AIR PLANT SHOP'S EBOOK

ALL ABOUT AIR PLANTS



THE ROOTS

From our roots as a family business, we've grown into one of the largest air plant providers in the US. With an unwavering commitment to sustainable farming, a passion for our customers, and a dedication to giving back, we're not just about the plants - we're about creating the ultimate air plant experience.



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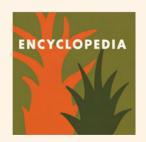
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BY: AIR PLANT SHOP





WELCOME TO PLANT PARENTHOOD!

First things first, the air plants need to acclimate to their new home after being in a box for a few days. It is important to ease them into a new environment!

Start by giving them a standard water bath by soaking in a bowl or sink of lukewarm water for 20-30 minutes. [More detailed watering instructions are on pages 4&5.] Then, remove the air plants from the water and gently shake off excess water. Lay them on a towel or rack to dry completely.

Although they are resilient, shipping can be stressful on air plants. If your plants do not perk up in about a week after delivery, please reach out to our customer service team immediately at service@airplantshop.com with the order number, a photo of the plants, and a brief explanation of the issue. We stand by our products and are happy to help!

Now for the fun part! Where will you display your air plants? The most important factor to consider is lighting. Air plants need daily bright, indirect light. Typically, an open kitchen is ideal, or a living room near a window. Windowless rooms, such as an office or bathroom, are not good homes for air plants. [More information on lighting is on page 6.]

Get creative with your air plants! Style them alone or pair them with an Air Plant Shop accessory. You can use something you already have around your home like a shallow bowl or a seashell. We love combining air plants with vintage pieces too. Just make sure they have good air circulation and no soil...ever. The only material to avoid touching plants is accessories with real copper as they can burn the plants.

Oh, and rest assured, all of our air plants are safe around cats and dogs, making them the perfect addition to any pet-friendly home.





MORE ABOUT AIR PLANTS...

"Hearty" and "exotic" are go-to terms for describing Tillandsia, aka air plants. [Explore the rich vocabulary of air plants on pages 8, 9 and 10 for a deeper understanding of these botanical wonders.] Most people own plants that are identifiable in their homes because they are well-known and easy to care for compared to exotic potted plants...enter air plants.

A member of the Bromeliad or Bromeliaceae family, the Tillandsia genus consists of approximately 540 species, with more to be discovered. Most commonly found in South America, Central America, parts of Mexico, and the southernmost border states of the United States, these plants thrive in the deserts, mountains, and forest areas of these regions.

Areas with abundant rainfall usually produce plants that have thinner leaves. Arid areas, such as deserts, that are subject to drought or have minimal rainfall usually produce plant varieties with thicker leaves. These plants support themselves in the dryer areas by collecting moisture and nutrients from the surrounding air. The sources of nutrients include dust, insect matter, and decaying leaves, which are gathered through leaf structures called trichomes.

Tillandsia have adapted to rely on their leaves instead of their roots to absorb nutrients and moisture. Epiphytes, plants that grow on other plants, rocks, and structures and don't need soil to live, are *not* parasites – they do not take nutrients or moisture from their host. The internal structure and anatomy of Tillandsia have adapted to survive on varied hosts, both alive and not. Their leaves can pull moisture from the air more efficiently, while some have developed a camel-like ability to store water and survive in areas prone to drought. Being up in trees or on rocky cliffs protects these plants from damage done by foraging animals, flooding, or erosion on the ground.





EVEN MORE ABOUT AIR PLANTS...

Carolus Linnaeus, a leading scientist from the 1700s, coined the term Tillandsia after the Swedish-born Dr. Elias Tillandz, a well-known botanist and physician. Linnaeus was at the forefront of European botany and animal science. His life's work inspired much of the modern-day science that helps us understand the Tillandsia genus. These amazing plants are still not fully understood, and the work of Linnaeus continues through modern-day botanists and enthusiasts!

