

THE SOUL OF PLANTED SOIL



WHAT MAKES SOIL ALIVE?

When you put a plant in a pot or the ground you are actually not working in dirt, you are working in soil! Dirt is just the reminisce of soil you get on your hands and clothes while working in the garden, but soil is a living thing made up of microbes, bacteria, fungi and elements of the earth that have been decomposing since its very existence.

WHAT IS MACRO AND MICRO NUTRIENTS



As you know, it is crucial for humans to have a good balance of vitamins and minerals to grow and live a healthy life.



Plants roots and foliage absorb over 70 different vitamins and minerals and not all soil offers a good dose of them all



Planted Places soil delivers both Macro and Micro Nutrients of many kinds



Macronutrients are the three main elements the plant absorbs and utilizes in the highest quantity

There are only three Macronutrients, which are key to the health of our plants.

N₂

Nitrogen

P₄

Phosphorus

K⁺

Potassium

Some of these Micronutrients include

Mg

Magnesium

Zn⁺²

Zinc

Ca⁺²

Calcium

Thankfully our soil had a good variety of all the Micro and Macronutrients it could possibly need

LET'S START BY BREAKING DOWN ALL THE INGREDIENTS IN OUR BASE SOIL ONE BY ONE

Coconut Coir

The thin hollow tubes of coconut fibers are a sustainable source for the base of our soil. Coco Fibers absorb water in their hollow tubes like a sponge, helping you water less often while preventing water and nutrients from leaching out of your pot.



BioChar

BioChar is a type of charcoal made from wood, animal manures, and sometimes bones through a process called pyrolysis which in simple terms means decomposition by fire in an oxygen limited environment.



WormCastings

Worm Castings are the by-product that worms leave after they eat and break down organic matter that the plant's roots can not absorb. These castings provide over 60 different elements and trace elements which are the nutrients plants need to grow.



Feather Meal

As you may know plants actually need different elements to thrive, Feather Meal brings about nitrogen as a nutrient additive in our soil blend. Feather Meal is derived from ground up and hydrolyzed poultry feathers, this is commonly used in lots of organic fertilizers and soils.



Bone Meal

As we are learning, organic materials can provide nutrients to our soil. Bone Meal is an organic additive for your soil that delivers phosphorus which is a major nutrient for the plant. Phosphorus is key for root development and flower formation meaning it helps with fast strong growth and healthy fruit production like tomatoes and zucchinis!



Pasteurized Poultry Litter

Poultry Litter is an important ingredient in lots of organic gardens due to the fact that it delivers a wide range of nutrients to our plants including, Nitrogen, Phosphorus, Potassium, Zinc, Copper and so much more! Poultry Litter is a sterilized mixture of Chicken droppings and feathers, and has been used by farmers since the beginning of gardening.



Alfalfa Meal

Alfalfa Meal is a wonderful addition to our soil medium due to the fact that delivers lots of nitrogen and quickly, but does not stop there! Alfalfa Meal delivers on major elements such as Potassium, and Phosphorus but it also delivers trace elements like Vitamins A, B, and E as well as magnesium, Iron and sixteen different amino acids.



Azomite

Azomite is a superb addition to the soil for our plants. Azomite is a rock dust from naturally occurring volcanic rock in Utah, the collosion between volcanic ash and seawater created a nutrient dense rock dust for soil.



Gypsum

Gypsum powder is a star in our soil! First off Gypsum adds Calcium and Sulfur, which our plants need to grow proper fruit, leafy foliage, and also helps with cell growth and reproduction.



Dolomitic Lime

Dolomitic Lime is a type of limestone that is used to balance out our soil nutrients and PH level. This limestone powder contains calcium and magnesium which helps to build strong cells within the root structure and foliage of the plant, in turn preventing extreme pest damage and disease damage, while also helping the plant handle cold and dry soil to a better degree.



Kelp Meal

Kelp Meal is a wonderful resource for the organic gardener because of what it delivers to our plants and how fast this type of seaweed grows in our nutrient dense ocean! This kelp Meal grows at a rate of 3 feet per day in our oceans making it a very sustainable source for home gardeners.



Epsom Salt

Epsom Salt may seem like an outlandish thing to add to our soil, but Epsom Salt actually is an organic way of adding a good dose of magnesium into our soil medium.



