

GLOBAL SCAN | OCTOBER 2024

Biological Products Database

By Source and Trade Name

About this database and how to use it

This Biological Products Database is a tool for growers that will assist with navigating the array of 'biological' products currently available to their farming business. We have compiled the information in response to questions from growers about available products. (Webinar on biopesticides available [here](#).)

Definition

'Biological' products (also called 'biologicals') are defined as those that are derived from living organisms (plants, animals, microorganisms, fungi). The term encompasses a diverse range of products, and this is a fast-growing segment of agricultural inputs (definition from www.croplife.org).

This database includes a column that indicates

whether products have APVMA registration (Australian Pesticides and Veterinary Medicines Authority). Registered products are known as 'Biological Crop Protection' products. If a product is used for crop protection (i.e., used as a biopesticide) it must be registered for use in the crop and situation it is applied in. Contact the APVMA or Hort Innovation for more information. For products not registered with the APVMA, potential effects suggested by manufacturers are NOT efficacy claims and data on potential for phytotoxicity or residues do not exist.

How was the database developed?

We have gathered information primarily from the manufacturers, via their websites and/or their representatives. We have attempted to strip away any confusion by laying out the bare bones of each product. We will include references to independent research as and when it becomes available.

The database is a work in progress

The database is a work in progress and is not comprehensive. We have not carried out reviews of science-based literature for each product. If a column or cell is blank, it does not mean that there is no information, just that we have not found it yet (this is particularly the case for independent trial information). The database will be updated and published regularly as information becomes available.

Is anything missing?

If you know of any products or trial information we have not included, or details that are inaccurate or incomplete, please either complete the spreadsheet at the bottom of this webpage (www.soilwealth.com.au/resources/global-scan-and-reviews/biological-products-database/) and/or get in touch - rm@rmcg.com.au.

DISCLAIMER: VERY IMPORTANT

This document does not include or offer advice of any kind. It is a collection of publicly available information. Very few products have been registered by the APVMA, a process that entails rigorous independent testing of efficacy, residues, phytotoxicity and potential effects on flora, fauna and people. We do not endorse any products and the database is not an exhaustive list. To the best of our knowledge the information is correct at the time of publishing.

The following explanations of ‘Source’ and ‘Product Type’ have been developed to provide clarity and aid with interpretation of the Biological Products Database. Some products do not fit neatly within these, where this is the case, the aim has been to provide the best fit for the product details available.

BIOLOGICAL PRODUCTS DATABASE – EXPLANATIONS – SOURCE

| | |
|-----------------------------|---|
| <p>microbial</p> | <p>Microbial products are products derived from various small, simple organisms. Microbial products may contain the organisms themselves and/or the metabolites they produce. Microbial products generally contain or are derived from four different subcategories:</p> <ul style="list-style-type: none"> • Bacteria - may prevent plant diseases by outcompeting plant pathogens in the rhizosphere, producing anti-fungal compounds, and by promoting plant and root growth. Examples of beneficial bacteria include <i>Bacillus subtilis</i>, <i>Bacillus pumilus</i>, <i>Pseudomonas</i> spp., and <i>Streptomyces</i> spp. • Protozoa - while most protozoa feed on bacteria and decaying organic matter, a wide range of protozoan species are insect parasites. For example, the protozoan <i>Nosema locustae</i> is known to be a natural biocontrol agent of many grasshopper species. • Viruses - can be very specific to particular insects or arthropods. For example, certain viruses can kill only one or a few species of Lepidoptera larvae (caterpillars), making them good candidates for management of crop pests with minimal off-target effects. The granulovirus of the codling moth (<i>Cydia pomonella</i>), or CpGV, is a good example of a commercially successful viral insecticide. • Yeasts - may work through competition with pathogens, e.g. for nutrients. For example, <i>Candida oleophila</i> Strain O, has been developed as an effective biocontrol for post-harvest fruit rots. It is applied to apples and pears after harvest — but before storage — to control particular fungal pathogens causing post-harvest decay such as grey mould (<i>Botrytis cinerea</i>) and blue mould (<i>Penicillium expansum</i>). <i>Candida oleophila</i> Strain O works primarily through competition for nutrients and pre-colonisation of plant wound sites. |
| <p>plant extract</p> | <p>Water- or solvent-based plant extracts or essential oils (EOs) can contain valuable natural products, many of which can be used safely in pest and disease control due to their ability to degrade quickly. An important consideration is that EOs and plant extracts are biologically unstable as they are easily destroyed by environmental pH, oxygen, light, and moderate temperatures. EOs exhibit poor aqueous solubility and high volatility in general. Many extracts or EO biopesticides are often used without deeply understanding their mode of action. Water- or solvent-based extracts and EOs can improve plant resistance to biotic and abiotic stressors, and can be involved in metabolic processes that control plant tolerance to these stressors.</p> |
| <p>amino acids</p> | <p>Amino acid products are manufactured either by hydrolysis or enzymatic treatment of animal or plant protein feedstock. Amino acids are readily absorbed, transported, and utilised as a source of nitrogen and carbon for plants. This saves the energy expended by the plant to reduce organic matter, synthetic nitrates and ammonia into amino acids. Some amino acids are efficient metal ion chelators which can help with metal ion nutrient uptake and help protect plants from toxic levels of metal ions.</p> <p>Amino acids also function as biostimulants for plants, playing important roles in enhancing plant productivity, especially under abiotic and biotic stress conditions. Refer to https://www.growerssecret.com/amino-acids-as-biostimulants</p> |

BIOLOGICAL PRODUCTS DATABASE – EXPLANATIONS – SOURCE (CONTINUED)

| | |
|--------------------------|--|
| seaweed extract | <p>An extract produced from seaweed. It is usually a concentrated organic product (usually liquid, but can be soluble granules) that can be diluted and applied to seedlings and transplants as well as larger plants – see comments below for the specific functions of humic and fulvic acids.</p> <p>Nutrient content: Seaweed is a rich source of many essential plant nutrients such as nitrogen, phosphorus, potassium, and trace elements like iodine, zinc, and iron which can improve soil fertility.</p> <p>Microbial growth: Seaweed can act as a source of carbon and energy for microorganisms in the soil, stimulating their growth and activity.</p> <p>Root growth: Some studies suggest that seaweed extracts can have a positive impact on root growth and root health, which can improve overall plant growth and vigour.</p> <p>Disease suppression: The compounds present in seaweed can have an antimicrobial effect, inhibiting the growth of certain pathogens and helping to suppress plant diseases.</p> <p>Alginates: Seaweed contains alginates, a complex carbohydrate that can form gels in soil, which can improve soil structure and water-holding capacity, making it more conducive to healthy microbial growth.</p> <p>Hormones: Seaweed contains growth hormones like cytokinins and auxins that can promote root growth, cell division and elongation, which can help plants to better cope with environmental stress.</p> |
| fish extract | <p>Fish extract (also emulsion, or fish fertiliser) for plants, is a fast-acting, organic liquid product made from the by-products of the fishing and aquaculture industries. It is rich in nitrogen, phosphorus, and potassium, plus trace elements such as calcium, magnesium, sulphur, chlorine, and sodium.</p> |
| seaweed/fish mix | <p>A mix of seaweed and fish extracts described above.</p> |
| humic/fulvic acid | <p>When plants and animals are decomposed by bacteria, humic substances are released and are found naturally in soils. Humic substances are composed of: relatively small fulvic acids that dissolve in both acid and alkaline environments, larger humic acids that are soluble under alkaline conditions, and very large humins that are insoluble. Humic acids can be 100 000 times larger than fulvic acids. Humic acids used in soil amendments are often extracted from brown coal.</p> <p>Humic acid</p> <p>Humic acids can aid with nutrient cycling, microbial growth and disease suppression through the following mechanisms:</p> <p><u>Nutrient cycling:</u> Humic acids can help to make nutrients such as nitrogen and phosphorus more available to plants by chelating or complexing them, making them more accessible to plant roots.</p> <p><u>Microbial growth:</u> Humic acids can act as a source of carbon and energy for microorganisms in the soil, stimulating their growth and activity.</p> <p><u>Disease suppression:</u> Humic acids can also have an antimicrobial effect, inhibiting the growth of certain pathogens and helping to suppress plant diseases.</p> <p>Fulvic acid</p> <p>Fulvic acid may stimulate root growth and affect root function to exude organic acids that can lead to increased nutrient uptake.</p> <p>Fulvic acid can also help to increase plant nutrient uptake by chelating (binding) minerals and other nutrients. Chelated minerals are easier for the plant to absorb and use.</p> |

BIOLOGICAL PRODUCTS DATABASE – EXPLANATIONS – PRODUCT TYPES

| | |
|----------------------------|--|
| fungicide | Product to control the growth of fungi and fungal spores. They can be made from a variety of chemical compounds including synthetic chemicals, botanicals, and microbial pesticides. |
| herbicide | Product to kill or control weeds. They can be made from a variety of chemical compounds, including synthetic chemicals, botanicals, and microbial pesticides. Some herbicides target specific weeds or groups of weed (e.g. grasses), while others have a broader spectrum of activity. |
| insecticide | Product to kill or control a population of insects. They can be made from a variety of chemical compounds, including synthetic chemicals, botanicals, and microbial pesticides. Some insecticides target specific insects, while others have a broader spectrum of activity. |
| miticide | Product to kill or control a population of mites. They can be made from a variety of chemical compounds, including synthetic chemicals, botanicals, and microbial pesticides. |
| pest deterrent | <p>A plant pest deterrent is a substance or method used to prevent or discourage the presence of pests. These pests can include insects, mites, nematodes, and other animals that feed on plants or cause damage to the foliage, roots, or fruit of plants. Plant pest deterrents can include a variety of chemical and non-chemical methods, such as:</p> <ul style="list-style-type: none"> • Biological controls, such as the use of predators or pathogens that feed on or kill pests • Botanical repellents, such as certain essential oils or plant extracts that have been shown to repel certain pests and also • Physical barriers, such as screens or nets, which can physically prevent pests from reaching the plants. |
| disease suppressant | <p>A plant disease suppressant is a substance or method that is used to prevent or reduce the incidence or severity of plant diseases. These diseases can be caused by a variety of pathogens, such as bacteria, fungi, viruses, and nematodes. Disease suppressants can include a variety of chemical and non-chemical methods, such as:</p> <ol style="list-style-type: none"> 1. Biological controls: The use of beneficial microorganisms such as bacteria or fungi that can outcompete or inhibit the growth of pathogens in the soil or on the plant surface. 2. Botanical extracts and essential oils: Some plant extracts and essential oils have been found to have antimicrobial properties, which can help to suppress the growth of pathogens. <p>Products should be supported via:</p> <ol style="list-style-type: none"> 1. Crop rotation: rotating crops can help to reduce the build-up of pathogens in the soil, which can help to reduce the incidence of diseases. 2. Cultural controls: Sanitation practices, such as removing and destroying infected plant debris, can help to reduce the incidence of diseases. 3. Nutrient management: Proper nutrition can help plants to better cope with disease stress and improve overall plant health. 4. Environmental control: Manipulating the environment by controlling temperature, humidity, light intensity can help plants to better cope with pathogens. |

BIOLOGICAL PRODUCTS DATABASE – EXPLANATIONS – PRODUCT TYPES (CONTINUED)

| | |
|--|---|
| <p>stress resistance</p> | <p>There are several ways to increase stress resistance in plants; the following may be used in products:</p> <ol style="list-style-type: none"> 1. Microorganisms: Some microorganisms can promote plant growth and stress tolerance by improving nutrient uptake, protecting against pathogens, and producing plant growth-promoting compounds. 2. Hormonal treatments: Some phytohormones such as cytokinins and gibberellins have been shown to increase stress tolerance in plants by promoting cell division and elongation. <p>However, sole reliance on products will not be successful. Other methods that should be used at the same time are:</p> <ol style="list-style-type: none"> 1. Variety selection (breeding): Selecting and breeding plants that are naturally more tolerant to stress conditions such as drought, heat, cold, and disease. 2. Proper nutrition: Providing plants with adequate and balanced nutrition can help them to better cope with stress. 3. Water management: Proper irrigation and drainage can help plants to better tolerate drought stress and prevent effects of waterlogging. 4. Mulching: Mulching, e.g. planting into cover crop residues, can help to reduce soil moisture loss, moderate soil temperature and suppress weed growth, which can help plants to better tolerate stress conditions. 5. Crop rotation: rotating crops can help to reduce the build-up of pests and diseases, as well as improve soil health, which can help plants to better tolerate stress conditions. 6. Environmental control: Manipulating the environment by controlling temperature, humidity, light intensity can help plants to better tolerate stress conditions. |
| <p>crop nutrition product</p> | <p>Crop nutrition products can include a variety of chemical and organic compounds that provide plants with macronutrients and/or micronutrients (such as zinc, copper, and iron). These products can be applied to soil or foliage in various forms such as granular, liquid, and foliar sprays.</p> |
| <p>growth stimulant/regulator</p> | <p>A plant growth stimulant is a substance or a microorganism that when applied to plants, can improve their growth and development. Plant growth stimulants can be in the form of hormones, enzymes, minerals, or microorganisms that are applied to the soil or the foliage of plants. They can be used to improve crop yields, and/or increase the tolerance of plants to environmental stress. Some examples of plant growth stimulants include auxins, cytokinins, gibberellins (which are produced by plants) or humic acids which naturally occur in soils.</p> |
| <p>soil biology stimulant</p> | <p>A soil biology stimulant is a substance that is used to enhance the diversity and activity of microorganisms in the soil, which can improve soil health and plant growth. Soil biology stimulants can include a variety of microorganisms such as bacteria, fungi, and protozoa, as well as organic compounds such as humic acids (see 'Source' definitions above) and seaweed extracts. The microorganisms help to break down organic matter, improve nutrient cycling, and promote root growth, leading to healthier and more productive plants. Soil biology stimulants can be applied through soil drench, foliar spray or seed coating.</p> |
| <p>wetting agent</p> | <p>A chemical added to reduce the surface tension of a liquid and allow it to spread more easily and evenly over plant surfaces (reduces beading). Also known as a surfactant.</p> |

