GESNERIADS

The gesneriad family consists of mostly tropical plants, such as African violet and gloxinia, and is made up of 120 genera with about 1500 species from Africa, Asia, and Central and South America. About 300 species are cultivated, exhibiting an incredible diversity of growth habit and flower form.

Light
Gesneriads are grown primarily for their flowers. Almost all of the cultivated gesneriads produce their beautiful flowers at relatively low levels of light which makes them ideal indoor flowering plants. Many have long blooming periods, and some hybrids will bloom year-round if light levels are adequate.

Temperature
Indoor temperatures closely resemble those found in gesneriads’ native environments, averaging between 60 and 80 degrees Fahrenheit during the day and 60 to 70 degrees Fahrenheit at night. Temperatures must never be allowed to drop below 55 degrees Fahrenheit or the plants will lose vigor and permanent damage may result.

Moisture & Humidity
Gesneriads generally require moderately high humidity. The humidity around plants can be raised in several ways. The simplest is by humidifying the room in which they are kept. The humidity level (around 50%) at which most gesneriads do best is also considered the best level for human health. If humidifying an entire room is impossible, the area immediately surrounding plants may be humidified by setting plants on top of trays filled with wet gravel. The pots should not be sitting in water, but should be kept above the water level by the gravel or the soil will remain constantly saturated and the roots may rot.

Gesneriads are also well-suited to fluorescent light gardens. Their low light requirement allows them to bloom readily under standard cool-white/warm-white fluorescent fixtures. The correct distance from the lights for a particular species can be determined by experimentation. A plant is receiving too much light if its leaves start yellowing, bunching in the center, or hugging the sides of the pot. Too little light causes leaves to be darker, stems to be longer and weaker, and flowers to be sparse or absent. Please refer to Growing Plants Under Artificial Light for more information on this subject.

Because they need humid conditions, gesneriads are excellent terrarium plants. Small, flat growing plants are well-suited for this purpose. Dollbaby Gloxinia (Sinningia ‘Dollbaby’), a miniature hybrid gesneriad, is especially useful in a terrarium. Other dwarf gesneriads that work well include Sinningia pusilla, S. concinna, S. ‘White Sprite, Gesneria canellifolia and its many variants, and miniature hybrid African violet (Saintpaulia). Species of Sinningia, rosette forms of Streptocarpus, Boa, and juvenile stages of trailing plants all can be used.

Gesneriads will flourish in a home greenhouse. Shading is essential from March to September since gesneriads will not tolerate the full intensity of summer sun. Temperatures should be monitored carefully in the winter to avoid temperatures below 55 degrees Fahrenheit, which may damage the plants.

Windowsill gardeners, too, will find many gesneriads adapted to the environments they can provide. Trays of moist gravel will help add the humidity that some species need. Sills can be extended with wooden or glass shelves to keep plants away from the cold window glass in winter. South windows should be avoided during the summer months unless they are shaded, though gesneriads will tolerate and sometimes require southern exposure in winter. Plants must be turned frequently so that they will not become uneven as they grow towards the light. Even some of the best everblooming types may be difficult to keep in bloom in the winter when light levels are low and the days are short.

As with all other houseplants, the frequency of watering gesneriads depends on the type of pot and growing media, and on how actively the plant is growing. The best rule is to water well with room-temperature water whenever the top of the soil feels dry to the touch. Cold water will cause spotting of the leaves and may damage the roots of these tropical plants, and therefore should be avoided. Water from salt-based softeners should not be used as the salts may damage plants. Certain gesneriads, such as Episcia, Gesneria, and Boa, require soils that are slightly moist at all times. Others, such as Sinningia, are especially sensitive to overwatering and poor drainage. A potting soil high in organic matter will work well for most gesneriads. Commercial soil mixes for African violets can also be used. Automatic wick watering devices maintain an even level of soil moisture and are frequently used for gesneriads. Hand watering must be done carefully to avoid overwatering. Injury to the plants results more often from too much water than from too little. It is important to know the needs of the species and adjust watering to satisfy them.
Most of the gesneriads that have scaly rhizomes, such as *Achimenes* and *Kohleria* or tubers, such as *Sinningia* naturally enter a dormant period after blooming. When these plants cease to bloom, the soil should be allowed to dry out by gradually withholding water. The rhizomes or tubers may be stored in their pots or in vermiculite or peat, adding only enough moisture to keep the tubers or rhizomes plump. The dormant period may last as long as four months. When new shoots appear, the tuber or rhizome can be repotted and brought back into the light for another year’s flowering. Since this dormant period may not be necessary for some new hybrids, it is best to verify specific cultural information.

Below are thirteen of the most commonly grown genera of gesneriads with basic information about culture, plant form, and flower type. Particular species are mentioned when they are especially well-suited to indoor cultivation. Plants are fibrous-rooted unless otherwise specified.

### Achimenes

**Achimenes**

Bloom color: red, orange, purple, blue, yellow, pink, violet, or white

Bloom time: spring and summer (dormant September – March)

Size: 6” – 24”

Habit: upright or spreading

Light: blooms can drop in direct sun

Moisture: evenly moist except when dormant; if plant is allowed to dry out, it may go dormant prematurely.

Humidity: high, mist leaves frequently

Temperature: minimum 65 degrees F. (may not bloom above 85 degrees F.)

Maintenance: pinch upright forms to keep bushy

Notes: scaly rhizomes

### Goldfish Plant

**Columnnea**

Bloom color: red or yellow goldfish-like blooms

Bloom time: species for approximately one month; hybrids may flower continuously forms available

Habit: trailing, spreading and upright

Light: bright light, no direct sun

Moisture: constant moisture

Humidity: mist leaves frequently

Temperature: may suffer at temperatures above 85 degrees F.

