

Tropiflora's GENERAL BROMELIAD CARE

Bromeliads are amongst the easiest and most rewarding plants to cultivate and are growing in popularity worldwide. They are useful as houseplants, container plants for the patio, for landscaping (in warm zones) and as collectible specimens that require but minimal care, and will thrive, rewarding the grower with beautiful foliage, blooms and years of enjoyment. Here are a few simple and easy tips to get you started in the right direction.

(Note: This care sheet is general and aimed mostly at common potted-type bromeliads. Terrestrial or extreme epiphytic types that require special care are covered on other care sheets.)

Environmental Requirements

- 1. Air Movement:** Grow your bromeliad in a well-ventilated area. Good ventilation will help avoid problems that could arise, such as fungal diseases, scale, mealy bugs and other pests and can help prevent overheating in sunny or hot locations.
- 2. Light:** Bromeliads show their best color and form if kept in bright light within tolerable limits. 3000 to 4000 foot candles is considered ideal for most, though some will tolerate a low of 2000 while others up to 6000 in areas of higher humidity. Not all bromeliads thrive in the same conditions. A few rules of thumb may be helpful to determine light requirements of your bromeliad:
 - a. Bromeliads with soft foliage that may be spineless or have small spines, is deep green or discolor (green above, reddish below) generally like less light and usually do best out of direct sun, often making good houseplants.
 - b. Those with brightly colored or silvery, somewhat stiff leaves with moderate spines thrive in bright light, up to partial sun.
 - c. Very stiff or succulent leaves, heavy spines, yellowish-green or reddish coloration may indicate tolerance for more sunlight.
 - d. If in doubt, keep your plant in some degree of shade and increase the light intensity in stages over a period of weeks until it reaches its best potential. Too little light causes weak, etiolated, fading or poorly colored foliage. Too much light may cause bleaching or burning on the leaves upper surfaces that will result in patches of dry brown or yellow.
- 3. Moisture and Humidity:** Bromeliads are native to a variety of habitats and therefore have varied needs for water. It is natural for 'tank type' bromeliads to have water in the central 'cup' formed by the leaves. Most bromeliads do not like to be kept in wet soil. Humidity requirements vary from moderately dry to quite humid. Indoors, a humidity level of 40 to 60% would be ideal, and can be augmented by a 'pebble tray'. Outdoors, ambient humidity will normally suffice.
- 4. Temperature:** Protect bromeliads from frost. Preferred temperature range is 70 to 95°F, though many can take short-term dips to near freezing in landscape situations. A few exceptional varieties can even tolerate a light freeze with little or no damage.

Cultural Requirements

- 1. Potting:** For most varieties a well-drained medium consisting of bark, peat, Perlite and/or a mix of other organic and inorganic media that promotes drainage and aeration, but retains some moisture will do well. Choose a pot sufficient to hold the plant upright. Avoid over potting, you can repot later if needed.
- 2. Watering:** Bromeliads do not like wet feet! Though some like more moisture than others, none thrive in wet soil. Water thoroughly as needed when soil becomes dry to the touch just below the surface. Drench the plant and soil with enough water to flush the cup and run out the bottom of the pot, usually 1 to 3 times per week as dictated by your local conditions. Use water low in salts and, ideally, on the acid side, pH 6.5 or lower. Bromeliad 'cups' that hold water may be kept filled or empty. You should flush old water when watering, do not just refill the cup. Always wet the soil as well, whether you keep water in the cup or not. Bromeliads are very drought tolerant. It is always better to keep them too dry than too wet. "When in doubt, don't water."
- 3. Fertilizing:** Feed with a water-soluble fertilizer such as a 20-10-20, at intervals that would equal a tablespoon per gallon per month in irrigation water. Example: ½ tablespoon/gallon bi-weekly or ¼ tablespoon/gallon weekly, etc. A slow release fertilizer such as Osmocote® or Nutricote® may be applied to the soil surface at label rates once or twice a year. Note that urea sourced nitrogen can not be used by bromeliads. Choose a brand of fertilizer using nitrate as its chief nitrogen source.

