



Making Quality Compost

Introduction: Making Compost

- Remember that when growing organically we are focusing on feeding the microorganisms in the soil what they need to thrive (namely rock powders and organic matter)
- The microorganisms then help make these nutrients available to the plants



Introduction: Making Compost

- On the other hand “conventional” agriculture focuses on feeding the plant certain nutrients (N-P-K) leaving the soil to be treated like “dirt”
- It’s a lot like us eating whole foods vs. taking vitamins



Introduction: Making Compost

- So we've talked about taking a soil test and amending your soil with natural rock powders, but remember that the number one amendment you can add to your soil no matter where you are is quality organic matter (compost or humus)



Introduction: Making Compost



- Overview
 1. Benefits of Compost (Humus)
 2. Organic Matter Sources
 3. The Successful Compost Pile



1. Benefits Of Compost

1. Benefits Of Compost

- Adding quality compost (humus) to your garden can result in many and diverse benefits
 - Compost can act as a soil buffer neutralizing acidic soils and acidifying alkaline soils
 - The microbes that help form compost leave behind sticky glues that hold soil particles together in a nice crumbly structure
 - Compost is light and airy, making it easy to work and allowing for good air circulation

1. Benefits Of Compost

- Benefits of compost (humus) cont.
 - Compost can hold a huge amount of water (80-90% of its weight)
 - Compost is very good at hanging on to important mineral nutrients that would otherwise wash away with rain water
 - Compost can immobilize toxic heavy metals keeping them from being taken up by plants or other soil organisms

1. Benefits Of Compost

- Benefits of compost (humus) cont.
 - Because it is naturally dark in color, compost can absorb sunlight and warm up faster
 - Compost provides food that fuels the cycle of life keeping your garden running smoothly





2. Organic Matter Sources

2. Organic Matter Sources

- Perhaps the most obvious source of organic matter is the closest to home – right in your kitchen
- Garden scraps and left over plants who's season has past are great additions to a compost pile



2. Organic Matter Sources



- Grass clippings or leaves raked up from the lawn can be composted
- You may also want to look around your local area for quality sources of compost

2. Organic Matter Sources



- Do you have any neighbors with horses? You could possibly use their manure
- Do any neighbors mow large fields? You could possibly use the clippings
- Is there a place where your local town dumps leaves in the fall? You could possibly use them or collect them from neighbors

2. Organic Matter Sources

- There are many options for obtaining organic matter – but you will want to be careful what sources you choose as there can often be toxic wastes that come with what should be natural organic matter
- Also, you may want to note that while most vegetable and grass sources use a bacterial process to break down – leaf and wood sources use a fungal process



2. Organic Matter Sources

- Also – bark chips or sawdust for the most part do not make good compost piles due to how long it takes for them to break down
- But once you have organic matter – how do you make a successful compost pile?

