



Souped-Up Soil

by Rick Weller, Founder of Organically Done Plant Products

Hot soil, super soil, souped-up soil...these all refer to soil with organic additives blended throughout prior to planting. The objective of making a souped-up soil is to place all of the elements (nutrients, amino acids, minerals, etc.) that a plant needs to grow into your planting mix. The goal is to produce healthy, high-yielding plants only adding water during the grow cycle.

We sell a lot of organic components to customers who are following one of the many soil recipes that can be found on the web (like Subcool's super soil) or in books (like The Rev's True Living Organics) and we get a lot of questions so we thought we'd take a closer look. Here are some of the common questions/issues we hear.

Sometimes I get plant burn - Organic plant products, in general, are slow release. However, there are some (guano, blood meal, fresh manure, hydrated lime, etc.) that may be very high/low pH or have high levels of water-soluble nitrogen, ammonia or salts that can damage plants if over-applied. ***Solution:*** there are great organic components that can supply the same elements without having these potentially damaging characteristics – try substituting.

I always have to supplement to fix deficiencies – We reviewed some of the more popular recipes and found that many of them do not contain the correct amount of necessary elements. ***Solution:*** review your deficiencies and modify your recipe.

Can I use additional products like teas, boosters, supplements – Absolutely. Souped-up soil is nothing magical, simply a different way to fertilize with organic products. There are some elements that you may not want to be available at all stages of growth. Layering is interesting but difficult/impossible to control. ***Solution:*** supplement away.

How long should I 'cook' the soil – Some rationale for the cooking process:

You want your soil biology to develop – if you add a decent percentage of quality castings or compost to your soil mix (15-20%), you are starting off with a great (and more than adequate) population of microorganisms. In the right environment, microorganisms will flourish quickly.

You want your organic matter to breakdown and stabilize – your organic matter is continuously breaking down and will continue until fully composted, long after your plants have been harvested.

You want your soil biology to convert your nutrients to plant-available form – not only does this defeat one of the significant advantages of organic nutrients (slow-release) but excess water-soluble nutrients are leached from the soil with watering anyway. Good soil biology is more than adequate to supply your plant's nutrient requirements as they are needed.

Solution/Conclusion: 'cooking' (meaning let your soil sit for a time period before using) soil does not add any benefit (assumes that you are starting with a good quality soil mix, including biological source like castings or compost) and actually might waste some water-soluble elements. However, little harm is done so cook away if it makes you feel better.



What do I do with my souped-up soil after I have harvested my plants? - Clean out plant material (don't want composting while you are growing) and re-use soil for next planting. Your goal as an organic grower is to develop healthy soil, full of microorganisms and organic matter and that is exactly what you have. You will need to re-charge with nutrients and you may want to mix in some fresh soil components – do this gently to minimize disturbance of your fungal populations. However, as usual, if any disease or pests are present, do not re-use.

Summary

Using the souped-up soil concept is not magic, it is another way to provide essential elements to your plants in an organic

growing environment. It works (assuming you are working with the right recipe). It does have trade-offs: more work up front versus less work while growing, more elements used versus elements available throughout the root zone, less ability to time nutrient availability versus ensuring all elements are available.



Organically Done has recognized that many of our customers have an interest in the souped-up soil method and we have developed a water-only product to be blended into your favorite potting mix prior to planting. Water-only, what a concept.

Organically Done (www.organicallydone.com) is a Michigan manufacturer of organic fertilizers and soil amendments. Our mission is to produce high-quality truly organic products that provide everything your plants need while being free of potential contaminating sources that are found in many of today's "organic" alternatives – **NOT ALL ORGANICS ARE CREATED EQUAL.**