



BioAg

Solid Fertilisers

For immediate and continuous long-term
nutrient supply for vegetable crops



BioAgPhos[®]
Reactive Phosphate Rock

For immediate & continuous long-term nutrient supply for vegetable crops



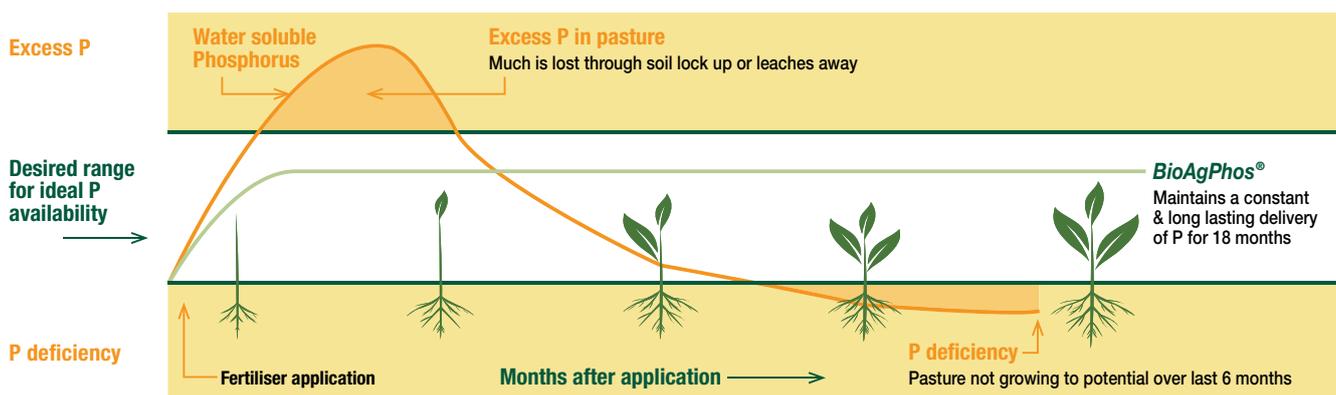
Reliable Phosphorus Supply for Intensive Vegetable Production

Vegetable crops have high and continuous Phosphorus (P) demand to support rapid root development, early vegetative growth, flowering, and marketable yield. In intensive vegetable systems, conventional water-soluble fertilisers such as MAP, DAP, or SSP deliver an immediate P flush but are inefficient over time, with a large proportion quickly fixed in the soil and unavailable to crops.

BioAgPhos[®] provides a more effective long-term strategy. As a biologically enhanced reactive phosphate rock (RPR) containing 13% elemental P and 35% calcium, it supplies P gradually through biologically mediated processes. This sustained release aligns with vegetable crop uptake patterns, improving phosphorus-use efficiency, supporting uniform growth, and reducing the need for repeated high-rate soluble P applications.

P availability – “non-water solubility doesn’t mean non-plant availability”

Phosphorus availability – Water soluble phosphates vs. **BioAgPhos**[®]



Biological Phosphorus Cycling in Vegetable Soils

In vegetable production, P availability is governed largely by soil biological activity rather than water solubility. **BioAgPhos** works through the rhizosphere by supplying mineral P in a form that soil microbes, fungi, and plant roots can solubilise via weak organic acids and phosphatase enzymes. These biological mechanisms convert complex and otherwise unavailable P forms into plant-available orthophosphates.

BioAgPhos is treated with a proprietary biological digester that primes the rock phosphate surface for faster microbial access and stimulates native phosphorus-solubilising organisms. Unlike acidulated fertilisers that can suppress microbial diversity and disrupt soil function, **BioAgPhos** supports a biologically active soil, which is essential in high-frequency vegetable rotations where soil resilience and nutrient cycling are critical to sustained productivity.

Application Flexibility for Intensive Cropping Systems

BioAgPhos is well suited to both large scale and intensive vegetable production systems, including bedded, irrigated, and high-input operations. With 96% of particles below 500 microns, it delivers excellent spreadability and uniform soil contact, enhancing mineralisation and crop access across the root zone. It can be applied pre-plant, incorporated into beds, or broadcast between crops, and is suitable for annual or biennial application programs.

