



Better soils. Better crops. Better stock.™

## **BioAg Fertility Program**

### **– Broadacre crops**

BioAg Fertility Programs produce a living, healthy and balanced soil. Each program is custom made for each paddock or crop using advanced soil and tissue analysis. These integrated programs typically incorporate a range of BioAg solid and liquid nutrients, often in association with conventional inputs. BioAg Fertility Programs can be developed to meet BFA certification requirements for organic producers. A standard BioAg Fertility Program for broadacre crops is outlined overleaf.

A biological system starts to become self-sustaining within three to five years, but producers will begin to notice a visible difference in the health of their soils during the first year. Benefits include improved soil structure, water infiltration and retention; reduced stubble retention; improved germination and crop establishment; reduced weed competition and disease; improved populations of beneficial insects; improved resistance to insects, disease and climatic extremes; improved crop yields and grain quality. Many long-term customers have also reported higher gross margins through fewer inputs of conventional fertilisers and pesticides, fewer passes across the paddock in the tractor and greater fuel efficiency during tillage as the soil is easier to work. BioAg Fertility Programs provide the foundation for sustainable, efficient production.



**For more information,  
phone 1300 599 911 or visit [www.bioag.com.au](http://www.bioag.com.au)**

Time	Products	Comments	Features and benefits	Application details
Pre-sowing	BioAgPhos® Lime	BioAgPhos and lime provide the two most important nutrients for plant growth – phosphate (regulation within the plant and nutrient uptake) and calcium (growth and reproduction energy).	<ul style="list-style-type: none"> <li>• Reactive phosphate rock treated with a proprietary microbial treatment</li> <li>• Immediate and continued-release of plant-available phosphate</li> <li>• Minimum phosphorus content of 15%</li> <li>• Improved soil microbial activity “unlocks” previously-applied nutrients</li> <li>• Rejuvenates natural soil fertility and structure</li> <li>• Improves plant growth, nutritional value and yields</li> <li>• Can be easily mixed with lime and/or gypsum</li> </ul>	<ul style="list-style-type: none"> <li>• Annual application using belt spreader prior to sowing.</li> <li>• BioAgPhos: 100–150 kg/ha</li> <li>• Lime: 350–500 kg/ha</li> </ul>
	BioAg Sulphate of Ammonia	BioAg Sulphate of Ammonia is a cost-effective source of nitrogen and sulphur and is ideal for use in biological farming systems.	<ul style="list-style-type: none"> <li>• Ideal for use in biological cropping systems</li> <li>• Minimum nitrogen content of 21% as ammonium (NH<sub>4</sub>)</li> <li>• Minimum sulphur content of 24% as sulphate (SO<sub>4</sub>)</li> <li>• Lower susceptibility to volatilisation</li> </ul>	<ul style="list-style-type: none"> <li>• Apply using a belt spreader prior to sowing</li> <li>• 80–180 kg/ha</li> </ul>
Sowing	BioAg Soil & Seed™	BioAg Soil & Seed is a liquid microbial culture that is applied directly onto the soil using a boom spray. It may also be used as a seed inoculant to encourage germination and root development.	<ul style="list-style-type: none"> <li>• Soil amendment and seed inoculant</li> <li>• Balanced food supply for soil microbes</li> <li>• Stimulates soil microbial population and diversity</li> <li>• Accelerates conversion of crop residues into humus</li> <li>• Improves soil moisture and nutrient utilisation</li> </ul>	<ul style="list-style-type: none"> <li>• Apply at 2.5–4.5 L/ha to moist soil using a boom spray or irrigation system</li> <li>• Incorporate within 48 hours mechanically or with rainfall/irrigation</li> <li>• Can be used as a seed inoculant at 2.5 L/tonne</li> </ul>
Early growth	BioAg Balance & Grow® Calcium nitrate	BioAg Balance & Grow is a liquid microbial culture that is applied to foliage using a boom spray. Calcium nitrate and micronutrients may be added if needed.	<ul style="list-style-type: none"> <li>• Balanced nutrient supply for plants and soil microbes</li> <li>• Supports vegetative growth</li> <li>• Increases calcium level in plants</li> <li>• Stimulates soil microbial population and diversity</li> </ul>	<ul style="list-style-type: none"> <li>• Apply at 1.5 L/ha using boom spray or irrigation system</li> <li>• Apply when there is good ground cover and plants are actively growing</li> <li>• Include calcium nitrate (4–8 kg/ha) if necessary</li> </ul>
Stem elongation (cereals) Commencement of flowering (oilseeds and pulses)	BioAg Fruit & Balance® Urea	BioAg Fruit & Balance is a liquid microbial culture that is applied to foliage using a boom spray. Urea may be added if needed.	<ul style="list-style-type: none"> <li>• Balanced nutrient supply for plants and soil microbes</li> <li>• Stimulates and supports fruiting and maturation</li> <li>• Increases phosphate supply during period of peak load</li> <li>• Stimulates soil microbial population and diversity</li> </ul>	<ul style="list-style-type: none"> <li>• Apply at 1.5 L/ha using boom spray or irrigation system</li> <li>• Apply from second internode elongation up to head emergence (cereals)</li> <li>• Apply at early flowering (pulses and oilseeds)</li> <li>• Include 3–10 kg/ha urea if necessary</li> </ul>
Post-Harvest	BioAg Digest-it® Urea	BioAg Digest-it is a microbial liquid culture that is applied to stubble using a boom spray.	<ul style="list-style-type: none"> <li>• Converts stubbles and residues into humus</li> <li>• Eliminates need for stubble burning</li> <li>• Reduces carry-over of soil-borne pathogens</li> <li>• Reduces reliance on herbicides to control fallow weeds</li> <li>• Improves soil tilth and workability</li> </ul>	<ul style="list-style-type: none"> <li>• Apply at 2.0–4.0 L/ha</li> <li>• Apply using boom spray to moist soil/stubble and incorporate stubble throughout aerobic zone within 48 hours with offset disc or similar</li> <li>• Apply with 0–20 kg/ha urea</li> </ul>