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Gloxinia
Culture

TEXAS A&M UNIVERSITY
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Gloxinia *Culture*

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GLOXINIAS, one of the oldest known house plants, are becoming popular again with Texas growers. The varied, rich colors of the flower, plus the plant's ability to withstand summer conditions successfully, make it an increasing favorite.

Present day hybrids and varieties are even more colorful and showy than older types. Some flowers are bell-shaped, while others are slipper-shaped, depending on the type as indicated by the bloom.

Standard, or bell-shaped, gloxinias are most commonly grown. On these plants the trumpet-shaped flowers widen evenly into flaring bell-shaped blooms. This type is available in all colors other than yellow.

The brilliant red shades are richer than those found in other flowers, varying in shade from pink and lavender to purple. The deep purple-colored blooms are almost black.

Slipper-shaped gloxinias have smaller blooms that are longer and narrower than the more common type mentioned above, but usually they are more profuse in their blooming habit. Most common colors in this group are a deep rose, shading to clear pink and a rich lavender.

This type can be determined easily even before it blooms, because it is characterized by a much taller and more spreading growth. Although not a common type, it is grown more easily and blooms longer than standard gloxinias. It is semiclimbing, however, and needs some support.

The third type commonly is called *tigrina hybrid*, and has large flowers like the standard sorts, but these are spotted and veined, rather than solid. Varieties in this group are not grown

commonly, but the odd flowers make them interesting novelties.

All varieties and types of blooms remain and hold up on the plants. The blooming period is extensive. Flower size varies with the types previously outlined, but the lips or petals are divided into from five to seven segments, and sometimes are ruffled or fringed.

Blooms are richly colored, ranging in shades of red, purple, violet, maroon and pink and snowy white. Tigrina hybrids are white, often spotted or marbled with the darker shades. The leaves are large and downy. This downy or pubescent character varies in different plants, especially in the early growth stages. Leaf veins are distinct.

Growing Procedure

Gloxinias are native to the warm, humid climate of Brazil. This type of environment should be provided as nearly as possible for successful culture.

The plant produces a tuberous root, requiring a period of dormancy. Unlike many other plants, however, dormancy is not restricted to any one time of the year, thus timing for various blooming seasons is less difficult. Planning is necessary, however, in purchasing tubers since they are sensitive to cold and not always obtainable.

Normal dormant periods are early spring or late summer, and either time is satisfactory for starting a crop. Plants are propagated easily from seed, cuttings or tuberous roots. Commercially, the common practice is to grow them from seed.

Pot average-sized tubers separately in a 5-inch pan or azalea pot. Place larger sizes in pans or three-quarter pots that will accommodate them. Standard pots are usually out of scale for these low growing subjects.

Good drainage at the bottom of the pot, provided by broken pot chips or gravel, is essential. The plants are fine-rooted, and poor drainage prohibits root growth and eventually rots storage organs.

Porous soil is needed for the same reason. A mixture of one-third loam, one-third peat and one-third perlite has proved satisfactory under Texas conditions.

Press the tuber into the soil after placing it in the pot, so that it rests in the soil with 1 inch covering. Examine the tubers carefully, and pot them with the growing points up. Many tubers have been lost by being potted upside down.

Place the pots under a bench in a warm house (60 degrees F.), and cover with about 1 inch of moist sphagnum moss. Keep the moss moist until growth starts, usually 10 days to 2 weeks.

Place the started plants on a bench in good sunlight in the same temperature. A light shade is needed on the glass only during the brightest days. At other times, they will take full sunlight which prevents the plants from becoming soft and leggy.

Keep the plants well watered as soon as a good root system is established, but avoid getting them soaking wet.

Tubers planted in January and February will bloom in early summer. Plant tubers from February to May for a succession of bloom. Tubers planted in the fall produce blooming plants during winter months under Texas conditions.

The flowers lose their brilliancy when not grown under sufficient light, and in this way differ greatly from *St. Paulias* in their cultural requirements. Because of light requirements, water carefully. Do not overwater, but keep uniformly moist. Flowers often droop during warmest hours of the day, but come back rapidly if watering is watched carefully.

There is no danger when washing the leaves or spraying if the water used is warm or at room temperature. However, keep water off leaves and flowers when plants are in bloom.

When the plants finish blooming, cut off the tops and rest the tubers. A gradual drying off sometimes is practiced, but is not necessary. Place the potted tubers under a bench in a cool house (45 degrees F.) and water occasionally. Remember, they freeze easily. Keep them in a place where 45 degrees F. can be maintained. For the next growing period, they can be started in the same pot or cleaned up and grown in the same manner outlined above.

Leaves cut from the plants just after blooming are the most satisfactory for propagation by petiole

or leaf sections. Place in the media used for other cuttings. Roots, tubers and small leaves soon arise on these cuttings. They can be potted in small pots in the same soil mixture used for the tubers and later shifted. If space is available, they can be placed in the finish pots to produce blooming plants.

One feeding with a complete fertilizer of 5-10-5 analysis is sufficient for any crop of gloxinias. Apply this when the flower buds begin to form.

Many types that do not come true from seed may be propagated by petiole cuttings, but gloxinias are grown best by using a perlite and peat mixture for germination. Sow the seed on this mixture and do not cover. They can be transplanted into flats, spaced 2 x 2 inches, or into 2¼-inch pots, using the soil mixture outlined for growing. When well established, shift to 5-inch pans.

Dangers to Gloxinias

Some insects and diseases attack gloxinias, but not commonly under Texas conditions.

Mealybug is sometimes troublesome when greenhouses are not kept free of this pest. Malathion gives complete control when aerosol bombs or sprays are used.

Thrips are sometimes troublesome in the summer months, causing a browning of the buds. This also is caused by broad mites or Cyclamen mites. Malathion fumigation on a regular schedule will control these pests.

Varieties

The following colors and varieties have proven satisfactory under Texas conditions:

- Purple and lavender — Black Knight, Bavarian Prince, Waterloo, Viola cea
- White — Monte Blanc, Queen Victoria
- Red — Defiance, Fire King
- Pink — Monterey Rose
- Spotted and striped — Tigrina hybrids

This list is not comprehensive and can be added to, depending on color combinations or shades desired by the grower or market supplied. All are equally beautiful and striking.

These plants should be interesting to the small grower of novelty plants, especially, or to the retail grower. They can be grown almost year around under Texas conditions, and because of their adaptability as house plants, are profitable and readily acceptable to the Texas customer.