

# peats



**TAILORMADE SOLUTION**

The science of  
soil performance



## Increase

- Nutrient binding sites in your soils
- Soil and plant disease resistance
- Water use efficiency
- Critical micro-nutrients for plants
- Applied fertiliser efficiency
- Cycling of oxygen and water
- Yield potential across your soils

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SOIL & GARDEN SUPPLIES

**Market leader in  
soil performance**

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The most effective soil conditioner money can buy for improved yield and active disease suppression.



### **PEATS TAILORMADE™ Pellet**

The initial form of Peats TailorMade™ was a pellet that was designed to meet the needs of both the horticultural and viticultural producer. This extruded form is also applied effectively into turf markets and has also worked in broad acre applications.

- Easy to handle, easy to spread.
- Consistent pellet, little crumbling.
- Ideal for application in horticulture and viticulture settings.



### **PEATS TAILORMADE™ Prill**

Increased interest in Peats TailorMade™ from the broadacre cropping sector catalysed the need for a flowable form for easy application through airseeder equipment, hence the development of the TailorMade™ prill.

- Easily added to existing granular fertility programs at sowing.
- Easy to handle, easy to spread.
- Flows readily in machinery.
- Ideal for broadacre applications.

### **WHAT RATES OF PEATS TAILORMADE SHOULD YOU USE?**

Peats TailorMade can be used in either a pellet form or prill depending on mode of delivery. Rates vary depending on crops and soil requirements. Please contact Peats Soil or your local agronomist to discuss correct rates based on your soil test results and production plans. A table of indicative rates is provided on the next page.

# Field trial results and infiltration demonstration



Fig 1. Untreated dispersive clay



Fig 2. Same dispersive clay treated with Peats TailorMade™

## Dispersive clay

Peats TailorMade™ has unique properties for mitigating clay dispersion as clearly demonstrated in these pictures.

The soil conditioner in Peats TailorMade™ assists in the maintenance of aggregation of the clay soil sample shown in Figure 2.

The soil conditioner in Peats TailorMade™ stabilises the clay fraction which improves the infiltration of water through soil pores.

## Field trial results and infiltration demonstration

Rate of Peats Tailormade™ (Kg/Ha).	Area (Ha)	Total Yield (MT)	Yield per hectare (MT/Ha)
0	2.2	5.408	2.476
30	2.2	5.892	2.678
60	2.2	5.898	2.681
90	2.2	5.874	2.670
120	2.4	6.485	2.702

## Indicative Application Rates:

Situation	Application	Comments
<b>In Furrow:</b> Cereals, Brassicas, Legumes	30-100Kg/Ha in furrow	Will combine well with granular fertility treatments or in conjunction with liquid applications into the furrow of sowing.
<b>Deep Banding:</b> Cereals, Brassicas, Legumes	400-800Kg/Ha at depth	
<b>Horticulture:</b> Fruit Trees, Vines, Potatoes	300-700Kg/Ha in furrow	Apply into furrow at the time of establishment.
<b>Turf:</b> Fairways, Tees	500-1000Kg/Ha	Please seek advice on compatibility with inoculate and fungicide applications.

# What are the advantages of applying?



## Improving water use efficiency

Soil with good structure will hold water better than sandy soils do and drain better than clay soils do. Neither clay nor sand absorbs water well; water simply flows between the large particles in sand, and it can be trapped by the tiny particles in clay. The organic material in soil absorbs water far more willingly than sand but releases it more than clay.

These physical effects have important ramifications. Compost in sandy soil ensures that the soil holds water long enough to dissolve nutrients - an essential role since plants can only use nutrients when they are dissolved. In tightly bound clay soils, introducing compost allows dissolved nutrients to circulate, making them more available for root uptake.



## Increases nutrient availability

### Increases the Cation Exchange Capacity

Peats TailorMade™ increases the number of physical locations that can bind nutrients in the soil (increasing the Cation Exchange Capacity or CEC), making nutrients less likely to leach. It also supports the growth of micro-organisms that recycle plant matter in the soil, converting it back to plant available nutrients.



## Improves fertiliser efficiency

### Better use of existing and applied fertiliser

By improving the structure of the soil through the application of compost such as Peats TailorMade™, more water can enter and move within a soil profile. This improves the accessibility of nutrients in the soil solution to reach the plant. The majority of nutrients required by the plant are absorbed from the soil solution, so improving the movement of this solution improves the efficiency of fertiliser applications into the soil.



## Increased available nutrients

### Increases critical micronutrients into the soil

In the process of producing Peats TailorMade™, vital micronutrients such as iron, manganese, copper and zinc, which are essential to plant health in minute quantities, are added. These are critical pre-cursors, catalysts or complementary building blocks for macro-nutrient uptake and use by the plant.



## Increased Humic & Fulvic Acid functionality

### Increases rate of nutrient exchange capacity in the soil

Peats TailorMade™ boasts Humic Acids of 5.66% and Fulvic Acids of 9.72% concentration (tests may vary between samples). Both are an excellent additive to soils with low nutrition permitting such soils to increase their chemical reactivity in supplying higher nutrient exchange capacity to the plants therein.

# What are the advantages of applying?



## **Building microbial activity**

Micro-organisms improve soil-structure because they help soil to aggregate. But they also play a number of other roles. Some help to reduce plant diseases while others establish the mycorrhizal fungi that allow plant roots to access nutrients far below the reach of their roots.

