

# COMPOST BASICS

BEGINNERS GUIDE TO GARDENING



# AN INTRODUCTION TO COMPOST

When planting and growing anything in the garden, one of the words that you may hear a lot is 'compost.' While you may know what compost does generally, there may be a few questions about what compost is or how to use it properly. There are many different types of compost and all can be used in different ways and for different plants - most of the time, it's not a 'one-size-fits-all' situation, though there are a lot of useful all-purpose or multi-purpose composts, sometimes you will need additives to make the conditions just right for whichever plants you choose to grow.





# WHAT IS COMPOST? AND WHICH COMPOST SHOULD YOU USE



Compost is a soil additive created from decomposed organic matter which would normally be regarded as waste. The process of composting takes this organic matter and reduces it down, over time, to create a soil conditioner (compost) which can then be applied to all sorts of plants to encourage rapid, healthy growth and improve the overall soil quality. It also helps in the recycling of brown and green waste - mostly using a compost bin - and makes the perfect fertiliser due to the composting process retaining all of those nutrients.

## **What compost should you use?**

Compost is beneficial in many ways, as being able to use compost means that you don't have to worry too much about the condition of your existing garden soil. Of course, it is good to find out what type of soil you have before beginning, but compost being added to this soil can change the fertility of the soil and its overall composition. There are many different types of compost which all do different things and have different properties, so they are recommended for different plants entirely.

# THE 5 MAIN TYPES OF COMPOST:

## 1. Peat compost

Peat compost has been used for years for many different purposes. It is a naturally occurring substance made from decaying vegetation - most of the time from sphagnum moss or sedge - and while it is naturally low in nutrients, it provides an aerated, warm environment for roots to grow in. This medium can hold moisture and nutrients while avoiding the roots from getting too waterlogged, perfect for avoiding complications that a lot of plants get from root rot.

Most peat compost mixes will have other additives, either to add nutrients or texture for added drainage. Commonly, you will find a peat compost mix with sand, grit, vermiculite or perlite and a range of added nutrients, too. The exact ingredients used to make the peat compost mix available will vary depending on its target use. There are peat compost mixes which will benefit your plants as seeds and some that will keep mature plants growing strong, though a lot of people are making a shift from using peat-based composts as there is an environmental impact to be considered.

Peat is found in lowland bogs. Using peat from these peat bogs on a large scale (such as in the Horticultural industry) can be damaging to those wetland environments. The main issues come about when we are using more of this naturally occurring peat than is being replenished, similar to a lot of naturally occurring resources. This has led to a lot of companies offering peat-free alternatives or peat compost mixes with lower peat content.





# 5 MAIN TYPES OF COMPOST:

## Loam compost:

Loam compost mixes contain a certain amount of loam soil in their mix, whereas a lot of compost mixes actually contain no soil at all. Loam soils contain an even balance of minerals. These loam soils are composed of 40% sand, 40% silt and 20% clay. The benefits of these components can really help with the growth of some plants. Sand is good for aeration and drainage but doesn't do too well for water retention, which is why a good balance with silt and clay helps. Clay particles in the soil are tiny and compact well while generally being nutrient-rich, whereas silt is less nutritious than clay, but retains moisture well.

Some of the main reasons that loam compost is highly recommended are that it retains nutrients and water really well while still being well-draining. This means that the roots will be kept moist while reducing the risk of root rot. These types of compost are especially good when used in a vegetable garden or for mature plants which will stay situated for a long period of time. It is always important to remember that with loam-based composts, a lot will have a different makeup, with different additives and nutrients added. As such, this means that not every loam compost is good for every type of plant and this is something to be wary of before planting up all of your plants in a loam compost.



# 5 MAIN TYPES OF COMPOST:



## **Peat - free compost:**

As briefly mentioned above, a lot of gardeners and horticulturalists are trying to steer away from the overuse of peat that we have seen in recent years. This is due to the lack of sustainability with the use of peat compost. Thankfully, in more recent years, there has been an influx of peat-free alternatives to aid those gardeners who wish to plant out their gardens in a more sustainable way. Peat-free compost simply refers to any compost which does not contain peat moss, though there are some peat-free alternatives that are used specifically in order to try and recreate the properties of peat compost.

Some of the materials added to compost as a peat substitute are perlite, a volcanic glass that expands and becomes porous in higher levels of heat; coconut-based materials such as coco pulp which has similar properties to white peat and can help aerate the substrate. There are other alternatives that are being used such as bentonite or expanded clay - bentonite is also a clay mixture - and wood fibre or chips. All of the alternatives are also naturally sourced, though it is generally reported that they do not impose such a risk to the local wildlife when being sourced.



# 5 MAIN TYPES OF COMPOST:

## **Organic compost:**

Organic compost is generally what most new gardeners will think of - this is the compost that you can make at home and holds a lot of nutrients which is extremely beneficial for aiding in the growth of your plants.

These composts are made up of rotted organic materials or green waste such as fallen leaves, and grass clippings and more or brown waste such as food scraps. The best way to make your organic compost is in a compost bin, just by adding any of your garden or food waste each time you find some leftovers lying around.

The benefits of using organic compost - even better if you've made it yourself - are that the nutrient levels tend to be a lot higher than a generic compost due to the composting process which may not necessarily retain as many nutrients. This can mean that you won't need to worry as much about adding feed or additional fertiliser. The organic matter in the compost can also retain water very well while keeping the substrate aerated which can help the nutrients travel further. These composts can boost the fertility of the soil, reduce greenhouse gas emissions and provide crops with an extra boost from the organic matter.