| Trade Name | Source | Registered Product Type (APVMA Registered) | Product type | Active Ingredient(s) (APVMA Registered Products) | Ingredients | Registered Use (APVMA Registered) | Use | Crop | Manufacturer | Formulation | Australian Certified Organic | pH | Analysis | Trial Information |
|--|-----------------|--|-----------------------------|--|--|-----------------------------------|---|-------------------------------------|---|-----------------|------------------------------|------------------------------------|--|---|
| Amfol K | amino acids | not registered | crop nutrition | not registered | Amino Acids + Potassium | Not Registered | Increase fruit fill & quality | all crops | Rovensa ANZ (Tradecorp) | Liquid | No | 11.2 | Potassium 38.6%, L-α free amino acids 7.5% (all wv) | https://tradecorpaustralia.com.au/?s=amfol+k&e=0&y=0 |
| Amino Boss | amino acids | not registered | growth stimulant/ regulator | not registered | 50% (635g/L) Amino Acids, 26% Organic Nitrogen, 8% Organic Carbon. | not registered | crop health | all crops | Sipcam (Agricrop) | liquid | Yes | 6 to 7 | Alanine 5.4%, Arginine 0.5%, Aspartic acid 1.6%, Glutamic acid 5.2%, Glycine 12%, Hydroxylysine 2.1%, Hydroxyproline 3.5%, Histidine 0.4%, Isoleucine 0.9%, Leucine 1.8%, Lysine 1.7%, Methionine 0.7%, Ornithine 2.5%, Phenylalanine 1.2%, Proline 6.9%, Serine 0.3%, Threonine 0.5%, Tyrosine 1.2%, Valine 1.6%, Carbon 26%, Nitrogen 8% | - |
| Amino-max | amino acids | not registered | crop nutrition | not registered | amino acids | not registered | crop health | all crops | Nutri-Tech Solutions (NTS) | liquid | Yes | 5 to 6 | Nitrogen 5.78%, Amino acids 40%, Free amino acids 28% | - |
| Amino-Tech | amino acids | not registered | crop nutrition | not registered | amino acids | not registered | crop health | all crops | Nutri-Tech Solutions (NTS) | liquid | Yes | 3.5 to 5 | Nitrogen 2.6%, Phosphorus 0.36%, Potassium 0.16%, Sulphur 3950mg/L, Calcium 1040mg/L, Magnesium 94mg/L, Iron 9mg/L, Zinc 7mg/L, Boron 1mg/L | - |
| Aton Mo | amino acids | not registered | stress resistance | not registered | Amino Acids + Molybdenum | Not Registered | Reduce abiotic stress and increase Mo absorption to promote Nitrogen use efficiency | all crops | Rovensa ANZ (Tradecorp) | Liquid | No | 3.9 | Molybdenum 7.7%, L-α free amino acids 6.4%, Phosphorus 6.4%, Total Nitrogen 3.3% (all wv) | - |
| Boramin Ca | amino acids | not registered | stress resistance | not registered | Amino Acids + Calcium + Boron | Not Registered | Reduce abiotic stress and increase flowering success and fruit quality | all crops | Rovensa ANZ (Tradecorp) | Liquid | No | 2.8 | Total Nitrogen 8.8%, Calcium 7.3%, L-α free amino acids 6.4%, Boron 0.27% (all wv) | - |
| Delfan Plus | amino acids | not registered | stress resistance | not registered | Amino Acids | Not Registered | Reduce Abiotic Stress | all crops | Rovensa ANZ (Tradecorp) | Liquid | Yes | 7.2 | L-α free amino acids 28.8%, Total Nitrogen 10.8% (all wv) | https://tradecorpaustralia.com.au/web-content/uploads/2018/02/2012-Sweetcorn-Delfan-Plus-TCAU-ENG_v1_3-18.pdf |
| Fertigofol Ultra | amino acids | not registered | crop nutrition | not registered | amino acids, nitrogen, potassium | not registered | crop health | all crops | Agronutrition | liquid | No | 8.4 | Nitrogen 10%, phosphorus 1.5%, potassium 7%, trace elements | - |
| Flower 'n' Fruit Maker | amino acids | not registered | growth stimulant/ regulator | not registered | 50% (635g/L) Amino Acids, 26% Organic Nitrogen, 8% Organic Carbon. | not registered | crop health | all crops | Sipcam (Agricrop) | liquid | Yes | 6 to 7 | Alanine 5.4%, Arginine 0.5%, Aspartic acid 1.6%, Glutamic acid 5.2%, Glycine 12%, Hydroxylysine 2.1%, Hydroxyproline 3.5%, Histidine 0.4%, Isoleucine 0.9%, Leucine 1.8%, Lysine 1.7%, Methionine 0.7%, Ornithine 2.5%, Phenylalanine 1.2%, Proline 6.9%, Serine 0.3%, Threonine 0.5%, Tyrosine 1.2%, Valine 1.6%, Carbon 26%, Nitrogen 8% | - |
| Protifert LMW 8 | amino acids | not registered | growth stimulant/ regulator | not registered | amino acids, peptides | not registered | crop health | all crops | Sipcam (Agricrop) | liquid | No | 6 to 7 | Protein hydrolyzates, animal 50% | - |
| All Star Stim | composite/blend | not registered | soil biology stimulant | not registered | polyglutamic acid from <i>Bacillus</i> ; fish skin and seaweed extracts | not registered | reduced plant stress, increased microbial activity, soil health, enhanced nutrient uptake | all crops | Seawigs | liquid | SXC certified | 4.0 - 6.0 | Fulvic acid 5%, PGA 0.5%, amino acid 1%, seaweed polysaccharides 10%, alginate acid 3%, organic matter 15-20% | - |
| Balance & Grow | composite/blend | not registered | growth stimulant/ regulator | not registered | Fermented product - Microbial inoculum: fungi, bacteria, yeast and protozoans (not specified); Liquid food source containing calcium and phosphate, vitamins, minerals, proteins, enzymes, amino acids and carbohydrates (not specified). | not registered | Foliar nutrition spray to enhance vegetative growth | all crops | BioAg Pty Ltd, New South Wales | liquid | Yes | 2.2 | Micro-organisms (unknown g/L), All % as w/w%: Nitrogen 0.1%, Phosphorus 1.3%, Potassium 0.4%, Sulphur 0.8%, Calcium 0.5%, Magnesium 0.03%, Sodium 0.1% | https://www.bioag.com.au/trials-demonstrations/ |
| Bio TX500 Humus Extract | composite/blend | not registered | soil biology stimulant | not registered | Micro-organisms (not specified), humic acids, enzymes, plant hormones and minerals | not registered | Pre-plant soil conditioner/fertiliser to stimulate beneficial microbial activity in the root zone and biological processes. Also applied as foliar fertiliser. | all crops | YLAD Living Soils, New South Wales | liquid | Yes | - | not supplied | Independent 3 year trial results available with manufacturer |
| Bio-Hum Concentrated Fertiliser Additive | composite/blend | not registered | soil biology stimulant | not registered | Microbial inoculum: <i>Enterococcus faecalis</i> , <i>Lactobacillus</i> spp., <i>Pediococcus pentosaceus</i> , <i>Aspergillus</i> spp., <i>Saccharomyces cerevisiae</i> , <i>Bacillus subtilis</i> subsp. <i>Humic and fulvic acids</i> | not registered | Pre-plant soil conditioner/fertiliser additive to stimulate beneficial microbial activity in the root zone and biological processes. | all crops | Bioliink 4 Plants Pty Ltd, Victoria | liquid | Yes | n/a | not supplied | - |
| BioFlora IsoGreen | composite/blend | not registered | soil biology stimulant | not registered | Four species of microalgae: <i>Scenedesmus quadricauda</i> , <i>S. obliquus</i> , <i>Chlorella vulgaris</i> , <i>Nonnochloris atomus</i> ; Two <i>Bacillus</i> species: <i>Bacillus amyloliquefaciens</i> and <i>B. subtilis</i> ; humic and fulvic acids | not registered | enhanced soil microbial activity, soil and plant health | all vegetable crops + others | BioFlora, Queensland | liquid | Yes | 8.7 | Bacteria at 10 ³ CFU/mL; Microalgae at 10 ³ cells/mL; Humic acid 2%, Fulvic acid 1% | - |
| BioFlora Sea Isolates | composite/blend | not registered | soil biology stimulant | not registered | liquid inoculum derived from seaweed (<i>Ascophyllum nodosum</i>) containing <i>Bacillus amyloliquefaciens</i> + trace/micronutrients, plant growth hormones (auxins, cytokinins, gibberellins) calcium acetate | not registered | enhanced soil microbial activity, soil and plant health | all vegetable crops + others | BioFlora, Queensland | liquid | Yes | 3.2 | <i>Bacillus amyloliquefaciens</i> at 1 x 10 ⁶ CFU/mL; Total nitrogen 0.10%; Soluble potash 0.10% | https://bioflora.com.au/australian-trials-results/ |
| BiologiCAL PLUS | composite/blend | not registered | stress resistance | not registered | calcium acetate | not registered | soil biology/saline or sodic soils | all crops | SLTEC | liquid | No | 8.0-10.0 | 41.8% molasses, 0.3% kelp, 0.2% Humic, 0.3% Fish, 0.1% B, 6.3% Ca, 1.8% S, 2% K, 38.0% molasses, 0.23% kelp, 0.2% Humic, 0.2% Fish, 5.9% Ca, 1.8% K, 1.7% S | - |
| BiologiCAL PLUS TE | composite/blend | not registered | crop nutrition | not registered | calcium acetate | not registered | crop health | all crops | SLTEC | liquid | No | 6.5-7.5 | Inoculum: Bacterial and fungal species (no concentration specified); Other ingredients expressed as w/w%: Water 30-60%, Ammonium sulphate 10-30%, Ammonium nitrate 10-30%, Urea 10-30%, Potassium fulvate (fulvic acid, potassium salt) 5-10%, Proprietary Plant Growth Stimulants 10-30% | - |
| BioMAX Biologic Blend | composite/blend | not registered | soil biology stimulant | not registered | Brown coal (humic acid); Seven bacterial species: <i>Atoposiphium brasiliense</i> , <i>Bacillus subtilis</i> , <i>B. megaterium</i> , <i>Cellulomonas cellulosa</i> , <i>Pseudomonas fluorescens</i> , <i>P. putida</i> , <i>Streptomyces cellulosae</i> ; Two fungal species: <i>Trichoderma harzianum</i> , <i>Yarrowia lipolytica</i> | not registered | Pre-plant soil conditioner/fertiliser to stimulate beneficial microbial activity in the root zone and biological processes: nitrogen fixation, phosphorus solubilisation, growth hormone production. | vegetables (potato, onion, carrots) | LawrieCo Pty Ltd trading as LawrieCo, South Australia | compost style | No | - | Inoculum: Bacterial and fungal species (no concentration specified); Other ingredients expressed as w/w%: Water 30-60%, Ammonium sulphate 10-30%, Ammonium nitrate 10-30%, Urea 10-30%, Potassium fulvate (fulvic acid, potassium salt) 5-10%, Proprietary Plant Growth Stimulants 10-30% | - |
| BioMAX Digest Fungi & Food + Kicker | composite/blend | not registered | soil biology stimulant | not registered | Four fungal species: <i>Chaetomium brasiliense</i> , <i>C. globosum</i> , <i>Trichoderma viride</i> and <i>T. harzianum</i> ; kelp, fulvic acids | not registered | Crop residue (stubble) management: postharvest cellulose decomposing fungal inoculum | all crops | LawrieCo Pty Ltd trading as LawrieCo, South Australia | liquid | No | 4.8 - 5 | Microbial inoculum: Fungal species (concentration not specified); Other ingredients expressed as w/w%: Water 30-60%, Ammonium sulphate 10-30%, Ammonium nitrate 10-30%, Urea 10-30%, Potassium fulvate (fulvic acid, potassium salt) 5-10%, Proprietary Plant Growth Stimulants 10-30% | - |
| BioMAX MicroLife Inoculum + Food | composite/blend | not registered | soil biology stimulant | not registered | Ingredients for fermentation process - Microbial inoculum: Seven bacterial species: <i>Atoposiphium brasiliense</i> , <i>Bacillus subtilis</i> , <i>B. megaterium</i> , <i>Cellulomonas cellulosa</i> , <i>Pseudomonas fluorescens</i> , <i>P. putida</i> , <i>Streptomyces cellulosae</i> ; Two fungal species: <i>Trichoderma harzianum</i> , <i>Yarrowia lipolytica</i> ; humic acid; Liquid food source: yeast (not specified) extract, potato starch, peptone, molasse, malt extract, inorganic salts, thiamine HCl | not registered | Use as fermented product - foliar spray alone or generally a foliar spray with nutrition, it can also be used as a direct inject or in drip irrigation (fertigation) combined with nutrient applications. It is also added to manufacturer's foliar nutrition products (incl. HumiPLEX, NutriMAX liquid range) and is used to inoculate manufacturer's brown coal based BioMax Biologic Blend | all crops | LawrieCo Pty Ltd trading as LawrieCo, South Australia | powder + liquid | No | 6.7 - 7.5 (at 20 °C, 50 g/L water) | Inoculum ingredients expressed as w/w%: Bacterial and fungal species 15 - 20%, Wheat germ 25 - 30%, Humic acid (potassium salt) < 2%, inert carrier (excipient) 50 - 60%; Liquid food ingredients expressed as w/w%: water 50 - 60%, yeast extract 5 - 10%, potato starch 5 - 10%, peptone 5 - 10%, molasses 5 - 10%, malt extract < 5%, inorganic salts < 5%, thiamine HCl < 0.5% | - |

