

Features

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Added Insurance

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One of our biggest challenges as an industry is keeping consumers successful, no matter their gardening skill level. That's pretty tricky, and if you can help your customers keep their plants healthy, it will go a long way in allowing that plant to fight off pesky pests and diseases. With that in mind, we explore two amendments that can be added at various points of the plant's life to keep them happy, and your customers coming back for more.

Mycorrhizae

What is it? Aside from being a mouthful (you pronounce it like this: mahy – kuh – rahy – zee), it is at its essence, fungi that have a symbiotic relationship with the plant's root.

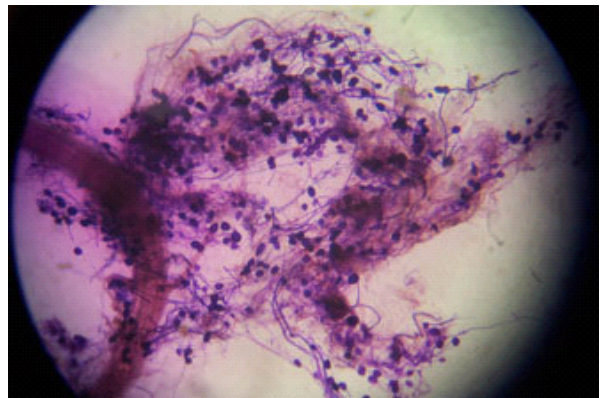
Todd Baker of Braun Horticulture so eloquently describes it this way: "The mycorrhizae represent the potential for an elegant solution to a thirsty, polluted world."

What he means by that is the soils we plant in are typically devoid of many of the nutrients a plant needs to be healthy.

Mycorrhizae can help solve that issue because once they colonize the roots, it in basic terms brings water and nutrients to the roots in exchange for sugar. "There's some other add-on effects that occur – there's often less root diseases as a well-colonized plant is less susceptible to be colonized by bad fungi," Baker says. Braun recently introduced Mother Nurture, an amendment featuring mycorrhizal fungi for retail as well as for professional use.

How do you apply it? Mycorrhizae need to be applied at the time of transplanting, either when the plant is put in the ground or during the production process. The good news is you really can't overapply it, you can only underapply it.

What's the delivery system? It can be mixed into a slow-release fertilizer, and it also can be put right into the soil mix. The mycorrhizae are microscopic, so they need a carrier. In the case of Mother Nurture, zeolite and vermiculite deliver the fungi. Another popular product is MYKE, which uses natural granule carriers for delivery.



Why is it beneficial? On the retail side, it promotes healthier roots for stronger plants at the consumer level. For growers, it can help plants overcome human error, like mistakes with fertilizer applications, over or under watering, or soil mixes that aren't quite right.

Final notes: This product is better explained to consumers, either through signage or via educating salespeople so they know how to talk about the process. It makes a great add-on sale or it can tip a consumer weighing different soil and fertilizer options. But only if they understand what it does.

Pictured above: This image shows mycorrhizae germinating and preparing for root colonization (the root is on the left).

Photo credit: Sustane

Biochar

What is it? Biochar is the product of heating an organic material (wood fiber or wood particles, typically) at a very high temperature with very low or no oxygen. This leaves a refined carbon product. Quality is very important when it comes to biochar. You want to look for a lower ash content, consistent particle sizes and a pH no greater than 11.



How does it work? Think of it like an empty battery that needs to be charged, explains Mike Betterly, vice president of The Organic Mechanics Soil Co., which has been incorporating biochar into some of its products. “Biochar by itself won’t give great results ... it needs to be charged properly to work best.” When he says “charged,” he means the biochar needs to be combined with nutrients and minerals in the soil so it can “soak up” the good stuff before the plant hits the ground. “It takes a while for all these guys to inoculate themselves,” he adds.

How do you apply it? Like the mycorrhizae, it impacts the roots of the plant, so it should be mixed in before the plant is added to the ground or raised bed. Mike recommends adding a minimum of 5% biochar to get the ultimate benefits.

What’s the delivery system? Biochar can be added to fertilizers or mixed into the soil. Organic Mechanics introduced Fuhgeddaboutit Root Zone Feeder Packs last year that include biochar, mycorrhizae, a 4-2-2 fertilizer, azomite and micronized oyster shell, which means the biochar is already “pre-charged” and ready to help the plant. They also offer private label Soil Reef, which is a blend of compost, worm castings, kelp meal and biochar.

What are the benefits? For plants, trees and shrubs that are planted in the ground or raised bed gardens, it’s a long-term proposition. “Biochar is going to be there for the life of the plant, it won’t break down,” Mike says. “That’s the value proposition of biochar; it makes more sense if I can see it’s going in to help me for a long time.”

Final notes: Because biochar is relatively new, it's important for retailers to talk about its benefits with consumers. It's cost effective and helps strengthen the health of the plant, and adding it now means they won't have to add as much later because it builds up in the soil. "It's really about using it properly (inoculating it prior) for best results immediately," Mike says.

*Pictured above: The key with biochar is to make sure the particle size is consistent.
Photo credit: Mike Betterly*