

# COMPOSTING GUIDE

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The Municipality of Ovar is launching the home composting project "Ovar Composts" supported by the "RecolhaBIO" program from the Environmental Fund. If you have a small yard, garden, or a small cultivation plot, this project is for you.

As the waste production increases, awareness of environmental issues grows, and reducing the amount of waste sent to landfills is a goal. Composting is a natural process of decomposing organic matter through the action of microorganisms in the presence of oxygen. Composting is a simple and effective technique for waste valorization, resulting in nutrient-rich material. The compost can be applied to pots, seedbeds, vegetable gardens, and gardens.

This guide aims to inform and encourage composting practices. If you look at your household trash bin, almost half of the waste consists of biodegradable materials, suitable for your compost bin. Take advantage of your everyday organic waste to create nutrient-rich compost.

We count on the collaboration of everyone.

The Mayor of the Municipality of Ovar

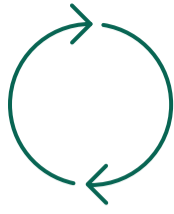
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www.cm-ovar.pt



## Poor maintenance of the composting process.

Problem	Cause	Solution
Smell of rotten eggs, ammonia, and leachate	Many wet residues, excess moisture, compaction, and anaerobiosis	Add dry materials. Turn more frequently.
Temperature doesn't rise	Few residues or dry pile	Place wet waste or moisten the pile.
Slow composting	Dry pile or large-sized residues	Moisten the pile more frequently or cut smaller residues.
Pile is very wet	Lack of dry residues and excess watering	Add dry residues and reduce the amount of water provided slightly. Turn the compost pile. Remove the composter lid to allow for drying.
Presence of fruit flies and pests (blowflies, rats)	Exposed food residues and lack of turning	Turn the material and cover the food residues with dry waste
Ants	Dry pile	Moisten the pile



7 Repeat steps 3, 4, 5, and 6 until our composter is nearly full

The **composting time varies**, ranging from 3 to 4 months to 1 year. A more careful maintenance of the composter allows for faster composting.



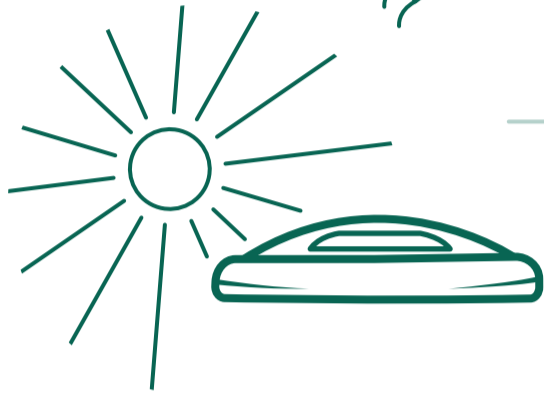
• **Monitor the temperature**

Temperature is the most important factor in determining whether the composting process is proceeding as desired. Heat production indicates the biological activity of the pile and its degree of decomposition, ranging from 25°C to 65°C. Elevated values are essential to maximize decomposition efficiency and material sanitization. You can check the temperature with a thermometer, or place a long iron rod in the pile and carefully check its temperature with your hand.

>>> 15 days



6 At the end of 15 days, gently **stir** with a pitchfork/rake without pulling the branches placed at the base.



5 **Aerate** the pile with the aerator every time you add waste to provide oxygen to the pile. Then, put the lid on. **Optimal temperature ranges from 25°C to 65°C.**

• **Oxygen** is necessary for the microorganisms to break down the waste.



4 Cover with double the amount of dry waste and water lightly to maintain some moisture content. **Important:** Always cover wet waste with dry waste to prevent fruit flies. Use half the amount of dry waste you initially added.

During monitoring, to check for moisture, perform the "ball test," which involves taking a small amount of the pile and shaping it into a ball, then squeezing it. **Moisture content should be between 40 and 60%.**

How to check moisture content:  
a) If it's not moldable, doesn't take shape, and doesn't release water – the pile needs watering.  
b) If it molds perfectly in your hand, holds its shape, and leaves some residues on your hand – moisture level is correct.  
c) If it clumps together completely, leaves many residues on your hand, and releases excess water – it's too wet.



3 Place a layer of chopped wet waste. Cutting wet waste into smaller pieces speeds up the composting process by increasing the surface area in contact with microorganisms. Place a layer of chopped wet waste.

**List of wet waste:**

- Fruit peels and rotten fruit;
- Vegetable scraps;
- Coffee grounds;
- Dry or moldy bread;
- Dry cakes;
- Leftover cooked pasta and rice;
- Tea bags;
- Eggshells;
- Weed without seeds;
- Fresh grass;
- Flowers;
- Green manure (clover, alfalfa).



2 Place a layer of **dry waste** 5 to 10 cm thick and a handful of soil, as this amount will contain enough microorganisms to initiate the composting process.

**List of dry waste:**

- Greasy kitchen paper (vegetable paper and napkins);
- Paper coffee filters;
- Dry leaves and plants;
- Small branches and twigs;
- Pine needles;
- Cardboard egg cartons;
- Dry grass, hay, and straw;
- Untreated wood shavings;
- Shells of nuts;
- Natural fibers (sisal or cork);
- Newspapers, writing/printing paper;
- Corrugated cardboard;
- Wood ash.

1 Place the composter in a **shaded area** to avoid high summer temperatures. It should be in **contact with the ground** for proper drainage, allowing water to drain and microbial activity to occur. Cut a layer of thick branches and place them at the bottom of the composter.