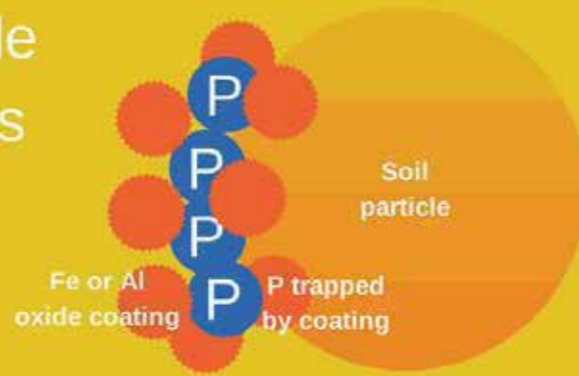


Water-soluble  
phosphorous  
lock-up

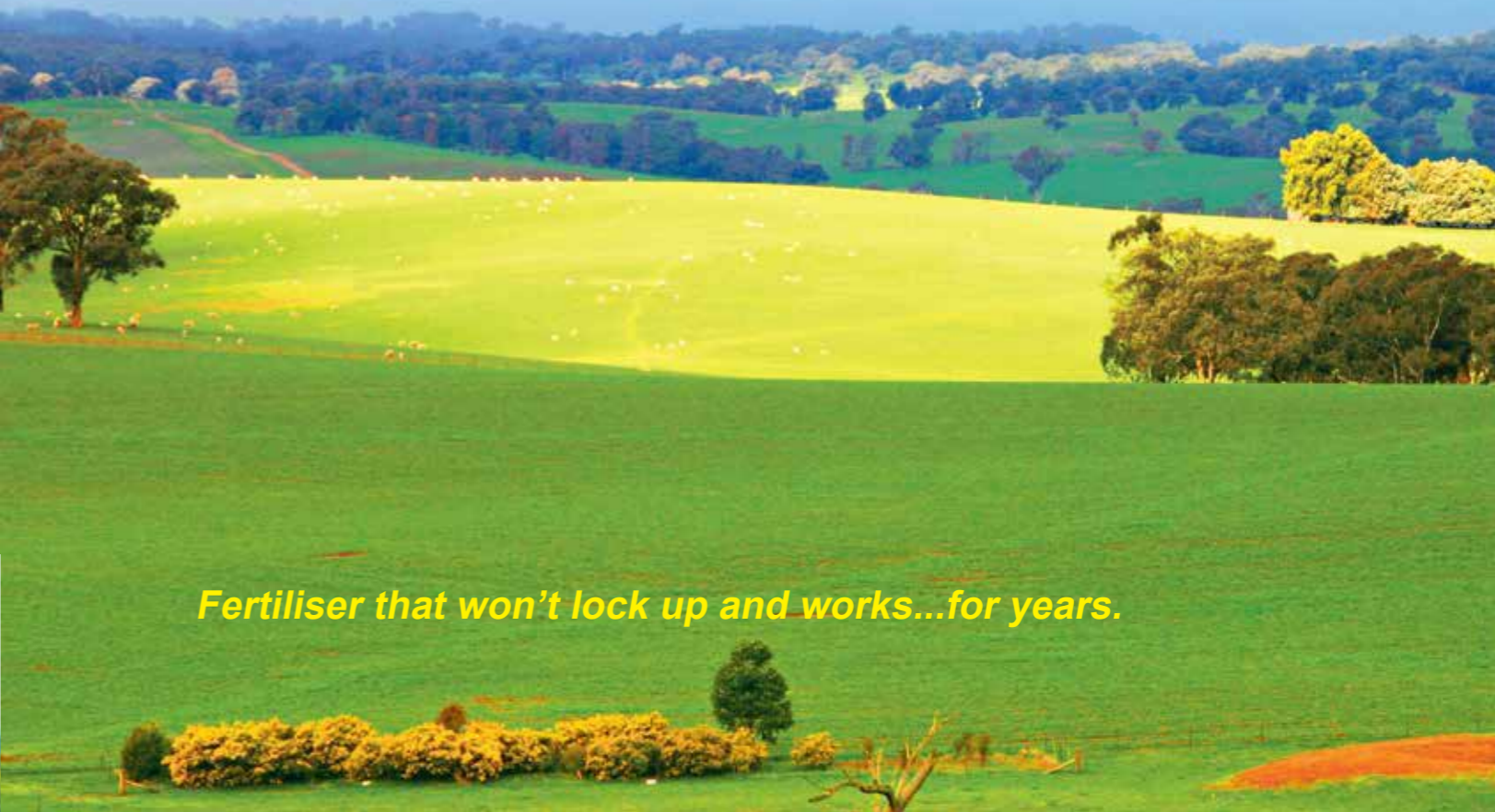


P can be freely adsorbed into soil minerals. Available for plant use.

Water-soluble P reacts with minerals in the soil & 'locks up'. Becomes unavailable to the plant.

# BioAgPhos®

PHOSPHATE FERTILISER  
THAT WORKS NOW  
AND KEEPS WORKING



*Fertiliser that won't lock up and works...for years.*



## Microbial Technology

A real strength behind the BioAgPhos range of products is the pre-digestion of the phosphate rock by BioAg's proprietary fermented culture. While greater than one third of the phosphorous content of BioAgPhos is immediately available to plants, the microorganisms digest the remainder of the phosphorous content over a long and sustained period, continually adding to the nutrient reservoir of the soil.

The improved microbial activity in the soil after application also helps unlock previously applied phosphate, calcium and other nutrients, leading to long-term benefits in soil structure and fertility.

Independent testing by CIAAF has identified the bacteria families in the BioAg culture include:- Pseudomonas, Actinomycetes, Aspergillum Spp, Pencillium Spp, Bacillus, Azotobacter, Azospirillum, Protozoa. These microbes enhance the availability of the phosphorus within the product by digesting the rock and excreting the phosphorus as a readily available plant food source. This microbial activity also stimulates other microbial growth within the soil leading to an improved availability of soil nutrients.



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Better soils. Better crops. Better stock.

Since its founding in 1999, BioAg has become the Australian market leader in agricultural microbial fermentation technology. We manufacture biologically-active solid and liquid nutrients for all farm systems producing living, healthy and balanced soils.

