Organic waste and its benefits to soil

making the case for the environment
Have you ever wondered what happens to our leftover food and garden waste that we put out in our bins? Many people would assume that it goes into a big hole in the ground, and until recently much of it did.
However, rather than going to landfill, many local authorities now offer collection services for our food and/or green waste, which they recycle into good quality soil improver or fertiliser.
Once collected from the kerbside, the biodegradable waste is taken to a local authority municipal waste site or a specialist waste management facility.

It is then sorted and anything that is not compostable (such as plastics and metals) is removed.
The waste is then fed into a shredder, cutting it into small pieces, which helps speed up the composting process.

The waste will then go through one of the following processes:
In-vessel composting

This process involves putting a mixture of food and green waste into an enclosed container at temperatures of over 60°C, which speeds up the composting process and kills any bacteria and seeds that may be present.

After two weeks, the material is taken outside and left for a further six to eight weeks. During this time it is turned regularly.
Windrow composting

This process involves piling garden waste into long, narrow piles called windrows. The piles are turned regularly to accelerate the composting process. The waste will remain in the windrows until it has fully decomposed.
Once the composting process is complete, it is then screened for remaining contaminants. This is usually done using a trommel (large barrel) where the material is sifted to ensure that any large, unwanted material is removed from the compost.
The compost is then graded to establish its end of use suitability.

A quality standard for compost called PAS100 is given to sites that can demonstrate that they have a high level of control over the inputs and composting process, and that the resulting compost meets strict quality criteria.

Once certified to the standard, and if other SEPA requirements are met, the resulting compost is not classed as a waste any more and can be used as a product without waste regulatory controls.
Good quality compost will then be used for a wide range of different applications, including agriculture, local parks and in floral displays in public spaces.

Some local authorities also provide householders with the opportunity to acquire their quality controlled compost for a small charge, or even for free.
The use of compost has many benefits to soil. It is a good source of nutrients for plants, including nitrogen, phosphorous and potassium, as well as micronutrients, which are all essential for plant growth.
Mixing compost into soil can help to keep the soil pH in a favourable range, but only if the current soil pH isn't far from the optimum level.
It has also been shown to help control some plant diseases as the enhanced biological activity from applying compost can suppress diseases that might otherwise overrun a more sterile soil.

It therefore reduces the need for various fungicides and other chemicals.
Adding compost to soil regularly can also improve its structure. Soil with good structure has a crumbly texture and enables air to pass through it, holds moisture well and allows excess water to drain away. Plant roots also find it easier to penetrate the soil. Soils with a good structure also support a higher soil biodiversity, which in turn helps to reduce pests.