



# **COMPOSTING GUIDE**

## FOR FOOD AND GARDEN WASTE



## COMPOSTING GUIDE FOR FOOD AND GARDEN WASTE

**By composting food waste and garden waste, you are doing an environmental good by reducing the amount of waste you produce. And best of all, composting gives your garden and yard a truly natural fertilizer and soil improver.**

### **What can you put in the food composter?**

Separate the waste you take to the composter already in your kitchen into its own bin. You can put decomposable food and kitchen waste and fibrous materials in the food composter. Remember to chop up any excessively large pieces into smaller pieces, as this will speed up the decomposition process.

General waste management regulations of Savonlinna can be found at [savonlinna.fi/asukas/asuminen-ja-ymparisto](https://savonlinna.fi/asukas/asuminen-ja-ymparisto)



## SUITABLE FOR COMPOSTING:

- Food waste and spoiled food
- Peels and pieces of vegetables, fruit and berries
- Coffee and tea grounds with filter bags
- Eggshells crushed and egg cartons torn out
- Meat and fish offal
- Small quantities of liquid cooking fat absorbed in kitchen paper
- Small quantities of kitchen paper and napkins
- Cut flower soil, plant parts and cut flowers cut in pieces
- Small quantities of shredded natural fibres
- Wood-based pet litter and droppings
- A bucketful at a time of garden waste

## Not suitable for composting:

- Liquids, broths, fats or sauces in large quantities
- Large bones
- Ash and lime
- Cigarette butts, cleaning dust and chewing gum
- Wet wipes and cotton buds
- Large quantities of kitchen paper and napkins
- Biodegradable plastic packaging and disposable containers
- Biodegradable nappies and sanitary towels.



# HOW TO COMPOST SUCCESSFULLY

## Well planned is half done.

To start composting food, you need:

- A sorting bin for the kitchen
- A composter
- A mixing agent (ready-made or homemade) and a container and a bucket for the mixing agent
- You may need: a digester, a pitchfork, a mixing stick, a shovel, a wheelbarrow, a composter, or a composting frame for post-composting.

## MEASURE CORRECTLY

Size the composter so that it does not need to be emptied until the waste has had time to decompose for at least 6-8 weeks. A family of four will need a composter of about 200-300 litres for year-round use. You can also use two composters: when one is filled, the soil in the other one matures.

## BUY OR MAKE YOUR OWN COMPOSTER

Food waste can only be composted in a closed, well-ventilated composter designed for the purpose, with pest-proof access. You can buy or make your own composter from wood, polystyrene and netting.

For year-round composting, it is best to use a thermally insulated composter. Freezing will not ruin the compost, but it will start up automatically when the weather warms up. You can put biowaste in a frozen composter, too. If the composter is not thermally insulated, consider the extra space required for the composter volume due to freezing. If you wish, you can take the frozen and full composter to the Nousiala waste station for emptying.

## REMEMBER THE LOCATION

Remember that the composter must be located, constructed, and maintained in such a way that its use does not cause any harm or danger to health or the environment. The composter must be at least 15 metres from the nearest well and water area and it cannot be placed less than 5 metres from the boundary of the plot without the consent of the neighbour.

## SETTING UP A COMPOSTER

The very first thing to do is to put about 10 cm of coarse mix in the bottom of the food composter. If you add fresh compost or soil to the bottom layer, you will encourage the development of a suitable microbial population for the compost. Each time you put bio-waste into the composter, add enough mix to cover the bio-waste completely. A good amount of mix is at least half the amount of biowaste.





You will need about 10-15 litres of compost mix per month. You can buy mix in the shops, but good binders are also made from brushwood chips and raking waste. It helps prevent odour and fly problems and ensures oxygen supply for small organisms.

## COMPOSTER MANAGEMENT

The composter will start when it has accumulated around 30-50 litres of waste. In the beginning, you can use compost starter as an aid. The temperature of a working composter is between 40 and 60 °C. Once the composter has started, stir it for the first time after about two weeks and then every couple of weeks.

It is a good idea to monitor the humidity and temperature of the composter. A properly maintained composter will not smell bad. A rotten smell indicates that the compost is too moist and lacking in oxygen. The compost is suitably moist when you squeeze the compost mass in your fist, and it resembles a washcloth that has been squeezed dry. Decomposition is usually faster in the middle of the composter, so you can turn the compost from the sides to the middle when mixing, but not too deep.

Empty the compost at the latest when the available composter is full. Remember, however, that emptying should not be done until the waste has been left to decompose for at least 6-8 weeks.

## MATURITY OF COMPOST

The use of compost mulch is influenced by its degree of maturity. Raw compost that has been composted for about 2-5 months can already be used as a covering material, for example at the roots of shrubs. Unfinished compost is coarse and may contain substances harmful to plants, so it should not encounter plant roots.

