

Soils and Medium

A medium is anything that you plant your plants into true provide a source of nutrients or simply just to provide stability for the plant, depending on application of soil grown or hydroponically grown crops. There are a variety of mediums to choose from, depending on what it is you wish to cultivate. Many folks will opt to grow in soil their first time for a couple of reasons. One is soil has more forgiveness to error than hydroponic applications. Hydro will definitely require more attention, but can provide grander yields.

Soil amendments are added to a mix to provide certain characteristics of the overall soil composition. Perlite is an amendment that works especially well for aerating soil. It provides excellent drainage during all phases of growth and does not promote salt buildup from fertilizers. It is an amorphous volcanic glass, meaning it does not have a crystalline structure. It crumbles like chalk in stead of breaking like glass. Another type of amendment is sand which is usually heavier and provides more weight to the overall soil. It tends to wash into soil pockets and will accumulate on the soil surface.

Light- weight expanded clay aggregate (LECA), is expanded clay pellets used to assist in drainage and provide oxygen within the medium. They are inert (No nutrient value) and are commonly used in hydroponics.

Vermiculite is another popular additive used to hold moisture. If used in larger quantities, It cannot be as cost-effective as other mediums. It holds water, nutrients and air and gives substance to high porosity soils. By itself, it will hold too much water, But works well when mixed with excellent draining medium. Peat is another commonly used amendment. It is relatively affordable and provides excellent texture to almost any application as it is lightweight and fluffy. It is similar to another popular medium called coco coir or coconut fiber. It holds so much water and air at the same time and many gardeners prefer to mix it with soil. Others prefer to use it straight. It is usually inert. This makes it excellent for hydroponics or soil used methods awake.

Soil is usually composed of Peat, perlite, and Coco. Another popular type of medium is Rockwool, which is created by heating molten rock to high temperatures and having steam or air blown into it. Other techniques will spin the molten rock in high-speed spinning machines, resulting in a product that is very porous and fibrous such as insulation or cotton candy and can be pressed into slabs, cubes, or pellets. There are still other amendments and products folks will use as medium such as gravel or styrofoam. The ones we have just reviewed are the most commonly used, as well as usually being readily available.