

What is GROW?

GROW is developed from specially selected organically composted chicken manure blended to specific requirements. Composted manure is put through a unique patented process of aerobic fermentation. Added to that process is a combination of microbial inputs and other ingredients that results in a highly refined, biologically active, high carbon and pH neutral liquid with a complete balance of macro and micro nutrients.



Grow biofertilizer

How Does GROW Work?

GROW is a biofertilizer with a mix of microbial inputs developed over many years of research and although they are the company's 'trade secret' here are some of the names of the beneficial bacteria, algae, fungi and other ingredients found in GROW:

Azotobacter vineladii; Bacillus cereus / thuringienis; Bacillus subtillis; Bradyrhizobium japonicum; Chaetomium globosum; Endo & Ecto Mycorrhiza; Fusarlam spp; Nematodes; Ochrobactrumanthropi; Protozoa - flagellates, amoebae, ciliates; Pseudomonas aeruginosa; Pseudomonas fluorescens; Pseudomonas pseudoalcaligenesl; Pseudomonas putida; Pseudomonas stutzeri; Rhizobium leguminosarum; Sphingomonas paucimobillis; Streptomyces albidoflavus; Streptomyces celluosae; Trichoderma lignorum;

This combination helps build soil micro-flora and thereby, soil health. The importance of healthy soil and complete, plant acceptable, nutrients has been well documented by many experts over the years. The benefits of GROW can be shown in independent trials run by Dr Rogers of Applied Horticultural Research, including increased yield, improved soil health, greater resistance to pest and climatic variation, and greater water efficiency. Researchers have also found that the use of highly refined biofertilizer such as GROW can reduce production costs by supplementing inorganic/chemical fertilizer use through promoting improved soil microbial populations, including free-living nitrogen fixing bacteria such as Azotobacter, improving nutrient uptake through better root development.

Highlighting Microorganisms

Rhizobium Bacteria: vital symbiotic nitrogenfixing bacteria, meaning the plant helps them with food and shelter and in return they provide the plant with much needed nitrogen. Azotobacter Bacteria: protects the roots from pathogens present in the soil. Mycorrhizal Fungi: the independent gut of the plant. Once connected to the plants root system it mines and delivers often out of reach minerals, water and other nutrients into the plants metabolic process.

Bacillus Bacteria: capable of inhibiting plant disease caused by protest pathogen.

Micro And Macro Nutrients In GROW

Nitrogen	mg/L	779
Aluminium	mg/L	2.3
Boron	mg/L	2.0
Calcium	mg/L	86.0
Cobalt	mg/L	<0.1
Copper	mg/L	<1.0
Iron	mg/L	1.7
Magnesium	mg/L	43
Manganese	mg/L	<1.0
Molybdenum	mg/L	<0.1
Phosphorus	mg/L	25
Potassium	mg/L	270
Sodium	mg/L	142
Sulphur	mg/L	59.0
Zinc	mg/L	1.8

GROW contains on average 1500-2000 mg/L of PURE CARBON. The above analysis is compiled from analyses conducted by accredited Australian laboratories. GROW is a natural product hence concentration of individual components may vary from batch to batch.





Independent Research Trial Results

The most significant independent testing of our product comes from trials run by Dr Gordon Rogers, BAppSc (Hons), Dip Ed, PhD.

Dr Rogers is the Managing Director of Applied Horticultural Research (AHR) and an adjunct Professor of Horticultural Crop Physiology with the University of Sydney, Australia. He has a PhD in plant physiology, and 24 years' experience in agronomy and crop physiology, with strong links to the farming and horticulture industry. Dr. Rogers specializes in soil health, vegetable agronomy, sustainable crop production systems, climate change physiology, and food production systems in developing countries.

Below, is a summary of the findings by Dr. Rogers for trials he conducted across a broad spectrum of crops using GROW:

Plant health is considerably improved with plants growing with greater vigor, remaining healthier and exhibiting enhanced capacity to resist pests and diseases without the need to apply protective substances.

Colour, taste and texture of produce grown with GROW are considerably enhanced, with improved brix (sweetness and flavor of produce), firmness of flesh and better texture.