BioAgPhos can also be custom blended with key vegetable nutrients and trace elements such as zinc, boron, or manganese, and applied alongside lime, gypsum, composts, or manures in a single pass. It's non-water-soluble nature reduces losses from leaching or runoff under irrigation, improving overall nutrient-use efficiency.

“ Increased yields, constant quality and the economic benefits of less nitrogen. ”

– Dhami Singh,
Vegetable Grower, Shepparton



Building Soil Health and Long-Term Farm Viability

In intensive vegetable systems, fertiliser strategies that prioritise short-term yield often come at the expense of long-term soil health. Research shows that only 10–20% of water-soluble phosphorus is taken up in the season of application, with up to 50% becoming fixed and unavailable in the short to medium term.

BioAgPhos avoids this inefficiency by building a stable, biologically accessible phosphorus reserve that improves year-on-year soil fertility. Its high calcium content contributes to improved soil aggregation, infiltration, and cation balance—critical factors for root health and water management in vegetable production.

As a natural sedimentary phosphate rock with very low heavy metal content and a lower carbon footprint than processed alternatives, **BioAgPhos** supports environmentally responsible production.

By investing in biologically compatible phosphorus management, vegetable growers can maintain high productivity today while preserving healthy, resilient soils that ensure long-term farm viability for future generations.

Product Highlights

- You don't need forecast rain to apply.
- Doesn't need to be applied annually. It can be applied every second year.
- Can be applied at any time of the year.
- Reduces reliance on repeated synthetic applications and builds fertility that endures beyond a single crop cycle.
- **BioAgPhos** is the only Australian product using highly reactive phosphate rock on the market.
- Productivity and profitability combined with improved soil performance.

Application Rates

The principals of a balanced soil are paramount, the goal is getting the chemistry, structure and biology in balance to make sure the crop realises its full potential. General application rates are between 200–500kg/ha.

The individual paddock requirements are considered, including history and soil type, along with soil test results.

A farmer's yield, quality goals, and budget are also required to make a sound recommendation.

BioAg can tailor programs that are suitable for both conventional and organic farming systems and may include products from the BioAg range of biostimulants.



Imported from Algeria, this natural sedimentary rock has been specifically selected for its reactivity.

BioAgPhos[®] is the only highly reactive rock phosphate available in Australia.



Customised Blends

BioAg offers customised blends with **BioAgPhos** as a base component that can have other nutrients and/or trace elements added.

BioAgPhos can be applied on farm with other ameliorates in one pass (lime, gypsum, compost).



Visit our website or contact your local Area Manager for more information.



BioAg Pty Ltd is an Australian owned and operated manufacturer of liquid biostimulants and importer of Reactive Phosphate Rock fertilisers. The company has been in business for over 25 years with the head office and modern liquid production facility in Narrandera and a solid fertiliser site in Geelong. BioAg products are scientifically proven to provide yield responses in conventional and all other farming systems. A dedicated team of Area Managers / Agronomists provide full field technical support to farmers and the reseller network.

Your local BioAg Area Managers are always available to discuss how BioAg's products and programs can improve your farming system or put you in contact with our distributor network.

The BioAg Range of Solid Fertilisers

Certified for use in organic systems

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BioAgPhos

Highly reactive phosphate fertiliser made from high-grade reactive phosphate rock combined with BioAg's microbial digesting agent.

S10 BioAgPhos

Incorporates elemental sulphur in the form of sulphur bentonite for a steady and longer S supply. Ideal for higher rainfall and higher leaching environments.

MagPhos

Incorporates dolomite in *BioAgPhos*. Ideal for soils that need phosphorus, sulphur, calcium, and magnesium, such as pastures and grazing systems where there is a risk of grass tetany.

BioAg Superb

Incorporates calcium sulphate in the form of gypsum into *BioAgPhos*. Ideal for soils that need phosphorus, sulphur, and calcium, such as pastures and grazing, and for crops requiring extra sulphur, such as canola.

Pasture Primo

Provides a rich source of calcium and phosphorus through a blend of *BioAgPhos* and lime.

BioAgSoP

Organically certified granular form of fertiliser containing potassium and sulphur. Immediately available to crops and plants. Ideal for crops with a high potassium demand and sensitive to chloride.

