







HOW TO CHOOSE THE RIGHT MYCORRHIZAL PRODUCT TO IMPROVE YOUR BUSINESS?

The cannabis industry is a highly competitive market, with everyone trying to get an edge on the competition in order to increase profitability. For most businesses or any cannabis enthusiast, the question basically comes down to: how can I produce more high-quality cannabis at a reasonable cost? Of course, it's easier said than done, but one thing for certain, active ingredients, like mycorrhizae, provide amazing benefits (*Table 1*) for your crop.

				
	HEALTHY, ENHANCED ROOT SYSTEM	FASTER GROWTH	INCREASED CROP YIELD	HIGHER QUALITY
BENEFITS	<ul style="list-style-type: none">• Better nutrients and water uptake• Increased stress resistance	<ul style="list-style-type: none">• Shorter vegetative time• Greater resistance to transplant shock	<ul style="list-style-type: none">• Increased yield• Healthier crop	<ul style="list-style-type: none">• Better terpene profile• Higher cannabinoid content
LOOK FOR	<ul style="list-style-type: none">• Root development and mass• Robust plant• Uniform canopy	<ul style="list-style-type: none">• Plant height and width• Size of the stem• Number of ramifications	<ul style="list-style-type: none">• Flower size• Flower density• Overall increase in biomass	<ul style="list-style-type: none">• Trichome density (frostier buds)• Stronger aroma (smell)• Resin level (stickiness)• Consistency

▲ TABLE 1

Unfortunately, as you probably guessed, not all mycorrhizal products are created equal. While some will consistently provide you with all the listed benefits above, allowing you to get the best out of your crop, most of them won't have any effect on your plants. And even if mycorrhizae are a relatively well known subject in the industry, there are still a lot of misconceptions in the community, making it difficult to make a decision when purchasing a mycorrhizal inoculant.

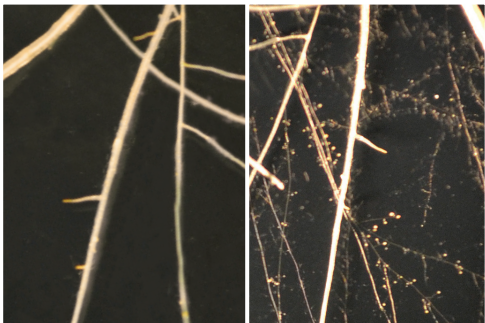
So, which elements should you consider when evaluating if a mycorrhizal product is worth the investment?

PROPAGULES VS VIABLE SPORES

Why the Viable Spore Count Is More Relevant Than the Propagule Count?

Most mycorrhizal products are listed as propagules, but it also implies that the product isn't totally made of viable spores. But why is that important?

Well, the spores are to the mycorrhizal fungi what the seeds are to a cannabis plant, it's the structure that allows the fungi to reproduce themselves. Therefore, the real value of a mycorrhizal inoculant lies in the number of viable spores it contains, since only viable spores can create a symbiosis efficiently.



▲ WITHOUT MYCORRHIZAE

▲ WITH MYCORRHIZAE



SPORES are reproductive structures of a mycorrhizal fungus that are round and contain lipids. Their lifespan is longer than other propagules, and they have superior resistance to stresses. However, not every spore has the same tolerance and vigor.

HYPHAE FRAGMENTS are vegetative structures that grow out of spores. They are not resistant to stresses and have short lifespans.

VIABLE SPORES are active spores that can colonize roots and help resist stresses. Both spores (inside the product you buy) and vesicles (inside root fragments) can be viable spores if they have physical integrity.

NON-VIABLE SPORES are spores with heterogeneous or no lipid content. They cannot germinate or colonize a plant.

PROPAGULES are any part of a mycorrhizal fungus (including all the above) that may connect with plant roots to form the symbiosis. As we have seen, not all propagules have the same ability and vigor to form the symbiosis, but the registration process allows companies to count propagules to indicate their quantity on the product label, instead of viable spores.

In Summary, you should always look for a mycorrhizal inoculant that display its concentration in viable spores or at least guarantee the viability of its propagules.

NOT ALL MYCORRHIZAE PRODUCTS ARE CREATED EQUAL

It basically means that to be truly efficient, a mycorrhizal inoculant needs to be at least three things:

VIABLE	CONCENTRATED	CLOSE
<ul style="list-style-type: none">It needs to be viable (alive) when it's finally time to use it and remember only a viable spore (fungi seed) can colonize a root efficiently.	<ul style="list-style-type: none">It needs to be concentrated to get a stronger reaction and a better chance to connect efficiently.	<ul style="list-style-type: none">It needs to be applied close to the root system to allow the symbiosis to happen as quickly as possible.

PRO-MIX® Mycorrhizal Inoculant CONNECT™ has been designed for cannabis growers by keeping these three aspects in mind. With 6000 viable spores per gram, this inoculant is the most concentrated product of its kind on the market. By applying it as a slurry on your rooted cuttings when transplanting, you get approximately 30 000 viable spores in direct contact with the root system. The symbiosis will happen, and it will happen fast.

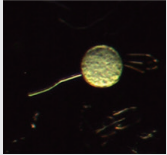
TESTING THE PRODUCT'S EFFICACY

Premier Tech has tested several mycorrhizal inoculants on the market in controlled conditions with scientific protocols, to test product viability and efficacy. The goal was to test if the products contained the numbers of spores it guaranteed, and most importantly if the products could colonize a plant at a respectable rate.

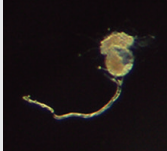
Not only PRO-MIX® CONNECT™ was by far the most concentrated product (with a verification of the spore count to prove it), but it was the only product that colonized 100% of plants at an average of more than 40% of root colonization. Four out of seven tested products did not colonize plants at all.

The root system is the key for improved terpene profile, greater yield and higher cannabinoids concentration. Investing in quality mycorrhizal with a high number of viable spores brings high-value benefits, including faster growth (shorter vegetative time), improved stress resistance, greater trichome density and increased potency (THC, CBD, etc.).

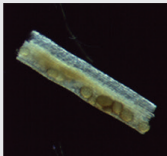
VIABLE SPORES



NON-VIABLE SPORES



ROOT FRAGMENT with vesicles inside



HYPHAE FRAGMENTS



PRO-MIX® CONNECT™ IS AVAILABLE IN THE US AND CANADA IN DIFFERENT FORMATS.
SCAN HERE TO GET MORE INFO.