## **All/Multi purpose compost:**

All or Multi-Purpose composts are generic mixes with a well-balanced mix of nutrients which are generally beneficial to most plants, though if you have plants growing in your garden that may need a more specialised mix then it is usually best to have fertiliser or feed on hand as well. This can ensure that you are giving your plants everything they need. That isn't to say that you can't use multi-purpose compost on its own, you just need to make sure you know what each plant you are growing will need to grow to its full potential.

Multi-Purpose composts are found in most garden centres and each will have a different composition, so be sure to check the contents and ingredients before using them all over your garden as you may need to think about what else you can do to boost the properties of your soil. These composts are especially good for topping new raised beds, mulching existing beds or borders and filling containers of plants which have no real specific requirements.

# MAKING YOUR OWN COMPOST:

With the cost of living rising and the call for change when it comes to climate change and environmental factors, one of the best ways to cultivate your green thumb on a budget is to start making your own compost. Compost can enrich the soil that your plants grow in, aiding in growth and where edible plants are concerned, a higher crop yield, too. Composting doesn't have to be a mystery and it can really help reduce your waste output, reusing and recycling all of those green and brown materials which may have previously been put in the bins for collection.

## Why bother?

Most councils offer green waste and brown waste collection services, though if you can start composting this will reduce your environmental impact further. Bin collections are associated with heavy transportation and other environmental impacts, so if everyone were to start turning their food scraps and garden cuttings into compost, this would lessen the impact we were having on the environment which is at the forefront of a lot of people's minds these days.



## When to Compost?

Composting can be done all year round, as there will never be a shortage of materials that you can use on the compost pile or in the compost bin. Suitable materials for composting include fruit and vegetable peelings, grass cuttings, fallen leaves and other green and brown materials, all of which are known as organic matter. The key time of year for composting is late summer to early winter, though, as temperatures are high in the late summer which will accelerate the composting process, and grass clippings, fallen leaves and more can be added to the compost in the autumn/early winter to boost the nutrients.



# HOW TO COMPOST?

When starting up compost heaps or compost bins, there are a few things to keep in mind. The location and container can really aid or hinder the composting process. Bins will help to retain warmth and moisture which will speed up the breakdown of organic materials like your food scraps or grass clippings. However, open compost heaps will do the trick eventually, it will just take longer as there is less temperature regulation. If you did decide to use a compost bin, any of the marketed compost bins available will work, as long as they keep out the rain, keep in some warmth and allow drainage and aeration. If you really wanted to DIY the composting process, you could even build your own compost bin or container out of wood.



## **What to add to the compost heap?**

A lot of people will think that just chucking everything on the compost heap will do the trick, though there are a few things to be mindful of when making your own compost. Balance is key when it comes to any soil additive or compost and this is just the same when it comes to homemade compost made of organic materials. When adding green materials such as grass clippings and food scraps to the compost pile, these will contain higher levels of nitrogen which will speed up the composting as they heat up the pile and accelerate the breakdown of the materials. Nitrogen is also good for growing plants as it will aid in photosynthesis giving a better green pigment to the growing plants.

Brown materials, on the other hand, are more carbon-rich. These materials will include dry leaves, twigs, plant stalks and more - all the rest of the garden waste. Adding these to the compost pile will provide food for the microorganisms in the composting process to consume and digest. The carbon content in compost will also affect plant growth in that it can result in healthier and more productive plant growth.

Compost piles also need moisture and oxygen. Water will help the materials to break down and oxygen will regulate the temperature, eliminate some foul odours and also break down any pesticides, etc. used on the garden waste before adding to the compost pile.

# COMMON COMPOSTING MATERIALS:

## Common Composting Materials

### Green Materials (Nitrogen-rich)

- Grass clippings
- Soft, herbaceous plants (generally annual plants which will die back)
- Whole fruit and vegetables (or just their peels, whichever is left over)
- Uncooked food scraps
- Certain pet waste or bedding

### Brown Materials (Carbon-rich)

- Cuttings and hedge trimmings (best added to the compost pile after shredding)
- Bark and woodchip
- Leaves (particularly bountiful in the autumn)
- Paper and card (torn up or shredded is best)
- Straw and hay
- Plant stems or twigs (if they are quite large, it is best to break them down first)



# WHEN IS IT READY?

Composting can take 6 months to 2 years to be ready. Turning the heap will enable you to see when it is ready, as well. When it is done, you will find a dark brown, crumbling soil-like substance which smells like damp earth.

You will find that, over time, there will still be some un-rotted organic materials in the compost heap or bin, but this is nothing to worry about. Any matured compost can be taken out and used in the garden, while any remaining materials can simply be left in to break down further.

Leaving the un-rotted materials in there and continuing to add more food scraps and other organic materials will eventually give you a steady flow of compost production, especially if you make sure to get that perfect balance of brown and green materials previously mentioned.

## Tips

To get the most out of your composting, it is recommended to position the bin or heap in the sun or light shade, which can speed up the process due to the heat.

If the compost heap becomes too compacted, it will slow down the composting process and the best way to counter this is to turn the heap. Try adding quite a lot of material at once and then once a month or so, turn the heap over so that there is more air added in - this will help everything mix in and break down, too.

Moisture is key for composting, so ensure that the compost heap is kept moist in dry weather, as there will be a reduced level of composting if it all dries out.

