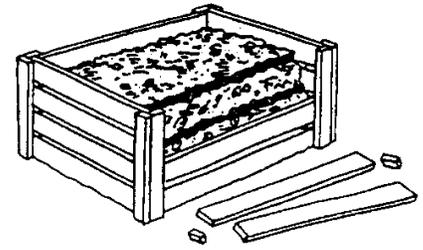


Troubleshooting Your Compost Pile



Symptom	Possible Causes	Prescription
Rotten or sulfurous odor	<ul style="list-style-type: none"> < Too many food scraps; or “lumping” food wastes. < Too wet. < Too many grass clippings in a mass. < Material shredded into particles which are too small. < Anaerobic conditions (no oxygen). 	<ul style="list-style-type: none"> < Eliminate food scraps (put them in a worm bin). Or, mix food wastes evenly throughout the pile. Add coarser material to keep moist food scraps more aerobic. < Turn pile while adding some dry, high-carbon material such as leaves or chipped wood. The odor will eventually correct itself as the pile drives off excess nitrogen. Cover the bin during rainy spells. < Mix grass clippings with coarser and drier high-carbon material. < Turn pile while adding material of different sizes and coarseness. Layer pile with plenty of loose, bulky material. < Tear pile apart, diagnose problems and rebuild a loose pile with many types of materials.
Ammonia smell, mostly when turning pile	<ul style="list-style-type: none"> < Too many grass clippings in one mass, or layered too thickly. < Too much manure; too many kitchen scraps. < Anaerobic conditions (no oxygen). 	<ul style="list-style-type: none"> < All symptoms of too much nitrogen. If the pile is left alone, it sometimes corrects itself by volatilizing nitrogen. Leave alone. Or, turn the pile while tearing apart any matted lumps of high-nitrogen material (adding coarser, high-carbon compostables) and rebuild into loose, aerated layers. < Often caused by one of the following: Material is the same size; material pieces are too small; pile is too moist. Rebuild using the guidelines mentioned above. < Turning the pile helps circulate oxygen.
Pile has low temperature	<ul style="list-style-type: none"> < Pile has finished composting. Not a problem, time to use the material. < Pile too small. < Too much high-carbon material. < Too dry or too wet. < Material too coarse or too fine. < Not enough nitrogen. 	<ul style="list-style-type: none"> < Congratulations, you are a certified compost maker. < The formula for hot compost recommends a pile built with at least 27 cubic feet (3'x3'x3'—a cubic yard) of material. < Rebuild pile, adding nitrogen—manure, grass clippings, kitchen scraps or fresh garden wastes. < If too moist, the pile will have an odor. Rebuild and add dry carbonaceous material. Cover when raining. A dry pile has no odor. Rebuild pile while wetting the raw material. A cover may help retain moisture. < Too much coarse material can make a dry pile; too fine can make an anaerobic pile. Use different-sized materials. Rebuild pile with a heterogeneous mix.
Pile too hot	<ul style="list-style-type: none"> < Temperatures above 160°F can kill beneficial microbes. Temperatures above 180°F will sterilize the pile’s core. < Too much nitrogen. 	<ul style="list-style-type: none"> < The hot pile will kill some of the bacteria and the temperature will drop, then a few remaining microbes will re-inoculate the pile. Turning the pile will help cool it. < Turn pile while incorporating more carbonaceous material.

Symptom	Possible Causes	Prescription
Pile bursts into flames	<ul style="list-style-type: none"> < Needs more frequent turning. < Pile is too dry. 	<ul style="list-style-type: none"> < The pile must be too dry. It rarely bursts into flames, but can smolder. < While lots of nitrogen is needed to generate heat, the pile's upper layers must be very dry to combust. < Scatter – extinguish fire – allow to cool and rebuild the pile. < Turn the pile more often.
White moldy/fungal growth	<ul style="list-style-type: none"> < Not really an illness; most likely the filament of beneficial fungi as they help digest compostables. While there are fungi which thrive at all temperature levels, fungal growth is usually noticed when the pile is in a mesophilic condition (cooler than hot compost, but not a cold process). < Too wet or too dry. 	<ul style="list-style-type: none"> < If you want a high temperature pile, adjust the carbon-to-nitrogen ratio, check the moisture level and turn the pile. < A dry condition often favors fungi. Either way, adjust moisture by rebuilding the pile while adding either water or dry material (depending on the condition).
Nothing rots	<ul style="list-style-type: none"> < Not enough moisture. < Material too woody or not enough nitrogen. < Not enough available carbon. < Pile too small. 	<ul style="list-style-type: none"> < Rebuild the pile while misting material. < Shred any woody material which is too chunky; or mix in more nitrogen-filled material (such as fresh lawn clippings). < Shredding “waxy,” hard leaves helps aerobic bacteria. < Save raw materials until you can build a 3' x 3' x3' pile.
Flies and insects in and around pile	<ul style="list-style-type: none"> < Too much food waste. 	<ul style="list-style-type: none"> < Reserve the kitchen scraps for your worm bin or add them only to the pile's middle. If this does not solve the problem, stop mixing vegetable waste with fruits and edible parts.
Mice and rats in pile	<ul style="list-style-type: none"> < Food wastes. 	<ul style="list-style-type: none"> < First try adding the kitchen scraps to the middle of the hot pile. If that doesn't work, try eliminating all meat, dairy and fish scraps and all salad and cooking oils. Or, eliminate all kitchen wastes and use them in a worm bin. Some bins are sold with tightly fitting, plastic bottoms and lids to help exclude rodents.

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