To be suitable as a growing medium, the compost requires about six months of post-ripening, for example under a tarpaulin or in garden compost. Mix the compost soil, even when it is finished, with, for example, peat. The finished, mature compost is dark brown or almost black in colour and smells like soil.

## HOW TO COMPOST GARDEN WASTE

There is usually so much garden waste that you should get a separate composter for it. The composting principle is almost the same as for food waste. However, there is no need to add a mixing agent to the garden waste compost.

## WHAT CAN YOU PUT IN GARDEN WASTE COMPOST?

Do not dispose of garden waste in parks or in other public or private areas. Garden waste that is not composted or otherwise disposed of on your own must be taken to a place designated by the municipality or Savonlinnan Seudun Jätehuolto Oy.

If you take garden waste containing invasive species and diseased plants/parts of plants to the waste station, please pack it separately from other garden waste in waste bags. You must inform the staff at the waste station in advance of the delivery and its contents.

### YOU CAN PUT IN GARDEN COMPOST:

- Plant stems, leaves, roots and dead flowers
- Grass and garden raking waste
- Twigs and branches in shredded form
- Moss and lichen

### YOU CAN PUT IN SHREDDED OR COVERED FORM:

- Mummified apples
- Potato tubers with scab
- Currant and rowan leaves with rust disease
- Plants with leaf spot and grey mould
- Currant and gooseberry shoots and leaves with caterpillars/green flies
- Plants damaged by downy mildew mite

**Note:** These plants should also be shredded and covered in the composting mass to start the decomposition process quickly

### YOU CAN PUT IN SHREDDED OR COVERED FORM:

- Currant twigs with gall mites
- Strawberry bushes and runners with mites
- Leaves and shoots with mildew
- Infected with plague and viroid potato tubers.

### DO NOT PUT IN:

- Tubers or soil infected by potato cyst nematodes
- Rhizomes or bulbs damaged by cabbage, onion, or carrot fly
- Roots or soil affected by clubroot
- Onions with blighted bulbs
- Onions with ring rot
- Spring waste from the root cellar
- Roots or seeds of perennial weeds

## IF YOU PUT WEEDS/OTHER SPECIES IN THE COMPOSTER, PLEASE NOTE:

- Perennial weeds with roots that have been uprooted will lose their germination within a few days in a composter with a temperature of at least +55°C. Remember to dry them in the sun before putting them in the compost and place them in the middle of the compost where it is hottest.
- Garden waste containing alien species (e.g., giant hogweed and Indian balsam) should be disposed of on your own plot. Digest the waste in a sealed plastic bag before composting, as composting does not always destroy invasive species or their seeds. Use a closed composter. You can also take the invasive species to the waste station.

## YOU WILL NEED THESE FOR COMPOSTING GARDEN WASTE

If you decide to make use of garden waste by composting, you will need the following equipment:

- a composter or composting frame (the composter can be uninsulated, outside urban areas you can compost in a pile)
- starter (commercial compost starter, manure, green grass clippings, nettle water or urea)
- wheelbarrow, garden fork and shovel

## LOCATION OF GARDEN COMPOST

Remember that the composter must be at least 15 metres from the nearest well and water area, and it cannot be placed less than 5 metres from the boundaries of the plot without the neighbour's consent. Also, choose a location where it is easy to fill, turn and empty the compost. The best location for a garden composter is a semi-shaded flat area that does not accumulate water.

## SETTING UP AND MAINTAINING A GARDEN COMPOST

Setting up a garden compost is surprisingly easy. Here are some tips to help you make it a success:

- Place twigs, branches, or plastic drainage pipes at the bottom of the compost to maintain air circulation under the compost.
- Add different types of garden waste on top of the base layer in layers: alternating between nutrient-poor and nutrient-rich materials.
- Composting is accelerated if you sprinkle mulch, partially decomposed compost or compost starter between the layers. Also remember to water the compost occasionally if it dries out.
- Water the finished compost well and cover it with hay. Cover the compost frame with plywood or a lightweight tarpaulin, for example.
- During autumn rains, cover the open compost with a lightweight tarpaulin or plastic sheeting with the skirts left off the ground.
- Turn the garden composter at least in spring and autumn.

## GARDEN WASTE MAKES GOOD SOIL

Horticultural compost decomposes in 1-3 years. When the soil is fully mature, the starting materials are no longer separable. However, you can already use the semi-mature compost as a cover material and fertilizer in spring. Only fully mature compost is suitable as a growing medium, and even then, it is a good idea to mix it with other soil or peat (ratio 1:3-5).



## CHALLENGES



### THE CHALLENGES OF COMPOSTING

Compost works well when micro-organisms, bacteria, fungi and filamentous fungi that do the decomposing work have the right conditions: adequate oxygen, moisture and nutrients. Below are some of the most common challenges associated with composting and solutions to them.

