



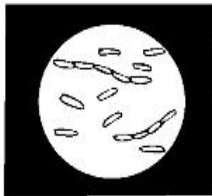
Sustainable Liquid Technology

Sustain & Gro®

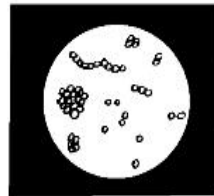
The Sustain & Gro® range of products offers nutrients and ingredients that provide both an organic and microbial activity benefit. The Sustain & Gro® products offer a family of inputs designed to stimulate plant and soil health, providing naturally available goodness and organic sustenance.

Overview

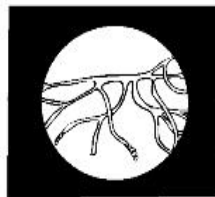
Sustain & Gro® products have beneficial role in a wide range of situations and applications; crops, pasture, turf, gardens etc. They provide both nutrients and organic stimulants suitable for enhancing beneficial plant and soil microbiology (bacteria, fungi, protozoa etc).



Bacilli



Cocci



Actinomycetes



Fungi



For further information
about our products or
services contact us today
03 58 591 323

REQUEST FOR SERVICE

Sustain & Gro® products are recommended for use in combination with the implementation of sustainable principles and best practice. Several of these products contain organic materials that will stimulate enhanced microbial activity, however there is no substitute for land management practices that directly raise organic carbon levels (e.g. cover crops, mulches, composted manures). Organic matter fuels the soil food web and needs to be carefully maintained to provide the basis for healthy and sustainable soils.

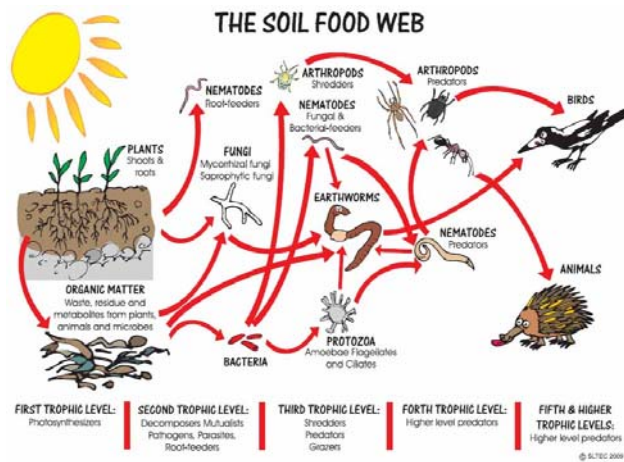
Sustain & Gro® products should be utilized strategically "in combination" with the above practices and informed agronomy advice, to deliver sustainable outcomes for landholders. These products may be applied in combination with selected Spring Start®, Green and Gro®, Spray NPK® and Turf and Landscape® products. Check compatibility via the SLTEC Website (www.sltec.com.au) or by contacting our office or our authorised dealer distributors.

Sustain & Gro® products can be applied using fertigation, directed soil sprays, via injection through tynded implements or as foliar sprays (for selected products).

Our Journey with Sustain & Gro® So Far...

Since the green revolution (post World War II) agriculture has benefited from many advances in chemical technologies and derived ingredients. Agricultural soils have been enriched chemically with industrial fertilizers and pesticides and productivity has increased. However with increased chemical inputs, the biological health (e.g. the Soil Food Web) and natural balance of these soils has in many cases declined.





Sustainable soils have a balance of chemical, microbial and physical properties. Our operational practices can impact on this natural balance either positively or negatively.

Production systems with a sterile environment, void from beneficial soil and plant biology, remain vulnerable to disease and insect pressure. They are lacking in many of the non chemical attributes important for sustainable production.

Given that most fertilizer and soil amendment inputs used today are derived predominately from industrial chemical processes, we are developing and expanding the Sustain & Gro® product range to provide credible softer alternatives.



Sustain & Gro® products are designed to stimulate soil biology and improve soil structure.

Our development of Sustain & Gro® products has only just begun. In the future we aim to deliver a range of renewable, sustainable and in some cases organically certified inputs.

Clarification of our terminology;
Organically Certified: certified organic by recognised industry bodies and associations within Australia and Internationally.

Renewable: products derived from recycled materials and ingredients. A natural resource qualifies as a renewable resource if it is replenished by natural processes at a rate comparable or faster than its rate of consumption, hence being replenished within a reasonable amount of time.

Sustainable Inputs: Inputs that maintain and/or enhance the sustainability of production and living systems.

Sustainable Agricultural Production: Practices that maintain or improve;

- productivity and economic viability
- the natural resource base and,
- the impact agriculture has on other ecosystems.

Sustain & Gro® Benefits:

- Carefully selected and blended raw ingredients
- Guaranteed analysis
- Formulated using quality systems and processes
- Custom blends available

- Sustain & Gro® products can be blended with a variety of SLTEC products - check compatibility information

Bio Kelp20

Bio Kelp20 is a liquid sea weed concentrate that contains a wide range of naturally occurring plant nutrients and trace minerals essential to plant growth, health and productivity.

Kelp contains concentrations of plant hormones (e.g. auxins, cytokinins) which stimulate biological activity in soils (particularly Actinomycetes bacteria and cellulose utilizers).

This product consists of naturally occurring chelated trace minerals which are more readily available for plant uptake than minerals supplied in an inorganic form. Bio Kelp20 acts as a nutritional supplement which releases nutrients as it breaks down and contains chelating carbohydrates such as alginic acid and mannitol and is an excellent source of organic matter.

