Growing Begonias
Classification and General Culture

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Begoniaceae is one of the largest families of flowering plants in the world. Begonia, the major genus, has been known for many centuries in various parts of the world, but was actually named Begonia in 1700 based on plants brought back to Europe from the Americas. Begonias, as we know them today, consists of over 1,900 named and unnamed species and more than 12,000 hybrids and cultivars.

**Begonia Classifications**
Begonias come in all sizes, shapes and colors. For show purposes, the American Begonia Society subdivides begonias into seven broad classifications, based on their growing habits. This is a convenient subdivision, even for the grower, because plants with the same growth habits often require similar growing conditions and care. The major classes of begonias are:

**Rhizomatous:** The largest per cent of species begonias are rhizomatous. They plants have a thickened stem with short internodes, which usually runs on the soil surface. Leaves come from the rhizome, rising above it, to form the plant. These plants usually flower in the winter and early spring, (January through May) with small white or pink flowers hanging on tall inflorescence that rise in the middle of the plant.

**Cane-like:** Cane-like begonias are characterized by a strong upright stem with long internodes, and look very much like bamboo. Many cane-like begonias will to attain an upright growth pattern or can be made into a hanging basket plant, depending on the growers pruning techniques. These plants are very popular with local growers because they are easy to grow and flower heavily in the spring through fall (April through October). Flower colors range from bright red, to orange, to pink, to white and all shades in between.

**Shrub-like:** These plants are very similar to the cane-like plants, except they branch easily along the main stems. These plants make good hanging baskets and many bloom spring through fall.

**Rex cultorum:** This is the brightly colored, big leafed begonia plants sold widely in the winter time. These plants are also rhizomatous, but because of their high commercial value, they are classified separately. This plant is beautiful, but sometimes difficult to grow. for some of the older varieties, too high or too low a temperature, even for a short period of time, will cause the plant to go dormant, losing all its leaves. Many rex cultorums never recover from this dormancy in ordinary home growing condition. There are several hybridizers now working on rex cultorum with more heat resistance. These are rapidly becoming more and more available.

**Thick-stem:** These plants grow tall and upright, with thick, strong stems. Many grow to five or six feet in home care. Some branch frequently; some never branch. Many have leaves only at the
very top of their main stems, while some have leaves located throughout the stem. These plants tend to bloom with very small white blooms in mid-winter.

**Trailing/Scandent:** These plants resemble vines. They grow downward (trailing) as a hanging vine, or climb upward (scandent) with a clinging vine habit. These are favorites for hanging baskets. Most bloom in the spring and summer and have small white flowers.

**Tuberous/Semi-tuberous:** These plants have a tuberous growth below the soil surface from which the stems emerge. These plants require low temperatures for proper growth, and don't seem to adapt to our southern climates. The "Rieger" begonias are of this type; beautiful, but very difficult, almost impossible, to grow except under very special condition.

**Begonia Culture**
Most begonias that one encounters are hybrids. These plants have usually been bred for some particular characteristic that the hybridizer liked, such as growing habit, leaf or flower color, or disease resistance. To grow these plants successfully, it helps understand the plants parentage, and more specifically, where the species originated. It is well known that species begonias are found growing in the temperate zones around the globe. Central and South America, are very important sources of begonias, as are West Africa, India, South China, Malaysia, and Indonesia. It is also well known that many begonia species grow in low lying, dense, heavily shaded jungles environments, usually near creeks and streams. Others occur high in tropical mountains, and often near waterfalls. The major challenge for the hobby grower of these beautiful plants is to know the plant, it's background, and then to try to simulate the growing conditions that occur in nature for its species parents. It is only when the correct conditions of light, temperature, humidity, soil, fertilizer, and water are met, will the plants grow healthy and flourish. We will examine each of the critical conditions as follows:

**Light:** Begonias are shade loving plants. The general rule is to never allow direct sun to shine on a begonia. There are exceptions of course. Many cane hybrids will benefit from early morning sunshine: some will even tolerate afternoon sunshine. Some thick-stem begonias will take midday sun, but these are really the exception.

**Temperature:** The ideal temperature range for most begonias is in the 62 to 72 degree F. Most will grow successfully, however, at temperatures normally found in the home, say from 50 to 85 degrees. Most will also tolerate drastically adverse temperatures, from a high of 100 degrees to a low of 28 degrees, for very short periods of time. My general rule is that a begonia plant will be comfortable in the same temperature conditions in which I am comfortable.

**Humidity:** Begonias like humidity. All of them like 50 per cent humidity as a minimum, and most like it even higher. Typically, if the grower supplies humidity of 60 to 80 percent, the plants will grow successfully. There are some begonias, however, especially some species, that demand near 100 per cent humidity and thus can only be grown in a terrarium-like environment. Most growers supply humidity with misting, both in and out of greenhouses. In the home, placing the plant on a wet gravel bed will sometimes be quite successful. Some begonias will grow well in a kitchen or bathroom window ledge.

**Potting Mix:** One of the more important issues with begonias is not allowing the roots to smother in water. They must be allowed to get oxygen. To do this, the potting medium must be very loose and porous. There are as many potting mix formulas as there are potters, but the one that I personally find most useful is 50 percent peat moss and 50 percent perlite. This is very simple to make, and will work with all ages of all classifications of plants. Many mixes contain very coarse sand, some soil, and even vermiculite, but my experience says these components only get me into trouble. If the potting mix does not come with a wetting agent, just spray the mix with a mild, weak soap solution. Then the peat moss will wet properly.

**Fertilizer:** Begonias require periodic fertilizing, like any other potted plant. One fertilizing schedule that I find useful is to use a time-release fertilizer twice a year, January and April, and a soluble fertilizer at 1/4 strength weekly throughout the year. I use one teaspoon of a 16-8-12 time release formula, such as Osmocote, in a 6 inch pot, and a 15-30-15 soluble fertilizer such as Miracle-gro.

**Water:** The easiest way to kill a begonia is to over water it. The rhizome on some begonias, and the thickened stems on others, are water reservoirs and carry the plant through short dry periods. I recommend testing the potting mix one inch below the service for wetness with the finger, before any watering. Just stick your finger in, and if it feels wet, do not water. If it is dry, then water completely, till water runs out the bottom of the pot. Do not let the pot set in a tray of water at any time.

**Pots:** I like clay pots for all my begonias. I like the feel of a heavy pot, and they don't blow over easy. A clay pot also dries out faster than one of plastic, hence it tends to correct any over watering. The downside to using clay pots is that they accumulate calcium and magnesium salt deposits which are unsightly, and which will cause rapid petiole rotting for some rhizomatous plants. I use plastic 10 inch hanging baskets for the low growing cane-like and begonias and for the trailing/scandent plants. Hanging baskets tend to quickly dry out, so again, they tend to correct any over watering.

If the grower will follow the above simple procedures, they can grow almost any begonia, with the exception of those requiring a contained atmosphere. Information on growing begonias in a terrarium will be covered elsewhere.

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