Fertilize: each watering ¼ strength

Maintenance: requires well-drained soil

Notes: a rest period of one month at cool temperatures will trigger bud formation

### Lipstick Vine

**Aeschynanthus lobbianus**

Bloom color: red or orange

Bloom time: June – September

Habit: usually trailing

Light: bright light, some direct sun

Moisture: evenly moist

Humidity: high; mist leaves frequently

Temperature: minimum 60 degrees F.

Fertilize: monthly at half-strength

Maintenance: cut back straggly growth after blooming

Notes: excellent when used in hanging baskets

### Episcia or Flame Violet

**Episcia**

Bloom color: scarlet, orange, and white, less commonly bluish

Bloom time: some are everblooming; others grown for colorful foliage

Habit: creeping, trailing

Light: bright, no direct sun

Moisture: moist at all times in summer; reduce water in winter

Humidity: mist leaves frequently

Temperature: 60 – 80 degrees F.

Fertilize: every two weeks while actively growing

### Rock Violet

**Boea hygroscopica**

Bloom color: deep blue-purple

Bloom time: ever-blooming

Size: 4 – 5” h x 6 – 8” w

Habit: low rosette

Light: bright, no direct sun

Moisture: soil should never be allowed to completely dry out

Humidity: mist leaves frequently

Temperature: minimum 65 degrees F. for bloom

Notes: ideal for terrariums

### Gesneria

**Gesneria cunefolia** & hybrids

Bloom color: red to yellow

Bloom time: everblooming

Size: 2 – 3” h

Habit: low rosette

Light: low

Moisture: constant moisture

Humidity: occasionally mist leaves

Temperature: minimum 65 degrees F.

Fertilize: one time per month with ¼ strength fertilizer
Bolivian Sunset Gloxinia

**Gloxinia sylvatica**

- **Bloom color:** tomato-red with yellow throat
- **Bloom time:** can be everblooming
- **Size:** 12 – 24" h x 12 – 36" w
- **Habit:** upright to trailing
- **Light:** bright, no direct sun
- **Moisture:** moist at all times
- **Humidity:** mist leaves occasionally
- **Temperature:** minimum 65 degrees F.
- **Fertilize:** every two to three weeks while actively growing
- **Notes:** scaly rhizomes

Kohleria

**Kohleria**

- **Bloom color:** red, purple, or pink
- **Bloom time:** some are everblooming; others need dormancy period
- **Size:** 1 – 1.5' h
- **Habit:** upright to sprawling
- **Light:** higher light grows sturdier, compact plants
- **Moisture:** moist at all times
- **Humidity:** high, mist leaves frequently
- **Temperature:** no greater than 80 degrees F.
  
  in summer; tolerates cool
- **Fertilize:** every two weeks while in bud and bloom
- **Notes:** scaly rhizomes, patterned green leaves

Nematanthus

**Nematanthus**

- **Bloom color:** orange or yellow
- **Bloom time:** intermittent
- **Habit:** erect or trailing
- **Light:** bright, no direct sun
- **Moisture:** moderate, less in winter
- **Humidity:** at least 50 percent; mist regularly
- **Temperature:** sensitive to temperatures below
  
  65 degrees F or above 80 degrees F.
- **Fertilize:** one time per month while actively growing

African Violet

**Saintpaulia**

- **Bloom color:** purple, white, blue, pink, rose, lavender, and bicolor
- **Bloom time:** can be everblooming
- **Size:** 3 – 16” h
- **Habit:** spreading rosette or trailing
- **Light:** adaptable to low light
- **Moisture:** soil should dry out between waterings
- **Humidity:** 50 percent humidity helpful but not vital
- **Temperature:** minimum 60 degrees F.
- **Fertilize:** every two weeks while actively growing
- **Maintenance:** remove spent bloom stems as needed; does not tolerate cold water on leaves or crown
- **Notes:** single and double flowering, variegated leaf types available

Sinningia

**Sinningia**

- **Bloom color:** various
- **Bloom time:** many hybrids ever-blooming; some species go dormant
- **Size:** 3” h
- **Habit:** rosette
- **Light:** tolerates low light
- **Moisture:** keep plants moist but not wet
  using room-temperature water
- **Humidity:** mist leaves often
- **Temperature:** should be kept above 65 degrees F.
- **Fertilize:** one time per month using 
  ½ strength fertilizer
- **Maintenance:** remove stems that have finished flowering.
- **Notes:** tuberous

Temple Bells

**Smithiana**

- **Bloom color:** reddish-orange outside & yellow with red spots inside
- **Bloom time:** short bloom season after dormancy period
- **Size:** 1 – 3’ h
- **Habit:** upright
- **Light:** bright, no direct sun
- **Moisture:** one time per week while actively growing,
do not water in winter
- **Humidity:** high, mist leaves frequently
- **Temperature:** minimum 65 degrees F.
- **Fertilize:** every other watering
- **Maintenance:** pinch young plants to keep compact
- **Notes:** scaly rhizomes

Cape Primrose

**Streptocarpus**

- **Bloom color:** blue, pink, mauve, or white
- **Bloom time:** most of the year with good growing conditions
- **Size:** 6 – 15” h x 18” w
- **Habit:** rosettes of long, arching, stemless leaves
- **Light:** bright, no direct sun
- **Moisture:** soil should never be allowed to dry out; however, do not overwater; water from bottom
- **Humidity:** 50 percent or greater
- **Temperature:** 65 – 80 degrees F.
- **Fertilize:** twice each month at one-quarter strength
- **Maintenance:** remove spent flower stem