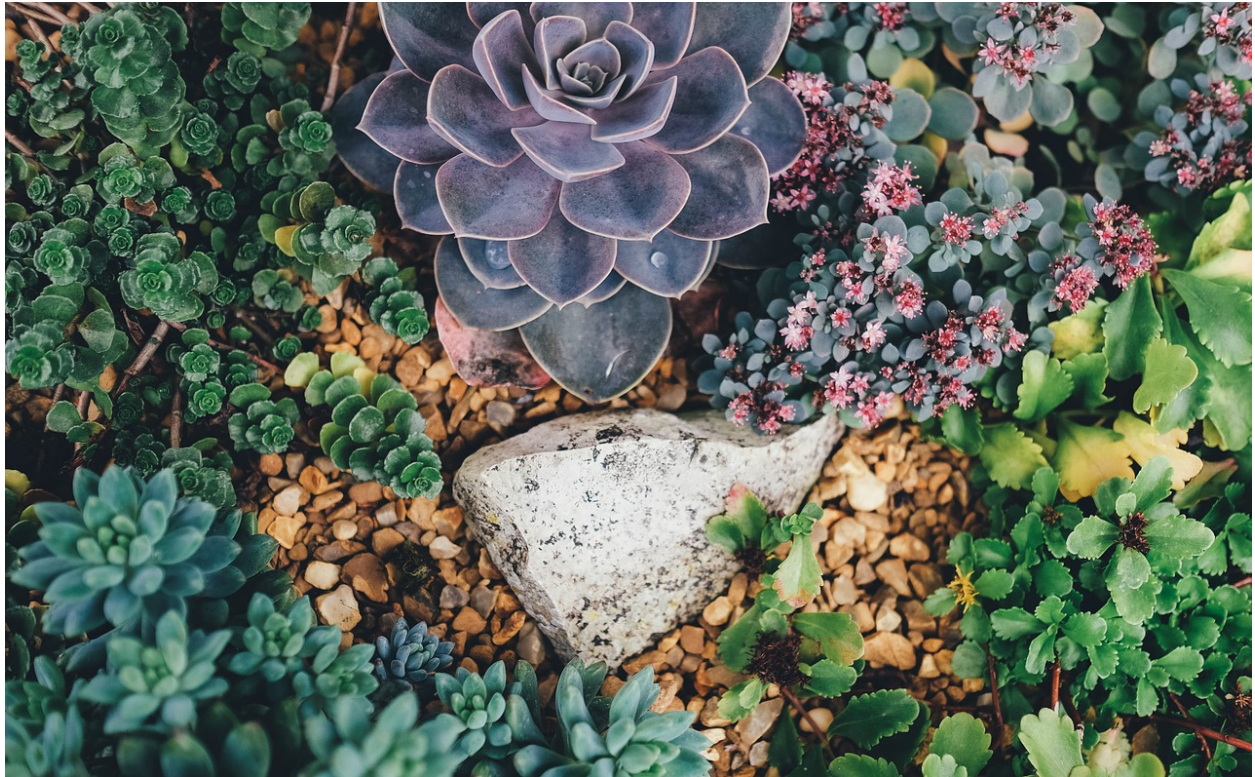


## How to Keep Desert Plants Alive in a Semi-Arid to Arid Vivarium

Written by Mariah Healey, [ReptiFiles.com](https://www.ReptiFiles.com)



Keeping plants alive in a tropical vivarium is a piece of cake — you already have plenty of water to maintain the right humidity levels, so as long as you have tropical plants and a good grow light, they'll essentially grow all by themselves! However, if you have an arid to semi-arid environment with average humidity levels consistently below about 50%, chances are that you're struggling to keep your plants alive. You might even be considering giving up entirely.

If this sounds like you, despair not! This article was written for you.

### Use Drought- and Heat-Tolerant Plants

Did you know that not all drought-tolerant plants are heat tolerant? If you have an enclosure that needs to be dry but not particularly hot (under 90°F), you probably aren't having too many problems finding suitable plants. But if you have an enclosure that needs to be hot AND dry (over 95°F basking area temp), then the plant selection process gets more tricky.

We've already covered drought-tolerant plants in our article, [Reptile-Safe Plants for Every Level of Light!](#), but what about heat-tolerant varieties? Here's a quick list of reptile- and heat-safe suggestions:

- Blue fescue
- Blue oat grass
- Chinese fountain grass
- Coneflower (Echinacea)

- Coreopsis
- Daylily
- Dianthus
- Echeveria (Hens and Chicks)
- Geranium
- Lavender
- Little bluestem
- Marigold (*Calendula* spp.)
- Potentilla
- Rosemary
- Salvia
- Sedum (all except *Sedum acre*)
- Verbena

For best results, let your plants get established for at least 1 month (preferably more) before introducing your reptile and turning up the heat and reducing the waterings. A well-established plant is more likely to be able to withstand the relatively harsh conditions of your setup.

### **Arrange Them Away from the Heat Lamp**

The heat under most heat lamps is too intense for even heat-tolerant plants to survive for very long – this is especially the case if you have a reptile that needs particularly high basking temperatures! This doesn't mean you need to give up on keeping live plants with heat-loving reptiles, however. You just need to be smart about it.

For best results, arrange your plants in the middle to cool side of the enclosure. This will also help you create a natural humidity gradient consistent with your temperature gradient. Using a well-ventilated enclosure will also help prevent heat from building up on the cool side.

### **Water on a Schedule**

Plants need water to survive, even the drought-tolerant ones!

Of course, if you're maintaining a semi-arid or arid vivarium, you're probably worried about the way that watering your plants will increase humidity. After all, most cacti and succulents prefer a good occasional drenching rather than consistent light watering. However, as long as your enclosure has good ventilation, humid air should dissipate too quickly to create problems for your pet.

### **Deliver Water to the Roots**

If you have a particularly dry setup (say, for a uromastyx), then letting water sit at the surface of the substrate can be potentially dangerous to your pet's health. In that case, you need to deliver water straight to your plants' roots.

One way to do this is via houseplant watering globes. They can be a bit large, however, so if this doesn't work for the size of enclosure that you're working with, you can also cut/drill some notches in the base of a small pipe, insert it into your substrate, and pour water into the pipe to deliver water to the base layer of your substrate.

## **Conclusion**

It's not impossible to maintain a healthy, fully-functional semi-arid to arid bioactive setup as long as you know what to do. Yes, it's more difficult than maintaining a temperate or tropical vivarium, but this article should make the process a little easier.

If you're still worried about humidity levels going too high when you water your plants, think about it this way: Even semi-arid and arid habitats still have rainy days once in a while. That's how the plants there survive, after all, and the reptiles there do just fine. It's okay to have occasional humidity spikes in your vivarium as long as you have good ventilation to let it dry out afterward.