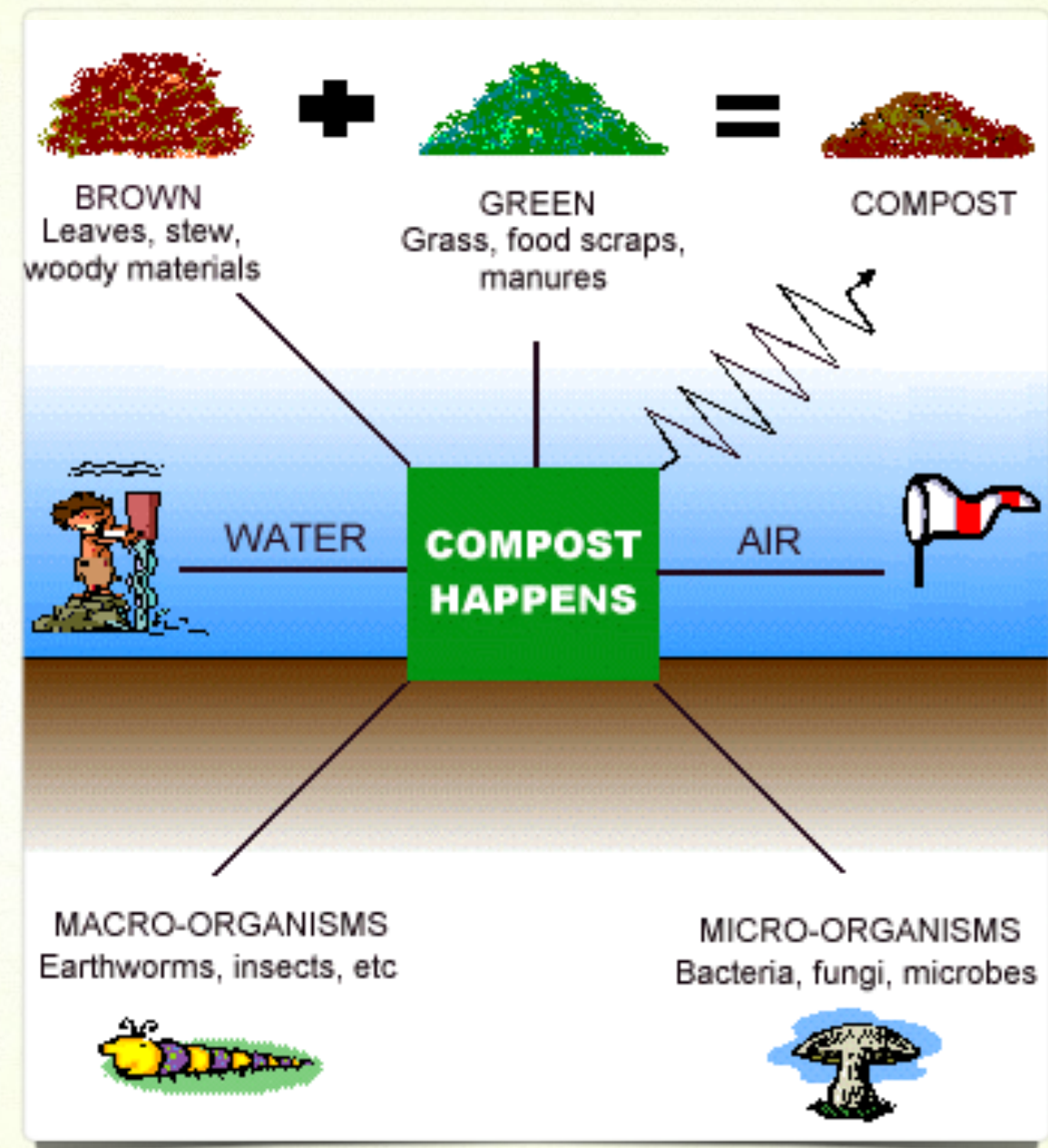




3. The Successful Compost Pile

3. The Successful Compost Pile

- The breakdown of organic matter requires three main variables
 - Temperature
 - Moisture
 - Air



3. The Successful Compost Pile

- The key to managing a successful compost pile is to regulate these three factors
- Organic matter (OM) itself is mainly composed of two elements – carbon and nitrogen
- The composting process requires a proper ratio of carbon (browns – old and dry ingredients) to nitrogen (greens – young, moist, fresh materials)
- A good compost pile consist of alternating layers of the two like a multi-layer sandwich of browns (bread) and greens (jelly)

3. The Successful Compost Pile

- A good ratio is around 3 parts of browns to 1 part of greens
- Tossing a few shovel full's of dirt onto the pile can help stimulate the microbes as you build it up



3. The Successful Compost Pile

- Tips for making and monitoring your pile
 - The ideal size of a compost pile is around 4-6 feet square
 - If you go larger than this you will need to make holes in the pile for air circulation
 - One way to build a structure to contain your compost pile is with straw bales stacked two high on their sides
 - Cover this with a weighted tarp and then your “old container” can become the ingredients for your next compost pile

3. The Successful Compost Pile

- Tips for making and monitoring your pile (cont.)
 - Straw is the perfect brown ingredient because of its structure
 - The ideal moisture level of your pile should be like a squeezed out sponge
 - If your pile stinks, is mushy, or attracts flies, you will want to remake the pile while adding in more brown ingredients
 - If your pile isn't doing anything than it either needs more moisture added to it or more green material

3. The Successful Compost Pile



- You can jump start a dead compost pile by making holes in it with a bar and pouring liquid fish emulsion or molasses into the pile (approx. ½ cup per 2 gal. of water)

3. The Successful Compost Pile

- Turning and aerating your pile
 - Decomposition works best when your pile is between 110 and 160 deg. Fahrenheit (43 – 71 deg. Celsius)
 - You do not necessarily need to turn your compost pile, but doing so will help with speeding up the decomposition process
 - If you are adding to your pile regularly it will be better to turn and water it more often

3. The Successful Compost Pile

- Turning and aerating your pile (cont.)
 - Turning your pile can be done as often as every week but more realistically once a month
 - If you are not adding lots of new material to your compost pile and you manage it correctly, you could have quality compost ready for use in a matter of 3-4 months (during the summer)
 - Otherwise it will usually take a year or two for your compost to decompose to an optimal state

3. The Successful Compost Pile



- During the winter your pile will most likely go dormant from the cold and is best left alone until spring

3. The Successful Compost Pile

- There are smaller compost bins and containers for making compost on a smaller scale that can be effective as well
- You can use the same principles for making quality compost in them



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Summary: Making Compost

1. Benefits of Compost (Humus)

- Adding quality compost can benefit many areas of your garden including your soil structure, the life in the soil, nutrient availability and more...



Summary: Making Compost

2. Organic Matter Sources

- From your kitchen to the lawn next door – there is a whole host of possibilities when it comes to finding organic matter for your compost pile
- But watch out! Even lawn clippings can be polluted with



Summary: Making Compost

3. The Successful Compost Pile

- The best compost pile will be layered with around 3 parts carbon (brown material) to 2 parts nitrogen (green material)
- Turning your pile can speed up the process but is not



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