

C & C Peat Co., Inc.

Premium Quality Potting Media

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Technical Information for C&C Peat Company's Nutri-Bark®

Stabilized 3/8" Pine Bark Fines for use in Foliage Mixes

In order to provide our nursery customers with the finest products in the marketplace, C&C Peat has developed a new pine bark product that is far superior to other barks available, in many applications. This product, which we have trademarked "Nutri-Bark®", is a stabilized 3/8" pine bark providing several key benefits as part of a foliage growth media. Using C&C Peat's unique DEP Certified Class AA Composting process, green bark is partially composted in an effort to nutritionally stabilize the bark and reduce the carbon to nitrogen ratio. Additionally, through the EPA 503 composting guidelines, a minimum temperature of 131° F is maintained for at least 15 days, which results in the destruction of any weed seeds.

Typical "green" pine bark has a carbon to nitrogen ratio of roughly 300:1. All organic matter has a predisposition towards decomposition, and the desired ratio for composting is 30:1. So, with green bark this means that in order to begin decomposition some nitrogen will need to be consumed, from somewhere, by the bacteria utilized in composting. This nitrogen, along with other nutrients, is taken up from the soil media, which can mean that the fertilizers or other additives that have been incorporated into the media may not reach the plant, instead feeding the decomposition bacteria. With Nutri-Bark®, and its much lower carbon to nitrogen level, roughly 72:1, this nutrient up-take is greatly reduced and in addition many nutrients are made more available to your plant through the decomposition bacteria.

Bacteria, such as the various mycorrhiza and Enterobacter, are found in abundance in Nutri-Bark® – just as they are found in our standard Class AA Compost. These bacteria are beneficial, and in many cases necessary, for proper plant growth and development. By using Nutri-Bark versus green, un-aged, pine bark your plants will be able to draw up nutrients and water more readily. Additionally, the presence of these bacteria will help in the control of harmful bacteria and fungi, either through competition or predation.

In addition to the reduction in nutrient uptake, through the lowering of the carbon to nitrogen ratio that results from the stabilization process, Nutri-Bark® will not shrink as dramatically as green bark is known to do. Since Nutri-Bark® has already been partially composted, it has already been "pre-shrunk", similar to what is done to cotton clothing. This does not mean that some shrinkage will not still occur, merely that there will be far less shrinkage over time. Because of this ability, the soil properties will also be more consistent over time – which means that less correction for changes in porosity will need to be made.

Some of the physical properties that differ from green pine bark are in terms of porosity and bulk density. Because Nutri-Bark® is partially composted its particles have already shrunk and as a result are more compacted than might be seen with green bark. Through this, the bulk density is much higher than green bark, but still far shy of fully composted pine bark. With an increased bulk density also comes a change in the porosity from high in air pore space to high in water pore space. The compaction that takes place through the stabilization process closes many of the Macropore (air) spaces into many Mesopore (water) spaces, also known as capillary space. Therefore, while Nutri-Bark® will not hold as much water as C&C Peat's Enviro-Peat®, it will hold quite a bit more than green bark.

Because of these physical properties, Nutri-Bark® can also be used, to some extent, as a more cost effective alternative to non-renewable products, such as perlite and vermiculite. For the foliage grower, Nutri-Bark® is an all around win in terms of benefit over alternative products available. For trials, samples, or more information please contact our offices or sales representative.

Carbon:Nitrogen Ratio	Total Carbon	Soil pH	Humic Acids	Total Pore Space	Large (air) Pore Space	Capillary (water) Pore Space
72:1	21.75%	6.2	2.43%	78%	32%	46%

Fertilizers



Quality Potting Media



Quality Service

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