| Trade Name | Source | Registered Product Type (APVMA Registered) | Product type Has been used as / for (not registered) | Active Ingredient(s) (APVMA Registered Products) | Ingredients Main ingredient(s) of non registered products | Registered Use (APVMA Registered) | Use Has been used as / for (not registered)2 | Crop | Manufacturer | Formulation | Australian Certified Organic | pH | Analysis | Trial Information |
|---|-----------------|--|---|--|---|-----------------------------------|--|--|--|---------------------------|--------------------------------------|-----------|--|---|
| BIOWISH Crop 16-40-0 | composite/blend | not registered | soil biology stimulant | not registered | Microbial inoculum: <i>Bacillus subtilis</i> , <i>Bacillus amyloliquefaciens</i> , <i>Bacillus licheniformis</i> , <i>Bacillus pumilus</i> . Diammonium phosphate, diatomaceous earth | not registered | Soil conditioner/fertiliser supplement through fertigation or (foliar) spray to stimulate beneficial microbial activity in the root zone and biological processes. | all crops | BIOWISH Technologies Inc. USA / Enviro Nutrition Pty Ltd, Queensland | powder | No | 7.9 - 8.5 | Bacterial live cultures (total < 1.0%): <i>Bacillus subtilis</i> 1.0 x 10 ⁸ CFU/g, <i>B. amyloliquefaciens</i> 1.0 x 10 ⁸ CFU/g, <i>B. licheniformis</i> 1.0 x 10 ⁵ CFU/g, <i>B. pumilus</i> 1.0 x 10 ⁶ CFU/g Diammonium phosphate 93.0 - 97.0%, Diatomaceous earth 3.0 - 5.0%, Guaranteed Analysis: ammoniacal nitrogen 16.0%, available phosphate 40.0% | https://biowishtechnologies.com/au/au/crop-16-40-0/ |
| Cloak Spray Oil | composite/blend | not registered | wetting agent | not registered | canola oil, fish oil | not registered | product penetration | all crops | Nutri-Tech Solutions (NTS) | liquid | Yes | 7 to 8 | not supplied | - |
| FertiCoat | composite/blend | not registered | crop nutrition | not registered | information not provided | not registered | reduce leaf scorch, increase nutrient use efficiency | all crops | Omnia | liquid fertiliser coating | No | >10 | Potassium >45% w/vol, Humic and Fulvic acids, seaweed, amino acids, trace elements and vitamins, coating polymers. | - |
| Fertile Veg | composite/blend | not registered | crop nutrition | not registered | NPK and trace elements in glycine amino acid chelate form | not registered | nutrition (foliar fertiliser) | all crops | Zadco (JH Biotech) | granular | Yes | n/a | Nitrogen 10%, Phosphorus 10%, Potassium 23%, Sulphur 4%, Magnesium 2%, Zinc 0.03%, Iron 0.018%, Manganese 0.027%, Copper 0.008%, Boron 0.005%, Molybdenum 0.004% | - |
| FoliCal 19 | composite/blend | not registered | growth stimulant/ regulator | not registered | calcium chloride 50-100%, claim that it is boosted with Fulvic Acid | not registered | nutrition | all crops | Omnia | liquid | No | 2.5 | Calcium 19% w/vol | - |
| Fruit & Balance | composite/blend | not registered | growth stimulant/ regulator | not registered | Fermented product - Microbial inoculum: fungi, bacteria, yeast and protozoans (not specified); Liquid food source containing vitamins, minerals, proteins, enzymes, amino acids, carbohydrates, and growth promoters (not specified). | not registered | Foliar nutrition spray to enhance reproductive growth (flowering, fruit set) | all crops | BioAg Pty Ltd, New South Wales | liquid | Yes | 4.5 | Not supplied | https://www.bioag.com.au/trials/demonstrations/ |
| Germinator Pelletised Crop Starter | composite/blend | not registered | soil biology stimulant | not registered | Microbial inoculum: <i>Enterococcus faecalis</i> , <i>Lactobacillus</i> spp., <i>Pedococcus gossypicus</i> , <i>Aspergillus</i> spp., <i>Saccharomyces cerevisiae</i> , <i>Bacillus subtilis</i> subsp. Blood meal, bone meal, fish meal, humic and fulvic acids | not registered | Pre-plant soil conditioner/fertiliser supplement to stimulate beneficial microbial activity in the root zone and biological processes. | all crops | Biolink 4 Plants Pty Ltd, Victoria | granular | Yes | n/a | Inoculum: Micro-organisms (concentrations not specified); Guaranteed minimum for: Calcium 9.9%, Nitrogen 7.27%, Phosphorus 5%, Potassium 1.57%, Sulphur 0.77%. | - |
| GrowGreen /Microbe Plus Kelp /Microbe Plus Kelp Premium | composite/blend | not registered | soil biology stimulant | not registered | liquid blend of soluble kelp (two seaweed species, not specified), calcium, vitamins, molasses, bacterial and fungal plant growth promoters (not specified), plant growth hormones (auxins, cytokinins, gibberellins, abscisic acid) | not registered | enhanced soil microbial activity, soil and plant health | all crops | GrowGreen Pty Ltd, Queensland | liquid | Yes (Microbe Plus Kelp Premium only) | - | Fungi/bacteria initially present at max. 10 ⁶ CFU/mL; All % as w/v: Nitrogen 0.2%, Phosphorus as water soluble 0.1%, Potassium as molasses 0.3% + as soluble potash 0.1% (Microbe Plus Kelp only), Calcium 0.4% (Microbe Plus Kelp only) Phytohormones expressed as ng/g FW (for Microbe Plus Kelp only): Cytokinins 65, Abscisic Acid 103, Auxins 723, Gibberellins 11 | - |
| GrowGreen AminoElite | composite/blend | not registered | soil biology stimulant | not registered | Microbially (= enzymatically) digested deep sea fish emulsion & crustaceans, vegetable oils + plant beneficial fungi and bacteria (not specified) | not registered | plant health | all vegetables + other crops | GrowGreen Pty Ltd, Queensland | liquid | No | - | Fungi/bacteria initially present at max. 10 ⁶ CFU/mL; all %w/v: Nitrogen 3.30%, Phosphorus as water soluble 0.7%, Potassium 0.5%, Sulphur 0.55%, Molybdenum 0.01%, Boron 0.04%, Calcium 0.2%, Zinc 0.1%, Iron 0.005%, Magnesium 0.02%, Manganese 0.025%, Cobalt 0.0025% | - |
| GrowGreen AminoKelp | composite/blend | not registered | soil biology stimulant | not registered | Mixture of GrowGreen AminoElite and GrowGreen Microbe Plus Kelp | not registered | enhanced soil microbial activity, soil and plant health | all vegetables + other crops | GrowGreen Pty Ltd, Queensland | liquid | No | - | Fungi/bacteria initially present at max. 10 ⁶ CFU/mL; all %w/v: Nitrogen 3.0%, Phosphorus 0.70%, Potassium 0.5%, Magnesium 0.02%, Sulphur 0.55%, Zinc 0.07%, Manganese 0.03%, Iron 0.005%, Boron 0.04%, Molybdenum 0.01%, Cobalt 0.0025% | - |
| GrowGreen Microbe Plus Citrus | composite/blend | not registered | soil biology stimulant | not registered | Foliar NPK fertiliser integrated with microbial (bacteria and fungi, not specified) cultures | not registered | plant health | designed for citrus, also effective with vegetable & fruit crops | GrowGreen Pty Ltd, Queensland | liquid | No | - | Fungi/bacteria initially present at max. 10 ⁶ CFU/mL; all %w/v: Nitrogen 7.0%, Phosphorus 0.1%, Potassium 4.0%, Molybdenum 0.015%, Boron 0.042%, Calcium 4.6%, Zinc 1.8%, Iron 0.02% Magnesium 1.1%, Manganese 0.6%, Cobalt 0.007% | - |
| GrowGreen Microbe Plus PhosCal | composite/blend | not registered | soil biology stimulant | not registered | Phosphorous acid, calcium carbonate, magnesium with beneficial soil fungi and bacteria (not specified) | not registered | enhanced soil microbial activity, soil and plant health | all crops | GrowGreen Pty Ltd, Queensland | liquid | No | - | Fungi/bacteria initially present at max. 10 ⁶ CFU/mL; All % as w/v: Phosphorus 7.0%, Calcium 4.0%, Magnesium 0.1%, Copper 0.025% | - |
| GrowGreen Microbe Plus Potassium | composite/blend | not registered | soil biology stimulant | not registered | Foliar K fertiliser integrated with plant and soil beneficial fungi and bacteria (not specified) | not registered | plant health | all crops | GrowGreen Pty Ltd, Queensland | liquid | No | - | Fungi/bacteria initially present at max. 10 ⁶ CFU/mL; All % as w/v: Potassium 11.0%, Sulphur 0.1%, Molybdenum 0.017%, Boron 0.014%, Zinc 0.022%, Iron 0.004%, Cobalt 0.001% | - |
| GrowGreen AminoKelp Premium | composite/blend | not registered | soil biology stimulant | not registered | microbially (= enzymatically) digested blend of selected marine waste and different seaweed extracts, rhizobacterial and fungal plant growth promoters (not specified), plant growth hormones (auxins, cytokinins, gibberellins, abscisic acid) | not registered | enhanced soil microbial activity, soil and plant health | all crops | GrowGreen Pty Ltd, Queensland | liquid | Yes | 2.0 - 4.5 | Fungi/bacteria initially present at max. 10 ⁶ CFU/mL; All % as w/v: Nitrogen 0.20 - 0.45%, Phosphorus 0.05 - 0.15%, Sulphur 0.15 - 0.30%, Potassium 0.15% | - |
| GrowGreen AminoOrganic Premium | composite/blend | not registered | soil biology stimulant | not registered | microbially (= enzymatically) digested blend of marine crustaceans + beneficial bacteria and fungi (not specified) + fulvic acid | not registered | enhanced soil microbial activity, soil and plant health | all crops | GrowGreen Pty Ltd, Queensland | liquid | Yes | - | Fungi/bacteria initially present at max. 10 ⁶ CFU/mL; All % as w/v: Nitrogen 0.5%, Phosphorus 0.1%, Sulphur 0.5% | - |
| GrowGreen Profert | composite/blend | not registered | soil biology stimulant | not registered | Spores of four VAM species: <i>Claroideoglossum etunicatum</i> (previously known as <i>Glomus etunicatum</i>), <i>Funneliformis mosseae</i> (previously known as <i>Glomus mosseae</i>), <i>Rhizophagus irregularis</i> (previously known as <i>Glomus intraradices</i>), <i>Scutellospora dipurpurensis</i> ; Microbially (= enzymatically) digested deep sea fish emulsion & crustaceans + beneficial bacteria (not specified) | not registered | mycorrhizae and enhanced soil microbial activity, soil and plant health | all mycorrhizal crops | GrowGreen Pty Ltd, Queensland | liquid | No | - | Fungi/bacteria initially present at max. 10 ⁶ CFU/mL; All % as w/v: Nitrogen total 3.0%, Phosphorus 0.6%, Potassium 0.4%, Calcium 0.2%, Magnesium 0.02%, Sulphur 0.55%, Zinc 0.10%, Manganese 0.025%, Iron 0.005%, Boron 0.04%, Molybdenum 0.01%, Cobalt 0.0025% | - |
| HumaKelp | composite/blend | not registered | crop nutrition | not registered | humate and kelp | not registered | nutrient use efficiency/soil health | all crops | Omnia | liquid | Yes | >10 | Potassium 4% w/vol, amino acids, plant growth stimulants, trace elements | - |

| Trade Name | Source | Registered Product Type (APVMA Registered) | Product type | Active Ingredient(s) (APVMA Registered Products) | Ingredients) | Registered Use (APVMA Registered) | Use | Crop | Manufacturer | Formulation | Australian Certified Organic | pH | Analysis | Trial Information |
|------------------------------|-----------------|--|---|--|---|--|--|---|---|-----------------|------------------------------|-----------|--|---|
| | | | Has been used as / for (not registered) | Main ingredient(s) of non registered products | | Has been used as / for (not registered)2 | | | | | | | | |
| Ignition Compost Starter | composite/blend | not registered | soil biology stimulant | not registered | Microbial inoculum: <i>Enterococcus faecium</i> , <i>Lactobacillus plantarum</i> , <i>Lactobacillus casei</i> , <i>Pediococcus pentosaceus</i> , <i>Aspergillus oryzae</i> , <i>Aspergillus niger</i> , <i>Saccharomyces cerevisiae</i> , <i>Bacillus subtilis</i> . Blood meal, bone meal, fish meal, humic and fulvic acids | not registered | Pre-plant soil conditioner/fertiliser supplement (compost production) to stimulate beneficial microbial activity in the root zone and biological processes. | all crops | Biolink 4 Plants Pty Ltd, Victoria | granular/powd | Yes | n/a | Inoculum: Micro-organisms (concentrations not specified); Guaranteed minimum for: Calcium 9.9%, Nitrogen 7.27%, Phosphorus 5%, Potassium 1.57%, Sulphur 0.77%. | https://biolink4plants.com.au/agricult-ur-sustainable-farming/ |
| Ignition Soil Drench | composite/blend | not registered | soil biology stimulant | not registered | Microbial inoculum: <i>Enterococcus faecium</i> , <i>Lactobacillus plantarum</i> , <i>Lactobacillus casei</i> , <i>Pediococcus pentosaceus</i> , <i>Aspergillus oryzae</i> , <i>Aspergillus niger</i> , <i>Saccharomyces cerevisiae</i> , <i>Bacillus subtilis</i> . Blood meal, bone meal, fish meal, humic and fulvic acids | not registered | Soil conditioner/fertiliser supplement (compost tea) through fertigation/spray to stimulate beneficial microbial activity in the root zone and biological processes. | all crops | Biolink 4 Plants Pty Ltd, Victoria | granular/powd | Yes | - | Inoculum: Micro-organisms (concentrations not specified); Guaranteed minimum for: Calcium 9.9%, Nitrogen 7.27%, Phosphorus 5%, Potassium 1.57%, Sulphur 0.77%. | https://biolink4plants.com.au/agricult-ur-sustainable-farming/ |
| Kelp-Boost | composite/blend | not registered | stress resistance | not registered | kelp (<i>Ascophyllum nodosum</i>), nutrients | not registered | crop health | all crops | SLTEC | liquid | No | 8.5-9.5 | all % as w/wk: 10% kelp, 6.4% K, 0.7% P, 0.4% N, 1.1% fulvic acid, 1.4% amino acids | - |
| Mega-Kel-P | composite/blend | not registered | crop nutrition | not registered | kelp, fulvic acid, chemical elements | not registered | nutrition (foliar fertiliser) | vineyard, orchard, broadacre, vegetables | Omnia | liquid | No | <3 | Nitrogen 4% w/vol, Phosphorus 9%, Potassium 2.1%, Sulphur 2.7%, Manganese 1.9%, Zinc EDTA 1.3%, Copper EDTA 0.23%, Iron EDTA 0.18%, Boron 0.22%, Molybdenum 0.03%, Magnesium 1.3%, amino acids, seaweed, fulvic acids, biostimulants, uptake enhancers | - |
| New Era Better Grow | composite/blend | not registered | crop nutrition | not registered | composted poultry manure | not registered | soil health, nutrient uptake | all crops | Sustainable Farming Solutions | pellets | Yes | n/a | 4.0% N, 1.8% P, 2.2% K, 3.2% Ca, 0.5% S, 0.6% Mg, 0.2% Fe, 370ppm Zn, 170ppm Cu, 500ppm Mn | - |
| New Era Premium | composite/blend | not registered | crop nutrition | not registered | meat, bone, fish meal; seaweed extract, composted poultry manure | not registered | pre-plant fertiliser for vegetables; basal fertiliser for fruit trees | all crops | Sustainable Farming Solutions | pellets | Yes | n/a | 3.6% N, 3.1% P, 4% K, 6.3% Ca, 1.6% S, 0.7% Mg, 0.2% Fe, 0.03% Zn, 0.03% Mn, 1.4% Si | https://sustainablefarming.com.au/trials-database/ |
| New Era Protein Meal | composite/blend | not registered | crop nutrition | not registered | animal protein blend | not registered | slow release source of natural N | all crops | Sustainable Farming Solutions | n/a | Yes | n/a | 13% N | https://sustainablefarming.com.au/trials-database/ |
| Photo-Finish | composite/blend | not registered | growth stimulant/ regulator | not registered | silicon, kelp, humic acid | not registered | crop health | all crops | Nutri-Tech Solutions (NTS) | liquid | Yes | 11 to 12 | Potassium 10.6%, Silicon 10.38% | - |
| Plant of Health Plant Assist | composite/blend | not registered | stress resistance | not registered | VAMs (not specified), <i>Trichoderma</i> spp., silica, zeolites, kelp, natural surfactant (saponins), humic and fulvic acids, natural rock minerals | not registered | enhanced fertiliser uptake, soil health, mycorrhizae | all mycorrhizal crops | Batphone Australia Pty Ltd, Queensland | granular/powd | No | - | not supplied | https://www.batphone.com.au/images/articles/Testimonials/BatphonePlantAssistMPB-1.pdf |
| QuadSHOT | composite/blend | not registered | growth stimulant/ regulator | not registered | humic acid/ fulvic acid/ fish extract/ molasses | not registered | crop health | all crops | SLTEC | liquid | Yes | 10.0-11.0 | 8% Molasses, 8% kelp, 6.6% Fish, 8% Fulvic, 3.4% K | - |
| Soil & Seed | composite/blend | not registered | soil biology stimulant | not registered | Fermented product - Microbial inoculum: Bacteria (<i>Pseudomonas</i> spp., Actinomycetes, Gram positive spp., Gram negative spp., anaerobic spp.), Fungi (<i>Aspergillus</i> spp., <i>Penicillium</i> spp., unspecified yeast spp.), protozoans (not specified); Liquid food source: molasses, raw sugar, seaweed concentrate, fish hydrolysate, humic compounds, vitamins, minerals | not registered | Soil amendment, seed inoculant for enhanced soil health | all crops | BioAg Pty Ltd, New South Wales | liquid | Yes | 3.4 - 4.5 | Micro-organisms (total of 38.6 g/L): Bacteria (total of 26.7 g/L): <i>Pseudomonas</i> spp. 4.8 g/L, <i>Actinomycetes</i> 0.7 g/L, Gram positive spp. 3.2 g/L, Gram negative spp. 23.4 g/L, Anaerobic spp. 0.1 g/L, Total fungi at 11.5 g/L; All % as w/w %: Ash 6.5%, Fat 0.15%, Protein 1.6%, Carbohydrate 18.2%, Phosphorus 2.09%, Phosphorus (bio-available) 2.04%, Orthophosphate (water soluble) 1.7% | https://www.bioag.com.au/trials-demonstrations/ |
| Soil Activator | composite/blend | not registered | soil biology stimulant | not registered | amino acids, vitamins, seaweed extracts, humus, fish & molasses | not registered | soil biological activity | all crops | Sustainable Farming Solutions | liquid | Yes | 3.2 - 4 | Fish emulsion, seaweed extracts, fulvic acid, molasses | https://sustainablefarming.com.au/trials-database/ |
| Stimulate | composite/blend | not registered | growth stimulant/ regulator | not registered | kelp, fulvic acid, alginic acid | not registered | nutrition, stress, soil biology | all crops | Nutri-Tech Solutions (NTS) | granular | Yes | 6.7 | Fulvic Acid 35%, Alginic acid 9%, Nitrogen 1.69%, Potassium 11%, Sulphur 2.48%, Magnesium 0.98%, Calcium 0.72%, Iron 0.53% | - |
| SureCROP VAM | composite/blend | not registered | crop nutrition | not registered | 4 VAM species: <i>Clavotrogium etunicatum</i> , <i>Fuaneliformis mossense</i> , <i>Rhizopogon irregularis</i> , <i>Rhizopogon aggregatus</i> ; 5 Bacillus spp.: <i>B. subtilis</i> , <i>B. laterosporus</i> , <i>B. licheniformis</i> , <i>B. megaterium</i> , <i>B. pumilus</i> ; 1 Pennebacillus sp.: <i>P. polymyxa</i> ; 4 Trichoderma spp.: <i>T. harzianum</i> , <i>T. viride</i> , <i>T. koningii</i> , <i>T. polysporum</i> ; humic and fulvic acids | not registered | Pre-plant fertiliser/biological seed coating for enhanced fertiliser uptake, soil health, mycorrhizae | all mycorrhizal crops | LawrieCo Pty Ltd trading as LawrieCo, South Australia | powder + liquid | Yes | 8.0 - 8.3 | Multiple microbial species at 32,500 propagules/L, Phosphorus 1.68%, Potassium 0.71%, Sulphur 0.15%, Calcium 5.17%, Silicate 2.52%, Zinc oxide 2.40%, Manganese carbonate 1.53%, Humic acid 4.40%, Fulvic acid 3.18% (all %w/wk) | - |
| TM Agricultural | composite/blend | not registered | soil biology stimulant | not registered | plant extracts, kelp, molasses, fish meal | not registered | Stimulate Micro Organisms | all crops and pasture | Best Farming Systems Pty Ltd | liquid | Yes | - | all % as w/wk: Potassium 0.2%, Sulphur 0.1%, soluble potash 0.5%, Boron 0.05%, Iron 0.02% | https://bestfarmingystems.com.au/trials/ |
| YLAD Living Compost | composite/blend | not registered | growth stimulant/ regulator | not registered | Micro-organisms (not specified); Manure, Wheat straw, Compost, Clay. | not registered | Pre-plant soil conditioner/fertiliser to stimulate beneficial microbial activity in the root zone and biological processes: nitrogen fixation, phosphorus solubilisation, growth hormone production. | all crops | YLAD Living Soils, New South Wales | compost style | Yes | 7.3 - 8.1 | Inoculum: Micro-organisms (concentrations not specified); Manure 30 - 60%, Wheat straw 30%, Compost 20%, Clay 10%. | Seed inoculation / foliar spray to form a natural physical barrier to diseases |
| Aqua Power 5-1-1 | fish extract | not registered | crop nutrition | not registered | hydrolysed fish protein and bone meal | not registered | nutrition | all crops | Zadco (JH Biotech) | liquid | Yes | n/a | Nitrogen 5%, Phosphorus 1%, Potassium 1%, 20 amino acids, 13 vitamins, 8 minerals (trace amounts) | - |
| Farm Saver liquid fish | fish extract | not registered | crop nutrition | not registered | fish extract | not registered | nutrition | all crops | Nutri-Tech Solutions (NTS) | liquid | Yes | 4 to 5 | Nitrogen 3.31%, Phosphorus 0.3%, Potassium 0.55%, Sulphur 0.71%, Magnesium 248 mg/L, Calcium 135mg/L | - |
| Fish Emulsion | fish extract | not registered | crop nutrition | not registered | fish emulsion | not registered | crop health | all crops | SLTEC | liquid | No | 3.5-4.0 | 100% Fish Emulsion, 2.5% N | - |
| Fish Emulsion | fish extract | not registered | soil biology stimulant | not registered | fish | not registered | nutrient source for beneficial microbes | all crops | Sustainable Farming Solutions | liquid | Yes | 3.2 - 4 | 2.5% N, 0.3% P, 0.25% K, 0.5% Ca, 3% oil content | https://sustainablefarming.com.au/trials-database/ |
| Fish Max | fish extract | not registered | soil biology stimulant | not registered | concentrated fish hydrolysate | not registered | soil health, nutrients for beneficial microbes | all crops | Sustainable Farming Solutions | liquid | Yes | 5-6 | 7.8% N, 0.4% P, 2% K, 0.5% Ca | - |
| Fish Plus | fish extract | not registered | soil biology stimulant | not registered | fish, kelp, fulvic acid | not registered | soil biological activity, soil health | all crops | Sustainable Farming Solutions | liquid | Yes | 3.2 - 4 | 2.1% N, 1.0% P, 0.5% K, 0.4% Ca | - |
| HydraFish | fish extract | not registered | crop nutrition | not registered | Fish emulsion (not specified) containing macromicronutrients | not registered | 2 step nutrition application: soil fertiliser followed by foliar spray to enhance nutrient availability and soil health | vegetables, vines, vegetables as soil fertiliser and foliar spray | BioAg Pty Ltd, New South Wales | liquid | Yes | 3.0 - 4.0 | 100% fish emulsion obtained using a natural enzyme process at low temperature. All %w/wk: Nitrogen 2.5%, Phosphorus 1.25%, Potassium 0.25%, Calcium 0.5%, Sodium (NaCl salt) < 36% | - |
| Liquid Fish | fish extract | not registered | crop nutrition | not registered | 97.5% cold processed liquid fish | not registered | crop health | all crops | Eco Growth | liquid | Yes | n/a | Nitrogen 2.5%, Phosphorus 0.41%, Potassium 0.14%, Sulphur 0.16%, Calcium 0.31%, Magnesium 0.03%, Iron 0.08%, Zinc 6ppm, Manganese 1ppm, Copper 1ppm, Boron 4ppm | - |
| Nutri-Sea liquid fish | fish extract | not registered | crop nutrition | not registered | amino acids, natural nitrogen, trace elements | not registered | nutrition, soil biology | all crops | Nutri-Tech Solutions (NTS) | liquid | Yes | 2.2 - 4.2 | Nitrogen 5%, Phosphorus 0.65%, Potassium 1.32%, Sulphur 1.65%, Calcium 0.19%, Magnesium 0.11% | - |
| Purafish | fish extract | not registered | crop nutrition | not registered | fish extract | not registered | nutrition | all crops | Omnia | liquid | Yes | <4 | Nitrogen 2.5% w/vol, Phosphorus 1.25%w/vol, 19 amino acids | - |
| Acti-Fulv | humic/fulvic | not registered | crop nutrition | not registered | humic and fulvic acids, potassium | not registered | soil and crop health | all crops | Agtronutrition | liquid | No | 12.8 | fulvic acid 15%, humic acid 10%, Potassium 4.15% | - |
| Eco Fulvate | humic/fulvic | not registered | crop nutrition | not registered | Fulvic acid | not registered | plant uptake | all crops | Eco Growth | liquid | Yes | n/a | 1% K w/w, 10.1% fulvic acid | - |
| Eco Humate | humic/fulvic | not registered | crop nutrition | not registered | humic acid, potassium | not registered | soil health, soil biology, crop health | all crops | Eco Growth | liquid | Yes | n/a | Humic acid 12.2%, Potassium 2.2% | - |

