

## **Soil & Plant Tonic**

**Soil & Plant Tonic** is a potent biological inoculant (liquid) containing an enormous number and diversity of beneficial soil organisms. The species diversity achieved in **Soil & Plant Tonic** is the result of a complex extraction and culturing of indigenous biological species from biologically rich organic materials including composts and worm castings. This population which contains thousands of beneficial species is then boosted by the culturing and introduction of another diverse group of proprietary organisms, which include cultures such as;

Azotobacter vinelandii
Bacillus megaterium
Bradyrhizobium japonicum
Chaetomium globosum
Pseudomonas fluorescens
Pseudomonas putida
Pseudomonas stutzeri
Rhizobium leguminosarum
Streptomyces albidoflavus
Streptomyces cellulosae
Trichoderma lignorum
Arthrobotrys oligospora

Arthrobotrys conoidus
Paecilomyces funosoroseus
Paecilomyces lilacinus
Verticillium chlamydosporium
Trichoderma harzianum
Trichoderma lignorum
Trichoderma koningi
Arbuscular Mycorrhizal Fungi
Beauveria bassiana
Metarhizium anisopliae
Bacillus subtilis

Beneficial soil organisms play a significant role in the maintenance of soil structure, maintaining aerobic conditions, maximising water use efficiency, cycling nutrients and increasing the Cation Exchange Capacity (CEC) of the soil by decomposing and stabilising organic Carbon.

**Soil & Plant Tonic** provides a preventative approach to managing soil and plant diseases by improving the number, diversity and balance of beneficial soil organisms. This increase in beneficial microbes provides an increased level of competition for pathogens, reducing their ability to become infective, it also leads to better soil balance and increased competition for pests such as nematodes and other root feeding organisms.

**Soil & Plant Tonic** works on the causes underlying soil and plant decline by rejuvenating the soils' biological properties, and taking the stress out of plant management. It can easily work alongside normal management programs and will gradually improve conditions and reduce the need for chemical inputs. In addition to its biological properties **Soil & Plant Tonic** contains a range of plant growth hormones and enzymes to encourage and stimulate root growth.



The beneficial organisms present in **Soil & Plant Tonic** perform an amazing number of functions, including;

- Improve soil structure and Oxygen levels in the root zone.
- Increase atmospheric Nitrogen fixation.
- Rapid humus production (and thatch breakdown).
- Increase Phosphorus availability.
- Increase yield and plant quality.
- Helps reduce the use of toxic chemicals.
- Based upon naturally occurring fungi & bacteria.
- Applicable at all developmental stages.
- A powerful probiotic.
- A highly efficient bio-balancer capable of improving soil food web ratios.
- Promotes the production of phytoalexins (increases disease tolerance).
- Increases root activity and growth with all of the associated benefits.
- Reduces fertilizer requirements by improving nutrient uptake.
- Boost Zinc availability.
- Lift Calcium levels in plants.
- Improves bio-balance and associated plant resilience in the root zone.

## **Application Rates**

## **Greens and Tees**

Apply 100lt\ha (1 litre per 100m²) per month as a soil drench. Bowling Greens apply 20 litres per green monthly.

## **General applications**

Apply 20lt – 50lt\ha (200ml – 500ml per 100m²) per month as a soil drench.

NB: Follow applications with **BioGrow**.

