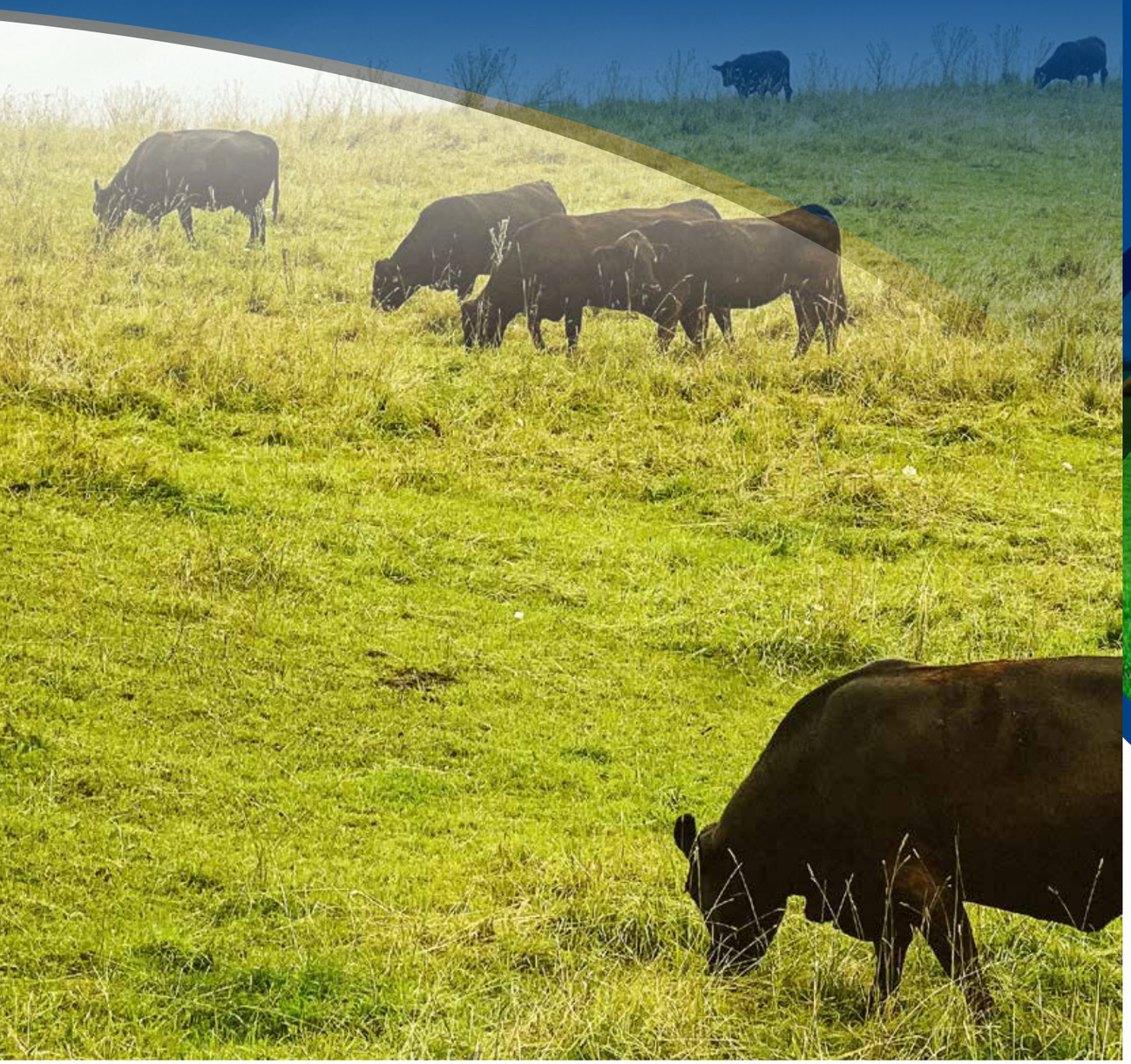
Biologically
Activated Minerals (BAM)



Suitable for: Agriculture Horticulture

O2E 0402

Contact us for pricing today at
ocean2earth@pentarch.com.au

The natural agriculture solution

Biologically
Activated Minerals (BAM)

Ocean2Earth Biologically Activated Minerals (BAM) is an organic soil amendment designed to enhance pasture health and productivity.

What is BAM?

BAM activator has been developed through a formulation of composted shellfish creating a biologically diverse and resilient microbial population. The activator is blended with organic minerals rich in calcium and silica, which improve soil structure, nutrient availability and root development, while also enhancing plant strength, disease resistance and drought tolerance.

Benefits

- **Superior microbial activity for soil health**
- **Rich in beneficial fungi**
- **Increased nutrient availability**
- **Improved soil structure & water retention**
- **Natural disease suppression**

Part of the Bega circular valley

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General Application Rate

250kg – 1500kg per hectare (kg/ha) for broad-acre pasture application. A customised rate can be determined through soil testing to optimise nutrient balance.

Application Method

Apply evenly across pasture using a standard belt spreader. This maybe used in conjunction with existing soil improvement programs.

For best results, follow up with an application of **Ocean2Earth SEA SPRAY™**.

SEA SPRAY is a powerful hydrolysate, rich in amino acids and proteins. It feeds and supports the beneficial microbes and promotes healthy soil biology. Healthy soil biology creates thriving, productive soils maximising crop growth and resilience.

Microbial Population

Actinomycetes Bacteria - **BAM** contains an exceptionally high population of active actinomycetes (790,000 cfu/g), making up 88.26% of the total active microbial population. These beneficial microbes play a crucial role in breaking down organic matter, improving soil structure and mineralising nutrients making N, P, K and Trace elements more available to plants.

Beneficial Fungi - With 102,000 cfu/g of active fungi, **BAM** enhances soil aggregation, improves water retention, and supports robust plant growth. Fungi play a key role in nutrient cycling and organic matter decomposition.

Component	Method Reference	Total Value
Major Nutrients		
Total Potassium (mg/kg)		744
Total Phosphorus (mg/kg)		2896
Total Cations		
Total Calcium (mg/kg)	Rayment & Lyons 2011 - 17C1 Aqua Regia	14498
Total Magnesium (mg/kg)		10644
Total Sodium (mg/kg)		1870
Trace Minerals		
Total Sulfur (mg/kg)		<50
Total Zinc (mg/kg)		68
Total Manganese (mg/kg)		865
Total Iron (mg/kg)		41166
Total Copper (mg/kg)		199
Total Boron (mg/kg)		2
Total Silicon (mg/kg)		960
Total Molybdenum (mg/kg)		1
Total Cobalt (mg/kg)		16
Total Selenium (mg/kg)		<0.5
Total Cadmium (mg/kg)		<0.5
Total Lead (mg/kg)		3
Total Arsenic (mg/kg)		<2
Total Chromium (mg/kg)		3
Total Nickel (mg/kg)		8
Total Mercury (mg/kg)		<0.1
Total Silver (mg/kg)		<1
Silica Content		
Total Silica (% Si)	Inhouse S39 (NaOH Fusion)	24
Total Silica (% Si02)	Calculation - Total Si x 2.143	51
Strength of Atoms and/or Molecules		
Paramagnetism (μCGS)	**Paramagnetic Count Soil Meter	6250
Microbial Population		**cfu/g**
Active Actinomycetes		790,000 (88.26%)
Total Active Fungi		102.000 (11.40%
Cellulose Utilisers		22,000
Active Yeasts		2,000
Active Lactic Acid Bacteria		1,000
Active Photosynethic Bacteria		100