| Trade Name | Source | Registered Product Type (APVMA (Registered)) | Product type | Has been used as / for (not registered) | Active Ingredient(s) (APVMA Registered Products) | Main ingredient(s) of non registered products | Registered Use (APVMA Registered) | Has been used as / for (not registered)2 | Crop | Manufacturer | Formulation | Australian Certified Organic | pH | Analysis | Trial Information |
|---------------------------------|--------------|--|-----------------------------|---|--|---|---|---|--|----------------|-------------|------------------------------|--|---|-------------------|
| Folap | humic/fulvic | not registered | crop nutrition | not registered | potassium fulvate | not registered | enhanced fertiliser uptake, soil health | all crops | Sustainable Farming Solutions | liquid | Yes | 3.5-4 | 10% Fulvic acid with potassium | - | |
| FulvActiv | humic/fulvic | not registered | crop nutrition | not registered | fulvic acids, amino acids | not registered | crop health | all crops | AgroNutrition | liquid | No | 6 | fulvic acids 24%, organic matter 35%, amino acids 8% | - | |
| Fulvic 10 | humic/fulvic | not registered | growth stimulant/ regulator | not registered | fulvic acid | not registered | crop health | all crops | SLTEC | liquid | No | 5.0-6.0 | 10% Fulvic Acid, 2.6%K | - | |
| Fulvic Acid Powder | humic/fulvic | not registered | crop nutrition | not registered | potassium fulvate | not registered | enhanced fertiliser uptake, soil health | all crops | Sustainable Farming Solutions | soluble powder | Yes | n/a | 95% fulvic acid with potassium | - | |
| Fulvic Acid Powder | humic/fulvic | not registered | crop nutrition | not registered | fulvic acid | not registered | crop health, soil biology | all crops | Nutri-Tech Solutions (NTS) | granular | Yes | n/a | Fulvic Acid 70%, Nitrogen 2.5%, Phosphorous 0.1%, Potassium 6.9%, Sulphur 3.9%, Magnesium 1.8%, Calcium 1% | - | |
| Granular Humic Acid | humic/fulvic | not registered | crop nutrition | not registered | humic acid | not registered | crop health, soil biology | all crops | Nutri-Tech Solutions (NTS) | granular | Yes | n/a | Humic acids 70% | - | |
| Humax | humic/fulvic | not registered | crop nutrition | not registered | humic acid (from leonardite) | not registered | soil health | all crops | Zadco (JH Biotech) | granular | Yes | 10.0 - 12.0 | Humic acid 80% | - | |
| Humic [K] WSG/WSP | humic/fulvic | not registered | crop nutrition | not registered | Humic acid, fulvic acid, potassium | not registered | soil carbon, soil biology | all crops | Sipcam (Agricorp) | granular | Yes | 9.25 | Humic acid 67%, Fulvic acid 7%, Potassium 10% | - | |
| Humic K 26 | humic/fulvic | not registered | growth stimulant/ regulator | not registered | humic acid | not registered | crop health | all crops | SLTEC | liquid | No | 9.5-11.0 | 25% Humic, 1% Fulvic, 6% K | - | |
| Humifirst WG | humic/fulvic | not registered | soil biology stimulant | not registered | humic and fulvic acids | not registered | crop health | general horticulture, orchards & vines, cane | Revensa ANZ (Tradecorp) | microgranular | Yes | 11 | Total Humic Extract (THE): 65.0% w/w, Humic Acid: 53.0% w/w, Fulvic Acid: 12.0% w/w, Potassium (K ₂ O) soluble in water: 17.0% w/w | https://tradecorpaustralia.com.au/products/humifirst/ | |
| Humus 100 | humic/fulvic | not registered | soil biology stimulant | not registered | potassium humate | not registered | nutrient use efficiency/soil health | all crops | Sustainable Farming Solutions | liquid | Yes | 9.5-10 (in w) | > 80% w/w includes 8% Potassium (>97% w/w dry weight after removing moisture) | https://sustainablefarming.com.au/trials-database/ | |
| Humus 26 | humic/fulvic | not registered | soil biology stimulant | not registered | humic and fulvic acid | not registered | nutrient use efficiency/soil health | all crops | Sustainable Farming Solutions | liquid | Yes | 9.5-12 | Potassium Humate & Fulvate 26.0% w/v | https://sustainablefarming.com.au/trials-database/ | |
| Humus 400 | humic/fulvic | not registered | crop nutrition | not registered | lignite, ligno-sulphates, cellulose | not registered | water infiltration, soil health | all crops | Eco Growth | granular | Yes | n/a | Nitrogen 0.9%, Phosphorous 0.4%, Potassium 0.12%, Sulphur 0.15%, Calcium 16.9%, Magnesium 0.8%, Iron 0.2%, Silicon 11.3%, Carbon 58%, Molybdenum 143 ppm | - | |
| HydraHume | humic/fulvic | not registered | crop nutrition | not registered | High grade leonardite (source of humic acids) | not registered | soil fertiliser to enhance nutrient availability and soil health | all crops | BioAg Pty Ltd, New South Wales | liquid | Yes | 9.5 - 10.5 | Potassium Humate in solution 13% w/v, Total Potassium > 1.5% w/v | - | |
| K-fulvate 10% | humic/fulvic | not registered | crop nutrition | not registered | potassium fulvate | not registered | nutrient uptake | all crops | Omnia | liquid | Yes | <3.5 | Potassium > 1% w/vol, Potassium Fulvate 10% w/vol | - | |
| K-humate 26% | humic/fulvic | not registered | crop nutrition | not registered | potassium humate, potassium fulvate | not registered | nutrient uptake | all crops | Omnia | liquid | Yes | >10 | Potassium > 5% w/vol, Potassium Humate + Potassium Fulvate 26% w/vol | - | |
| K-humate S100 | humic/fulvic | not registered | crop nutrition | not registered | potassium humate, potassium fulvate | not registered | nutrient retention, water holding capacity | all crops | Omnia | granular | Yes | >10 | Potassium > 15% w/vol, Potassium Humate + Potassium fulvate 85-95% | - | |
| Liquid Humus | humic/fulvic | not registered | crop nutrition | not registered | humic acid | not registered | crop health, soil biology | all crops | Nutri-Tech Solutions (NTS) | liquid | Yes | 10.5 - 11.5 | Potassium humate 12.6% | - | |
| Mobilizer | humic/fulvic | not registered | soil biology stimulant | not registered | fulvic acid and amino acids | not registered | compatibility | all crops | Zadco (JH Biotech) | liquid | Yes | 3.3 | Fulvic acid and amino acids 3% | - | |
| Organic-N | humic/fulvic | not registered | crop nutrition | not registered | nitrogen & fulvic acids | not registered | managing crop nitrogen demand & building yield. Supports crops under stress | all crops | Sustainable Farming Solutions | liquid | Yes | 5.5-7.5 | 10% N w/w with amino acids, 23% fulvic acids w/v, 37.5% organic C w/v | https://sustainablefarming.com.au/trials-database/ | |
| Rhizovator™ OB | humic/fulvic | not registered | soil biology stimulant | not registered | potassium humate, potassium fulvate | not registered | soil health | broadacre, orchards, potatoes | Omnia | liquid | Yes | >9 | Nitrogen 0.25% w/vol, Potassium 4.66%, Potassium humate 18.2%, Potassium fulvate 0.5% | - | |
| Rhizovator™ PC | humic/fulvic | not registered | soil biology stimulant | not registered | potassium humate, potassium fulvate, kelp | not registered | soil health, root system | broadacre, orchards, potatoes | Omnia | liquid | Yes | >9 | Nitrogen 0.25% w/vol, Potassium 4.66%, Potassium humate 13%, Potassium fulvate 0.5% | - | |
| Soil Enhancer | humic/fulvic | not registered | soil biology stimulant | not registered | humus | not registered | soil biological activity | all crops | Sustainable Farming Solutions | liquid | Yes | Alkaline >9 | Humic acid, seaweed extracts | https://sustainablefarming.com.au/trials-database/ | |
| Turboroot WG | humic/fulvic | not registered | soil biology stimulant | not registered | humic, fulvic acids, L-α free amino acids, N, P, K | not registered | crop health | all crops | Revensa ANZ (Tradecorp) | microgranular | No | 6.7 | Total Humic Extract (THE): 29.1%, L-α free amino acids 22.2%, organic Nitrogen 3.0%, Phosphorus 7.1%, Potassium 14.9%, Iron EDTA 0.1%, Manganese EDTA 0.2%, Zinc EDTA 0.2%, Molybdenum 0.25% (%ages w/w) | https://tradecorpaustralia.com.au/products/turbo-root-wg/ | |
| Vital Earth | humic/fulvic | not registered | crop nutrition | not registered | humic and fulvic acids | not registered | improving soil structure, promoting microbial activity, reducing Phosphorous lockup | all soil grown crops | Sustainable Farming Solutions | pellets | Yes | 9.5-11 | 40% humic and fulvic acids (with potassium), 37.9% silicates, Ca-0.22% Fe-2.3% Mg-0.54% S-0.39% K-3.44% Cu-17ppm Co-7.7ppm Mn-52ppm Mo-1.05ppm Na-0.34% P-150ppm Se-0.81ppm, Zn 11.5ppm | https://sustainablefarming.com.au/trials-database/ | |
| Actinobact | microbial | not registered | growth stimulant/ regulator | not registered | <i>Streptomyces</i> sp. <i>Bacillus subtilis</i> | not registered | root system | all crops | Sustainable Farming Solutions | liquid | Yes | 6 to 6.8 | <i>Streptomyces</i> sp. and <i>Bacillus subtilis</i> 1 x 10 ¹⁸ CFU/ml | - | |
| Activate Biofungicide | microbial | fungicide | - | not registered | <i>Streptomyces lydicus</i> strain WYEC 108 | Preventative control of foliar diseases (incl. powdery mildew) and soilborne diseases (incl. <i>Fusarium</i> wilt, <i>Rhizoctonia</i> root rot, <i>Pythium</i> damping off) + Biological soil amendment to supplement nutrient availability, plant growth | - | vegetable crops and others (foliar diseases, soilborne diseases through seed treatment, see label); all crops (biological soil amendment) | Novozymes BioAg Limited (Novozymes Biologicals Ltd), Canada / Novozymes Australia Pty Ltd, NSW | powder | Yes | n/a | <i>Streptomyces lydicus</i> strain WYEC 108 at 1 x 10 ¹⁷ CFU/g | Trials undertaken by manufacturer (protected data with APVMA) | |
| Advance Promote | microbial | not registered | soil biology stimulant | not registered | VAM Fungi, Humates, Amino acids, micros, kelp, sugars | not registered | root system health | all crops | MicroSoil | liquid | No | 4 - 5.5 | <i>Bacillus</i> & <i>Pseudomonas</i> (14 strains - 340 CFU/ml) | - | |
| Agree WG biological insecticide | microbial | insecticide | - | not registered | <i>Bacillus thuringiensis</i> Berliner subsp. <i>aizawai</i> | armyworm cabbage moth cabbage white butterfly cotton budworm or bollworm grapevine moth light brown apple moth looper moth native budworm or bollworm painted vine moth pear looper soybean looper | - | amenity tree cereal grain cotton forestry fruit crop herb macadamia oilseed crop ornamental tobacco turf vegetables - see label vine | Certis U.S.A. L.L.C. | granular | No | - | <i>Bacillus thuringiensis</i> Berliner subsp. <i>aizawai</i> strain GC-91 concentration not given. | - | |
| Agro-Vam | microbial | not registered | soil biology stimulant | not registered | one VAM (Vesicular Arbuscular Mycorrhizae) species: <i>Rhizophagus irregularis</i> (previously known as <i>Glomus intraradices</i>) | not registered | mycorrhizae | all vegetable crops + others | AgroBest Australia Pty Ltd, Queensland | powder | No | 2.6 - 2.8 | <i>Rhizophagus irregularis</i> (formerly <i>Glomus intraradices</i>) at 100 (spores + propagules)/g | - | |
| Alasca EasyRhiz | microbial | not registered | soil biology stimulant | not registered | One or more rhizobial (bacterial) strains | not registered | Stimulation of rhizobial nodulation, nitrogen fixation and yield | crop and pasture legumes | Alasca Technologies Pty Ltd, WA | freeze dried | No | n/a | Rhizobia > 1 x 10 ¹⁷ CFU/g. The strains are classified into Groups (AL, C, FE, GS, N) matched to crops they can inoculate. | - | |
| Alasca Granular | microbial | not registered | soil biology stimulant | not registered | One or more rhizobial (bacterial) strains | not registered | Stimulation of rhizobial nodulation, nitrogen fixation and yield | crop and pasture legumes | Alasca Technologies Pty Ltd, WA | granular | No | n/a | Rhazobia > 1 x 10 ¹⁹ CFU/g. The strains are classified into Groups (AL, AM, BS, C, EF, GS, N) matched to crops they can inoculate. | http://alasca.com.au/wp-content/uploads/2015/08/ALOSCA-AI-new-technology-to-deliver-rhizobia.pdf | |
| Alasca Nodule N (Peat) | microbial | not registered | soil biology stimulant | not registered | One or more rhizobial (bacterial) strains | not registered | Stimulation of rhizobial nodulation, nitrogen fixation and yield | crop and pasture legumes | Alasca Technologies Pty Ltd, WA | compost style | No | n/a | Rhizobia > 1 x 10 ¹⁷ CFU/g. The strains are classified into Groups (AL, AM, BS, C, FE, GS, N, Biserrula) matched to crops they can inoculate. | - | |
| Aspen | microbial | not registered | soil biology stimulant | not registered | <i>Azospirillum brasilense</i> | not registered | crop health | all crops | Novum Lifesciences, Queensland | liquid | Yes | 4.5 - 8.5 | 1 x 10 ⁹ CFU/ml | - | |
| B. Sub | microbial | not registered | growth stimulant/ regulator | not registered | <i>Bacillus subtilis</i> , activator | not registered | crop health | all crops | Nutri-Tech Solutions (NTS) | liquid | Yes | n/a | not supplied | - | |
| Bacchus WG | microbial | insecticide | - | not registered | <i>Bacillus thuringiensis</i> subsp. <i>aizawai</i> strain GC-91 (1200 ITU/mg) | lepidoptera larvae | - | all crops | Campbell Chemicals | granular | n/a | 4.1 | <i>Bacillus thuringiensis</i> subsp. <i>aizawai</i> strain GC-91 (1200 ITU/mg) | - | |
| BACSTIM® 100 | microbial | not registered | soil biology stimulant | not registered | <i>Bacillus</i> sp. | not registered | root nutrient uptake | all crops | Omnia | liquid | No | 4.2 | 2 strains <i>Bacillus licheniformis</i> , 2 strains <i>Brevibacillus laterosporus</i> , 1 strain <i>Bacillus amyloliquefaciens</i> , Total concentration 2 x 10 ¹⁹ CFU/ml | - | |

