



BROMELIADS and TILLANDSIAS

The *Bromeliaceae* family contains over 2000 species of plants native to the warmer regions of the Americas. Most are epiphytic (growing on other plants, but not taking nourishment from them), with stiff or fleshy leaves growing in a rosette or funnel shape. The most familiar bromeliad is the pineapple, *Ananas comosus*, a terrestrial bromeliad, followed by the Spanish moss, *Tillandsia usneoides*, which grows on trees in the Southern United States.

Terrestrial, or ground-dwelling bromeliads take water and nutrients in through their root systems, but the epiphytes have special scales (trichomes) on their leaves that enable them to absorb moisture and nutrients through their leaves. The roots of the epiphytic bromeliads serve to anchor them to their host plants, usually high in the treetops of humid areas like tropical rain forests, where dead leaves, animal droppings, etc., fall into the rainwater-filled central “cup” of the plant and decay.

The larger bromeliad species make beautiful pot plants, while the generally smaller genus *Tillandsia* (commonly called “air plants”) can be glued to a magnet or suction cup, placed in a tiny seashell or teacup, mounted on driftwood, or dangled from a strand of clear fishing line. Beautiful arrangements using both bromeliads and tillandsias can be created by mounting them on large pieces of driftwood or other rot-resistant woods like manzanita root.

A mature bromeliad (at least two years old) will flower if given proper light, water, temperature and humidity. During or after blooming, bromeliads produce new plants (pups) around the base of the plant or inflorescence. As the pups mature, the parent plant slowly—over a year or two—dies. If your mature bromeliad does not bloom within a year or so, you can induce flowering by exposing the plant to ethylene gas. Place the mature bromeliad (with all of the water drained from its cup) in a plastic bag along with a ripe apple. Seal the bag tightly, and leave it for a week to ten days. The apple will release the ethylene gas as it ages. Within six to fourteen weeks after removal from the bag, the bromeliad should begin to flower. If it does not flower, wait about six months, and repeat the apple treatment.

FYI: Many plant families contain epiphytic (tree-dwelling) species—orchids, ferns, cacti (e.g., the Christmas Cactus), and aroids, as well as mosses and lichens.

LIGHT: Most bromeliads need about 4 hours of direct sun, either early in the day or late in the afternoon. An east or west window is a good location for these plants. *Guzmanias* and *Vrieseas* prefer a little more shade. All of the more popular types of bromeliad can be grown under grow lights or other intense artificial light

TEMPERATURE: Minimum temperatures are 50° to 60°F, and bromeliads can tolerate 100°F with higher humidity.

WATERING: Use day-old, distilled, or rain water for best results. For potted bromeliads, allow the soil to dry moderately between waterings, but always keep water in the “cup” of the funnel type plants. This water should be changed at least weekly. Regular light daily mistings will help plants in dry homes and offices. Tillandsias or other mounted bromeliads should be misted heavily or soaked in water once or twice weekly. Add fertilizer to the water at half-strength every two to three weeks.

POPULAR GENERA

AECHMEA: Large, vase-shaped bromeliads with stiff, arching leaves, growing in a wide or narrow rosette, usually toothed, and often variegated. Produces a sturdy inflorescence topped by showy flowers. The name *Aechmea* comes from Greek (meaning “spear tip”) and refers to the sharp points of the bracts covering the flower buds on the inflorescence. Popular *Aechmeas* include the Silver Vase (*A. fasciata*), with its large, pink pineapple-shaped inflorescence, and *A. ‘Black Chantinii’*, with dark banded leaves and a bright orange flower head.





ANANAS: Pineapple plants, the genus *Ananas* includes the commercial pineapple plant, producing a large edible fruit, and many species grown for their pretty foliage and their small, fragrant, inedible fruits. While most species have sharp-toothed leaves, there are one or two species that do not have teeth.

BILLBERGIA: An epiphyte growing in an upright narrow rosette, tube-like, which can store large amounts of water. The flowers are carried on a scape (leafless flower stalk) which may be erect or may hang down below the plant. Billbergias have a short bloom time, but are easy foliage plants, tolerating dry indoor air.



CRYPTANTHUS: Sometimes called Earth Stars, these terrestrial bromeliads prefer higher humidity, but require good drainage. Grown for their attractive foliage rather than the small flowers nestled in the center of the plant (“cryptos” and “anthos”, meaning hidden flowers), they make attractive additions to terrariums and dish gardens.

GUZMANIA: Guzmanias are grown for their brightly colored bracts, usually carried high above the pretty foliage on the central inflorescence. The flowers are generally insignificant, although there are some varieties (e.g., *G. 'Kapoho Fire'*) that produce a showy contrast between the flower buds and the bracts. The bracts, available in burgundy, pinks, red, orange, salmon, yellow, or white, may hold their color for weeks.



NEOREGELIA: These beautiful bromeliads are grown for their colorful foliage. In some species and hybrids, the leaves undergo a spectacular change of color as the plant comes into bloom (e.g., *N. 'Tricolor'*). Neoregelias produce their pups on stolons (a horizontal stem) that may be very short or long, as with the popular hanging basket species *N. 'Fireball'*. The central cup should always be full of fresh water.

VRIESEA: Attractive bromeliads with stiff, sword-shaped leaves arranged in a loose rosette. Some species have variegated foliage, and all have strongly colored flower spikes, single or branched, that are also sword- or feather-shaped. The flowers are short-lived, but the brightly colored inflorescence is long lasting.



TILLANDSIA: The largest genus in the bromeliad family, with over 500 species, tillandsias grow in a wide range of conditions (rain forest to arid desert) and are found from the southern United States to Argentina in South America. Most are epiphytes, but there are a few terrestrials. One of the best known is *T. usneoides*, “Spanish Moss”, while our most popular tillandsia is *T. cyanea*, “Pink Quill”. As a rule, green leaved tillandsias can tolerate more moisture than those that are gray leaved (which need to dry out between waterings.) Watering can be achieved by misting heavily or by soaking plants in a bowl of water. (Tip: use day-old or distilled water.)