



UConn Soil Nutrient Analysis Laboratory

6 Sherman Place, Unit 5102, Union Cottage
 Storrs, CT 06269-5102
 860-486-4274
www.soiltest.uconn.edu

UConn
 COLLEGE OF AGRICULTURE,
 HEALTH AND NATURAL
 RESOURCES
 PLANT SCIENCE AND LANDSCAPE
 ARCHITECTURE

Composting Troubleshooting Guide

SYMPTOM	PROBLEM	SOLUTION(S)
Odor- Rotten Smell	Insufficient oxygen, pile is anaerobic	a) Turn pile or b) Rebuild pile on a pallet or c) Place large sticks in middle of pile to heap and give support or d) If pile keeps going anaerobic, use different ingredient ratios or e) use trench composting method
Odor - Ammonia smell	Excess nitrogen (N) in form of NH ₃ -ammonia), Too much green, nitrogen-rich material	a) Turn pile and spread pile out to allow excess ammonia to vaporize and mix in brown material to restore carbon and nitrogen balance
Pile won't heat up - old pile	Needs nitrogen OR oxygen supply depleted OR pile finished decomposing	a) If most organic materials decomposed, the pile is finished OR b) If most organic materials are not decomposed, turn pile to activate OR c) Check for moisture - squeeze a handful and only one drop should be shed. If not moist, add water and turn OR d) If too wet, turn pile or spread it out to promote drying OR e) If moisture not problem, add nitrogen in form of grass clippings, corn gluten meal or blood meal.
Pile won't heat up - newly built pile	Too small of a pile to begin with	Pile needs minimum of one cubic yard of material to start
Pile won't heat up - newer pile	Lack of moisture; dig in the pile in several places and see if it is damp. Squeeze handful and if forms a clump, water percentage is OK, if clump breaks into small pieces then water is needed.	Stick garden hose into the pile in several places letting water run for 30 seconds, then sprinkle water on top of pile. Check with a hand squeeze of material to see if more water is needed.
Pile won't heat up - newer pile	Lack of nitrogen; if pile does not heat up after adding water	Rebuild pile and incorporate more high nitrogen material throughout. If higher nitrogen feed stocks are unavailable add blood meal, cottonseed meal, kelp or dehydrated manure. Be sure to check moisture content.
Pile won't heat up - newer pile	Lack of micro-organisms; if pile is a quarter brown material and it is well dispersed in pile. The usual cause is that the pile is isolated from the ground, look for ways to connect the pile to its primary source of micro-organisms, via soil.	Remove barrier between pile and soil, add soil or finished compost to inoculate the pile.
Pile won't heat up - newer pile	Pile lacks oxygen; clumps or layers of material like leaves, sawdust, or grass have formed mats	Turn pile mixing all the ingredients uniformly. When adding new material, turn the pile to incorporate.
Pile won't heat up - newer pile	Large pieces of organic matter visible	Chop or shred before adding to pile.
Overheating	Temperature is too high in pile; compost is steaming on cool fall morning. Note: this is rarely a problem for backyard composters.	Turn pile when internal temperature exceeds 131 degrees F for three consecutive days. Internal temperature may continue to increase. If internal temperature goes above 160 degrees F, beneficial micro-organisms begin to die. Too high temperatures may cause soil to become sterile and lose its disease fighting properties.
Leaves and Grass clippings not decomposing	Large amounts of grass clippings or leaves usually picked up by lawn mowers were dumped in the pile all at once and not mixed in.	Turn pile when adding new material especially when adding large amounts of grass and leaves.
Unwanted critters in pile	Animal scat seen in pile or animals seen rummaging through compost bin.	Cover compost bin. Bury food scraps in compost pile. If critters persist move all kitchen scraps to a worm bin. When bears are present do not put kitchen scraps in compost pile. Some luck keeping bears out with those rotating barrel bins but bears are very determined creatures. Try pit composting.
Unwanted critters in pile	Presence of meat or fats	Avoid adding these to pile; remove or cover with soil or other feed stocks.
Fruit flies and/or Fungus Gnats in compost pile	Small insects are attracted to and flying around compost pile.	If they don't bother you, they are not harmful or hurting the pile. If bothersome, bury all fruits and vegetables deep in the pile. If still persisting wrap waste in newspaper and then bury. Check moisture level in pile as fruit flies and gnats love damp environments indicating pile may be too wet. If so, turn pile and add brown material.
Gnats in finished compost	Gnats that travel to the garden can deposit larvae that eat organic matter including hair roots of plants, not desirable.	Generally not a problem as natural predators keep them in check. If plentiful, spread compost out to dry in sun before adding to garden.

What To Compost**What Not To Compost**

Brown Material (50–75%)	Green Material (25–50%)	Harmful to Pile
Sawdust (except exotic hardwood)	Fruit Waste	Material totalling >10% of the compost pile. Typically a mixture of materials is desirable. Some materials, like leaves, can be successfully composted in greater quantities.
Woody Prunings (best chopped into 1-3 inch lengths)	Vegetable Waste	Ash from Stove, Fireplace and Barbeque
Pine Needles	Flowers	Animal Products (meat, bones, fish, fat or grease)
Fallen and Dry leaves	Immature Weeds (no seeds)	Dairy Products
Non-glossy Shredded Paper	Grass Clippings	Sawdust from Plywood, Treated Wood (painted, pressure treated) or Exotic Hardwoods
Seedless Straw	Shrub Clippings (leaves)	Weeds with Seeds
Non-corrugated Cardboard cut into Small Pieces	Coffee Grinds	Diseased Plants - especially from the nightshade family such as tomatoes or potatoes.
Shredded Newspaper	Paper Coffee Filters	Human Waste
Shovelful of Soil or Finished Compost to Inoculate Pile	Citrus Rinds	Dog or Cat Waste
Old Potting Mix	Fruit Rinds	
Three Year Old Mulch	Tea Bags	
Small Wood Chips (less than 1 inch diameter)	Herbs	
Dry Grass		

What temperature should my center of my compost pile achieve?

The Environmental Protection Agency (EPA) has found that decomposing organic matter in aerated static piles exposed to 131 degrees farenheit for 3 days is enough to eliminate parasites, fecal bacteria, and plant pathogens as well as inactivete most weed seeds. However, piles need to be turned 5 times and maintained at 131 degrees farenheit for 3 consecutive days between turnings. Turning the pile regularly to allow cooler zones to mix with hot center areas is recommended to maintain 131 degrees farenheit.