| Trade Name | Source | Registered Product Type (APVMA Registered) | Product type | Active Ingredient(s) (APVMA Registered Products) | Ingredients) | Registered Use (APVMA Registered) | Use | Crop | Manufacturer | Formulation | Australian Certified Organic | pH | Analysis | Trial Information |
|--|-----------|--|-----------------------------|---|---|--|--|---|--|--|------------------------------|---------------|--|---|
| BAM | microbial | not registered | soil biology stimulant | not registered | blend of beneficial anaerobic organisms including phototropic non-sulphur bacteria and lactic acid bacteria | not registered | composting, crop health, nutrient availability | all crops, also compost, effluent ponds, septic treatment | Nutri-Tech Solutions (NTS) | liquid | Yes | 2.5 - 4 | not supplied | - |
| Basis XC | microbial | not registered | soil biology stimulant | not registered | microorganisms including <i>Bacillus licheniformis</i> | not registered | fertiliser efficiency | all crops | Loveland (distributed by Nutrien Ag) | liquid (for impregnation on dry fertilisers) | No | 8 | water-based culture medium 99%, microorganisms <1%, <i>Bacillus licheniformis</i> 1 x 10 ³ CFU/ml | - |
| Bee-Tagonizer Bee Vectoring Powder | microbial | not registered | fungicide | not registered | spores of beneficial fungus <i>Trichoderma harzianum</i> strain Td81b | not registered | entomovectoring: beneficial fungus that is carried by bees to colonise flowers and assist with fruit set, control of fungal pathogens | crops reliant on bee pollination for fruit set, including vegetables | Metaalf BioControl (Biocontrol Australia Pty Ltd), Tasmania | powder | Yes | n/a | <i>Trichoderma harzianum</i> strain Td81b at 2 x 10 ⁸ spores/g | https://ziwtk.com.au/wp-content/uploads/2016/07/130_Metaalf.pdf |
| Bio-N | microbial | not registered | crop nutrition | not registered | nitrogen fixing bacteria - <i>Azotobacter</i> species | not registered | nitrogen | all crops | Nutri-Tech Solutions (NTS) | liquid | Yes | n/a | not supplied | - |
| Bio-P | microbial | not registered | crop nutrition | not registered | <i>Azotobacter</i> spp., <i>Bacillus subtilis</i> | not registered | Phosphorous | all crops | Nutri-Tech Solutions (NTS) | liquid | Yes | n/a | not supplied | - |
| Bio-Flex | microbial | not registered | growth stimulant/ regulator | not registered | <i>Azotobacter</i> spp. | not registered | leaf life | all crops | Nutri-Tech Solutions (NTS) | liquid | Yes | n/a | not supplied | - |
| Bio-Size | microbial | not registered | soil biology stimulant | not registered | by-products of microorganisms (no living organisms); betaines and amino acids | not registered | stimulate microorganisms | all crops | Zadco (JH Biotech) | liquid | Yes | n/a | not supplied | - |
| Biocrystal Kurstaki biological insecticide | microbial | insecticide | - | <i>Bacillus thuringiensis</i> subsp. <i>kurstaki</i> strain HD-1 | - | armyworm cabbage moth cabbage white butterfly <i>Helicoverpa armigera</i> light brown apple moth looper - <i>Chrysothrips</i> spp. native budworm or bollworm pear looper soybean looper tobacco looper or looper caterpillar vine moth | - | adzuki bean amenity tree canola cereals chickpea cotton faba bean field bean field pea forestry fruit herb lentil linola lucerne lupin - weed free seedbed mung bean navy bean oilseed crop ornamental pigeon pea safflower sorghum soybean sunflower tobacco turf vegetable vetch vine | Grevillia Ag Pty Limited | liquid | No | n/a | <i>Bacillus thuringiensis</i> subspecies <i>kurstaki</i> strain HD-1. Concentration not given. | - |
| BioFlora GO Isolates | microbial | not registered | soil biology stimulant | not registered | two <i>Bacillus</i> species: <i>Bacillus amyloliquefaciens</i> and <i>B. subtilis</i> | not registered | enhanced soil microbial activity, soil and plant health | all vegetable crops + others | BioFlora, Queensland | liquid | Yes | 9.1 | Bacteria at 10 ³ -3 CFU/mL | https://bioflora.com.au/australian-trial-results/ |
| BIOWSH Crop | microbial | not registered | soil biology stimulant | not registered | Microbial inoculum: <i>Bacillus subtilis</i> , <i>Bacillus amyloliquefaciens</i> , <i>Bacillus licheniformis</i> , <i>Bacillus pumilus</i> , Dextrose | not registered | Soil conditioner/fertiliser supplement through fertigation or (foliar) spray to stimulate beneficial microbial activity in the root zone and biological processes. | all crops | BIOWISH Technologies Inc., USA / Enviro Nutrition Pty Ltd, Queensland | powder | Yes | 3.0 - 6.0 S.U | Bacterial live cultures (total < 1.0%): <i>Bacillus subtilis</i> ≥ 2.5 x 10 ⁷ CFU/g, <i>B. amyloliquefaciens</i> ≥ 2.5 x 10 ⁷ CFU/g, <i>B. licheniformis</i> ≥ 2.5 x 10 ⁷ CFU/g, <i>B. pumilus</i> ≥ 2.5 x 10 ⁷ CFU/g Dextrose 97.0 - 99.0% | - |
| BIOWSH Crop Liquid | microbial | not registered | soil biology stimulant | not registered | Microbial inoculum: <i>Bacillus subtilis</i> , <i>Bacillus amyloliquefaciens</i> , <i>Bacillus licheniformis</i> , <i>Bacillus pumilus</i> . | not registered | Fertiliser manufacturing: liquid product can be coated onto a wide range of solid fertilisers and fertiliser fillers, or mixed with liquid fertilisers to create enhanced efficiency fertilisers | all crops | BIOWISH Technologies Inc., USA / Enviro Nutrition Pty Ltd, Queensland | liquid | Yes | 3.0 - 7.0 S.U | Bacterial live cultures in aqueous suspension (total 99.0 - 99.9%): <i>Bacillus subtilis</i> , <i>B. amyloliquefaciens</i> , <i>B. licheniformis</i> , <i>B. pumilus</i> : all 1.0 x 10 ⁹ CFU/g; Calcium sulfate 0.1 - 1.0%, Preservative 0.01 - 0.1% | https://biowishtechnologies.com/press-release/ |
| Botector | microbial | fungicide | - | <i>Aureobasidium pullulans</i> strains DSM 14940 & 14941 | - | control (preventative) of grey mould (<i>Botrytis cinerea</i>), suppression of sclerotinia (<i>Sclerotinia sclerotiorum</i>); other diseases as per label | - | fruiting vegetables (eggplant , melon, capsicum , tomato , zucchini) and berries | Nufarm Australia Ltd, Victoria | granular | Yes | - | <i>Aureobasidium pullulans</i> strains DSM 14940 & 14941 at minimum 2.5 x 10 ⁹ CFU/g | - |
| BTI 1200 | microbial | insecticide | - | <i>Bacillus thuringiensis</i> subsp. <i>israelensis</i> serotype H14a | - | mosquito larvae | - | all crops | Barmac Industries | liquid | n/a | 4.8 | not supplied | - |
| Campbell Bacchus WG biological insecticide | microbial | insecticide | - | <i>Bacillus thuringiensis</i> Berliner subsp. <i>aiwawai</i> | - | armyworm cabbage moth cabbage white butterfly cotton budworm or bollworm light brown apple moth looper native budworm or bollworm susceptible insect species - see label vine moth | - | agricultural non-crop areas amenity tree cereal grain forestry fruit herb macadamia oilseed crop ornamental tobacco turf vegetable vine | Colin Campbell (Chemicals) Pty Ltd | granular | No | n/a | <i>Bacillus thuringiensis</i> Berliner subsp. <i>aiwawai</i> strain GC-91 concentration not given. | - |
| CataPult /SuperFine /Power Inoculum /Power Seed Dressing | microbial | not registered | soil biology stimulant | not registered | Four species of VAMs (vesicular arbuscular mycorrhizae, not specified) + two species of phosphorus solubilising <i>Bacillus</i> | not registered | mycorrhizae | all mycorrhizal crops | Mapleton Agri Biotec Pty Ltd / Vanadis Bio Science Pty Ltd, Queensland | powder | No | n/a | not supplied | https://www.mabiotec.com/pdfs/Trial%20CataPult%20SW%20not%20final%20UPDATE.pdf |
| Deflin WG biological insecticide | microbial | insecticide | - | <i>Bacillus thuringiensis</i> Berliner var. <i>kurstaki</i> | - | armyworm cabbage moth cabbage white butterfly cluster caterpillar corn earworm grapevine moth <i>Helicoverpa armigera</i> lawn armyworm light brown apple moth looper looper - <i>Chrysothrips</i> spp. native budworm or bollworm painted vine moth pear looper soybean looper tobacco looper or looper caterpillar vine moth | - | amenity tree cereal grain forestry fruit herb oilseed crop ornamental tobacco turf vegetables - see label vine | Certis U.S.A. L.L.C. | granular | No | n/a | <i>Bacillus thuringiensis</i> subspecies <i>kurstaki</i> strain SA-11. Concentration not given. | - |
| DiaSil | microbial | not registered | growth stimulant/ regulator | not registered | Micronised diatomaceous earth (fossilised remains of diatoms, a type of hard-shelled protists) | not registered | Applied as a seed coating, seedling drench, soil application, fertigation and a foliar spray (best in combination with LoliPepta product) for plant growth stimulation and environmental stress resilience | all crops | Novum Lifesciences, Queensland | powder | Yes | - | Elements expressed as %w/w. Diatomaceous earth ≥ 95%, Silica as quartz < 3% | - |
| Digestor NP | microbial | not registered | soil biology stimulant | not registered | microbial stimulants (not specified) | not registered | soil health (stimulation of bacterial group Alphaproteobacteria, <i>Sphingomonas</i> spp.), nutrient uptake through irrigation, boom spray, over manure or compost, or via liquid injection | dicots: vegetable crops, legumes , fruit crops, bananas, orchards | Metagen Pty Ltd, Queensland | liquid | No | 3.2 | not supplied | - |
| DiPel DF biological insecticide dry flowable | microbial | insecticide | - | <i>Bacillus thuringiensis</i> subsp. <i>kurstaki</i> strain ABTS-351 | - | armyworm cabbage moth cabbage white butterfly cotton budworm or bollworm green looper light brown apple moth native budworm or bollworm pear looper soybean looper tobacco looper vine moth | - | amenity plantings cereal grain forestry fruit herb oilseed crop ornamental tobacco turf vegetable vine | Sumitomo Chemical Australia Pty Ltd | granular | Yes | n/a | <i>Bacillus thuringiensis</i> subspecies <i>kurstaki</i> strain ABTS-351. Concentration not given. | Trials undertaken by manufacturer |
| DiPel SC biological insecticide suspension concentrate | microbial | insecticide | - | <i>Bacillus thuringiensis</i> subsp. <i>kurstaki</i> strain ABTS-351 | - | armyworm cabbage moth cabbage white butterfly cotton budworm or bollworm green looper native budworm or bollworm pear looper soybean looper tobacco looper | - | adzuki bean canola oilseed crop chickpea cotton faba bean field pea lentil linola linseed oil crop lucerne lupin mung bean navy bean oilseed crop pigeon pea pulse crops safflower oilseed sorghum soybean sunflower vetch | Sumitomo Chemical Australia Pty Ltd | liquid | Yes | n/a | <i>Bacillus thuringiensis</i> subspecies <i>kurstaki</i> strain ABTS-351, concentration not given; hydrocarbon liquid 683g/L | https://sumitomo-chem.com.au/sites/default/files/literature/dipels_broadacre_brochure.pdf |
| Dominate-F | microbial | not registered | soil biology stimulant | not registered | not stated | not registered | microbial brew adjuvant for fungal dominated brew | all crops | Nutri-Tech Solutions (NTS) | liquid | Yes | 4.4 - 5.4 | not supplied | - |
| EasyRhiz | microbial | not registered | soil biology stimulant | not registered | One or more rhizobial (bacterial) strains | not registered | Stimulation of rhizobial nodulation, nitrogen fixation and yield | crop and pasture legumes | New Edge Microbials Pty Ltd, NSW | freeze dried | No | n/a | <i>Rhizobium leguminosarum</i> > 5 x 10 ¹¹ CFU/g. The strains are classified into Groups (F, H, J, M, N, P, Specials: Adzuki bean, Common bean, Burgundy bean, Fenugreek, Guar Bean) matched to the crops they can inoculate. | - |

