred temperature is 70 degrees F. If the air is cooler, you can place the flats on a heating mat.
4. Tubers can be started in the dark. Supplemental lighting such as grow lights is not necessary at this early stage.
5. After 2-6 weeks, you should be seeing some growth and maybe some leaves.
6. Once the begonia stems have grown to at least one-inch tall, it is time to repot the tubers into larger containers, either 5- to 6-inch pots, or their permanent summer containers.
   a. A good mixture to establish and encourage early growth is equal parts potting soil, perlite and sterile sand (for drainage). The mix must be well-draining, non-compact and must have proper aeration. There is no alternative to this requirement; tuberous begonia plants don’t love damp soil because it can lead to root rot, fungal diseases, and a host of other pests.
   b. A good rule of thumb is to keep 2 in. between the tuber and the pot edge.
7. Provide supplemental lighting or move the plants to a brighter location to allow the plant to thrive until it is time to relocate to its chosen summer location.
   a. Rotate the pot every two or three days if the light source is a window.
8. Until plants are a few inches tall, pinch off any flower buds that form so energy isn’t taken from the young plant.

Hardening Off

Hardening off plants gradually exposes the tender plants to the wind, sun, and rain, toughening them up by thickening the cuticle on the leaves so they lose less water when exposed to the elements. To accustom the plants to being outdoors, begin hardening them off about two weeks before the last frost date in your area. The American Begonia Society considers 55 degrees Fahrenheit the lower end of begonias’ comfort zone.

- On a warm day (above 55 degrees Fahrenheit), move the plants outdoors to a shaded, protected place.
- Bring them back in before temperatures cool off at night.
- The next day, put them out and bring them in again.
- Gradually move them out into brighter light and expose them to more wind, but continue to bring them in at night.

Planting/Care

After danger of frost has passed (usually late May to early June), move containers to a partly shaded outdoor location away from any strong winds. If planting in beds, set begonias 8 to 12 inches apart. To keep tuberous begonias looking good; wherever you plant them (or place their pots), begonias like light, well-drained soil. Begonias prefer morning or late-afternoon sun; avoid direct, hot sun as it can burn the foliage and flowers. Too much shade, conversely, can cause begonias to grow spindly.

Once tuberous begonias start blooming, they can flower continuously for four months. Keep plants tidy by removing spent flowers and leaves; cut the flowers off close to the stem using a sharp knife.

Tuberous begonias have brittle stems, so they need to be protected from strong winds. Upright types with large flowers benefit from being staked. Be cautious when staking; do not poke through the tuber with the stake.

Watering

Begonias need to be watered consistently.
Between waterings, it’s best to let the top inch or two of soil get dry to the touch. Check your begonias often during hot, dry weather. Tuberous begonias are not drought tolerant, so it's important to water them when it hasn't rained. Focus your watering so the foliage stays as dry as possible, or can dry quickly after watering. Don't allow water to stand in saucers. Overhead watering can lead to powdery mildew disease, so use soaker hose, drip irrigation or self-watering containers for best results. If the plants start dropping flowers or wilting, it means the soil is either too wet or too dry.

Fertilizing

Tuberous begonias are fairly heavy "feeders". Feed begonias after you see flower buds. Use a weak solution of a low-nitrogen/high-phosphorus fertilizer at two-week intervals.

- If leaves curl under, the plant is overfed; if they look pale; they need a shot of fertilizer.
- For larger blooms and sturdier plants, feed weekly with a fertilizer high in phosphate and potash after flower buds appear and show color. This will also yield tubers that are hardier and more likely to survive winter storage.
- Foliar feeding is also beneficial.

Overwintering

Tuberous Begonias REQUIRE winter dormancy. Cut back on water in late summer, then dig the tubers when cold weather hits (within a few days of a killing frost) and the tops turn yellow and the soil is completely dry.

- Cut back most of the top of the plant, about 1 inch above the tubers, leaving the ball of roots and soil intact.
- Spread apart tubers on a sheet of newspaper or on a screen so you have air circulating around them.
- Place the tubers in a cool, dry area to cure for 2 to 3 weeks.
- After curing, shake off the soil and remove the remaining stalks and roots.
- Place a layer of peat moss, vermiculite, or sawdust in a small cardboard box. Lay the tubers on the storage medium, then cover the tubers with additional peat, vermiculite, or sawdust.
- Store the tubers in an area with a temperature of 40 to 50 degrees Fahrenheit. Do not allow the tubers to freeze.
- Check the tubers occasionally and discard any that are soft or rotten.
- Replant (wake up) the tuberous begonias in spring.

References
Oregon State University, “Don’t toss those tuberous begonias - save for next summer”
North Carolina State University Plant Toolbox “Begonia, Tuberosa Group”
University of Vermont spring news article: “Tuberous Begonias”