## BioAgPhos®

BioAg's solid products range is based on BioAgPhos®, a highly reactive phosphate rock which has been inoculated with a microbial culture in the manufacturing process that results in the phosphorus being less reliant on rainfall to become plant available. Unlike conventional phosphorus fertilisers, BioAgPhos is not water soluble and therefore does not become "locked up" in the soils. This allows for an immediate and sustained release of phosphorous and calcium over a period of 24 months or more. 100% of the phosphorus is bioavailable as tested by the Commonwealth government reference laboratory the National Measurement Institute (NMI). This test shows the total amount of phosphorus that is available to plants.

BioAgPhos® is well suited to grazing, cropping and horticulture enterprises and provides a cost effective and agronomically sound phosphate source. It is principally used as a source of capital phosphate in cropping systems and a complete phosphate supply for grazing systems and permanent plantings like trees and vines.

BioAgPhos® contains a minimum phosphorus content of 13%, about one third of which is immediately available (i.e. citrate-soluble) for plant use. The remainder is slowly digested by the micro-organisms and added to the nutrient reservoir in the soil. The improved microbial activity in the soil helps unlock previously-applied phosphate, calcium and other nutrients, leading to long-term benefits in soil structure and fertility.

BioAg offers various blends of BioAgPhos with other essential minerals depending on soil requirements (see the Product Range diagram). Trace elements can also be blended (either on farm or pre delivery depending on volumes and order size) into the BioAgPhos® program to create a product tailored to your individual soil's needs.

