



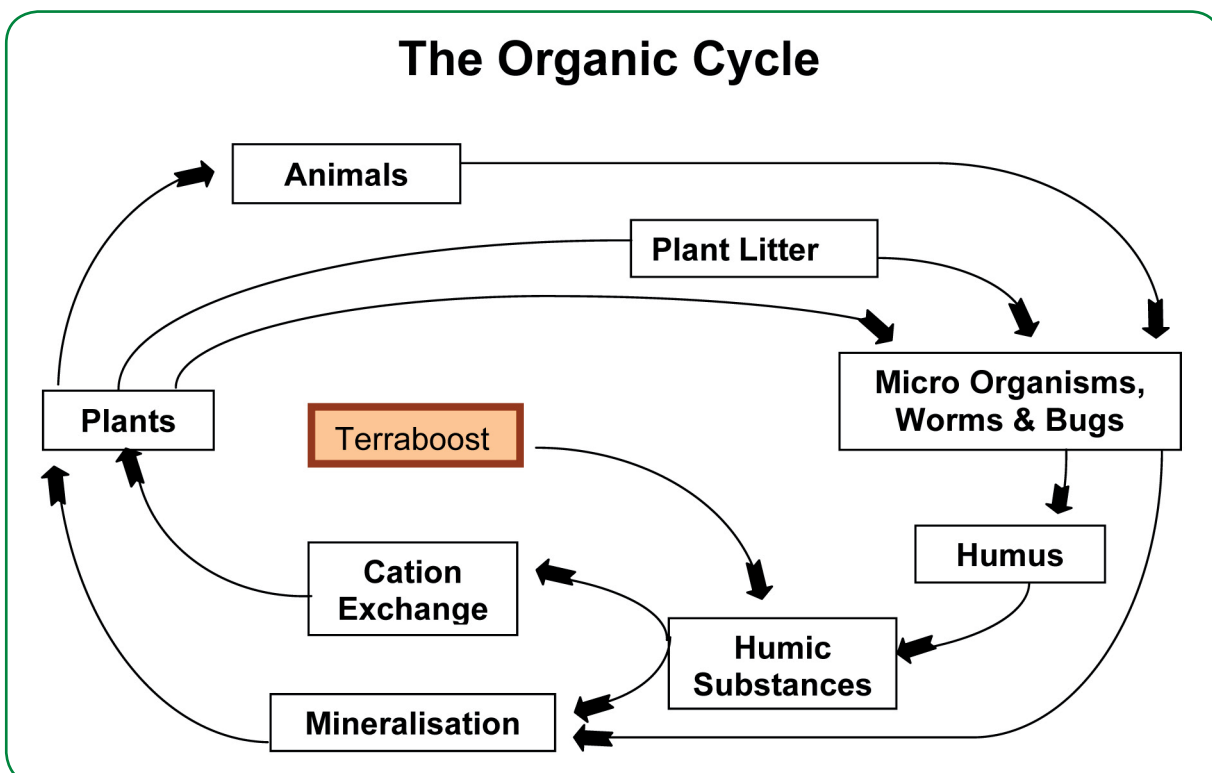
Terraboost

Terraboost is a liquid soil conditioner extracted from lignite humates.

Humic substances result from the breakdown of organic matter and Terraboost is a concentrate derived from humus in the same way that coal is a concentrate of organic matter from forests of bygone ages.

Terraboost is designed to:

- Enhance the effectiveness of applied fertilisers
- Improve physical characteristics of clay and sandy soils
- Stimulate soil biological activity and speed up nutrient cycling
- Increase the availability of phosphates and calcium
- Act as a powerful chelating agent to elevate cation exchange capacity
- Stimulate root growth and development



The humble humate is the essence of healthy soil

All higher plants evolved in the presence of humic acids. Humic acids are an end product of the breakdown of plant and microbe tissue and occur naturally in the soil. They are essential for the healthy growth of plants and the wellbeing of soil biomass.

There is currently a worldwide revolution in the use of humates in agriculture and horticulture. The ecology of the soil is becoming better understood at the same time as the extraction of humates is becoming more efficient. Even large international agrichemical companies are becoming interested in humates.

Humates are mined from coal – but not ordinary coal. It is only possible to extract significant amounts of high-grade humate from a peaty lignite called Leonardite. Some of the best Leonardite is mined in Australia and distributed in New Zealand by Primaxa Ltd.

Humates are soil conditioners. It is best to think of them as concentrated liquid compost.

The surfaces of humic molecules are negatively charged and improve nutrient holding ability of the soil. They buffer soil chemical reactions reducing soil acidity. In sandy soils they coat particle surfaces reducing the leaching of fertiliser elements. In clay rich soils they interact with the clay particles to keep them apart allowing water, air and nutrient penetration.

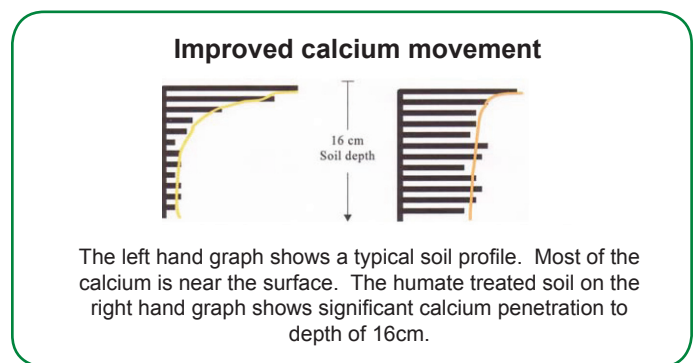
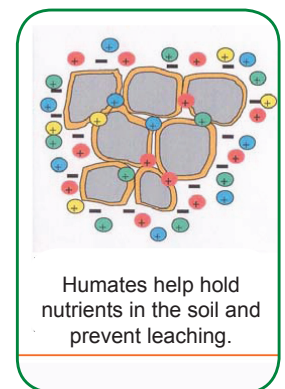
One of the limitations of lime is that it does not penetrate the soil well. As a result the soil tends to remain acidic at depth. This causes shallow rooting. Humates increase the penetration and retention of calcium in the subsoil. In addition, they tend to bond with toxic aluminium ions and take them out of the soil solution.

Humates also stimulate soil biological activity, which speeds up the recycling of nutrients.

You can of course, achieve the benefits of humates by applying tonnes of quality, aged compost to your

farm. But nowadays, thanks to better sourcing and mining of raw materials and more improved extraction methods, the essence of nature condensed over eons of geological time can be brought to you in Terraboost.

Typical application rates		
Crop	Application rate/ha	Timing
Maize	10 L /ha	Apply pre-emergent
Pasture	2 x 10 L /ha	Apply in spring and autumn
Potatoe	2 x 10 L/ha	Apply at planting and flowering



To find out more about Terraboost or other Omnia products, please contact your local specialist: