

Adventures in Gardening

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Composting

Maintaining Healthy Soil Without Commercial Fertilizers



Is composting difficult?

I would say that it isn't so much difficult as tricky. When it works you have the most aromatic good earth smell wafting from your compost. When it goes wrong it stinks!

So here are some basic guidelines to successful composting.

First, you really need two composting drums. While you are adding new material to one drum the other drum is cooking up beautiful, rich humus. If you try to keep everything in one drum then your mixture always has material that has not composted and is not ready to add to a garden.

Second, you need to keep the ratio of carbon to nitrogen favoring carbon. Too much nitrogen leads to a compost that develops so much heat it kills the bacteria that make it work. Too little nitrogen and you have a cold, unreactive mixture. If you place your hand above a compost pile during any time but Winter when it is dormant and generally frozen, you should feel a gentle warmth emanating from the mixture. This ratio is often referred to as brown to green. Brown leaves are high in carbon (so are cardboard, paper, wood chips). Green grass clippings are high in nitrogen (so are food waste and coffee grounds).

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Third, while soil harbors many anaerobic bacteria, it is important to keep the compost oxygenated to support a healthy community of aerobic bacteria. It is the aerobic bacteria that produce the good smells of earth and the anaerobic bacteria that can lead to sulfurous smells (stinky smells). For a compost drum this means turning the drum. The warmer the weather, the more often the drum should be turned. About three turns daily during the summer.

Come Help Us Grow!



I've owned two of these type of drums for ten years plus. They have remained in good condition. They are easy to rotate. I tie a ribbon onto the one that is ready to receive new material so I won't get mixed up. The non-active drum is rotated without adding any new material for about a month. Then I empty out about two thirds of the humus and leave the rest to keep the bacteria going.

In the Spring, now, I push the topsoil aside before I plant and lay in the composted soil. I have one drum that is ready to be emptied now – it is from the Fall. Once the drum is emptied it becomes the new active drum. This allows my second drum to begin it final cooking cycle. Later in the summer I will dig a trench around the tomato and other high nitrogen consuming plants and feed them with the composted soil that is in the other drum.

So why do all of this? Well, turning the drums is good exercise 😊 I don't use fertilizers at all and I have always had healthy crops. I love the smell of earthy humus. And it recycles vegetable waste well.

One last caveat, there are some things which must not be composed. They will either kill the bacteria (vinegar, oranges) or grow dangerous microbes (meat, bones, dairy, diapers, pet poop) or introduce toxins into your soil (pesticide treated grass). If you aren't sure – research.

References

How to Compost At Home: The Ultimate Beginners Guide <https://pela.earth/blogs/news/how-to-compost-at-home>

10 Things You Should Not Put In Your Compost Pile <https://www.smallfootprintfamily.com/10-things-you-should-not-put-in-compost-pile>

