

Diggas potting soil mixture,

c = cup

per 1.3 cu/ft of potting soil

1 1/3 c humates

1 1/4 c zeolite (fedco)

1 c Tennessee brown phosphate

1 c hi cal lime

1 c gypsum

1 c redmond clay

1/3 c kelp meal

1 pint worm castings

Humates:

<http://www.teravita.com/humates/chapter2.htm>

Humates, which are composed of various forms of carbon, are naturally occurring material that is very rich in humified organic matter and humic substances. Humates are now recognized as the single most productive input in sustainable agriculture.

Zeolite

<http://blog.coldstreamindustries.com/zeolite-soil-treatment-for-gardening/>

How Zeolite Grows a Garden

- Increases seed germination rate
- Increases the speed of sprout emergence
- Promotes root growth and mass
- Reduces the leaching and evaporation of essential plant nutrients like ammonia, nitrogen & phosphorus
- Holds moisture and nutrients in the root zone
- Promotes aeration by preventing soil compaction
- High nutrient retention capabilities reduce the number of fertilizer treatments required each season
- Reduces odors caused by various fertilizers and manure
- Prevents root burn with a controlled release of ammonia
- 100% natural and highly suited to organic gardening

So long story short, Zeolites are very effective as a distributor of water. They're efficient at helping distribute water around dripper lines and are particularly effective in sandy soils. Zeolites have the ability to absorb up to 55% of their weight in water then slowly release the water as the plant needs it. Pretty amazing, huh?

Tennessee brown phosphate

<http://www.cropservicesintl.com/shop/dry-soil-amendments/tenn-brown-rock-phosphate/>

Product Description

[0-3-0] A 21-25% P₂O₅ natural, "REACTIVE" rock phosphate 20% calcium, & broad spectrum of trace minerals[NOP]

The Premier Phosphate in the US today. It is the cleanest, least costly and highest available phosphate of any working deposit. Material is 8-10% moisture as it is naturally hygroscopic. Moisture can vary depending upon weather conditions. Will spread with a spinner spreader most seasons of the year but may require lime spreader if high humidity.

hi cal lime

<http://www.fertrell.com/hicallimepulverized.htm>

Hi-Cal Lime (Pulverized)

This product raises soil pH and increases the release of phosphorous and potassium from their insoluble compounds, making them plant available. Use it with Gypsum on soils where magnesium is high. Hi-Cal Lime also loosens clay soil. When soil is sandy, it binds particles together. For immediate use and a gradual breakdown, use the product in pulverized form. It contains less than 5% magnesium oxide.

gypsum

<http://www.agprofessional.com/resource-centers/crop-fertility/micronutrients/news/Impacts-of-gypsum-as-a-soil-amendment-on-clayey-soils-148270815.html>

Some producers have wondered about the potential benefits of gypsum applications to heavy-textured, clayey soils that have slow drainage. The potential benefits of using gypsum (calcium sulfate dihydrate) as a soil amendment on clayey soils include:

- Enhanced soil aggregation ◦ Improved infiltration
- Reduced risk of runoff and erosion

- Reduced aluminum toxicity in acidic soils
- Source of soil calcium (Ca) and sulfur (S)

redmond clay

<http://www.redmondnatural.com/soil-application/>

- Re-mineralization—over 60 elements for the ancient sea
- Increases uptake of other nutrients
- Works well with biologicals
- It feeds the predators of parasitic nematodes

kelp meal

<http://www.planetnatural.com/product/kelp-meal-50-lb/>

Made from dried and ground *Ascophyllum nodosum* seaweed, Organic Kelp Meal is an excellent source of micronutrients and beneficial plant growth promoters. Contains over 60 naturally-chelated minerals and essential elements that the fast-growing sea plant absorbs from the cold, nutrient-rich waters of the North Atlantic.

When added to ALL gardens, kelp will enhance plant nutrition, improve overall plant vigor and encourage tolerance to crop stresses such as insect pests, disease, frost and drought. Excellent as a trace mineral supplement for animals too! OMRI Listed for use in organic production.

Worm Castings

<http://www.tastefulgarden.com/store/pc/Worm-Castings-d114.htm>

Worm castings are the richest natural fertilizer known to humans. That's right: as little as a tablespoon of pure worm castings provides enough organic plant nutrients to feed a 6" potted plant for more than two months. Worm castings stimulate plant growth more than any other natural product on the market. Unlike animal manure and artificial fertilizers it is absorbed easily and immediately by plants. But Worm Castings don't only stimulate plant growth: they also enhance the ability of your soil to retain water (because of its texture), and it even inhibits root diseases such as root rot.

Lancaster AG

Redmond Conditioner: 50lb bag \$14.59

Gypsum: 50 lb bag \$10.50

Hi Cal Lime: 50lb bag \$6.50

Fedco

Menefee humates: 50 lb bag \$27.75

Zeolites: 50lbs (2 25 lb bags) \$37.00

Kelp meal 50lbs \$69.00

Tennessee Brown Phosphate 50 lbs \$22.00