Problems

Few pests or diseases routinely infest bromeliads, though problems may occur if the environment is not right.

1. Poor air circulation, over or under watering and poor quality water are the cause of many common bromeliad problems.
2. Most insect pests such as scale and mealy bugs can be avoided with good air circulation and by controlling ants that 'farm' scale and other insects. If scale or mealybugs appear, removing them with a cotton swab dipped in alcohol can treat them, as will a mild soap solution or as a last resort; chemical sprays.
3. Exposure to metal salts can be the source of problems. **Avoid exposure to pressure treated lumber or copper in any form.** Water dripping from pressure treated or 'green' lumber will carry enough copper or other metals to severely damage your bromeliads. Copper or zinc based fungicides may damage bromeliads. Do not worry about these metals in fertilizer.

Propagating

Bromeliads are most commonly propagated by offsets or 'pups' as many refer to them. Nearly all cultivated bromeliads produce offsets, which simply put are vegetative offshoots or if your prefer; 'branches'. If you want to enjoy a larger, full specimen with multiple blooms, you need not remove the offsets. However, if you want to propagate the plant, the offsets may be removed and potted to grow and bloom, renewing the cycle. A few rules of thumb apply to propagating by offset:

1. Offsets can be removed when they are about one third the size of the original or 'mother' plant, or when they begin to harden at the base and open at the top to form a funnel-like shape. About one third as large as the mother plant is a recommended size for removal.
 - a. Remove offsets with a firm grip at the base and a slight twist, or cut them free with a pair of sharp shears, close to the main stem of the plant.
 - b. Offsets need not show any roots before cutting.
 - c. Most plants will continue to produce more offsets if the first ones are removed.
2. Offsets can be potted right away or allowed to sit in an empty container for some days or weeks, as long as the plants are upright and are kept watered. They may form roots during this phase and begin to grow, even without soil!
 - a. Generally, if the stem of the plant is woody or hard, it need not be left to dry and 'callus', but can be potted immediately.
 - b. Pot offsets with the plant centered in the pot, in an upright position, regardless of the angle of the base or stolon. Rooting hormones are not needed, though they do no harm.
 - c. Pot just deep enough to hold the plant upright. Not over an inch and a half or so of the leaves should be below the soil. If the plant will not stand alone, you may stake it as needed. **DO NOT PACK SOIL TIGHTLY!** Bromeliads need good aeration at the roots.
 - d. Use the same media that you will grow the plant in to maturity. Some people root sensitive offsets in Perlite, but generally, this is not necessary.
 - e. Choose a pot that will hold the plant upright and accommodate it for the next few months. It is better to repot later than to use too large a pot to start with.
3. Place newly potted bromeliads in indirect light until they becomes established. Water enough to keep the soil just moist, never keep wet or allow it to become bone dry. Fertilizers applied to the soil at this stage do no good until roots appear. (A slow release fertilizer can be used safely) Foliar feeding is strongly recommended. Once roots are established, the plant may be moved to optimum light for finishing growth and may be treated as a mature plant would be.

See these other Tropiflora care sheets for further information on bromeliad culture:

'Terrestrial Bromeliad Care', 'Tillandsia Care', 'Bromeliads In The Terrarium', 'Creating A Bromeliad Tree', 'Mounting Bromeliads', 'Forcing The Issue' (forcing blooming) and 'A Media Event' (potting soil info).

Visit these informative websites for comprehensive information on bromeliads and their culture:

Bromeliad Society International (bsi.org) and Florida Council Of Bromeliad Societies (fcbs.org)

Tropiflora, LLC

3530 Tallevast Road, Sarasota, Florida 34243

Phone: (941) 351-2267 Fax: (941) 351-6985 Email: sales@tropiflora.com

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