#### COMPOST SMELLS

##### **Compost smells bad**

There is too little oxygen in the compost. Add coarse mix to the compost and stir. Also check that the air circulation in the composter is working.

##### **Compost smells of ammonia**

The compost temperature is probably too high. Nitrogen from nutrients evaporating into the air is causing the smell. Do not stir hot compost but add a layer of unfertilised and uncalcified peat about 5 cm above the surface. Peat will bind nutrients. In future, use a compost mix that includes peat.

#### UNINVITED GUESTS HAVE APPEARED IN THE COMPOST

##### **There are ants in the compost**

If you have ants in your compost, it is usually too dry. Water the compost

##### **There are flies or fly larvae in the compost**

Flies are attracted by the foul smell of compost and uncovered waste. Almost every composter will find light-coloured fly larvae and brown cocoons in the compost at some point. The problem is solved by mixing the compost and adding a mixing agent. Turn the caterpillar spot to the hottest part of the compost. Larvae cannot withstand temperatures above 43°C.

In the future, cover the waste carefully and use enough mixing agent. Also remember to clean the composter lid and seals regularly and, if necessary, wash the composter completely.





### **Moles, mice and rats in the compost**

Remember that composter must be rodent proof. If the compost smells bad, add mixing agent, and stir. In future, use enough mixing agent and always cover the waste with mixing agent.

If more than one rat is found, you should report it to the municipal health authorities, who will also give you advice on how to get rid of rats.

## **COMPOST TEMPERATURE PROBLEMS**

### **Compost does not heat up**

If the compost is not warm enough, it is too dry and/or has too few nutrients. Add water to the compost and stir. You can increase the nutrient content of the compost, for example by using compost starter.

### **Compost freezes**

Freezing does not spoil the compost, and you can put bio-waste in frozen compost. However, there must be enough space in the composter for both the bio-waste and the additional space needed for freezing. Remember to also use compost mix.

As the weather warms up in the spring, the compost will get up and running. You can speed up the thawing process by keeping the lid open, pouring in about 10 litres of hot water or placing a hot water canister inside the composter. Stir the compost as it thaws, adding more mixing agent or water if necessary.

A well-insulated composter will prevent the compost from freezing. You can also use snow as an insulator and adjust the air ducts to a smaller size.



## FOOD WASTE COMPOSTER

- Food scraps and spoiled food
- Vegetable and fruit peelings and pieces
- Coffee and tea grounds with filter bags
- Eggshells crushed and cracked egg cartons
- Small quantities of liquid cooking oil absorbed in kitchen paper
- Meat and fish offal
- Small quantities of kitchen paper and napkins
- Cut flowers, parts of plants and cut flowers cut in pieces
- Small quantities of shredded natural fibres
- Wood-based pet litter and faeces in biodegradable bags and small quantities of sand
- Garden waste, one bucket at a time

## NOT ORGANIC WASTE

- Liquids, broths, fats, or sauces in large quantities
- Large bones
- Ash and lime
- Cigarette butts, cleaning dust and chewing gum



## GARDEN COMPOST

- Plant stems, leaves, roots and dead flowers
- Grass and raking yard waste
- Twig shreds
- Moss and lichen

### Shredded/covered can be put

- Currant twigs with gall mites
- Strawberry bushes and runners with mites
- Leaves and shoots with mildew
- Infected with plague and viroid potato tubers

### In a functioning thermal composter

(small quantities)

- Mummified apples
- Scabby potato tubers
- Currant and rowan leaves with rust disease
- Plants with leaf spot and grey mould
- Currant and gooseberry shoots and leaves with caterpillars/green flies
- Plants damaged by downy mildew mite

## DO NOT PUT IN

- Tubers or soil infested by potato cyst nematodes
- Rhizomes or bulbs damaged by cabbage, onion, or carrot fly
- Roots or soil affected by clubroot
- Onions with blighted bulbs
- Onions with ring rot
- Spring waste from the root cellar
- Roots or seeds of perennial weeds

## CONTACT INFORMATION

### NOUSIALA WASTE STATION

Nousialantie 11  
57230 Savonlinna

### KERIMÄKI WASTE STATION FOR SMALL QUANTITIES

Kalatie 6  
58200 Kerimäki

### RANTASALMI WASTE STATION FOR SMALL QUANTITIES

Sepäntie 26  
58900 Rantasalmi

### SULKAVA WASTE STATION FOR SMALL QUANTITIES

Tiemestarintie 2  
58700 Sulkava

## MORE INFORMATION

[www.rippee.fi](http://www.rippee.fi)

You can find the nearest recycling point at  
[www.kierratys.info](http://www.kierratys.info)

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