

Green Johanna

A handbook on the art of composting.



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Green Johanna - Hot Composter

Thank you for purchasing a Green Johanna. We hope you will be happy with your purchase. If you have any queries about your product, please contact Green Johanna UK Ltd. Phone number +44 (0) 115 911 4372 where a member of our Sales Team will be able to help. 0800 731 2572 (UK residents only)



Creating a recycling society.

Food waste and garden rubbish don't disappear just because we've thrown them away. Too often, they are piled in with general plastics and other household detritus and condemned to become landfill or to be incinerated. But rules are gradually being introduced to encourage everyone to pay more attention to exactly what they are throwing away, and to consider the practical alternatives that are available.

So whether you need to comply with rules, or simply because it is fun and economical, it's a good idea to learn how to compost.

Organic waste breaks down naturally. Plants absorb nutrients, grow, die and decay ... thus creating new nutrients. Properly managed, more than half of the mountain of domestic and garden waste could be dealt with in this way.

Composting not only reduces the amount of waste in the rubbish bin, it also lowers the cost of rubbish collection. Important nutrients are returned to the soil and expensive artificial fertilisers become redundant. Most important, composting does the rest of the world a great service by reducing the waste mountain.

This is Green Johanna.

Green Johanna is a unique closed, hot composting container, manufactured in Sweden. It has good ventilation, is easy to empty and the WINTER model comes with an insulating jacket which allows successful composting all year round.



The Lid

regulates the container's ventilation system by covering or uncovering the 4.5 mm diameter ventilation holes to adjust air circulation and temperature.

When assembling

When assembling the Green Johanna, the marks (*see figure 1A on p. 5*) on each section of the bin must be lined up.

The round shape

The round shape ensures that there are no cold corners and that heat is spread more evenly through the compost.

The cone-shaped design

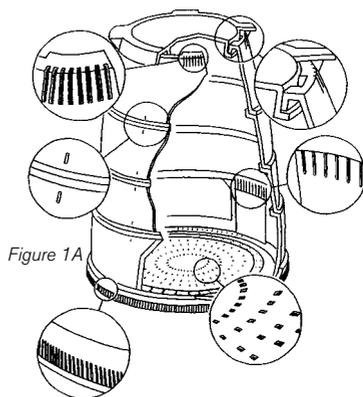
ensures that the compost doesn't stick to the sides but sinks towards the centre. This lets air circulate, oxygenating the compost.

Sliding doors

Sliding doors on two sides make it easy for you to inspect progress and to remove the compost when it's ready. The simplest way to remove the compost is to rake it out with the stirring stick.

The base plate

has a series of 4.5mm diameter holes which allow good ventilation but keep out rats and mice. Four inward-facing air vents lead in from the base plate, allowing air to flow upwards into the container.



The winter jacket (Winter model only)

is made of foam polyethylene. It should be fitted when the average outdoor temperature falls below 5°C and removed when it is anticipated it will consistently be above 10°C. If you leave it on when the weather warms up the core of the compost will get too hot and the composting micro-organisms will die.

The stirring stick

helps aerate the compost effectively. It is made of wood and has metal blades at one end and can be used to agitate the top layer (10–15 cm/4–6 ") of material to encourage the composting process.

Warranty

The Green Johanna has a five-year warranty in respect of defective materials used in manufacture.





Why make compost?

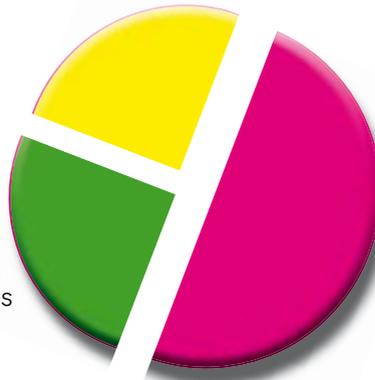
The waste mountain is a huge and expensive problem, yet more than half our domestic rubbish is biodegradable and can be composted to produce, free-of-charge, natural nutrients for our gardens. Much of the balance such as paper, glass, cans, textiles and some plastics can be recycled.

