



Tech Talk: Ultra Coir



Benefits of and Recommendations for this Mix:

- Indoor and Outdoor growing medium with Maximum water retention capabilities: coir is the main ingredient
- Non-bark, non-compost mix
- Coir, Peat Moss and Perlite mix for those who like to grow with coir

Product Purpose:

Sunshine Advanced Ultra Coir was designed specifically for growing indoor and outdoor foliage crops, vegetables, herbs and other consumable crops. Highly recommended for indoor use with crops that need a lot of water, although close monitoring of water retention is important to make sure the plants do not get too much water.

Typical 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

*Results using SME method

Product composition:

Formulated for maximum water retention without sacrificing good aeration; and development of strong root systems for maximum stem, flower and foliage growth.

Rationale/function of each ingredient:

SS Advanced Ultra Coir has the dual benefits of coir (coconut fiber) and peat moss to hold water and nutrients for optimal plant growth. The perlite provides excellent drainage, resulting in a mix that is most suitable for growing conditions where plants need to be watered more frequently. Our organic nutrient package gives a supplemental charge to help plants get started 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, we examined the roots for mycorrhizal colonization to determine the optimal 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.

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 ensures 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 is OMRI listed, 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 in peat mixes to aid in rapid rewetting of the mix. Many other coir products on the market are only coir and may need to be blended with other ingredients for optimal performance.

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 plant uptake. 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 potting soil?

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 plants. The organic fertilizer is a low phosphorus fertilizer so it will not interfere with the establishment of the mycorrhizae in the root zone.

5. So I need to use a low phosphorus fertilizer?

Correct. While the mycorrhizae are growing along with your plant, remember to use a fertilizer 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 20-9-20.