

Organic Fertilization

Our sandy Florida soil is typically low in organic matter. Soils low in organic matter are usually low in nutrient content. By amending the soil organically we can grow stronger more naturally pest resistant crops, while increasing our yields!

Amendments:

- 1) **Compost**- either made at home or commercially purchased, compost adds a balance of nutrients usually released in small amounts
- 2) **Composted Manure**- Cow, horse, chicken. Fresh manure needs to decompose before being added to your garden bed. Soil decomposers use nitrogen as they decompose and you don't want this process to tie up much needed nitrogen in your garden bed. Be aware that horse manure may contain weed seed. A tea made from composted manure dissolved in a 5 gallon bucket of water makes a good liquid fertilizer. Because it is non-burning and has a low nutrient analysis, you can use it up to 3 times per week!
- 3) **Lime**- Lime, limestone, horticultural lime, hydrated lime, dolomitic lime. Lime is incorporated into the soil to raise pH. This makes the soil less acidic, often making soil nutrients easier for plant roots to uptake. Lime also provides calcium to the soil. Calcium is a necessary nutrient that is often deficient in our beaches area soils. Tomatoes and cucurbits (squash, cucumbers, zucchinis, etc.) are particularly affected by calcium deficiency and will experience 'blossom end rot' without added lime.
- 4) **Bone Meal**- calcium and phosphorus
- 5) **Blood and Kelp Meals**- nitrogen
- 6) **Seed Meal**- Cotton, alfalfa, etc. Primarily nitrogen.
- 7) **Chitin**- Soil nematodes are microscopic worms that feed on root tissue. Nematodes are abundant in our sandy soils. Increasing organic matter in your soil helps reduce their numbers. In addition, it's advisable to use chitin, which is the primary structural component in the outer shells of most arthropods (crabs, lobsters, crayfish, shrimp) as well as beetles and a host of other insects. In the soil, chitin's sharp, rough texture can literally cut nematodes into ribbons. It is also a food source for fungus that prey upon soil nematodes--- double whammy!
- 8) **Milorganite**- Composted Milwaukee sewage. Sounds pretty gross but it is totally safe and a great organic fertilizer. Doesn't even smell!
- 9) **Fish Emulsion**- A by-product of the fishing industry, this is a water soluble, non-burning fertilizer that can be used on a regular basis (once weekly or every 3rd watering) to boost soil fertility!
- 10) **Wood Ashes**- Be sure ashes are from untreated wood! Good source of phosphorus.
- 11) **Seaweed extracts**- sea plants are rich in micro nutrients