| Trade Name | Source | Registered Product Type (APVMA Registered) | Product type | Active Ingredient(s) (APVMA Registered Products) | Main ingredient(s) of non registered products | Registered Use (APVMA Registered) | Has been used as / for (not registered)2 | Crop | Manufacturer | Formulation | Australian Certified Organic | pH | Analysis | Trial Information |
|--|-----------|--|-----------------------------|---|---|---|--|---|--------------------------------------|---------------------------------------|------------------------------|-----------|--|---|
| Eco Advance | microbial | not registered | crop nutrition | not registered | <i>Azotobacter</i> sp., <i>Azospirillum</i> , <i>Bacillus subtilis</i> , <i>Bacillus megaterium</i> , cellulosic fungi (<i>Chaetomium</i> spp.), mycorrhiza (<i>Glomus intraradices</i>), <i>Pseudomonas</i> spp., <i>Rhizobium</i> , <i>Spiratomycetes</i> , <i>Trichoderma</i> . | not registered | crop health, soil biology | all crops | Eco Growth | additive in other fertiliser products | Yes | n/a | not supplied | - |
| Endo-Fight | microbial | not registered | growth stimulant/ regulator | not registered | mix of 5 products - RhizoPhos, RhizoGuard, Mycorrhiza, AspeN, DiaSil | not registered | crop health, soil biology | all crops | Novum Lifesciences, Queensland | liquid and granular | Yes | 7-8 | <i>Azotobacter chroococcum</i> , <i>A. brasilense</i> , <i>Bacillus amyloquelificans</i> [strain rm303] 1x10 ⁸ CFU/ml, <i>Verticillium chlamydosporum</i> , <i>Rhizophagus irregularis</i> | - |
| EndoFight 2 in 1 | microbial | not registered | soil biology stimulant | not registered | Fermented product - Microbial inoculum: <i>Azotobacter chroococcum</i> , <i>Azospirillum brasilense</i> , <i>Bacillus amyloquelificans</i> strain rm303 | not registered | Pre-plant soil conditioner/fertiliser supplement to stimulate beneficial microbial activity in the root zone and biological processes (including nitrogen fixation) | all crops | Novum Lifesciences, Queensland | liquid | No | 6.8 - 7.6 | Elements expressed as %w/v. Bacterial live cultures in aqueous suspension (total concentration < 1%): <i>Azotobacter chroococcum</i> , <i>Azospirillum brasilense</i> , <i>Bacillus amyloquelificans</i> strain rm303. Non-hazardous components < 1% Water up to 100% | - |
| EndoFight 3 in 1 | microbial | not registered | soil biology stimulant | not registered | Fermented product - Microbial inoculum: <i>Azotobacter chroococcum</i> , <i>Azospirillum brasilense</i> , <i>Bacillus amyloquelificans</i> strain rm303, <i>Pseudomonas fluorescens</i> | not registered | Pre-plant soil conditioner/fertiliser supplement to stimulate beneficial microbial activity in the root zone and biological processes (including nitrogen fixation, drought stress relief) | all crops | Novum Lifesciences, Queensland | liquid | No | 6.8 - 7.6 | Elements expressed as %w/v. Bacterial live cultures in aqueous suspension (total concentration < 1%): <i>Azotobacter chroococcum</i> , <i>Azospirillum brasilense</i> , <i>Bacillus amyloquelificans</i> strain rm303, <i>Pseudomonas fluorescens</i> . Non-hazardous components < 1% Water up to 100% | - |
| EndoPrime | microbial | not registered | soil biology stimulant | not registered | 4 Endomycorrhizal fungi + 15% humic acid | not registered | mycorrhizae | all mycorrhizal crops | Sumitomo Chemical Australia Pty Ltd | powder | Yes | n/a | <i>Glomus intraradices</i> , <i>Glomus mosseae</i> , <i>Glomus aggregatum</i> , <i>Glomus etunicatum</i> all at 562 propagules/g, Humic acid from leonardite 15%, Inert ingredients (clay) 84.3% | Trials undertaken by manufacturer |
| Evergrow NP | microbial | not registered | soil biology stimulant | not registered | microbial stimulants (not specified) | not registered | soil health (stimulation of bacterial group Alphaproteobacteria), nutrient uptake through irrigation, boom spray, over manure or compost, or via liquid injection | monocots: cover crop grasses, cereal crops (corn) | Metagen Pty Ltd, Queensland | liquid | No | 3.2 | not supplied | - |
| Foundation LM | microbial | not registered | soil biology stimulant | not registered | microorganisms including <i>Bacillus licheniformis</i> , <i>Bacillus megaterium</i> , <i>Bacillus pumilus</i> | not registered | fertiliser efficiency | all crops | Loveland (distributed by Nutrien Ag) | liquid | No | 8 | water-based culture medium 99%, microorganisms <1%, <i>Bacillus licheniformis</i> 1 x 10 ⁹ CFU/mL, <i>Bacillus megaterium</i> 1 x 10 ⁹ CFU/mL, <i>Bacillus pumilus</i> 1 x 10 ⁹ CFU/mL. | - |
| Fulzyme Plus | microbial | not registered | soil biology stimulant | not registered | <i>Bacillus subtilis</i> , amino acids | not registered | nutrition, crop health | all crops | Zadco (JH Biotech) | liquid | Yes | n/a | <i>Bacillus subtilis</i> 2 x 10 ¹⁰ CFU/g | - |
| Gemstar Helicoverpa management through biocontrol biological insecticide | microbial | insecticide | - | Nuclear polyhedrosis virus of <i>Helicoverpa zea</i> | - | <i>Helicoverpa</i> spp. | - | chickpea cotton lettuce maize sorghum sweet corn | Certs U.S.A. L.L.C. | liquid | No | n/a | <i>Helicoverpa zea</i> virus, 2 x 10 ⁹ POB/mL | - |
| Gemstar LC biological insecticide | microbial | insecticide | - | Nuclear polyhedrosis virus of <i>Helicoverpa zea</i> | - | <i>Helicoverpa armigera</i> <i>Helicoverpa punctigera</i> | - | adzuki bean apple asparagus blackberry blueberry boysenberry brassica leafy vegetables - see label broad bean broccoli brussels sprouts cabbage canola oilseed crop capsicum or pepper cauliflower celery chickpea chinese broccoli cotton cowpea cranberry cucumber eggplant endive faba bean field pea gooseberry green bean green or garden pea kidney or mexican bean lablab bean lentil lettuce lima bean linseed crop lucerne maize maize - see label melon mung bean nashi pear navy bean oil seed crop - see label for inclusions peanut oilseed pigeon pea potato pumpkin raspberry rhubarb rocket (rucola) safflower oilseed silver beet snow pea sorghum soybean spinach squash strawberry sugar snap pea sunflower oilseed sweet corn tomato vetch watermelon zucchini | Sipcam (Agricrop) | liquid | No | n/a | <i>Helicoverpa zea</i> virus, 2 x 10 ⁹ POB/mL | - |
| Great Land | microbial | not registered | soil biology stimulant | not registered | <i>Lactobacillus</i> spp, <i>Acetobacter</i> spp. | not registered | nutrient use efficiency/soil health | all crops | Terragen | liquid | Yes | n/a | <i>Acetobacter fabarum</i> , <i>Lactobacillus parafarraginis</i> , <i>Lactobacillus buchneri</i> , <i>Lactobacillus rapa</i> , <i>Lactobacillus reesei</i> , <i>Candida ethanolica</i> (yeast), each species at a minimum population of 10 ⁷ CFU/ml | https://www.terragen.com.au/plant-health/#?a=1#tab=1 a2#tab=2 a3#tab=3 a4#tab=4 a5#tab=5 a6#tab=6 a7#tab=7 a8#tab=8 a9#tab=9 a10#tab=10 |
| Green Guard SC biological insecticide | microbial | insecticide | - | <i>Metarhizium anisopliae</i> var. <i>acridum</i> spores | - | australian plague locust - nymphs grasshopper wingless grasshopper | - | agricultural area - general crop establishment weed control forage crop non-crop area - general pasture | BASF Australia Ltd. | both, to be mixed | No | n/a | <i>Metarhizium anisopliae</i> var <i>acridum</i> spores, 4 x 10 ¹⁰ /g | - |
| Green Guard SC premium biological insecticide | microbial | insecticide | - | <i>Metarhizium anisopliae</i> var. <i>acridum</i> spores | - | australian plague locust - nymphs grasshopper wingless grasshopper | - | agricultural area - general forage crop grape - table grape - wine non-crop area - general pasture | BASF Australia Ltd. | liquid | No | n/a | <i>Metarhizium anisopliae</i> var <i>acridum</i> spores | - |
| Green Guard ULV biological insecticide | microbial | insecticide | - | <i>Metarhizium anisopliae</i> var. <i>acridum</i> spores | - | australian plague locust - nymphs grasshopper migratory locust - nymphs spur-throated locust - nymphs & adults wingless grasshopper | - | agricultural area - general non-crop area - general pasture & forage crops | BASF Australia Ltd. | liquid | No | n/a | <i>Metarhizium anisopliae</i> var <i>acridum</i> spores, 300/gL | - |
| Helicovex biological insecticide | microbial | insecticide | - | Nuclear polyhedrosis virus of <i>Helicoverpa armigera</i> | - | <i>Helicoverpa armigera</i> <i>Helicoverpa punctigera</i> | - | adzuki bean apple berry fruit blackberry blueberry boysenberry brassica leafy vegetables - see label broccoli brussels sprouts cabbage canola oilseed crop capsicum or pepper cauliflower celery cereal grain chickpea chilli chinese broccoli cotton cowpea cranberry cucumber curcubit currant eggplant endive faba bean field pea fruiting vegetable gooseberry green bean green or garden pea kidney or mexican bean lablab bean leafy vegetable legume lentil lettuce lima bean linseed oil crop lucerne lupin maize maize - see label melon mung bean nashi pear navy bean oilseed crop oilseed mustard ornamental plant peanut oilseed pear pepper pigeon pea pome fruit potato pumpkin raspberry rocket (rucola) safflower oilseed sesame silver beet snow pea sorghum soybean spinach squash strawberry sugar snap pea sunflower oilseed sweet corn tomato vetch watermelon zucchini | Andermatt Biocontrol Ag | liquid | No | NG | Nucleopolyhedrovirus of <i>Helicoverpa armigera</i> 7.5 x 10 ⁹ polyhedral inclusion bodies per millilitre. | - |
| Helicoid biological insecticide | microbial | insecticide | - | Nuclear polyhedrosis virus of <i>Helicoverpa armigera</i> | - | <i>Helicoverpa</i> spp. | - | chickpea cotton lettuce maize sorghum sweet corn | Bioflexus Pty Ltd | liquid | No | n/a | Nucleopolyhedrovirus of <i>Helicoverpa armigera</i> 2 x 10 ⁹ POB/mL. | - |