Benefits:

- Contains organic matter with soil conditioning properties
- Enhances soil fertility and productivity
- Enhances plant and root growth and development
- Organic matter in the soil, and the associated soil microflora, bacteria and fungi, play an important role in soil fertility and plant nutrient uptake.
- Stimulates microbial activity
- Enhances and building soil structure
- The organic matter contained in this product enhances nutrient retention
- and reduces leaching

Fish Emulsion

Sustain & Gro® Fish Emulsion is sourced from ocean fish. Fish emulsion is a natural organically based product that stimulates microbial activity in the soil. It provides a broad spectrum range of micro and macro nutrients, trace elements, vitamins.

Benefits:

- Contains organic matter with soil conditioning properties
- Promotes beneficial soil biology (bacteria and yeasts etc)
- Provides a readily available source of organic nitrogen
- Stimulates nitrogen cycling and enhancing the carbon to nitrogen (C:N) ratio of soils
- Can be applied as a foliar or to the soil via directed spray or fertigation
- Stimulates plant root development

Molasses

Sustain & Gro® Molasses is a by-product from the production of sugar. Molasses stimulates microbial activity, stimulates plant root development and can assist in improving soil structure and with the amelioration of soils high in sodium (sodic soils).

Benefits:

- Promotes beneficial soil biology (yeasts and lactic acid bacteria etc)
- Source of metabolisable carbon and energy for soil biology
- Assists in improving soil structure
- Aids in the management of sodic dispersive soils
- Stimulates plant root development

Potassium Humate Products;

Potassium humate is a concentrated soil microbial and plant stimulant available in 20% or 26% (w/v) concentrations of soluble humate and fulvate (i.e. humic and fulvic acid). SLTEC's potassium humate is formulated from plant derived natural deposits of Leonardite (brown coal).

Benefits:

Potassium humate increases soil fertility by:

- Increasing the nutrient holding capacity of the soil (i.e. improves the soils cation exchange capacity (CEC) as well as having a positive impact on the soil water holding capacity)
- Adds organic carbon to the soil
- Can assist in adjusting the Carbon to Nitrogen (C:N) ratio
- Stimulates the development and enhancement of soil structure through enhanced microbial activity
- Improves the retention and plant uptake of essential nutrients thereby reducing the loss of applied fertilisers from leaching and run-off
- Assisting to buffer the soil against increases in soil pH (acidity) from fertiliser applications
- Stimulates beneficial microbial activity and root growth
- Promotes nutrient uptake by plants in hydroponic production
- Enhances the incorporation and retention of essential elements such as calcium

throughout the soil profile

Fulvic Acid Products;

Fulvic acid is extracted from humus (organic matter) or brown coal. Fulvic acid has a lower molecular weight than Humic Acid and is separated and extracted during the production of potassium humate products.

Fulvic acids are typically foliar applied and assist in the uptake of nutrients and some chemicals (non selective herbicides). They are considered to offer chelating properties, enhancing the effectiveness of foliar applications of nutrients.

Benefits:

- Enhances uptake efficiency with selected foliar sprays
- Stimulates plant auxin production
- Improves the mobility and translocation of nutrients
- A source of organic carbon stimulating microbial activity

Triple Shot™ & Quad Shot™

Both Triple Shot™ and Quad Shot™ contain a carefully selected range of organic additives and biological stimulants. These ingredients stimulate soil biological activity, thereby improving the cycling and availability of plant nutrients and soil fertility and health. Together with management practices that enhance organic matter and soil structure development, these products assist in mobilizing available nutrients and improving plant uptake efficiencies.

Quad Shot™ has similar ingredients to Triple Shot™ however it has a molasses additive as an additional microbial stimulant.

Benefits:

- It contains humic acid, fulvic acid, kelp, fish emulsion and sugars to stimulate microbial activity
- Assists in improving management of saline and sodic soils
- Assists in improve the moisture holding capacity of soils
- Enhances nutrient cycling and availability
- Enhances soil cation exchange capacity (CEC)
- Can be mixed and blended with other SLTEC products

BiologiCAL™

Supplying calcium to crops and plants is a major challenge in both agriculture, professional sports turf and amenity horticultural situations.

Plants require calcium in relatively large amounts for many functions including cell division, elongation and development, root system and leaf development, fruit and seed development etc. Calcium is also an essential element required for healthy soils, influencing both the physical, chemical and biological aspects of the soil. Clearly lime and gypsum offer cost effective sources of calcium to assist in the amelioration of soils over the longer term. However, supplying activated plant available calcium to soils and for plant uptake is a significant challenge.

BiologiCAL™ has been specifically formulated to provide a highly available activated calcium, complimented with Potassium and Quad Shot™ biological stimulant. The calcium is 100% soluble and available in a form that promotes accelerated uptake by plants.

Benefits:

- A cost effective source of calcium
- Free of chlorides and nitrates
- Activated calcium in a unique form that stimulates plant uptake
- Can be applied to soil and as a foliar application
- Can be mixed with other SLTEC products such as UAN (Urea Ammonium Nitrate) and improves ammonium absorption by plants
- Displaces sodium (reduces sodicity) and magnesium (magnesium soils) from soils
- Assists the improvement of moisture penetration / infiltration
- Improves soil structure and friability
- Stimulates soil microbial activity and enhances soil fertility & health, enhancing a balance of health biology
- Improves plant resistance to disease
- Stimulates plant vigour and increases the uptake of other essential nutrients (nitrogen, phosphorus and potassium etc)
- Enhances shelf life characteristics of vegetable and fruit crops

Product Brochure Download:



[Sustain & Gro® Product Advisory \(Autumn 09\)](#)

Contact us today for more information on all SLTEC products and

services.