## Product Features

- > Stable form of phosphorus that won't lock up in the soil and continues to work for years after application
- > Low cost per unit of P
- > Low levels of heavy metals relative other phosphate fertilisers
- > Added benefit of plant available calcium
- > Year round availability to plants
- > Fine granular particles compatible with lime, gypsum and other soil conditioners

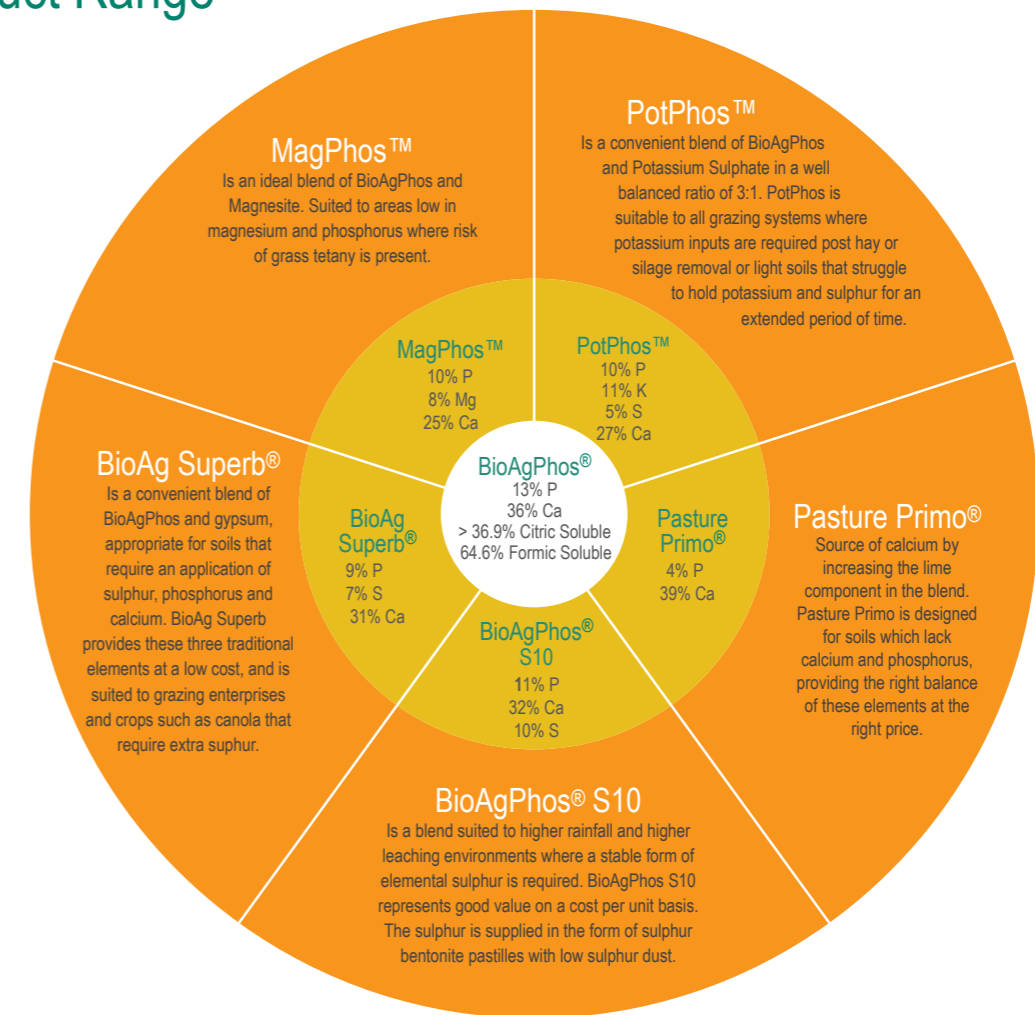
## Advantages to the farmer

- > Reduced reliance on water soluble forms of phosphate fertiliser
- > Reduced fertiliser costs
- > Improved crop and pasture growth from year round availability of phosphorus
- > Reduced spreading costs by blending additional soil nutrient requirements ie. P, Ca, Mg, K & S.
- > Allows for a stronger healthier plant and root system.
- > Increased surface area allowing for a more consistent release of P into the soil.

## Spreading Consideration

BioAgPhos® needs to be applied as a fine particle application, therefore to keep spreading costs down, it is recommended to combine all soil amendments needed in the one application. For example BioAgPhos® can be combined with lime, dolomite, magnesite, gypsum, compost, manures and trace elements and applied together with a belt spreader. BioAgPhos® can also be spread by air provided the product is kept dry prior to spreading.

## Product Range



## Phosphorus Availability

Water soluble phosphates vs. BioAgPhos