| Trade Name | Source | Registered Product Type (APVMA Registered) | Product type | Ingredient(s) | | Registered Use (APVMA Registered) | Use | Crop | Manufacturer | Formulation | Australian Certified Organic | pH | Analysis | Trial Information |
|---|-----------|--|--|--|--|---|---|--|--|---------------------|------------------------------|--|---|---|
| | | | | Active Ingredient(s) (APVMA Registered Products) | Main Ingredient(s) of non registered products | | | | | | | | | |
| Jermelva active /Success Neo / Delegate | microbial | insecticide | | Spinetoram (mixture of Spinetoram J and Spinetoram L in approximate ratio of 3 to 1). Spinetoram is a fermentation product of <i>Saccharopolyspora spinosa</i> and a structural analogue of spinosad | | control of range of insect pests (incl. lepidopteran fall armyworm) | | vegetable crops, fruit crops, herbs, ornamentals | Corteva Agriscience Australia Pty Ltd, New South Wales | liquid | No | Success Neo: 7.15 (1% pH electrode) Delegate: 8.7 (1% pH electrode) | Success Neo: Spinetoram at 120 g/L; spinetoram (spinetoram J, spinetoram L) 11.71%, propylene glycol < 10.0%. Delegate: Spinetoram at 250 g/kg; spinetoram (spinetoram J, spinetoram L) 25.0%, kaolin 30.0 - 40.0%, sodium N-methyl-N-ethyltaurine < 5%, titanium dioxide < 5.0%, quartz < 1.0%. | |
| Upoguard | microbial | not registered | fungicide | not registered | lipopeptides derived from bacterial strains (not specified) | not registered | biofungicide | all crops | Metagen Pty Ltd, Queensland | liquid | No | - | not supplied | |
| LoliPepta | microbial | not registered | disease suppressant | not registered | <i>Bacillus amyloliquefaciens</i> strain pm 414 | not registered | Seed inoculation / foliar spray to form a natural physical barrier to diseases | all crops | Novum Lifesciences, Queensland | liquid | Yes | 3.3 - 4.8 | All % as %w/w. <i>Bacillus amyloliquefaciens</i> strain pm 414 (total concentration < 1%). Non-hazardous components < 1%. Water up to 100% | |
| Metcalf Hamatum (Isolates TdAVC1 & TdAVA2) | microbial | not registered | fungicide | not registered | spores of beneficial fungus <i>Trichoderma hamatum</i> strains AVA2 and AVC1 | not registered | Beneficial microbe that is a natural enemy of <i>Phytophthora</i> disease | all crops | Metcalf BioControl, Tasmania | powder | Yes | n/a | <i>Trichoderma hamatum</i> strains AVA2 and AVC1 at 5 x 10 ¹⁰ spores/g | |
| Metcalf Td67 | microbial | not registered | fungicide | not registered | spores of beneficial fungus <i>Trichoderma koningii</i> strain Td67 | not registered | Beneficial microbe that is a natural enemy of grey mould (<i>Botrytis cinerea</i>) | all crops | Metcalf BioControl, Tasmania | powder | Yes | n/a | <i>Trichoderma koningii</i> strain Td67 at 5 x 10 ¹⁰ spores/g | https://awic.com.au/wp-content/uploads/2016/07/130_Metcalf.pdf |
| Metcalf Td81b | microbial | not registered | fungicide | not registered | spores of beneficial fungus <i>Trichoderma harzianum</i> strain Td81b | not registered | Beneficial microbe that is a natural enemy of grey mould (<i>Botrytis cinerea</i>) and brown rot (<i>Monilinia</i> spp.) | all crops | Metcalf BioControl, Tasmania | powder | Yes | n/a | <i>Trichoderma harzianum</i> strain Td81b at 5 x 10 ¹⁰ spores/g | https://awic.com.au/wp-content/uploads/2016/07/130_Metcalf.pdf |
| Micro-Force | microbial | not registered | soil biology stimulant | not registered | beneficial soil and plant microbes' | not registered | crop health, soil biology | all crops | Nutri-Tech Solutions (NTS) | granular | Yes | n/a | not supplied | |
| Myco-Force | microbial | not registered | soil biology stimulant | not registered | fungi species: <i>Beauveria bassiana</i> , <i>Metarhizium anisopliae</i> , <i>Leucanillium lecanii</i> | not registered | soil fungi | all crops | Nutri-Tech Solutions (NTS) | granular | Yes | n/a | not supplied | |
| MycoApply Defence | microbial | not registered | soil biology stimulant | not registered | various mycorrhizae, <i>Trichoderma</i> , <i>Bacillus</i> species and other bacteria (all unspecified) | not registered | mycorrhizae | all mycorrhizal crops | Mycorrhizal Applications International (MAI) Australia Pty Ltd, Western Australia | powder | Yes | n/a | not supplied | |
| MycoApply Endo | microbial | not registered | soil biology stimulant | not registered | unspecified VAM | not registered | mycorrhizae | all mycorrhizal crops | Mycorrhizal Applications International (MAI) Australia Pty Ltd, Western Australia | powder | Yes | n/a | not supplied | |
| MycoApply Endo/Ecto | microbial | not registered | soil biology stimulant | not registered | endo (= VAM) and ecto mycorrhizae species (not specified) | not registered | mycorrhizae | all mycorrhizal crops | Mycorrhizal Applications International (MAI) Australia Pty Ltd, Western Australia | powder | No | n/a | not supplied | |
| MycoApply Maxx | microbial | not registered | soil biology stimulant | not registered | endo (= VAM) mycorrhizae species (not specified) | not registered | mycorrhizae | all mycorrhizal crops | Mycorrhizal Applications International (MAI) Australia Pty Ltd, Western Australia | powder | No | n/a | not supplied | |
| MycoMaxx | microbial | not registered | soil biology stimulant | not registered | Mycorrhizal fungi | not registered | root system | host crops | Zadco (JH Biotech), Queensland | granular in sachets | Yes | n/a | <i>Glomus intraradices</i> , <i>Glomus mosseae</i> , <i>Pisolithus tinctorius</i> , <i>Sclerotoderma cepa</i> , <i>Sclerotoderma gastrum</i> , <i>Sclerotoderma citrinum</i> and <i>Laccaria bicolor</i> , 250,000 propagules/cc | |
| Mycorrhiza | microbial | not registered | soil biology stimulant | not registered | vesicular arbuscular mycorrhizae (<i>Rhizophagus irregularis</i>) | not registered | crop health (mycorrhizae - seed coating, soil drench) | all mycorrhizal crops | Novum Lifesciences, Queensland | powder | Yes | 6 - 7.5 | not supplied | |
| Naturalure Fruit Fly Bait Concentrate | microbial | insecticide | | Spinosad (mixture of Spinosyn A and Spinosyn D in an approximate ratio of 17 to 3). Spinosad is a fermentation product of <i>Saccharopolyspora spinosa</i> . | | control of fruit flies (incl. Qld fruit fly, Mediterranean fruit fly) | | vegetable crops, fruit crops, nut crops, ornamentals and trees | Corteva Agriscience Australia Pty Ltd, New South Wales | liquid | Yes | 4.7 (100% pH electrode) | Spinosad at 0.24 g/L; spinosad (spinosyn A, spinosyn D) 0.02%, sorbitan/monooctadecanoate/poly(oxy-1,2-ethanediyl) derivatives < 5.0%, propylene glycol < 5.0%. | |
| Nematamax | microbial | not registered | insecticide | not registered | <i>Verticillium chlamydosporum</i> | not registered | nematodes | all crops | Novum Lifesciences, Queensland | liquid | Yes | 6.5 - 8.5 | not supplied | |
| NitroGuard (= next generation version of TwinN) | microbial | not registered | soil biology stimulant | not registered | Rhizobacteria (not specified, possibly <i>Azospirillum</i> spp.) fixing nitrogen and producing plant growth factors (e.g. auxins) + <i>Bacillus</i> spp. | not registered | soil health, nutrient uptake | all vegetable crops + others | Mapleton Agri Biotech Pty Ltd / Vanadis Bio Science Pty Ltd, Queensland | freeze dried | No | n/a | not supplied | https://www.mabiotec.com/crop-trials.pdf |
| Nodulaid (Inoculant) | microbial | not registered | soil biology stimulant | not registered | One or more rhizobial strains | not registered | Stimulation of rhizobial nodulation, nitrogen fixation and yield | crop and pasture legumes | BASF Australia Ltd. | compost style | No | n/a | Rhizobia at > 1 x 10 ⁹ CFU/g. The strains are classified into Groups (A, B, C, E, F, G, H, I, J, N) matched to crops they can inoculate. | https://crop-solutions.basf.com.au/preview//prod-uct/59cb38598d5c5b7640d93751/road-aid_fact_sheet.pdf |
| Nodulator (Inoculant Granules) | microbial | not registered | soil biology stimulant | not registered | One or more rhizobial strains | not registered | Stimulation of rhizobial nodulation, nitrogen fixation and yield | crop and pasture legumes | BASF Australia Ltd. | granular | No | n/a | Rhizobia > 1 x 10 ⁷ CFU/g. The strains are classified into Groups (A, C, E, F, G, N) matched to crops they can inoculate. | https://crop-solutions.basf.com.au/preview//prod-uct/59cb38598d5c5b7640d93751/road-aid_fact_sheet.pdf |
| NoduleN | microbial | not registered | soil biology stimulant | not registered | One or more rhizobial strains | not registered | Stimulation of rhizobial nodulation, nitrogen fixation and yield | crop and pasture legumes | New Edge Microbials Pty Ltd, NSW | compost style | No | n/a | Rhizobia > 1 x 10 ⁷ CFU/g. The strains are classified into Groups (AL, AM, B, C, F, G, H, I, J, M, N, P, S, Specials: Adzuki bean, Bisserruja, Desmanthus, Leucaena, Messina, Sulla) matched to the crops they can inoculate. | |
| Nogall | microbial | fungicide (not registered for vegetables) | | <i>Agrobacterium radiobacter</i> var. <i>radiobacter</i> strain K1026 | | Preventative control of crown gall disease (<i>Rhizobium radiobacter</i> , <i>R. rhizogenes</i>) in stone fruit, nut trees, ornamentals | | almond, pecan, rose, stone fruit, walnut (registered) + vegetable crops (not registered) | Bio-Care Technology Pty Ltd (Bio-Care); Becker Underwood Pty Ltd, NSW / BASF Australia Ltd, Victoria | powder | No | n/a | <i>Agrobacterium radiobacter</i> var. <i>radiobacter</i> strain K1026 at 1 x 10 ⁹ CFU/g peat | |
| Onionmate | microbial | not registered | growth stimulant/ regulator | not registered | <i>Trichoderma atroviride</i> | not registered | root growth | onions | Aggrimm | granular | Yes | n/a | not supplied | |
| Plant of Health Root Extender | microbial | not registered | soil biology stimulant | not registered | VAMs (not specified) and other beneficial micro-organisms (not specified) | not registered | mycorrhizae | all mycorrhizal crops | Batphone Australia Pty Ltd, Queensland | powder | Yes | n/a | minimum 100,000 fungal spores/kg | |
| Plant of Health Microbe Army Mix | microbial | not registered | soil biology stimulant | not registered | blend of beneficial bacterial strains and other microbes (not specified) | not registered | enhanced fertiliser uptake, soil health | all crops | Batphone Australia Pty Ltd, Queensland | powder | No | n/a | not supplied | |
| Plant of Health Microbe Probiotic (MPB-1) | microbial | not registered | soil biology stimulant | not registered | lactic acid bacteria, yeast, phototropic bacteria (not specified) | not registered | enhanced fertiliser uptake, soil health | all crops | Batphone Australia Pty Ltd, Queensland | liquid | No | - | not supplied | https://www.batphone.com.au/images/articles/Testimonials/BelleJardin%20PlantAssistMPB-1.pdf |
| Plantmate Granular Platform | microbial | not registered | growth stimulant/ regulator crop nutrition | not registered | <i>Trichoderma harzianum</i> | not registered | crop health root system | all crops all crops | Aggrimm Nutri-Tech Solutions (NTS) | granular granular | Yes Yes | n/a n/a | <i>Trichoderma harzianum</i> 1 x 10 ⁶ CFU/g not supplied | |

| Trade Name | Source | Registered Product Type (APVMA Registered) | Product type | Ingredients | | Registered Use (APVMA Registered) | Use | Crop | Manufacturer | Formulation | Australian Certified Organic | pH | Analysis | Trial Information | |
|---|-----------|--|-----------------------------|--|---|--|--|---|--|-------------------|------------------------------|-----------------------------|--|---|---|
| | | | | Active Ingredient(s) (APVMA Registered Products) | Main ingredient(s) of non registered products | | | | | | | | | | |
| Qalcova active /Enrust Organic | microbial | insecticide | | | Spinosad (mixture of Spinosyn A and Spinosyn D in an approximate ratio of 17 to 3). Spinosad is a fermentation product of <i>Saccharopolyspora spinosa</i> . | control of range of insect pests (incl. diamondback moth, thrips, leaf miners) | - | vegetable crops, fruit crops, herbs, ornamentals and forestry | Corteva Agriscience Australia Pty Ltd, New South Wales | liquid | Yes | 8.0 - 9.5 (1% pH electrode) | Spinosad at 240 g/L; spinosad (spinosyn A, spinosyn D) 22.54%, propylene glycol >=1.0. < 20.0%, polyethoxylated dodecyl alcohol >= 1.0 - < 3.0%, spinosyn B >=0.25 - < 1.0%. | - | |
| Reefsaver Classic | microbial | not registered | soil biology stimulant | not registered | Microbial inoculum: <i>Kocuria rosea</i> , <i>Bacillus megaterium</i> , <i>Azospirillum brasilense</i> , <i>Arthrobacter crystallopoietes</i> , <i>Bacillus simplex</i> . | not registered | Pre-plant soil conditioner/fertiliser supplement to stimulate beneficial microbial activity in the root zone and biological processes. | all crops | IAO Pty Ltd, Queensland | powder | Yes | 4.5 - 7.5 | Bacterial inoculum (total concentration 3.25 x 10 ⁸ CFU/ml); <i>Kocuria rosea</i> , <i>Bacillus megaterium</i> , <i>Azospirillum brasilense</i> , <i>Arthrobacter crystallopoietes</i> , <i>Bacillus simplex</i> . Inert carrier | https://reefsaver.com.au/results/ | |
| Revitalize | microbial | not registered | soil biology stimulant | not registered | several species of beneficial bacteria and fungi | not registered | enhanced fertiliser uptake, soil health | all vegetable crops + others | AgroBest Australia Pty Ltd, Queensland | liquid | Yes | 3.8 | Total of 10 ⁹ CFU/ml: <i>Sutazleri</i> spp., <i>Pseudomonas</i> spp., <i>Bacillus</i> spp., <i>Streptomyces cellulosae</i> , <i>Azotobacter</i> spp., <i>Azospirillum brasilense</i> , <i>Polysargium cellulorum</i> , <i>Yarrowia lipolytica</i> | - | |
| Rhizomax | microbial | not registered | growth stimulant/ regulator | not registered | <i>Bacillus amyloliquefaciens</i> | not registered | crop health | all crops | Novum Lifesciences, Queensland | liquid | Yes | 4.5 - 8.5 | 1 x 10 ⁹ CFU/ml | - | |
| RhizoVital 42 | microbial | not registered | stress resistance | not registered | <i>Bacillus amyloliquefaciens</i> FZB 43 | not registered | root system, disease resistance | all crops | AbiTep GmbH, Germany | liquid | No | n/a | <i>Bacillus amyloliquefaciens</i> FZB42 2.5 x 10 ¹⁰ CFU/ml | http://www.oca.com.au/ | |
| Root Guard | microbial | not registered | soil biology stimulant | not registered | fungi species: <i>Arthrobactrys conoides</i> , <i>Purpureocillium lilacinus</i> , <i>Pochonia chlamydosporium</i> | not registered | soil fungi | all crops | Nutri-Tech Solutions (NTS) | powder | Yes | n/a | not supplied | - | |
| Rootmate | microbial | not registered | growth stimulant/ regulator | not registered | <i>Trichoderma harzianum</i> | not registered | crop health | all crops | AgriMm | granular | No | n/a | not supplied | - | |
| Serenade Opti | microbial | fungicide | - | - | <i>Bacillus amyloliquefaciens</i> strain QST 713 | - | Botrytis, bacterial spot | - | Bayer CropScience | granular | Yes | 4.5 - 8.5 | <i>Bacillus amyloliquefaciens</i> strain QST 713 1.3x10 ¹⁰ CFU/g | https://www.crop.bayer.com.au/prod-ucts/bayer-biologics/serenade-opti/tab-4 | |
| Serenade Prime | microbial | fungicide | - | - | <i>Bacillus amyloliquefaciens</i> strain QST 713 (1-34%) | - | rhizoctonia, black scurf, pineapple disease | - | Bayer CropScience | liquid | Yes | 4.5 - 8.5 | <i>Bacillus amyloliquefaciens</i> strain QST 713 1.3x10 ¹² CFU/g | https://www.crop.bayer.com.au/prod-ucts/bayer-biologics/serenade-prime/#tab-3 | |
| Serenade Soil Activ | microbial | - | crop nutrition | - | <i>Bacillus amyloliquefaciens</i> strain QST 713 | - | soil health, nutrient uptake | Soil ameliorant (nutrient uptake) for vegetables and other horticultural crops | Bayer CropScience | liquid | Yes | - | <i>Bacillus amyloliquefaciens</i> QST 713 at no less than 1.0 10 ¹² CFU/L | https://www.bayer-biologics/serenade-soil-activ/tab-4 | |
| Serifel Biofungicide | microbial | fungicide | - | - | Enzyme alpha-amylase (from <i>Bacillus amyloliquefaciens</i> strain MB1600, formerly named <i>Bacillus subtilis</i> strain MB1600) | - | Preventative control of <i>Botrytis cinerea</i> in grapes and strawberries + minor use permits for control of soil-borne and foliar pathogens in non-food nursery stocks | Preventative control of soilborne diseases (incl. Pythium damping off, Fusarium wilt, Verticillium wilt, Phytophthora root rot, Rhizoctonia root/crown rot, Sclerotinia stem rot) and foliar diseases (incl. anthracnose, powdery mildew, grey mould) in vegetable crops and others | BASF Australia Ltd. | powder | Yes | n/a | Enzyme alpha-amylase from <i>Bacillus amyloliquefaciens</i> strain MB1600 at 110 g/kg (> 5.5 x 10 ¹⁰ CFU/g) | Trials undertaken by Eurofins in grape and strawberry (+ protected data of manufacturer with APVMA) | |
| Sipcam Delfin WG biological insecticide | microbial | insecticide | - | - | <i>Bacillus thuringiensis</i> subspecies <i>kurstaki</i> strain SA-11 | - | armyworm cabbage moth cabbage white butterfly <i>Helicoverpa armigera</i> light brown apple moth looper native budworm or bollworm painted vine moth pear looper soybean looper vine moth | - | amenity tree cereal grain forestry fruit general agricultural use herb non-agricultural area - general oilseed crop ornamental tobacco turf vegetable vine | Sipcam (Agricrop) | granular | No | n/a | <i>Bacillus thuringiensis</i> subspecies <i>kurstaki</i> strain SA 11. Concentration not given. | - |
| Squadron | microbial | not registered | growth stimulant/ regulator | not registered | <i>Pseudomonas fluorescens</i> | not registered | crop health | all crops | Novum Lifesciences, Queensland | liquid | Yes | 4.5 - 8.5 | 1 x 10 ⁸ CFU/ml | - | |
| Start Up Ultra | microbial | not registered | soil biology stimulant | not registered | Four species of VAMs (vesicular-arbuscular mycorrhizae, not specified) | not registered | mycorrhizae | all mycorrhizal crops | MicrobeSmart Pty Ltd, South Australia | powder | No | n/a | not supplied | - | |
| Sudo-Shield | microbial | not registered | stress resistance | not registered | <i>Pseudomonas fluorescens</i> | not registered | recovery from pathogen damage | all crops | Nutri-Tech Solutions (NTS) | granular | Yes | n/a | none provided | support in literature | |
| Superzyme | microbial | not registered | soil biology stimulant | not registered | <i>Bacillus subtilis</i> , <i>Pseudomonas putida</i> , <i>Trichoderma koningii</i> and <i>Trichoderma harzianum</i> . | not registered | soil biology, crop health | all crops | Zadco (JH Biotech) | granular | Yes | n/a | <i>Bacillus subtilis</i> , <i>Pseudomonas putida</i> , <i>Trichoderma koningii</i> and <i>Trichoderma harzianum</i> , 2 x 10 ⁹ CFU/gram | - | |
| Teknar 1200 SC | microbial | insecticide | - | - | <i>Bacillus thuringiensis</i> subsp. <i>israelensis</i> serotype H14 | - | Control of first to early fourth instar mosquito larvae (<i>Culex</i> spp., <i>Anopheles</i> spp.) | - | Valent BioSciences Corporation, USA / Sunimoto Chemical Australia Pty Ltd, NSW | liquid | No | - | <i>Bacillus thuringiensis</i> subsp. <i>israelensis</i> strain SA3A at minimum potency of 1200 ITU/mg (= 5.6% w/w) | - | |
| Topmate Tri-D25 | microbial | not registered | growth stimulant/ regulator | not registered | <i>Trichoderma harzianum</i> | not registered | crop health | all crops | AgriMm | granular | No | n/a | not supplied | - | |
| Trich-a-soil | microbial | not registered | disease suppressant | not registered | <i>Trichoderma harzianum</i> and <i>Trichoderma koningii</i> | not registered | soil biology, crop health | all crops | Zadco (JH Biotech) | granular | Yes | n/a | <i>Trichoderma harzianum</i> and <i>Trichoderma koningii</i> , 5 x 10 ⁷ CFU/gram | - | |
| Tricho-shield | microbial | not registered | growth stimulant/ regulator | not registered | spores of beneficial fungus <i>Trichoderma viride</i> (indigenous strain) | not registered | root system, fusarium resistance | turf, intensive horticulture | Metcaif BioControl, Tasmania | powder | Yes | n/a | <i>Trichoderma viride</i> (indigenous strain) at 5 x 10 ¹⁰ spores/g | - | |
| Tricho-shield | microbial | not registered | growth stimulant/ regulator | not registered | <i>Trichoderma harzianum</i> , <i>T. lignorum</i> , <i>T. koningii</i> | not registered | crop health | all crops | Nutri-Tech Solutions (NTS) | granular | Yes | n/a | not supplied | - | |
| Trichomight | microbial | not registered | stress resistance | not registered | <i>Trichoderma</i> spp. | not registered | crop health, stress tolerance | all crops | Novum Lifesciences, Queensland | liquid | Yes | 6.5 - 7 | not supplied | - | |
| TwinN | microbial | not registered | soil biology stimulant | not registered | rhizobacteria (not specified, possibly <i>Azospirillum</i> spp.?) fixing nitrogen and producing plant growth factors (e.g. auxins) | not registered | soil health, nutrient uptake | all vegetable crops + others | Mapleton Agri Biotech Pty Ltd / Vanadis Bio Science Pty Ltd, Queensland | freeze dried | No | n/a | not supplied | https://www.mapleton.com/crop-trials.pdf | |
| Vectorex | microbial | insecticide | - | - | Seed inoculation / foliar spray to form a natural physical barrier to diseases | - | Control of first to early fourth instar mosquito larvae (<i>Culex</i> spp., <i>Anopheles</i> spp.) | - | Valent BioSciences Corporation, USA / Sunimoto Chemical Australia Pty Ltd, NSW | granular | No | n/a | <i>Bacillus sphaericus</i> strain 2362, strain AB15-1743 fermentation solids and solubles - no numbers supplied | - | |
| Velfer biological insecticide | microbial | insecticide | - | - | <i>Beauveria bassiana</i> | - | chrysanthemum aphid - suppression of green peach aphid - suppression greenhouse whitefly - suppression of onion thrips - suppression only rose aphid - suppression of silverleaf whitefly - suppression sweet potato whitefly - suppression of two spotted spider mite - suppression of western flower thrip - suppression | - | BASF Australia Ltd. | liquid | No | NG | <i>Beauveria bassiana</i> strain PPRI 5339 >8 x 10 ⁹ CFU/ml | - | |
| VIVUS Armigen biological insecticide | microbial | insecticide | - | - | Nuclear polyhedrosis virus of <i>Helicoverpa armigera</i> | - | <i>Helicoverpa</i> spp. | - | AgBITech Pty Ltd | liquid | Yes | n/a | <i>Helicoverpa armigera</i> virus 7.5 x 10 ⁹ POB/mL | - | |
| VIVUS Max biological insecticide | microbial | insecticide | - | - | Nuclear polyhedrosis virus of <i>Helicoverpa armigera</i> | - | <i>Helicoverpa armigera</i> <i>Helicoverpa punctigera</i> | - | AgBITech Pty Ltd | liquid | Yes | n/a | <i>Helicoverpa armigera</i> virus 5.0 x 10 ⁹ POB/mL | - | |