One of the most important mycorrhizae are arbuscular mycorrhizal fungi (Am), which infect (that's the technical term) the roots of many plants, forming long, slender, branching systems of threads stretching from plant roots into the soil below. AM fungi can penetrate much smaller spaces that can even the smallest root threads, accessing nutrients that roots cannot. That is particularly important in allowing plants to reach phosphorus and other immobile nutrients which are available only in the volume of soil immediately surrounding the roots - or in the microbes that extend from those roots.



## **Regulates pH**

### **Increase the availability of required nutrients**

Peats TailorMade™ has the ability to regulate pH: making alkaline soils more acidic and acidic soils more alkaline. Its ability to balance pH results from the fact that it increases cation exchange capacity (CEC) of the soil, creating sites to tie up Hydrogen ions in acidic soils. In alkaline soils as the organic matter in Peats TailorMade™ decomposes, it releases organic acids, lowering pH.



## **Disease suppression**

### **Counters the impact of soil borne diseases**

Adding a high quality compost like Peats TailorMade™ increases the number of beneficial bacteria and fungi in soil and improve the nutritional profile of the plant. The healthier crops and pastures that result are better able to withstand the introduction or presence of disease while also limiting disease-causing microbial populations. Composts have been proven to suppress the effect of diseases such as Fusarium, Phytophthora, Sclerotium, Pythium and Rhizoctonia.



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# A balanced blend of microbial benefits

## Key Microbe Groups

GROUP	Biomass (mg/kg)	
	Yours	Guide
Total micro organisms	167.9	50.0
Total bacteria	43.2	15.0
Total fungi	121.2	33.8
<b>BACTERIA</b>		
Pseudomonas	2.712	1,000
Actinomycetes	5.270	1,000
Gram positive	33.161	7.500
Gram negative	10.010	3.750
Methane oxidisers	2.668	0.500
Sulphur reducers	BDL*	< 0.005
True anaerobes	1.632	< 0.005
<b>EUKARYOTES</b>		
Protozoa	3.574	1.250
Mycorrhizal fungi (including VAM)	3.980	10.000

Useful Indicators	Yours	Guide
Microbial diversity	101.6	80.0
Fungi : Bacteria	2.8	2.3
Bacterial stress	0.4	< 0.5
Compost maturity	96.8	80.0
Disease suppression	100.0	80.0
<b>NUTRIENTS HELD IN MICROBES</b>	<b>Concentration (mg/kg)</b>	
	<b>Yours</b>	<b>Guide</b>
Nitrogen (N)	5.270	1,000
Phosphorus (P)	33.161	7.500
Potassium (K)	10.010	3.750
Sulphur (S)	2.668	0.500
Calcium (Ca)	BDL*	< 0.005
Magnesium (Mg)	1.632	< 0.005
Carbon (C)		
<div style="display: flex; justify-content: space-between; width: 100%;"> <span><b>POOR</b></span> <span><b>FAIR</b></span> <span><b>GOOD</b></span> </div>		

Test results conducted by Microbiology Laboratories Australia

Peats Soil regularly assess the microbial benefits of Peats Tailormade™ by commissioning independent analysis of the product.

The critical determinants of compost quality are the sources of the feedback, the process and time taken to properly mature the compost to activate the development of the beneficial active microbes in the compost.

Assessment of the biomass of total micro-organisms includes the types of bacteria and fungi present as well as the nutrient concentration of the microbial population.

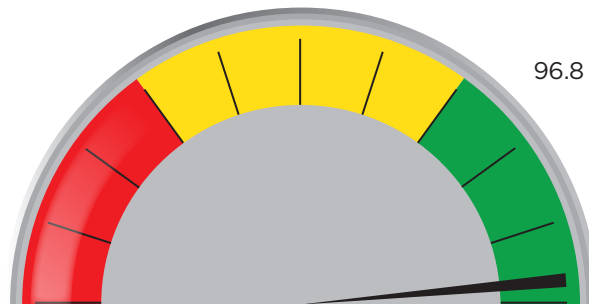
As demonstrated by this report by Microbiology Laboratories Australia, Peats Tailormade™ contains high levels of diverse microbes and as a result high concentrations of nutrients are being converted into plant available forms.

Peats Tailormade™ is properly matured and rates very highly on the measure of overall disease suppression as summarised in the spectrum indicators over-page.

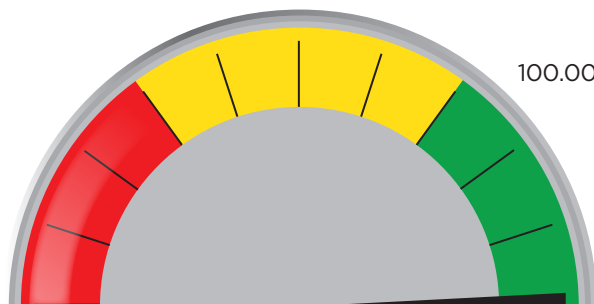
# A balanced blend of microbial benefits

## Compost Indicators

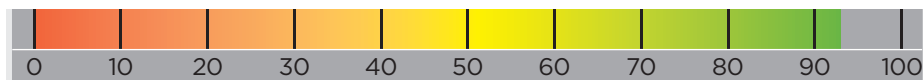
### Compost Maturity



### Disease Suppression



### Overall Microbial Balance



## Overall Microbial Balance

### Key microbe groups that are important for soil health and nutrient cycling include:

- Pseudomonas - nutrient solubilisation & disease suppression
- Actinomycetes - residue breakdown & disease suppression
- Gram positive bacteria - drought resistance & overall bacterial balance
- Gram negative bacteria - disease suppression & overall bacterial balance
- Protozoa - nutrient cycling
- Mycorrhizal fungi (VAM) - nutrient accessibility, drought & disease resistance

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