



Duke Farms

An Experiment in At-Home Composting

PART V

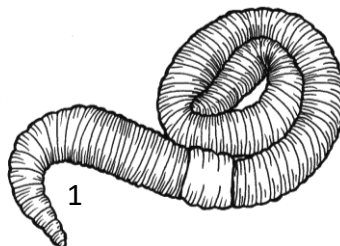
The concept of at-home composting may seem overwhelming, even intimidating, at first glance. The wealth of information available on the subject can be both helpful and harmful, steering you in the right direction while, at the same time, making you feel as though you are missing something important or doing something wrong. Fortunately, there is surprisingly little that can go seriously amiss when it comes to composting in your own backyard!



Check out the Duke Farms' educational resource ***The Black Gold Standard: A Beginner's Guide to Composting*** on the Distance Learning Portal for a thorough explanation of the composting process; the many benefits of both composting as a waste disposal method as well as compost as a soil amendment; and a helpful breakdown of different composting systems.

This resource will focus on the composting process as it plays out in real time, in an open bin system, utilizing the hot/active method – which involves weekly turning of the compost pile, vigilant monitoring of its temperature, and the regular addition of both “greens” (nitrogen-rich organic matter like fruit and vegetable scraps) and “browns” (carbon-rich organic matter like newspaper and straw). It will also explore the answers to interesting questions such as what organic matter looks like after one, two, three weeks of exposure to the elements and decomposer activity, and what some of those decomposers are.

In short, this experiment will illustrate just one of the many ways to compost at home easily and effectively.





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Day 29

Four weeks have passed since this experiment was begun. Numerous buckets of kitchen scraps and countless handfuls of straw have been exposed to sunlight and rain, hot temperatures and cold, microorganisms and insects and animal scavengers – all working together to process this even mixture of “greens” and “browns” into what is affectionately known as *black gold*: compost.

A Visual Summary

Day 1

Bin was constructed. First layers of greens and browns were added



Day 8

Majority of greens were no longer distinguishable; skins, cores, pits, and other fibrous materials remained recognizable



Day 15

Food items that had been kept whole (eggplant, gourd, potatoes) were broken into smaller chunks to hasten decomposition



Day 22

Food items that were broken into smaller chunks week before had almost fully decomposed



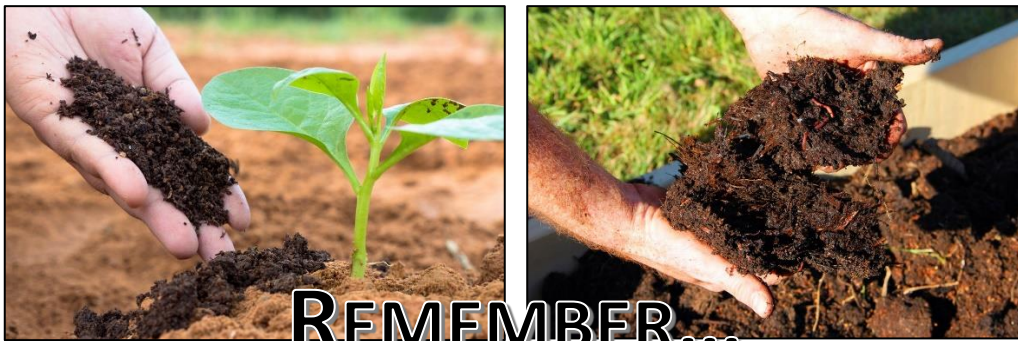
Consistent turning, close monitoring of the pile's temperature, and the addition of water when necessary have helped to hasten decomposition. While the passive, or "cold", method of composting typically results in usable compost in six months (or longer, depending on the inputs and conditions), the active/"hot" method has resulted in usable compost in four weeks, the shortest amount of time officially recognized by most resources.

Day 29



This compost has few, if any, identifiable greens left. As was discussed in previous parts of this series, browns do not have to be fully decomposed in order for compost to be considered “finished” and usable.

In short...**this compost is cooked!**



Compost can be applied as a “top dressing” (i.e. placed on the soil around a plant) or mixed directly with the soil a plant will be placed in. Either way, no more than a few handfuls should be applied to any given plant, as compost is often rich enough to overwhelm and kill a plant when too much is provided.

Thank you so much for joining Duke Farms for this series on composting! Be sure to check out the hundreds of other amazing educational resources offered on our Distance Learning Portal!

