

Humus 100

High Analysis Humic/Fulvic Powder

High quality, highly soluble humic & fulvic acid powder.

Humic and fulvic acid are the most active components of soil carbon (organic matter). Microbes use active carbon to improve soil structure, moisture retention and suppress disease.

Humus 100 is a cost-effective way to add active carbon to your soil.

Humus 100:

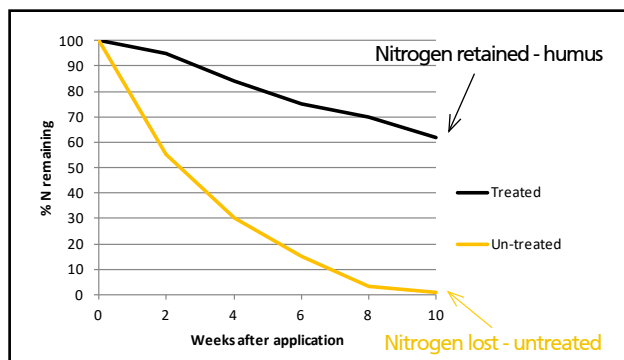
- Improves soil by holding moisture & nutrients
- Reduces the impact of salinity
- Promotes soil biological activity
- Improves soil structure
- Reduces lock up of phosphorus
- Stimulates root growth & nutrient uptake
- Reduces drought stress
- Suppresses disease

Contains >80%humate as humic and fulvic acids (with potassium).

We recommend using active carbon every time you fertilise to:

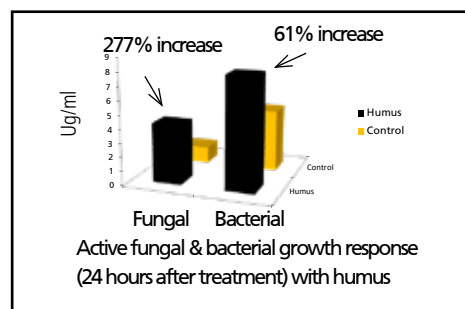
1) Improve the use of N in the soil or the leaf

Active carbon holds ammonium-N in the root zone, reducing leaching and volatilisation. It also buffers N in the soil and on the leaf surface improving uptake and reducing leaf scorch.



2) Buffer harsh aspects of fertilisers

Soluble fertilisers, particularly highly acidic or alkaline fertilisers, can have a harsh effect on soil biology. Active carbon improves soil microbial activity after fertiliser applications (contact us for multiple research references).

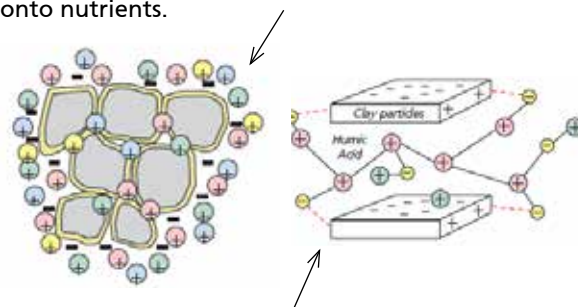


3) Reduce phosphorus lock up

Carbon competes with the adsorption with phosphate on the active surfaces in soil, delaying locking up of P, resulting in increased P efficiency by increasing the amount of P that stays in the soil solution.

4) Improve soil structure - essential in sandy soils

In sandy soils humus provides a charged surface to hold onto nutrients.



In clay soils humus helps prevent compaction by penetrating the clay particles and keeping them apart.

Cost-effective active carbon source - soluble powder

TYPICAL ANALYSIS:

Total water soluble Potassium Humate & Fulvate
> 80% w/v includes 8% Potassium
(>97% w/w dry weight after removing moisture)
pH in water 9.5-10

PACK SIZES:

20kg

DIRECTIONS FOR USE:

Humus 100 is used to provide increased nutrient and moisture retention to soil.

Suitable for use as a dry soil treatment or diluted for use as a soil drench and via irrigation.

Can be applied through standard spraying equipment. Always mix under vigorous agitation. Ensure all product is dissolved prior to application. Pre-dilute at 1 : 10 with water; do not add solid to spray tank. Test compatibility before using with other products.

APPLICATION RATES:

Via Irrigation :

2-4kg/ha; applied 2 - 4 times during growing season. Dilute 1 : 200 with water.

Broad-acre crops and pastures:

1-3 kg/ha; applied early in season.
Dilute at 1 : 200 with water.

Fertiliser Coating:

Apply 1-2kg per tonne of urea; can be dissolved at the rate of 1kg Humus 100 into 5L water before applying to fertiliser.

Nitrogen Buffering:

1.5-2kg/tonne Urea or 350g/30L UAN
(pre-mix at 1 : 10 in water).

Mixing Order:
Add water ... then Humus 100 ... then UAN/Urea.

Soil amendment:

Horticulture 2-4kg/ha; Broad acre 0.5-1kg/ha.

COMPATIBILITY:

Humus 100 is an alkaline product, do not add to acidic (low pH) fertilisers. If tank mixing, add Humus 100 first, followed by other components. Humus 100 is ideal for using with UAN, urea and other ammonium based fertilisers. Do not tank mix with NPK or soluble phosphorus fertiliser.

Always test mix (jar test) small quantities to ensure compatibility before use.

Humus 100 is generally not compatible with agricultural chemicals (insecticides, fungicides, herbicides). If in doubt, check chemical label for mixing instructions.

CLEAN UP PROCEDURE:

Use all mixture in spray and irrigation tanks; purge tanks and lines with clean water; flush irrigation lines. Do not return mix to original drums.

STORAGE:

Store in original container away from direct sunlight and moisture.

WHY HUMATES - THE BASICS!

- Provide the most active component of soil organic matter in a concentrated form. - Celik 2011
- Good soils contain on average 1-5% HFA - don't need much concentrated humus to make a difference. - Dong 2009
- Adding humates is a cheap and practical way to control N loss & get carbon into soil. Typically fertiliser efficiency improved by 20%. - Kasim 2011
- Humus 100 has both humic and fulvic acid (HFA) combined. This provides the best result for nutrient retention due to increased number of functional groups embedded in them. - Taufik 2011
- Humates enter into a complex reaction with a variety of organic and inorganic components of soil and influence plant growth and plant production. - Celik 2011
- In clay soils, humates separate the clay particles so water and nutrients can penetrate more easily. In sandy soils, humates provide a charged surface to hold nutrients and water. The active carbon improves soil structure.