Recyclable

Paper, glass,
sheetmetal, textiles

Other waste

Plastics, combustibles,
other non-combustibles



**Suitable for
composting**

Start at the kitchen sink.

It's really not hard to separate waste that can be composted from that which can be recycled or must be disposed of in other ways. Some families already have three kitchen waste bins, colour-coded or otherwise identified for this purpose.



Into one put all food waste for composting. This can include *vegetables, fruit, dairy products, bread, bones, fish remains, soup and egg shells*. You can add *coffee grounds, tea bags, egg cartons, wilted flowers and even pot plants* – although not the pots!

Out in the garden, *grass clippings, leaves, twigs, weeds, bark and other living matter* can be composted. Large items should be chopped into small pieces, to give the micro-organisms a larger surface area to work on and so produce compost more quickly.

Food waste:

- vegetables
- fruit
- dairy products
- bread
- meat/bones
- fish remains
- soup and egg shells
- coffee filters
- tea bags
- household paper
- egg cartons

From the garden:

- pot plants
- wilted flowers
- grass clippings
- leaves
- twigs
- weeds
- bark
- etc.

What to do with the Green Johanna.

1. Stand the Green Johanna

on a flat area of grass or earth in a shady corner of the garden. It should be in as sheltered an area as possible and not too far from the house.

2. Open the lid

and put in sufficient twigs or other coarse garden material to cover the base plate by 10 to 20 cm. Follow this with a layer of fine garden waste such as grass mowings, followed by a layer of mature compost or soil. You can now start to add kitchen waste. In winter, add one or two bucketsful of mature compost to keep the process going.

3. It's really important to layer

garden and household waste properly. The best combination is one part garden waste or soil to two parts of kitchen scraps. Don't let any one layer get too thick – cut the material as finely as possible and mix it well, as this helps to speed the composting process. Best practice is to cover each addition of household waste with a layer of garden waste – chopped hedge trimmings, fallen leaves and so on.

4. Every time you add new material

mix and aerate the top layer of compost using the stirring stick. This helps the micro-organisms which live and work in the compost to do their job properly. About once a month, aerate the whole pile more thoroughly by moving the stirring stick up and down in the compost to prevent it compacting.

5. To keep the process going

smoothly throughout the year, save some of your autumn prunings and leaf sweepings to add to your Green Johanna during the winter months.

6. Depending on the conditions

the compost will be ready to use after four to six months. It will look and feel like soil, smell good, is pleasant to touch and crumbles readily. You can remove the compost from the Green Johanna via the two doors at the base. This ensures you harvest the mature compost (humus), allowing the upper layers to sink down and continue the transformation process. It's even better if you have two Green Johannas, because you can alternate harvesting, allowing the compost to mature fully. Try to organise the process so you have the humus ready for spring, when your plants need the nutrients.

7. Spread the humus

around trees, bushes or on the vegetable patch and fork it into the soil. If you want to use it for hanging baskets or pots, mix it in equal quantities with garden soil. In autumn, you can safely dig half-ready compost into the earth to improve the organic matter in the soil. If you are not ready to use the compost when the Green Johanna is full, remove it as shown and store it in a covered heap until you need it.

8. For plant condition and soil quality

there is nothing to beat the humus that comes from composting both garden and kitchen waste in a hot composter. The compost produced in Green Johanna is a rich nutrient supplement for your garden.



The essential ingredients.

Air

The micro-organisms that live and work in the compost need oxygen. Without it, the compost will smell bad and the process will be delayed or even stop altogether. Ensure you add the waste material loosely and stir it monthly so that oxygen is always available.

Heat

As the micro-organisms break down the waste, they generate heat. As the temperature in the compost fluctuates, the types of micro-organisms present also change. This diversity is important to achieve successful composting.

Water

Composting can't begin in the absence of water, so it is important to make sure that all materials added to the Green Johanna contain some moisture – though it shouldn't be necessary actually to water the contents. The compost should be about as damp as a squeezed bath sponge.



