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 cuneifolia* and its many variants, and miniature hybrid African violet (*Saintpaulia*). Species of *Sinningia*, rosette forms of *Streptocarpus*, *Boea*, 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 *Boea*, 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

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

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

Goldfish Plant
Columnea

Bloom color:	red or yellow goldfish-like blooms
Bloom time:	species for approximately one month; hybrids may flower continuously
Habit:	trailing, spreading and upright forms available
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 while actively growing
Maintenance:	requires well-drained soil
Notes:	a rest period of one month at cool temperatures will trigger bud formation

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

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

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