

# Profert® Fortified with mycorrhizal fungi

*Microbially Active Foliar Fertiliser. Packed with Vital Amino acids.  
Balanced with trace elements and micro nutrients*



## Introduction

**Profert®** is a liquid fertiliser produced by a unique process which involves the breakdown of selected marine by-products, into a form in which plants can readily absorb the available nutrients.

One of the key ingredients in Profert® is the addition of mycorrhizal fungi (AM) spores.

Mycorrhizal fungi are part of the beneficial microbes that live in the plant rhizosphere. They form symbiotic structures with the plant roots. Through this points, the fungi will provide nutrients to the plant that otherwise would not be accessible. On the other hand, the plant will feed his fungal partner with sugars that have been produced during the photosynthesis.

The combination of an amino acid nutrition and the mycorrhizal fungi results in improved plant growth and general health in a noticeably shorter time frame than conventional chemical fertilisers.

### Why Profert® works so well

The unique ambient (room) temperature process used in developing Profert® means that the beneficial microbes which breakdown marine protein are unharmed throughout the process and continue to increase in numbers over time, improving soil biology and plant nutrition. This process creates nutrients in the form of absorbable amino acids which are immediately available to the crop.

Mycorrhizal fungi will remain as a spore form until they find a proper root to colonise. These fungi will supply the plant with many different soil nutrients. But they are specialised in Phosphorous relocation. This eventually means that the plant will have a much better nutrition in general and in phosphorous in particular.

### Amino Acid profile in Profert

Profert® has been obtained naturally from marine sources and no artificial amino acids have been included.

The complete amino acid profile of the product is as follows:

	mg/ml	% Mole
Hydroxyproline	1.6	5%
Histidine	0.3	1%
Serine	1.1	4.5%
Arginine	1.7	4%
Glycine	5	27.5%
Aspartic acid	1.7	5%
Glutamic acid	3.5	10%
Threonine	0.7	2.5%
Alanine	2.75	12.5%
Proline	2.6	9%
Lysine	1.8	5%
Methionine	0.04	0.2%
Valine	1.3	4.5%
Isoleucine	1	3%
Leucine	1.75	5.5%
Phenylalanine	0.27	0.8%

\* Calculation based on free amino acid molecular weight

\* Being a microbial product the concentration of the different amino acids may vary.

## Mycorrhizal Inoculum

The Mycorrhizal fungi spores added into our Profert belong to the endomycorrhizal group. This type of fungi will form symbiotic structures with more than 85% of the plant botanical species, including most agriculture crops, ornamentals and fruit trees.

The species in our product include:

- Glomus etunicatum*
- G. mosseae*
- G. intraradices*
- Scutellospora dipurescens*

## Product Benefits

- The correct balance of macro and micro nutrients will enhance plant growth.
- Microbes help supply organic nitrogen to the plant and soil.
- Profert® can enhance the uptake and assimilation of trace minerals to rapidly correct minor micronutrient deficiencies.
- Improving soil microbial activity can aid the reduction of bulk fertilisers use and assist with unlocking built up nutrients.
- Profert® has a nil withholding period.

## Shelf Life and Storage

Shelf Life up to 12 months from manufacture

Profert® should be stored at ambient temperature conditions. It is recommended to be stored out of direct sunlight, but within a well lit area so that the microbial digestion process within the product continues.

## Compatibility & Use

Profert® can be mixed and applied with most commonly used pesticides, however Profert® should not be used with selected herbicides (mainly of the metsulfuron family).

We strongly recommend checking labels for compatibility as well as pre testing in a small area prior to widespread application.

## Analysis (W/V)

Nitrogen (N)	as protein	1.10%
	as nitrate	0.20%
	as urea	1.50%
	as ammonium	0.20%
Total		3.00%
Phosphorus (P)	as water soluble	0.60%
Potassium (K)	as protein	0.30%
	as phosphate	0.10%
	Total	0.40%
Sulphur (S)	as sulphate	0.55%
Calcium (Ca)	as nitrate	0.20%
Magnesium (Mg)	as sulphate	0.02%
Zinc (Zn)	as sulphate	0.10%
Manganese (Mn)	as sulphate	0.025%
Iron (Fe)	as sulphate	0.005%
Boron (B)	as sodium borate	0.04%
Molybdenum (Mo)	as sodium molybdate	0.01%
Cobalt (Co)	as sulphate	0.0025%

## Packaging

Profert® is available in the following containers:

- 20L and 1000L

## Application Details

Crop	App. Rate/Ha	No. of applications
Horticultural crops	5 – 6L	3-4 soil applications (bud burst, pre flowering, post flowering & fruit enlargement stage)
Broad acre Winter crops	2 – 3L	Liquid injection with the seed at sowing
Broad acre Summer crops	2 – 3L	Liquid injection with the seed at sowing

**To be diluted in a minimum of 100L of water p/Ha**

*\* Application rates may vary depending on soil and leaf analysis. The above should be used as a guide only.*

For information about specific application rates, please contact our technical staff

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OR 1800 355 913

Email: sales@growgreen.com.au

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