

# VERTEBLACK – Plant, Soil & Environment

## Understanding VerteBlack

VerteBlack is a liquid humic acid. Humic acids are energy rich matter that all plants respond to. They are complex mixtures of materials formed in soils during the decay and transformation of plant microbial remains. They are renowned for the beneficial role they play in a range of biological matters involved in plant growth.

A healthy productive soil contains billions of micro-organisms which break down minerals, feed on dead plant and animal materials, break down proteins, sugars, fatty substances, starches, cellulose etc, and liberate carbon dioxide, nitrogen, phosphorous, and other minerals in a plant available form.

It was Sir Albert Howard in the 1940's who stated that although science was being subdivided into different categories such as chemical, botanical, physical etc, this could not be applied to agriculture as it was beyond the capacity of the individual plant to sustain its life processes in separate phases. The plant eats, drinks, breathes, sleeps, digests, grows, sickens, suffers or recovers, and reacts to all its surroundings in the course of twenty-four hours and none of its operations can be carried on apart from all the others.

Fertilizer New Zealand has a full range of conventional and BioGro Certified Products. Some solid and liquid products are: Phosphate 365 for year round application, VerteSea for seaweed additive, Actavize for instant grass and stock health, VitaLife for a healthier more productive soil.



## VERTEBLACK'S Benefits

1. Increased yields of protein and mineral rich crops with excellent taste, colour and keeping qualities.
2. Increased nutrient uptake by plants.
3. Improved soil moisture retention.
4. Increased brix levels.
5. Retaining nutrients in the soil, thus making more nutrient available to the plant and less available for run off and pollution.
6. Increased soil aeration.
7. Growth and expansion of soil micro-organism populations.
8. Increased cation exchange capability.

## Application Rate

### Pasture

Dairy 5 - 10 litres/ha

Drystock, Hay 2.5 - 5 litres/ha

For best results application should be made before or after rain, or when there is dew in the ground.

Ground application dilute 1:150

Aerial application dilute 1:1

### Field Crops

Booster 5 - 10 litres/ha

Corn, Maize, Brassica, Cereals, Pumpkin, Squash, Kumara, Potatoes and Onions.

Dilute 1:200 or 1:150 & apply 3-4 times

Dilute with as much water as possible & apply when planting out. Final amount used will depend on amount of base fertiliser used.

### Vine, Fruit Trees, Horticultural Crops

Dilute 1:200 & apply every 10-14 days during the growing season. As a base fertiliser dilute with as much water as possible & apply before planting out. Use 2.5-10 litres/ha

### Seedlings

Dilute 1:250 & soak seedlings overnight.

Otherwise, add bottom of hole dug for seedling.

**Below are trials of spinach and kale grown in a controlled environment the left hand side shows a mixture of both VerteFert and VerteBLACK. The control only had water added.**



## Application Information & Tips

**Dilution:** Dilute 1:150 or 1:200.

**Mixing:** Always add water to tank first, then add pre-mixed fertiliser. In all instances VerteBlack can be applied in split dressings. Can also be added to your regular sprays although when mixing for the first time test on a small scale first and consult spray manufacturer's recommendations as to additives.

**Agitation:** Contents may settle on standing and drum should be well agitated prior to use by stirring or rolling.

**Filters:** Maximum particle size is 197 microns (.197mm). Very fine filters may need to be removed from your spraying equipment, or alternatively pre-mix your fertiliser with water and strain prior to adding to final amount of water.

**Application Timing:** In line with good spraying practice we do not recommend using this product in the heat of the day. Early morning or late evening is preferable.

**Storage:** Due to its organic base, this product should not be stored after dilution. In its concentrated form it may be stored in a cool dark place indefinitely.

**Non-toxic:** VerteBlack liquid fertiliser technology means it is efficient to make, efficient to use, efficient in its action, doesn't leach into our waterways and is a low climate change contributor. It is also not harmful to beneficial insects, birds or livestock when used as directed.

**Liability:** Because of the wide variance in soil properties and fertility, climatic conditions, handling, mixing and application, the Company cannot be held responsible for the results obtained.

**To talk to our fertiliser experts call 0800 337 869**

**To find out more visit [www.fertnz.co.nz](http://www.fertnz.co.nz)**