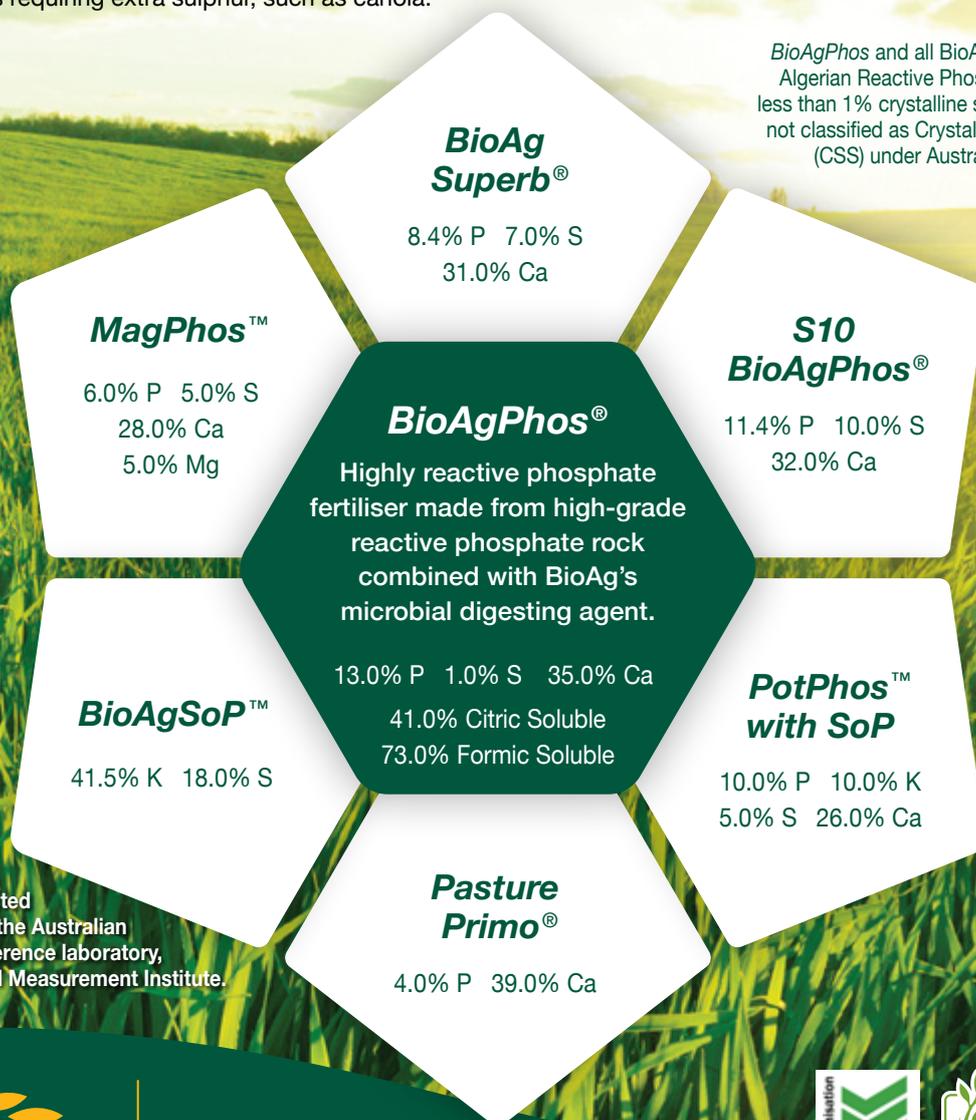
PotPhos with SoP

Incorporates *BioAgSoP* and *BioAgPhos* in a blend ideal for soils that need phosphorus, sulphur, and calcium, such as hay and grazing pasture.

BioAgBor

An immediate and sustained release form of boron suited to a range of enterprises such as horticulture, vegetables, pastures and field crops.

BioAgPhos and all BioAg products based on Algerian Reactive Phosphate Rock contain less than 1% crystalline silica, and therefore are not classified as Crystalline Silica Substances (CSS) under Australian regulations.



Phosphorus bio-availability tested independently by the Australian Government's reference laboratory, NMI – the National Measurement Institute.



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Reliable. Proven. Profitable.

BioAg is Australian-owned and operated and has been manufacturing liquid biostimulants and natural phosphate fertilisers since 1999.