Tillandsia is not produced or cultivated primarily for their flowers, even though most will bloom at regular intervals. Many of these species tend to undergo a change in leaf color, blushing when it comes time to bloom. The leaves will change from green to a reddish or purple hue depending on the variety. When a plant changes leaf coloration prior to blooming, it usually means they are monocarpic. Monocarpic plants flower one time before dying, like an agave plant. As stated previously, the pups from the dying plant will grow and also bloom at some point in the future, thus continuing the lifecycle.

Just like all flowering plants, Tillandsia blooms at the beginning of their reproductive cycle. They produce different flowers depending on their species – single-stem blooms, multiple blooms, inflorescence, and fragrant blooms. Most of these species produce beautiful flowers that come in diverse colors like pink, red, yellow, and purple! Depending on the variety, some blooms can last for multiple weeks, while others last multiple months. Some rare varieties even produce fabulously fragrant blossoms.

After completing their bloom cycle, depending on the species, they will likely form one or up to three offsets at the base or protected under under the last rung of old leaves. These are called "pups," which mature into adult air plants and repeat the growth cycle. Once the offsets reach about 1/3 the size of the original or "mother" plant, you can separate them or leave them to form a clump. This is known as asexual reproduction, and the most reliable way to cultivate air plants, however, air plants can also produce seeds after blooming, which is how they spread from place to place in nature and how unique hybrids are formed.



AIR PLANT WATERING

Air plants live on air, right? Uh, not quite! While these plants can survive long periods of drought, they will not grow or thrive and will eventually die if water is too scarce. Follow the directions below for watering your plants regularly, and they will stay alive for a long time! The good news is that since these plants are very forgiving, so you shouldn't stress too much over their care schedule.

It's important to remember that air plants take in nutrients through their leaves, not roots. The roots serve only to attach the air plant to a host tree, rock, or even the ground—nothing more. As the main method of watering air plants at home, we recommend giving them a thorough rinse under running water or letting them soak in a bath of water for 20-30 minutes. You can use a bowl, sink, or even a bathtub if your collection is large. Make sure to submerge the *entire* plant and that the water is lukewarm so you don't shock the plant!

After their shower or bath, gently shake the plants to remove any excess water from the leaves and especially the base. Then, set them out to fully dry in an area with good air circulation, such as a tray or towel on their side or upside down. This is especially important for the larger species like Xerographica, Streptophylla, and larger hybrid plants. They should be fully dry to the touch within a couple of hours after their bath. You will notice that when they are wet, the leaves will change color and when sufficiently dry, the color will return to normal. Familiarizing yourself with change in the appearance of the leaves during your water routine will make an expert air plant parent, more on that later. Do not return your air plants to terrariums and vases until they are completely dry. Watering plants and then immediately placing them inside an enclosure may cause rot to develop.

We recommend watering your air plants about once a week. The frequency of watering depends on whether they are indoors or outdoors and your location's climate. If you follow these simple watering instructions, you will have happy and healthy air plants!

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AIR PLANT SHOP

WATERING

You'll begin to notice that after watering, your plant's leaves will feel stiffer and full of water. On the other hand, they'll be softer and lighter in color when they need water. Wrinkled or rolled leaves can be a sign of dehydration. Using a spray bottle, preferably our stylish glass and gold-dipped mister, to mist the plants in between regular waterings can maintain their hydration. Take time to observe your air plants over time and cater to each variety's needs!

If you have air plant displays that do not allow for soaking or dunking techniques, and misting is the only option, be sure to water the plants more frequently. A heavy mist is recommended every one to three days, and always ensure there is plenty of indirect light and ventilation so the plant dries properly.

A plant in bloom should be misted or rinsed rather than submerged in water, and take care of the delicate flowers. [For more detailed information on all air plant topics, check out the blogs on our website airplantshop.com/blogs/all-articles.]

