Why is Coco Fiber not a good long-term substrate?



For many years this industry has been using Coco Fiber as our only base substrate, it has become a staple among the community. There are many benefits to Coco Fiber in small amounts. However, we have come to learn to effects of long-term use and how we can improve when it comes to basic husbandry!

Using Coco Fiber as your sole substrate can be done if changed every 2 weeks and maintained properly. When you take a look at what is currently on the market a lot of recommendations say to change out every 4-6 months, this can pose a threat and issue to many elements in your enclosure.

- 1. Bacterial/respiratory infections
- 2. Scale rot
- 3. Poor soil health
- 4. Failure to thrive

Common illnesses:

Respiratory infections

Scale Rot

Skin Rash

Why can't I use Coco Fiber? I've been using it for years.

With more husbandry resources available, we have been able to see the long-term effects of Coco Fiber. Typically, a few hours are all it takes for anaerobic bacteria to start forming inside Coco Fiber, it is a great media if one is purposely trying to culture up bacteria for fungi growth and plant matter. Once wet, your Coco Fiber will continue to grow bacteria, in an enclosure that has a limited amount of airflow your anaerobic bacteria are sure to skyrocket in just a matter of days. In small amounts it is good for the environment, balancing out the aerobic bacteria but when left to multiple this is when you will face issues.

Coco Fiber holds on to water and does not like to let go; this causes the buildup of potentially harmful bacteria, as well as a spike in the PH levels of the soils. Due to lack of aeration your Coco Fiber will not allow itself to drain, aiding in oversaturation. When you have an animal that is fossorial or is sedentary you may now face the potential for scale rot, respiratory infections and even skin infections.

Coco Fiber is a great option with the right mixture when used for gardening as it will retain the moisture needed for plants to flourish. This does not always work in the case of a bioactive enclosure. Your soil health needs to be on par for the animal, clean up crew and the plants. A healthy PH level for most amphibians and burrowing species is around 4.5-5.0%. Typically, Coco Fiber has a natural PH level of 5.7-6.5%, before even making the enclosure there is a difference in PH levels. There are ways to neutralize your Coco Fiber to lower the level in which the PH stands, however, when done you lose the possibility for your plants to continue to thrive as there will be a lack luster of nutrient rich options for it to photosynthesis and continue. There will always be a battle between keeping your PH levels at a healthy amount for your animal and plants to thrive in, one will eventually end up losing.



We continue as a community to expand our knowledge on how to care for our reptiles and amphibians properly. We want a thriving environment in every aspect in our enclosures, we are recreating a whole ecosystem! The more we know the more we are all able to help.

The Dude Abides-

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