

## **Plants in Space: The Care and Propagation of Tillandsias**

You've seen them in gift shops and nurseries, and maybe even on the internet. Alien looking plants with wild foliage and no roots that seem to grow on air. They look almost otherworldly, like plants from another planet. In fact, they are grown in space! Astronauts have grown them in space labs for decades. But luckily for us, they come from right here on Earth where we can keep them in our homes. By following these simple guidelines on care, mounting, and propagation, you too can have strange plants growing in your house.

### **They're Not From Venus**

Tillandsias are epiphytic plants that range from the southern United States down to Mexico and South America. Epiphytes are plants that grow without soil and are commonly found growing on a host plant. They are not parasitic, using their host plant only for support. Tillandsias grow in a wide variety of environments, everywhere from tropical forests to arid deserts. They make hardy and trouble free houseplants, as long as you remember a few basic rules.

### **Keeping Your Space Plants Happy**

The first rule is that tillandsias do not like dirt. Just touching dirt can make them rot. While some can be grown on fast draining substrate like gravel or orchid bark, most are happiest when mounted on something else.

The second rule is that tillandsias do not like it too wet or too dry. They will either rot or dry out. Air plants get their moisture from the air, so the humidity should be around 50% for most species. Misting them every few days or soaking for an hour once a week is usually enough. While air plants do not need fertilizer, they grow more quickly if diluted liquid fertilizer is mixed in with their water. Thicker leafed species that are gray in color are from the desert and can tolerate more dryness than thin leafed green species, which are from tropical climates.

The third rule is they need enough light. Desert species need more light than the tropical species. A tillandsia's color and growth rate are good indications on whether it is getting enough. Dull colors and slow growth are indications that the plant needs more light, while brown spots on the leaves are a sign of too much.

The fourth rule is not to let them get too cold. While air plants are not strict on temperature requirements, they should not be allowed to freeze. Those that live in areas where tillandsias can be grown outside should bring their air plants under cover if frost is a threat.

### **Giving Your Space Plants a Place to Hang Out**

If your tillandsia is already attached to something, then odds are it is fine right where it is. Air plants aren't fussy about what they're mounted on. If you buy air plants loose, then

you can decide where to put them. Pieces of driftwood are a popular choice, but the mount can literally be anything as long as the surface is not copper or prone to rust. Or you can choose to simply hang your air plant from a string or piece of wire, where some species can form striking spheres.

In order to mount a tillandsia to a flat or bulky surface, either attach them with a little hot glue or superglue. Another option is to tie them on with a piece of fishing line around an area where the air plant is not actively growing. The line can later be cut once the plant has a good hold.

### **The Flowers and the... Dogs?**

While tillandsias are a flowering plant, they are grown for their unusual foliage instead of the flowers. No special effort is required for them to flower, but when they do, prepare to be underwhelmed. With a few exceptions, tillandsias produce insignificant flowers on a small inflorescence that grows from the center of the plant. Some do have foliage that changes color while flowering, typically red. This is an indication that the parent plant will die after flowering, but the flowering stage can last as long as a year in some species.

Tillandsias do produce seeds, but the most effective method of propagation is by offsets called pups. One plant can produce over a dozen pups. Pups first appear as buds around the base of the original plant after flowering. They are unaffected by the death of the parent plant, and successive generations can make for indefinite growth. If you want to divide the plants, wait until the pups are approximately half the size of the parent plant. Once they have reached this size, trim them as close to the base of the parent as possible. The pups can then be grown as per the parent plant.

### **Space Plants in Your House**

Tillandsias are fascinating plants, and so easy to grow by following these few basic care and propagation guidelines. They require very little effort for a lot of reward. Even a black thumb gardener can have space plants in their home.