Because air plants get many of their nutrients directly from the water, it is best to give them water that has plenty of minerals and nutrients! Rainwater is best, but if you don't have an easy way to capture rainwater, the next best thing is spring water. You could also use creek water, lake water, or well water. Do not use distilled water. Distilled water has fewer minerals and nutrients. Some municipal water systems have more chemicals and fewer minerals and nutrients. If you can smell chlorine when filling your air plant water bowl, let the water sit for a couple of hours before submerging your plants. This will allow the chlorine additive to naturally dissipate. If you are pH-conscious, air plants prefer slightly acidic water. The best range is between 5.5 to 6.0 alkalinity. Nevertheless, do not be too worried about pH levels. As a general rule of thumb, any water you drink yourself is good enough for your air plants!





LIGHTING AND TEMPERATURE REQUIREMENTS

Air plants require daily bright, indirect sunlight. When cultivating air plants indoors, it's optimal to position them near a window that provides filtered sunlight, ideally shaded by a tree or barrier to prevent direct sunlight. While brief periods of direct sunlight are acceptable, extended exposure to hot sun for more than a few hours can deplete the plants of moisture and potentially lead to burns. If your plant is in a spot with direct light, supplement its hydration with an extra mist every couple of days. Another option is to keep your plant in an office with indirect sunlight or bright fluorescent lighting.

Air plant owners who prefer to keep their plants outdoors should be sure they are in an area that won't experience direct sunlight for more than a couple of hours per day. A completely shaded outdoor spot under a tree or on a porch is ideal! Another consideration is the strength and angle of the sun during the year. If your air plants live outside and you live in the American South or Southwest, Tillandsias will tolerate a lot more winter sun than summer sun. The same goes for plants that are kept indoors in the north, they will also tolerate more direct winter sun than summer sun. The general rule to follow is that direct, midday sun between April-September is too strong. Morning and evening sun is well tolerated.

Air plants are pretty easygoing, but they do have a sweet spot when it comes to temperature. Aim for a comfy range between 50°F and 90°F. Shield them from frosty chills by bringing them indoors during cold snaps and protect them from scorching temperatures in the heat of summer. Keep an eye out for any signs of discomfort, and if your surroundings get a bit extreme, provide a little extra TLC!

Here's the insider scoop for air plant success: become an observer. Regularly check in on your Tillandsia, noting any changes in color or texture. Seasonal adjustments are key – tweak their care routine as the environment shifts. If you're in a drier climate, create a mini-haven for humidity by grouping your air plants. Think of it as a plant party where everyone gets a boost!





AIR CIURCULATION AND DISPLAY

These remarkable plants don't rely on soil for their sustenance. In fact, they absorb nutrients and moisture through specialized trichomes on their leaves. This lack of dependence on soil liberates you from traditional planting constraints. Air plants flourish in environments with good air circulation, allowing them to breathe freely and absorb nutrients efficiently. Their soil-free existence makes them versatile and adaptable. So, while they appreciate a bit of airflow, the absence of soil opens up endless possibilities for creative displays! Embrace the unique nature of air plants, and enjoy the freedom they bring to your interior decorating endeavors.

So, you've got these cool air plants that don't need soil — neat, right? Now, let's talk about showing them off. Think outside the pot! Hang them in clear terrariums, perch them on driftwood, or toss them into funky containers. Keep it simple with a solo air plant in a cute dish, or go all-out with a wall full of these little guys. It's like decorating with living art.

Need some inspiration? Check out all of our air plant accessories. We have tons of cool ways to jazz up your air plant game. So, get those creative juices flowing and turn your place into an air plant paradise!

CHECK OUT OUR RECENT YOUTUBE VIDEO: **AIR PLANTS IN NATURE**



@ A I R P L A N T S H O P _ U S A



@ A I R P L A N T S H O P

AIR PLANT SHOP ENCYCLOPEDIA

BLUSHING

A change in coloration of the leaves, typically shades of pink, red, or purple. This change in hue is often observed in certain Tillandsia species as they approach the blooming stage of their reproductive cycle. It serves as a visual indicator that the plant is preparing to produce flowers. The intensity and extent of blushing varys depending on species, environmental conditions, and the plant's overall health.