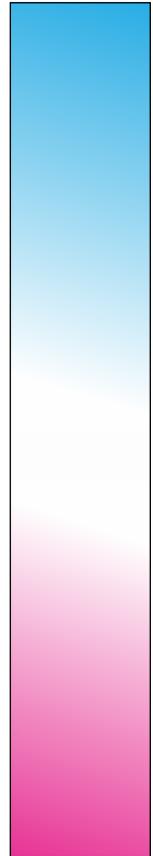
Carbon-nitrogen balance.

Micro-organisms need nutrition in the form of carbon and nitrogen to be able to work. This is why you mix garden waste with kitchen waste. A good balance is one part carbon-rich material (garden waste) to two parts nitrogen-rich material (kitchen waste).

Carbon

- Sawdust*
- Garden soil*
- Shredded newspaper*
- Chopped twigs*
- Dry leaves*
- Bark*
- Straw*
- Green leaves*
- Flowers*
- Weeds*
- Fruit*
- Carrots*
- Potatoes*
- Mixed food waste*
- Fertiliser*
- Grass mowings*
- Meat and fish*

Nitrogen



The creatures in you compost.

For successful composting you need heat – but not so much that the micro-organisms are killed. The Green Johanna is self-regulating when positioned in the shade, generating the ideal temperature for the growth of micro-organisms and larger insects. In winter, the use of a removable (optional) jacket helps to maintain appropriate temperatures inside the unit. A close look at your compost will reveal, among other inhabitants:

Mite

the compost's cleaner, smaller than a grain of sand. Leaves, rotten wood and old flowers are all part of its diet.



Worm

eats decaying vegetable and animal matter and its paths help to aerate the compost.



False-scorpion

this carnivore with glands in its front claws lives on nematodes, worms and larvae.



Wood-louse

feeds on decayed material in the compost. Its delicate, gill-like breathing organs require moisture.

Springtail

as many as 100 million may be found in one cubic metre of compost. Springtails eat most compost material. They get their name from the “jumping fork” under their stomach, which launches them into the air.



Nematode

lives on decaying plants, bacteria and fungi. One handful of compost can contain several million nematodes, invisible to the naked eye.



Centipede

a vegetarian which lives on decaying plant material.



Earwig

a nocturnal creature. Some are carnivores, others eat almost anything.



The above are only a few examples of creatures that live and work in your Green Johanna.



Problems and how to deal with them.

Flies in the compost

Cause: insufficiently covered, nitrogen-rich content

Remedy: stir the surface layer and cover with soil or garden waste.

Ants in the compost

Cause: compost too dry

Remedy: carefully add water to the compost and stir thoroughly – it should be as damp as a squeezed bath sponge.

Compost smells of ammonia

Cause: too much nitrogen-rich waste, such as fresh grass-mowings, meat or fish

Remedy: add a layer of garden soil or shredded newspaper and mix in, then cover with some of the half-composted material from lower-down the Green Johanna.

Compost smells rotten or like a rubbish bin

Cause: Compost is too compacted or poorly aerated

Remedy: Add some finely chopped hedge clippings or other coarse garden waste and stir to ensure it is properly aerated. The compost may also be too wet; if this is the case mix in materials with good absorption qualities such as shredded newspaper.

Activity in the compost has stopped

Cause 1: Too much carbon-rich material, such as dry leaves, chopped twigs or newspaper.

Remedy: add nitrogen-rich material such as fresh grass mowings or kitchen scraps and mix in.

Cause 2: Compost contains material that is too coarse, such as twigs, so it becomes too airy and dry.

Remedy: Remove this material and either discard it or chop more finely and re-mix in thoroughly.

Cause 3: There is too little material in the compost for the micro-organisms to work on.

Remedy: Add more material to the heap, maintaining the carbon-nitrogen balance.

Cause 4: The compost is too compacted and the air cannot get in.

Remedy: Stir properly and, if necessary, add finely chopped twigs or other coarse material.

Cause 5: The compost is too dry

Remedy: Water carefully and stir thoroughly – it should be no wetter than a damp bath sponge.

Cause 6: The compost is too cold

Remedy: When the weather is cold it is important to add new waste materials as often as possible – preferably every day – and to keep the compost properly aerated. If the average daily temperature falls below 5 deg C, you should put the insulating jacket on the Green Johanna.



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