

The Bioactive Keeper's Quick Guide to Plant Care

[RSS](#)



The Bioactive Keeper's Quick Guide to Plant Care

Written by Mariah Healey, ReptiFiles.com

A big part of setting up and maintaining a bioactive terrarium is the plants. Yes, we build these enclosures for housing our pets, but it's important to keep in mind that there are other living things in these enclosures, and just like our pets, they need to be cared for. However, even if you consider yourself quite good at keeping reptiles/amphibians/invertebrates, etc., plants are an entirely different type of organism that can stump the best exotics keepers.

Different plants need different amounts of light, water, and soil, and they need routine maintenance like pruning and cleaning. Think of the live plants in your vivarium as less of a decoration and more like a roommate for your pet — in many ways, plants are their own kind of pets. If you take the time to get to know how to actually take care of plants, with time and practice any black thumb can be turned into a green thumb!

Light

Plants use the energy in light to make food. When they don't have enough light, they slowly starve to death. Generally speaking, it's hard to give a plant too much light in a terrarium environment. Heat, yes, but not light, as most grow lamps are not strong enough to overwhelm a plant. However, it is possible.

Signs that your plants are getting too much light:

- wilting
- curled leaves
- brown/translucent spots (leaf burn)
- brown leaf tips
- yellowing

Signs that your plants aren't getting enough light:

- sparse growth
- undersized leaves
- lack of growth
- brown leaf tips
- brown leaves

If you suspect that your plants aren't getting enough light, add an extra 6500K T5 HO or LED grow lamp to your setup. If you suspect that your plants are getting too much light, switch to a less powerful grow lamp. However, if changing the amount of light in the enclosure means compromising your pet's needs, you may have the wrong plant(s) in your setup!

Soil

Soil plays two main roles for plants: 1) it gives them a foundation for their growth, and 2) it acts as a reservoir of water and other nutrients. There are many different types of soil around the world, and different plants prefer different soils. For example, cacti and succulents do best with soil that drains super well and lets their roots breathe, but most tropical plants need something more water-retentive. When you use [Bio Dude bioactive-ready substrate mixes](#), most of the guesswork here is taken out of the equation.

What about other nutrients? Do plants in a bioactive setup need fertilizer?

Generally speaking, your pet's droppings (as well as waste from your CUC) will serve as a natural fertilizer to keep your plants well-fed. However, it's perfectly possible for imbalances to develop. For example, one of the roles of live plants in a vivarium is to prevent nitrogen from building up to toxic levels. However, plants can drain all of the nitrogen from the soil if it's not being replenished fast enough. Alternatively, if your setup is more sparsely planted, then it might be building up faster than the plants can deal with it.

Signs that your soil has too many nutrients:

- lower leaves are wilted and/or yellowed
- weak stems
- brown leaf margins/tips
- root rot
- slow/no growth
- leaf loss

Signs that your soil doesn't have enough nutrients:

- unusually pale leaves
- purple/reddish leaves
- stunted growth
- dying leaves

If you have a sparsely planted setup, occasionally removing fecal matter and even doing partial substrate replacements can be helpful for maintaining the health of your soil. If you have a more heavily planted setup, routinely adding a herb-safe fertilizer like [Bio Dude BioVive soil revitalizer](#) will help top things off. Keeping up on the addition of biodegradables and actively feeding your CUC also helps.

However, the best way to determine what's wrong with your soil and how to fix it is to send a soil sample to a lab for analysis.

Water

Most people know that water is critical to keeping plants alive. However, different plants need different amounts of water. For example, some plants like to always have wet roots, while others prefer to live in perpetual drought.

Signs that your plants are getting too much water:

- root rot
- yellow leaves
- small leaves
- brown, dying leaves
- white spots
- brown, mushy roots
- salt deposits

Signs that your plants aren't getting enough water:

- brown leaf tips
- yellow or brown leaves
- dropping leaves

- curled leaves
- wilting
- stunted growth

Know your plants' requirements and keep an eye on the soil moisture content. Tools like soil moisture meters can be very helpful for doing this at a glance, but periodically sticking your finger into the soil to assess moisture content also works. Determine the watering schedule that works best for your plants, and set reminders so you don't forget!

However, if changing the amount of moisture in the substrate means compromising your pet's humidity needs, again, you may have the wrong plant(s) in your setup!

Pruning

One of the best indicators of healthy plants is aggressive growth. Of course, if your plants are growing, it's likely that eventually you will need to trim them down so they don't outgrow your pet's enclosure and/or become unattractive. Regular pruning decreases leaf crowding, encourages better ventilation, and is also an opportunity to remove damaged leaves and stems.

Use a sharp pair of pruning shears for the job, not a knife or the dull pair of scissors in your kitchen drawer, as these may crush the stem and damage your plant. Clean and disinfect your shears before pruning so you don't make your plant sick. To do this, you can wipe down the blade with rubbing alcohol or bleach solution, or even just run the shears through your dishwasher.

Some plants are more resilient to pruning than others, so it's a good idea to research how to prune your specific type of plant before getting started. When in doubt, don't remove more than 10% of the leaves in one go.

If you want your vertically-oriented plant to branch out and take a more bushy habit, trim off the growth at the top to encourage the plant to branch out horizontally instead. As you get used to the art of pruning, you can encourage certain plants to take any shape you want, potentially making them more functional for your pet.

Keeping the Leaves Clean

Plants use their leaves to absorb sunlight and exchange gases (breathe). If the leaves are dirty, then this reduces the plant's ability to photosynthesize, or feed itself. In other words, excluding other complicating factors, a clean plant is a healthy plant.

In most cases, misting your enclosure with distilled water will be enough to keep your leaves clean, especially for smaller plants. However, for more broad-leafed plants, you might need to get more hands-on. For these plants, wipe them down with a moistened microfiber cloth whenever you notice visible buildup.

Conclusion

It's hard to keep plants alive if they're not compatible with your pet's habitat, so your first task in creating a bioactive setup is selecting plants that are appropriate to the type of biome you're trying to re-create. For example, if you're putting together a hot, dry uromastyx enclosure, it's not a good idea to try planting pothos. Read up on the needs of each plant that you're considering in order to help you decide whether they're right for your vivarium. And of course, [don't forget to quarantine!](#)

It's also hard to keep plants alive if your pet is constantly munching on them. If you have an omnivorous or herbivorous pet, [make sure that the plants you choose are not only nontoxic](#), but sturdy enough to withstand grazing. Otherwise, prepare to replace your plants often.

Troubleshooting plants can be hard, since one symptom can mean a few different things. There may be some trial and error involved. However, as you practice, you'll learn how to read your plants' needs and become a vivarium plant pro!

Image by [Kabomani-Tapir](#) from [Pixabay](#)