



Tech Talk: Ultra Coir



Product Purpose:

Sunshine Advanced Ultra Coir was designed specifically for growing indoor and outdoor foliage crops, vegetables, herbs and other consumable crops. It can be used alone or as an amendment to texturize soil.

Technical specs:

pH – 6.00 – 7.00
Soluble salts – 1.5 – 2.5 mmhos/cm
Nitrate N – 25 – 60 ppm
Phosphorus – 1 – 10 ppm
Potassium – 150 – 450 ppm
Calcium – 30 – 60 ppm
Magnesium – 10 – 25 ppm

Product composition:

Formulated for maximum water retention with good aeration, and development of strong, healthy root systems for maximum stem, flower and foliage growth.

Rationale/function of each ingredient:

SS Advanced Ultra Coir has the dual benefits of peat moss and coconut fiber to hold water and nutrients for optimal plant growth. The perlite provides excellent drainage, resulting in a growing mix that is suitable for most growing conditions. Our organic nutrient package will begin to supply a supplemental charge three to four weeks after planting. And our endomycorrhizal blend enhances the ability of plants to access the nutrients in the root zone.

Trial summary:

Our Sunshine Advanced Ultra Coir formula was modeled after our professional coir based mixes used in greenhouses and nurseries on a wide variety of ornamental and agricultural crops. We trialed the mix in our own greenhouses to develop a high water retention formula while still providing excellent air porosity and nutrient availability. In addition, using our in house lab, we examined the roots for mycorrhizal colonization to determine that Sunshine Advanced Ultra Coir would optimize the effectiveness of mycorrhizae on root growth.

Cultivation tips:

Sunshine Advanced Ultra Coir is designed to provide a perfect background to your own fertility program because it is essentially inert when you receive it. An organic fertilizer is included to give a background boost to your seedlings or transplants. You should start your own feeding program within 7 days of planting or seedling emergence. Mycorrhizae prefer a low phosphorus fertilizer for optimal growth. During the plant's active foliar growth stage, it is important to remember to use fertilizer with high nitrogen and low phosphorus, such as Sunshine Advanced Max Grow Plant Fuel.

Formula Bio-actives:

Using endomycorrhizae means you only get the mycorrhizal species that actually work with garden, foliage, and vegetable plants. Other growing mixes offer ectomycorrhizae as part of their mycorrhizal blend – but ectomycorrhizae only work for plants such as pines, spruces and firs. Why pay for an ingredient that isn't going to benefit your plants? Using a growing media with a multi-species blend of endomycorrhizae insures that your plants will derive the maximum benefit from the same fungi that colonize their roots in nature.

Frequently Asked Questions:

1. How is Sunshine Advanced Mix Ultra Coir different from other competitive coir products?
Sunshine Advanced Ultra Coir contains washed coir, Canadian sphagnum peat moss and coarse perlite. Coir has unique properties of high aeration coupled with excellent water retention and is frequently used to aid in rapid rewetting of peat-based mixes. Our coir is washed, which means no excess salts—something you won't find in every coir product on the market. Many other coir products are only coir and may need to be blended with other ingredients for optimal performance. Sunshine Advanced Ultra Coir is natural and organic.
2. What are mycorrhizae?
Mycorrhizae are a group of fungi which form a symbiotic relationship with plants in nature. These important fungi colonize a plant's root system, sending their hyphae out into the surrounding soil to seek out nutrients and enhance uptake by the plants. It is estimated that 90% of the world's plants are dependent on mycorrhizae in their native habitats.
3. Why should I use mycorrhizae in my growing mix?
The same benefits of using mycorrhizae apply to potting soils. Mycorrhizae will help the root system take up nutrients and may provide a healthier, stronger root system. If you transplant into a garden soil, the presence of mycorrhizae will also assist in drought tolerance. As your plants grow, the web of mycorrhizae will likewise grow and continue to provide nutrients to support the growth of the plant.
4. Why does Sunshine Advanced Ultra Coir contain an organic fertilizer?
Our custom designed organic fertilizer contains both feather meal and sulfate of potash and gives your plants a base fertility level. We kept the fertilizer at a low level so you would be able to customize your fertilizer program for the needs of your particular plants. The organic fertilizer is a low phosphorus feed so it will not interfere with the establishment of mycorrhizae in the root zone.
5. So I need to use a low phosphorus feed?
Yes. While the mycorrhizae are growing along with your plant, use a feed containing less than 10% phosphorus. Mycorrhizae will not be active in soils with higher phosphorus levels. Look for a fertilizer where the second number is less than 10, such as Sunshine Advanced Max Grow Plant Fuel.
6. Where can I go for more information on Sunshine Advanced products?
That can be found at www.SunshineAdvanced.com and for more information on other Sun Gro indoor and outdoor garden products go to www.sungro.com and www.blackgold.bz.