BROMELIAD

A type of plant characterized by short stems and stiff leaves, typically thriving in tropical or subtropical regions. These plants are known for their diverse forms, with some growing in soil and others, like Tillandsia, preferring to attach themselves to trees. Notably, all Tillandsia species are considered Bromeliads, demonstrating the wide variety within this plant family.

CAULESCENT

Describing plants that feature a visible stem as they grow, with new leaves emerging progressively higher up the stem as the plant matures. A well-known example of a caulescent air plant is Tillandsia Latifolia, which can often be observed growing on an elongated stem, showcasing this characteristic growth pattern.

EPIPHYTE

A type of plant that derives its nutrients and moisture from the surrounding air rather than from the soil. This characteristic adaptation enables epiphytes to survive by attaching themselves to other plants or structures. While epiphytes are predominantly found in tropical climates, some species can thrive in drier environments. Common examples of epiphytic plants include Tillandsia, Bromeliads, Orchids, and Moss, all of which exemplify this unique method of obtaining sustenance.

AIR PLANT SHOP ENCYCLOPEDIA

HYDRIC

Relating to or characterized by a high level of moisture or water content. In ecological contexts, hydric environments typically have abundant water availability, such as wetlands, marshes, or areas with consistently high levels of precipitation. Plants adapted to hydric conditions often possess traits suited to thrive in waterlogged or saturated soils, allowing them to efficiently utilize water resources. In the Tillandsia realm, hydric air plants are well adapted to frequent rain storms, high humidity and positioning near fresh water rivers and lakes.

INFLORESCENCE

Refers to the cluster of flowers that emerge from a main stem of a plant. In the case of flowering air plants such as Tillandsia xerographica, they produce one or several vibrant blooms as part of their inflorescence. These blooms can exhibit a range of colors and may persist for varying durations, lasting anywhere from a few days to several months, adding to the beauty of the plant. Not all Tillandsia produce an infloresence but all Tillandisa bloom.

LITHOPHYTE / SAXICOLOUS

Terms used interchangeably to describe plants, such as orchids, ferns, and algae, that thrive in, on, or among rocks. Despite their seemingly complex names, these terms simply denote plants that have adapted to grow in rocky environments. For instance, Tillandsia tectorum, in particular, is categorized as a lithophyte due to its ability to flourish on rugged Andean cliff faces.

MESIC

Refers to environments or conditions characterized by moderate moisture levels, typically intermediate between dry and wet extremes. Mesic habitats often experience regular, balanced precipitation and moderate humidity levels, fostering diverse plant growth and ecological richness. Plants adapted to mesic conditions typically thrive in environments where water availability is sufficient but not excessive, allowing for optimal growth and development.

AIR PLANT SHOP ENCYCLOPEDIA

OFFSET

Refers to the plant offspring, often referred to as "pups," that emerge from a mature mother plant. Typically arising from the base of the mother plant after it blooms, offsets represent a method of asexual reproduction in which new plants develop independently. In some instances, multiple offsets may sprout, offering the opportunity to separate them from the mother plant, thus creating baby air plants.

TILLANDSIA

In scientific classification, Tillandsia denotes the genus encompassing a diverse array of epiphytic plants, primarily thriving in tropical and subtropical regions in the New World. This genus classification serves to categorize various species of air plants, for example, *Tillandsia bulbosa*, where "Tillandsia" represents the genus and "bulbosa" signifies the species.

TRICHOMES

Refers to the small hairs or structures found on the outer surface of air plants, serving crucial functions in their survival. These specialized trichomes play a significant role by aiding air plants in reflecting solar radiation and capturing nutrients essential for their sustenance. Additionally, trichomes enable air plants to efficiently absorb water, contributing to their adaptation to various environmental conditions.

XERIC

Refers to environments or conditions characterized by low moisture or limited water availability. In the context of plant biology, xeric describes plants that are adapted to thrive in dry or arid habitats, possessing mechanisms to efficiently utilize water and withstand drought conditions. Xeric air plants exhibit traits such as lighter colored leaves to reflect direct sunlight, thicker leaves to store water and limit transpiration, and abundant trichomes to collect nutrients to withstand the harsher conditions.

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