Diatomaceous Earth

Diatomaceous Earth is a unique additive to soil mediums. Diatomaceous Earth is derived from the fossilized skeletons of tiny aquatic organisms called diatoms and is often used as a top dressing to prevent pests like slugs and earwigs, but has even more beneficial properties when incorporated into the soil itself.

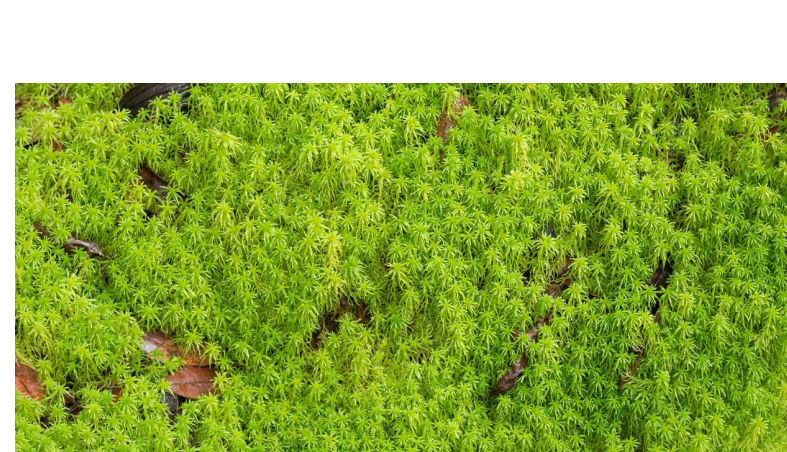


Sulfate of Potash

Sulfate of Potash is made from a combination of ground up water soluble minerals which include potash and sulfur! This combination of ground up minerals delivers a large amount of potassium to our plants which has a wide range of benefits to our plants.

Humates

Humates are a natural organic additive composed of various forms of carbon, and is recognized as the single most productive input in sustainable agriculture. A portion of Humates are derived from ancient plant matter and powerful natural acids that are beneficial fungi promotants.



Sphagnum Moss

Sphagnum Moss otherwise known as Peat moss was discovered in the mid 1900's and had revolutionized the way we garden forever! Peat Moss is dead and decomposed fibrous moss material and is excellent at holding moisture and nutrients, preventing our precious garden additives and water from leaching through the pot.



CONCLUSION

That is all of the organic materials our soil is made up of. All in all our soil is a great start for growing edible food due to its deliverance of all the macro and micro nutrients our plants could need while also making it so our plants are more forgiving when we don't get the chance to water for a day or so. These porous materials also aid our plants through the process of absorbing oxygen which is crucial for all life within the soil while also creating a large amount of surface area in those pores. The surface area gives our roots more space to wiggle and grow being they are in such small containers, this offers us longer growing seasons and better success rates. Being that our growing medium is nutrient dense and a wonderful consistency/texture, it makes gardening easier for you! All you have to worry about now is how often you water, checking for pests and enjoying your food.. We have done the dirty work for you! Enjoy and Happy gardening!

SOURCES:

<https://www.bioenergyconsult.com/applications-of-biochar/>
<https://www.indiamart.com/proddetail/coconut-husk-fiber-14855390230.html>
<https://www.cropsservices.in/shop/dry-soil-amendments/feather-meal/>
<http://www.nardfeed.com/meat-bone-meal.html>
<https://www.arbico-organics.com/product/alfalfa-meal-organic-soil-conditioner>
<https://www.amazon.com/Azomite-AZOMITE-44-1-Azomite-44A-Bag-AZOMITE-Micronized/dp/B00N24NCYM>
<https://www.collinsdictionary.com/dictionary/english/gypsum>
<https://www.kisorganics.com/products/dolomite-lime>
<https://feedsforless.com/products/organic-kelp-meal-50-lb-bag>
<https://wholebodyhealing.com/product/epsom-salts-50lbs/>
<https://www.saferbrand.com/articles/what-is-diatomaceous-earth>
<https://sanjacsupply.com/product/sulfate-of-potash-0-0-50-18-s/>
<https://www.carolinaorganics.com/humates/>
<https://www.gardeningknowhow.com/garden-how-to/soil-fertilizers/sphagnum-moss-vs-sphagnum-peat-moss.htm>

