



Tech Talk: Rain Forest Blend



Benefits of and Recommendations for this Mix:

- Outdoor "heavy" mix: Bark is a main ingredient which gives weight and higher density to container growing situations
- The bark in the mix also promotes improved drainage
- Kelp and alfalfa meal are part of the starter fertilizer package
- Compost also an added ingredient

Product Purpose:

Designed specifically for growing outdoor foliage crops, vegetables, and herbs. Can also be used in indoor growing situations where a heavier mix is needed to keep pots from falling over.

Typical Technical specs: pH: 5.5 – 6.5*

Soluble salts: 0.40 – 1.5 mmhos/cm

Nitrate: N –10 – 50 ppm

Phosphorus: – 5 – 10 ppm

Potassium: 50 – 100 ppm

Calcium: 8 – 30 ppm

Magnesium: 5 – 25 ppm

*Results using SME method

Product composition:

Formulated to provide a slow release, nutrient rich growing mix with good drainage, and develop strong root systems for maximum foliar growth.

Rationale/function of each ingredient:

SS Advanced Rain Forest Blend contains coconut coir for nutrient and water retention. The addition of fine bark provides physical stability for long term growing. The use of compost and worm castings adds a slow release source of nutrients along with beneficial microorganisms. The organic nutrient pack along with humic acid, alfalfa meal and kelp meal gives a good dose of starter fertilizer to get your plants going. Our endomycorrhizal blend enhances the ability of containerized plants to access the nutrients in the root zone and the earthworm castings boost microorganism populations which are beneficial to plant root growth.

Trial summary:

Our Sunshine Advanced Rain Forest Blend formula was trialed in our own greenhouses to develop the best combination of water retention, air porosity and nutrient availability. Various formulations were trialed using a range of herb and vegetable plants until we came up with the ideal blend of bark, coir, compost and perlite. In addition, using our in house lab, we examined the roots for mycorrhizal colonization to ensure that Sunshine Advanced Rain Forest Blend would enhance mycorrhizal growth.

Cultivation tips:

Sunshine Advanced Rain Forest Blend is designed to provide a perfect background to your own fertility program. We've included a starter organic fertilizer along with humic acid, kelp meal and alfalfa meal to give an initial boost and to supply background fertility over the course of your growing season. You should start your own feed program within 14 days of planting or seedling emergence. Mycorrhizae prefer a low phosphorus fertilizer for optimal growth so while during the plant's active foliar growth stage, use a high nitrogen, low phosphorus feed such as 16-1-2 or 20-9-20.

Formula Bio-actives:

Using endomycorrhizae means you only get the mycorrhizal species that actually work with garden, foliage, vegetable and herb 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 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. What makes Sunshine Advanced Rain Forest Blend unique?

Sunshine Advanced Rain Forest Blend contains coir, a byproduct of processing coconuts. Coir has unique properties of high aeration coupled with excellent water retention and nutrient retention and is frequently used in growing mixes to aid in rapid rewetting of the mix. The addition of compost helps to retain nutrients as well. Bark is a main ingredient for added container stability and good drainage.

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. It is estimated that 90% of the world's plants are dependent on mycorrhizae in their native habitats. The addition of mycorrhizae in this growing mix provides for optimized plant performance even in containers.

3. Why should I use mycorrhizae in my potting soil?

The same benefits 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 and will continue to grow along with the roots, seeking nutrients to supply to the plant.

4. Why does Sunshine Advanced contain an organic fertilizer?

Our custom designed organic fertilizer consisting of feathermeal and sulfate of potash gives your plants an initial gentle boost of fertility. Sunshine Advanced Rain Forest Blend also includes kelpmeal, alfalfa meal and humic acid for improved nutritional value. 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 is growing along with your plant, please 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.