Production levels (Yields) are significantly improved, typically by 33-50% and in some cases by as much as 100% (bananas).

Harvesting periods during which plants bear crops of harvestable quality are improved by as much as 25%

Shelf life of products grown with GROW is much improved with some crops showing an increase of up to 100% (broccoli) during normal storage.



Applied Horticultural Research

Core components of Grow that make it so effective...

Naturally Produced and Organically Certified – making it completely safe for you, your workers as well as safe and nutritionally rich for animals and food consumers alike. Aerobically Activated – The process of aerobic activation during the manufacture process extracts the highest amount of nutrients from any base material. Pathogen Free – Free of pathogens such as e-coli, listeria and salmonella.

pH Neutral – Allowing for easier absorption of nutrients through the foliage and soil

Foliar Application - University research trials show that nutrient uptake via liquid foliar fertiliser application is 10 times more efficient than soil application. What the foliage doesn't absorb, falls onto the soil.

Delivers Microbial Balancing Technology – a complete range of beneficial bacteria for optimum results in both plants and soil

Soil Correction – Soil pH and nutrient/biological balance will also occur over time. Additional carbon (1500-2000mg/L of pure carbon) is also added with each use of the product. Biology has shown to clear up contaminated soils also. Biological Carriers leads to Cost Savings – The mixing of fungicides, pesticides and herbicides with Grow Bio Fertiliser helps the uptake/absorption of the fungicide, pesticide and/or herbicide, with less usage required less often. Pest & Disease Resilience – is increased with the use of Grow Bio Fertiliser. Weak plants produce simple sugars and are more attractive to pest & disease. Grow helps plants develop complex carbohydrates, improved cell structure and stronger immunity for greater pest and disease resistance

Synergy – There is a symbiotic relationship between soil microbiology and nutrient delivery to plants. When a healthy soil microbiome exists and nutrients are in a balanced and available form as they are with the use of Grow, the microbes and nutrients work together for more efficient nutrient delivery and usage by plants. **Mycorrhizal Fungi** – Grow increases Mycorrhizal Fungi colonies, which again leads to more efficient delivery of, and usage of, nutrients and biology to plants as well as better

communication between plants as has been recently found **Filtered** - No blocked lines or jets in spray equipment due to Rural Boss refined filtering.

Application direction

Ferns & Indoor Plants: 10ml per litre of water Flowers & Ornamentals: 15ml per litre of water Vegetables, Fruits & Herbs: 20ml per litre of water

Lawns & Established Trees: 50ml per litre of water

The cost effectiveness and safety of Grow allows for increased applications if desired. **Note:** Initially use lower mixing rates if high applications of inorganic/synthetic fertilizers have been previously used, as Grow releases residual artificial nutrient build up. Product benefits accumulate with every use. **Pre-planting:** apply Grow to promote and accelerate microbial activity in the soil. **Pre-planting soaking of new seedlings:** 1:1000 solution – soak for 2 hours to help root system establishment

During life of crop: Increase application rate as crop matures. For best results apply at least 4 times through the life of the crop

Seedlings initial rate of 1-2 L per ha, 10-20 mls per litre of water

Short maturing crops (ie leafy vines and vegetables) 20-30 ml per litre of water Mid maturing crops (ie cereals eg rice) 30-40 ml per litre water

Long maturing crops (ie cotton, maize, sugar cane) 40-50 ml per litre water

After harvest application: 50–100 ml per litre water as foliar spray. Can be sprayed on stubble/trash to accelerate breakdown. This increases the carbon content of the soil and provides an added source for microbial activity during the spelling period prior to next planting. Horticulture/permaculture/Green House Application: 1–2 L concentrate per ha, 10–20 ml

per litre of water Easy to apply through any irrigation/fertigation

or sprinkler system in accordance with watering program.

Once diluted Grow should be used within 24 hours

MANUFACTURED Australia PACKAGING

1 litre, 2.5 litres, 10 litres, 20 litres. IBC 1000 litres **OTHER**

Store in the closed original container in a cool, dry place out of the reach of children. Do not store in direct sunlight. Shelf life under recommended conditions 2 years.

Organic registered farm input (Australia).