

INFORMATION



BULLETIN

SOIL IMPROVER

What is Soil Improver?

Organic matter is a much used term referring to a wide range of invaluable materials for feeding plants, improving soil and as mulch. Organic matter is sometimes referred to as 'soil improver' or 'soil conditioner' and soil organic matter as 'humus'.

Organic matter in soils binds other soil particles into aggregates that can be penetrated by roots and hold moisture, provides binding sites for nutrients so they are not washed out of the soil by rainfall and as it decays releases plant nutrients to feed plants. Typically this soil organic matter decays very slowly.

Gardeners (and farmers) aim to manage the levels of soil organic matter to get acceptable plant growth, which will typically mean that organic matter levels should be 3-6%. The main way they do this is to add organic matter. Because the effects of organic matter are so pronounced it is feasible to add sufficient organic matter to improve soils in a way that would be very difficult to add, say clay to a sandy soil and vice versa. Because clay and sand are not very effective in small quantities enormous amounts would have to be mixed into the soil to make a real difference.

Mulch and Mulching

Mulching is generally used to improve the soil around plants, but it also gives your garden a neat, tidy appearance and can reduce the amount of time spent on tasks such as watering and weeding. Mulches help soil retain moisture in summer, prevent weeds from growing and protect the roots of plants in winter.

Mulches are loose coverings or sheets of material placed on the surface of cultivated soil. Mulches can be applied to bare soil or to cover the surface of compost in containers. Depending on the type of mulch used, there are many benefits of mulching including:

- Help soils retain moisture in summer
- Suppress weeds
- Improve soil texture
- Deter some pests
- Protect plant roots from extreme temperatures
- Encourage beneficial soil organisms
- Provide a barrier for edible crops coming into contact with soil
- Give a decorative finish

When & How to Apply

Mulches are best applied from mid- to late spring and autumn, when the soil is moist and warm. It is best to avoid applying mulches in winter and early spring as the soil is too cold, and in summer, when it will be dry. They can be applied around new plantings or to established beds and specimen plants.

Beds and borders can be mulched entirely, taking care not to smother low growing plants or to pile mulches up against the stems of woody plants.

- To be effective, biodegradable mulches need to be between at least 5cm (2in) and ideally 7.5cm (3in) thick
- Lay mulches over moist soil, after removing weeds, including their roots, when the soil is not frozen
- When creating new beds, planting through mulch sheets is effective
- Single trees and specimen shrubs are best mulched to the radius of the canopy

Applying Organic Matter

Organic matter can be used in two ways;

1. **As a soil improver/conditioner to dig into the soil:** only use materials that are well-rotted (i.e. composted) to avoid depleting nitrogen from the soil. Examples include garden compost, composted green waste, composted bark, leafmould, well-rotted manure.
2. **As a mulch on the surface of the soil:** a wider range of materials can be used since there is less in contact with the soil surface than when dug in. As a general rule, the coarser the material, the longer it will take to break down. Examples include bark, woodchip, shredded woody waste, as well as the examples given above in no1.

Why use a Soil Improver?

Soil improver enhances and restores a range of natural properties within the soil. Advantages include:

- Adds natural humus and humus-makers back to the soil
- Improves moisture retention, making water easily available for plant roots
- Increases nutrient retention by reducing nutrients leaching away from roots, particularly in sandy soils
- A source of bulky organic matter
- Contains naturally slow-releasing nitrogen
- Aids drainage by restoring structure of soil
- Opens up heavy clay soils
- Helps reduce compaction of dense soils
- Weed-free
- British sustainably sourced materials with no added chemicals
- Our Soil improver is PAS100. ('Publicly Available Specification for Composted Materials' (PAS 100) sets a minimum compost quality baseline)