



“Composting 101: Composting at home”

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What is Compost?

Compost is a natural fertilizer and soil conditioner. You can make it at home from organic materials such as kitchen scraps and garden waste. When put into a pile, these materials naturally decompose, turning into a rich, soil-like material called compost or humus. Composting is basically a way of speeding up the natural process of decomposition.

Great Reasons to Compost:

- **Reduce chemical fertilizers in your garden** - Save money and keep local waterways clean.
- **Improve your soil and your garden** - Compost is rich in organic matter, and is a natural soil builder.
- **Reduce the amount of food and garden waste** you put at the curbside.
- **Reduce greenhouse gas production** - When not composted, food scraps often end up in a landfill where they become a source of methane, a major offender when it comes to climate change!
- **It's easy and fun!** Once you start a compost pile, maintenance is simple.

Keys to Good Compost:

- **Balanced diet:** For optimal decomposition, the carbon–nitrogen ratio in a compost pile should be about 30:1. The ratio is by volume, not weight, so 30cm of carbon materials to 1cm of nitrogen materials. Carbon-rich (“brown”) materials include dry leaves, corn stalks, and sawdust. Nitrogen-rich (“green”) materials include food scraps, coffee grounds, and grass clippings.
- **Temperature:** Compost piles are most active at temperatures of 44° to 52° Celsius. Decomposition drops with the ambient temperature, and stops altogether if the pile freezes.
- **Oxygen:** Compost depends on the production of aerobic (oxygen-loving) bacteria, which do the work of decomposition.
- **Moisture:** Compost should be moist, but not wet—excess water will decrease oxygen levels, slowing down decomposition. Ideally, if you pick up a handful of decomposing compost and squeeze it, it should mold together but not drip excess water.

How to Use Compost:

- Add to potting soil for indoor seed-starting. Use about a 3:1 ratio of potting soil to compost.
- Use as mulch to protect plants' roots from summer sun and harsh conditions. This is known as top dressing, and watering and rain over time will also allow the plants to use the nutrients in the compost.
- Incorporate into your garden to improve soil texture: blend the compost into the soil to a depth of 6-12 inches, making sure it is evenly dispersed through the entire planting area.
- Make compost tea—a natural, organic fertilizer, made by mixing finished compost with water and letting it sit for a couple of days. Apply compost tea to leaves or soil to provide your plants with a boost of nutrients.

Ten Easy Steps to Making Compost

- 1. Select a site:** In a sunny, well-drained location, measure out an area to site your bin. Three square feet is an ideal bin size, and is the minimum size necessary to generate the required heat in the shortest possible time.
- 2. Purchase a bin:** Contact your municipality, a local store, or build your own rodent-proof compost bin.
- 3. Form a base layer:** In the bottom of the bin, arrange a six-inch layer of coarse materials such as sticks, prunings, and bark pieces. This will allow air to filter into the center of the heap without smothering the soil surface.
- 4. Alternate layers:** After the base layer is formed, you can start using your compost bin daily. As you accumulate kitchen or yard waste, add it to the bin in layers, starting with 8 – 10 cm of “green” organic matter. Follow this with more carbon-rich “brown” matter, and continue to alternate between green and brown.
- 5. Moisten:** Lightly water the pile if necessary—compost ingredients should be damp, not soaking.
- 6. Cover:** The compost pile should always be topped by a thick carbon (brown) layer. Using a lid will discourage rodents and other animals.
- 7. Monitor:** Each time you add material to the bin, give it a look and a sniff. If the pile has an unpleasant odor, or does not appear to be gradually shrinking, this indicates a problem with the pile.
- 8. Add more layers:** The pile will shrink as its contents decompose; continue adding material.
- 9. Check:** Compost is generally ready to use after about 2–3 months. This can vary depending on things like temperature and the materials used. Once your bin starts to get full, check to see if the bottom portion of the pile is ready to harvest in order to make room at the top.
- 10. Harvest:** Begin harvesting when the compost at the bottom and centre is decomposed. Dig out the compost with a shovel.

Troubleshooting

Symptom	Diagnosis	Treatment
Unpleasant odor	Lack of air	Aerate the pile by turning it or poking holes in it
Unpleasant odor	Nutrient imbalance (too much nitrogen)	Add more carbon material
Rodents and other pests	Food left exposed	Always bury food with a thick carbon layer; cover the pile with a lid
Nothing is happening	-Too dry -Too much carbon -Too cold	-Add water - Add green materials -Wait and / or move to a sunnier space

What to compost

Greens to compost	Browns to compost	Never compost
Coffee grounds	Ashes and bark	Coal ash
Food waste – veggies & fruit	Stems and twigs – cut up	Coloured paper
Garden waste	Corn stalks	Diseased plants
Grass clippings	Leaves	Inorganic materials
Hay	Shredded newspaper	Meat, bones & fish
Spent hops	Straw	Fats & oils
Manure	Pine needles	Dairy products
Seaweed	Saw dust	Pet droppings
Weeds not gone to seed	Shredded cardboard	Weeds gone to seed