

AgroCoir® success in PLUGS & TRANSPLANTS

Fine grade AgroCoir is one of the best possible components for growing seedlings and rooting cuttings in plugs, cubes, and fiber pots. It is all natural organic matter derived from the husks of Mexican coconuts which are low in sodium and very rich in potassium. This sustainable fibrous product is milled and screened for use in small containers. The granular nature of the material makes it a natural for shallow containers where aeration is critical. It is free of sticks and wood and flows readily in mechanical systems. AgroCoir is resistant to excess compaction and decay making it an excellent component when air porosity is important. The ability to release tightly held water provides less production loss due to excess drying and provides longer shelf life. Growers report that incorporation of at least 30% or more AgroCoir in a blend gives disease suppression and provides great water management properties which help in plug and transplant production and in rooting cuttings.

PLUG & TRANSPLANT BLENDS

Fine grade AgroCoir makes an excellent substrate for seed germination and rooting cuttings alone or in combination with sphagnum peat. The high levels of potassium seem to stimulate strong and rapid germination but can contribute to the soluble salt levels. Growers who have limited experience using AgroCoir should limit the AgroCoir content to 50% of the blend. Where the total soluble salt concentrations can be managed 100% fine AgroCoir works very well. Three basic approaches to propagation blends include:

1. ADDING TO PREPARED BLENDS

Simply add 1 part AgroCoir fine grade to 2 parts of your favorite prepared blend and mix thoroughly before filling your containers. Adding some additional water (1 to 2 quarts per cubic foot) before mixing helps improve blend texture and maintain blend uniformity and air porosity while excess water in the blend makes uniform filling difficult.

2. BLENDING WITH PEAT

A suggested peat and coir blend for bedding plants

- 35% AgroCoir fine grade
- 45% sphagnum (finely screened)
- 20% fine perlite
- 3 to 4 lbs./Cu.Yd. fine Dolomitic lime
- ½ to 1 lb. / Cu.Yd. starter fertilizer (9-45-15)
- 4 to 8 oz./Cu.Yd. surfactant
- 10 to 15 gallons water

Apply water unto perlite to reduce dust. Combine components and mix thoroughly until uniformly blended. Do not over mix.

3. USING 100% COIR

- 1 cubic yard of loose AgroCoir fine grade
- 1.5 to 2 lbs. of calcium nitrate
- 1 to 1.5 lbs. of 9-45-15
- ½ to ¾ lb. of epsom salts
- 3- to lbs. fine gypsum
- 10 to 15 gallons of water

Combine components and add water and mix thoroughly until uniformly blended. Do not over mix.

STORAGE AND HANDLING

Your AgroCoir blends are best used when freshly mixed. However, prepared mixes should be stored like other blends and should remain usable for many years when properly stored. The following suggestions will help maximize performance of your AgroCoir blends.

- Store in a clean dry area
- Do not over wet (saturate) the mix before storage
- Do not over compact moist blends
- Cover to avoid contamination
- Avoid contact by rodents and pests

WATER MANAGEMENT

AgroCoir blends have higher available water than sphagnum peat blends when saturated but they also have greater air porosity and increased drainage thus avoiding water logging common in plugs and shallow containers. When sufficient quantities of AgroCoir are incorporated excess watering is not a problem and over saturation from mechanical and manual watering systems is greatly reduced. Use of a surfactant (wetting agent) is always recommended but often not necessary due to the hydrophilic nature of AgroCoir in propagation systems. Growers who prefer to grow on the dry side find the coir blends often take longer to reach wilt point but absorb and evenly distribute small quantities of water throughout the plug.

FERTILIZER & pH MANAGEMENT

The high nutrient holding ability and higher potassium levels in AgroCoir require simple adjustments in nutrient management. Lower levels of fertilizer will yield strong plants. For seedlings use 13-2-13 CaMg at a rate of 50 to 100 ppm N in rotation with calcium nitrate and an occasional application of Epsom salts will maximize performance. It is suggested that a 100 to 200 ppm N solution of calcium nitrate used for the initial watering will encourage good germination and strong root growth. Repeated use of the calcium nitrate about once every two to weeks is advised. Additional benefits are often observed from applications of Epsom salts applied at a rate of 1 to 2 Lbs. per 100 gallons every 2 weeks. Leaching the crop is seldom necessary but may be helpful on salt sensitive crops due to the high levels of potassium naturally in the AgroCoir. Management of substrate pH is less difficult in blends containing AgroCoir due to the higher C.E.C. buffer and improved pH stability. It is still advised to use the normal routine pH monitoring while adjusting for water alkalinity and selecting fertilizers to help maintain the desired media pH.

Note: These formulations are intended only as a starting point. For the greatest success in your operation adjustments should be made to the blends and management.