| Trade Name | Source | Registered Product Type (APVMA Registered) | Product type | Active Ingredient(s) (APVMA Registered Products) | Main Ingredient(s) of non registered products | Registered Use (APVMA Registered) | Use | Crop | Manufacturer | Formulation | Australian Certified Organic | pH | Analysis | Trial Information |
|---|---------------|--|-----------------------------|--|---|---|---|--|---|--------------------|------------------------------|----------------------------|---|---|
| Xentari WG GTA biological insecticide water dispersible granule | microbial | insecticide | - | - | <i>Bacillus thuringiensis</i> subsp. <i>ovizawai</i> | cabbage centre grub cabbage cluster caterpillar cabbage moth cabbage white butterfly | - | brassica spp. or cole crop broccoli brussels sprouts cabbage cauliflower | Sumitomo Chemical Australia Pty Ltd | granular | Yes | n/a | <i>Bacillus thuringiensis</i> subsp. <i>ovizawai</i> . Concentration not given. | Trials undertaken by manufacturer |
| AgroSpeed Fusion | microbial | not registered | nutrient availability | not registered | phosphorus and <i>Bacillus amyloliquefaciens</i> | not registered | crop health | all crops | Agronutrition | granular | No | - | - | - |
| Amysis | microbial | not registered | soil biology stimulant | not registered | <i>Bacillus amyloliquefaciens</i> | not registered | nitrogen fixation | all crops | Agronutrition | liquid | Yes (NASAA) | 6 | 10*9 cfu/mL | - |
| Basoes | microbial | not registered | soil biology stimulant | not registered | <i>Bacillus megaterium</i> , <i>Streptomyces beta-vulgaris</i> , <i>Burkholderia</i> sp. | not registered | phosphorous solubilisation | all crops | Agronutrition | liquid | Yes (NASAA) | 6 | 10*9 cfu/ml | - |
| Connects | microbial | not registered | soil biology stimulant | not registered | <i>Rhizophagus irregularis</i> | not registered | endomycorrhizal symbiosis | all crops | Agronutrition | liquid | Yes (NASAA) | 5.4 | 1 000 spores/ml | Connects trial conducted in strawberries by Staphyr AUS |
| Costar WG biological insecticide | microbial | insecticide | - | - | <i>Bacillus thuringiensis</i> subspecies <i>kurstaki</i> strain SA-12 | cotton budworm or bollworm native budworm or bollworm | - | chickpea cotton cotton - pre-squaring | Certs U.S.A. L.L.C. | granular | No | n/a | <i>Bacillus thuringiensis</i> Berliner subsp. <i>ovizawai</i> strain GC-91 concentration not given. | - |
| Digester | microbial | not registered | soil biology stimulant | not registered | Fermentation extract (<i>Pseudomonas putida</i>) and plant nutrients | not registered | Breakdown organic matter | all crops | BioStart | liquid | no | 4 | - | https://biostart.com.au/wp-content/uploads/sites/4/2022/10/910-5-179-Digester-Technical-Sheet-Two-Page-Web.pdf |
| EndoFuse | microbial | not registered | soil biology stimulant | not registered | 4 Endomycorrhizal fungi + 91.27% inert ingredients (carrier) | not registered | mycorrhizae | all broadacre mycorrhizal crops | Sumitomo Chemical Australia Pty Ltd | liquid | No | n/a | - | https://sumitomo-chem.com.au/sites/default/files/inline-images/endoFuse_intro_and_trial_data_april_2020_lower_v111.pdf |
| Folacin | microbial | not registered | stress resistance | not registered | Fermentation extract and plant nutrients | not registered | Foliar health | all crops | BioStart | liquid | no | 4 | - | https://biostart.com.au/wp-content/uploads/sites/4/2020/12/340-72-Folacin-Brochure-Aust-2018.pdf |
| GO Isolates | microbial | not registered | soil biology stimulant | not registered | humic acids, <i>Bacillus amyloliquefaciens</i> , <i>Bacillus subtilis</i> . | not registered | out-competing soil-borne pathogens | all crops | BioFlora, Queensland | liquid | Yes | n/a | - | - |
| Intervene | microbial | fungicide (not registered for vegetables) | - | - | Polyoxin D zinc salt. Polyoxin D is a fermentation product of <i>Streptomyces oxazol</i> subsp. <i>oxensis</i> . The zinc salt of Polyoxin D may be classified as synthetic because of an additional purification step. | control of grey mould (<i>Botrytis cinerea</i>), powdery mildew, <i>Rhizopus</i> fruit rot | - | grapes, berries, apples; potentially other horticultural crops incl. vegetables in future | Nufarm Australia Ltd, Victoria | granular | No | 7.5 (1% solution, 23.2 °C) | Polyoxin D zinc salt at 113 g/kg | - |
| Lettucemate | microbial | not registered | growth stimulant/ regulator | not registered | <i>Trichoderma atroviride</i> | not registered | crop health | lettuce | Agriimm | powder | Yes | 4.5 | <i>Trichoderma atroviride</i> 5 x 10*8 CFU/g | - |
| MeliorAdapt | microbial | not registered | soil biology stimulant | not registered | <i>Bacillus amyloliquefaciens</i> , <i>Streptomyces</i> sp., <i>Trichoderma harzianum</i> . | not registered | help accelerate breakdown of mulches, crop residues | horticulture crops | New Edge Microbials Pty Ltd, NSW | liquid | no | 6.9 | not supplied | - |
| Mycogel | microbial | not registered | growth stimulant/ regulator | not registered | mycorrhizal fungi (<i>Rhizophagus irregularis</i>) | not registered | soil health, nutrient uptake | most crops | Kimitec | liquid gel | Yes | n/a | <i>Rhizophagus irregularis</i> in sterile gel; 50,000 CFU/mL. | https://sustainablefarming.com.au/au/trials-database/ |
| Mycorcin | microbial | not registered | soil biology stimulant | not registered | Fermentation extract (<i>Pseudomonas putida</i>) and plant nutrients | not registered | Root growth and health | all crops | BioStart | liquid | no | 4 | not specifically listed but manufacturer advises contains - Manganese, zinc, potassium, boron, phosphorous, nitrogen, amino acids | https://biostart.com.au/mycorcin/ |
| Nucleon Liquid Fertiliser Enzyme Additive | microbial | not registered | growth stimulant/ regulator | not registered | enzymes - lipase, mannanase | not registered | enhances nutrient availability to soil microbes and plant roots resulting in improvements in soil and plant health, growth and yield. | all crops | Elemental Enzymes | liquid | no | 5.0 - 10.0 | Lipase 750mU/mL, Mannanase 350U/mL | https://sustainablefarming.com.au/products/nucleon/ |
| Optyz | microbial | not registered | soil biology stimulant | not registered | <i>Bacillus mucilaginosus</i> I-4361, <i>Ochrobactrum</i> sp. 14362 | not registered | seed treatment | all crops | Agronutrition | liquid | No | 5.5 | 10*7 cfu/mL | - |
| Plantmate Drench | microbial | not registered | growth stimulant/ regulator | not registered | <i>Trichoderma harzianum</i> | not registered | crop health | all crops | Agriimm | powder | Yes | 4.5 | <i>Trichoderma harzianum</i> 1 x 10*8 CFU/g | - |
| Plantmate Foliar | microbial | not registered | growth stimulant/ regulator | not registered | <i>Trichoderma atroviride</i> | not registered | crop health | all crops | Agriimm | powder | Yes | 4.5 | <i>Trichoderma atroviride</i> 1 x 10*9 CFU/g | - |
| Sabel X Canola | microbial | not registered | growth stimulant/ regulator | not registered | endophytic <i>Trichoderma</i> spp. | not registered | yield, crop health, soil health | canola | Sustainable Farming Solutions | dry seed treatment | Yes | 6-7 | <i>Trichoderma</i> spp. 5 x 10*7 CFU/g | https://sustainablefarming.com.au/au/trials-database/ |
| Sabel-X Cereal | microbial | not registered | growth stimulant/ regulator | not registered | endophytic <i>Trichoderma</i> spp. | not registered | yield, crop health, soil health | wheat barley oats rye spelt triticale | Sustainable Farming Solutions | dry seed treatment | Yes | 6-7 | <i>Trichoderma</i> spp. 5 x 10*7 CFU/g | https://sustainablefarming.com.au/au/trials-database/ |
| Sabel-X Corn | microbial | not registered | growth stimulant/ regulator | not registered | endophytic <i>Trichoderma</i> spp. | not registered | yield, crop health, soil health | field corn popcorn sweetcorn sunflowers | Sustainable Farming Solutions | dry seed treatment | Yes | 6-7 | <i>Trichoderma</i> spp. 7 x 10*7 CFU/g | https://sustainablefarming.com.au/au/trials-database/ |
| Sabel-X Hort | microbial | not registered | growth stimulant/ regulator | not registered | endophytic <i>Trichoderma</i> spp. | not registered | yield, crop health, soil health | vegetables | Sustainable Farming Solutions | soluble powder | Yes | 6-7 | <i>Trichoderma</i> spp. 7 x 10*7 CFU/g | https://sustainablefarming.com.au/au/trials-database/ |
| Synergy | microbial | not registered | soil biology stimulant | not registered | <i>Bacillus subtilis</i> , magnesium | not registered | nutrient availability, soil biology | all crops | Seawins | powder | SXC certified | 5.5 - 8.5 | <i>Bacillus subtilis</i> (1.0-1.5) x 10*10CFU/g, magnesium 13.5%, calcium 0.2%, green seaweed polysaccharide 1%, alginate acid 0.13% | - |
| Tri-Culture | microbial | not registered | growth stimulant/ regulator | not registered | <i>Bacillus licheniformis</i> , <i>Bacillus methylotrophicus</i> , <i>Bacillus subtilis</i> | not registered | crop health | all crops | SLTEC | liquid | No | n/a | <i>Bacillus licheniformis</i> 1 x 10*9 CFU/ml, <i>Bacillus methylotrophicus</i> 2 x 10*8 CFU/ml, <i>Bacillus subtilis</i> 2 x 10*8 CFU/ml, water based culture medium 80% | - |
| Vectobac WG | microbial | insecticide | - | - | <i>Bacillus thuringiensis</i> subsp. <i>israelensis</i> strain AM65-52 | common banded mosquito common Australian anopheline <i>Culex australis</i> saltmarsh mosquito saltwater culex brown house mosquito Dengue vectors including: <i>Aedes aegypti</i> and <i>Aedes albopictus</i> | - | all crops | Sumitomo Chemical Australia Pty Ltd | granular | Yes | n/a | <i>Bacillus thuringiensis</i> subsp. <i>israelensis</i> strain AM65-52 Minimum Potency 3000 ITU/mg | - |
| Acrecio | plant extract | not registered | growth stimulant | not registered | amino acids, humic acid | not registered | root stimulant | all crops | Agronutrition | liquid | no | 11 | L- Tryptophane, L-methionine, humic acids, N 12%, P 2%, K 8% | - |
| Actwave | plant extract | not registered | growth stimulant/ regulator | not registered | plant extracts (no further information given) | not registered | crop health | all crops | Valagro | liquid | No | 6.4 | Nitrogen 3%, Potassium 5.8%, Iron 0.5%, Zinc 0.08%, Organic carbon (soluble in water) 12% | - |
| Aloe-Tech | plant extract | not registered | growth stimulant/ regulator | not registered | gibberellins, indole acetic acid, polysaccharides, aloins, saponins, 8 vitamins | not registered | crop health | all crops | Nutri-Tech Solutions (NTS) | liquid | Yes | 3.7 to 4.5 | Whole leaf <i>Aloe vera</i> extract 100% | - |
| Batallon | plant extract | not registered | growth stimulant/ regulator | not registered | proprietary plant extracts; folic acid | not registered | Increasing fruit size and yield | all fruiting crops | Kimitec | liquid | Yes | 7.9 | 46.6% folic acid, 2.5% N w/v, 7.8% K w/v | https://sustainablefarming.com.au/au/trials-database/ |
| Benefit PZ | plant extract | not registered | growth stimulant/ regulator | not registered | plant extracts (no further information given) | not registered | crop health, stress tolerance | all crops | Valagro | liquid | No | 6.8 | Nitrogen 4%, Potassium 6.6%, Organic carbon (soluble in water) 10% | - |
| BioGarlic | plant extract | not registered | pest deterrent | not registered | garlic oil | not registered | insect pests | all crops | Zadco (JH Biotech) | liquid | Yes | n/a | garlic oil 10%, water 90% | - |
| Bioweed Organic | plant extract | herbicide | - | - | Pine oil (not specified) | Control of wide range of weeds, see label | - | orchards, vineyards and others, see label | GreenPro Solutions Pty Ltd, Queensland | liquid | Yes | 7 | Pine oil 680 g/L | Protected trial (efficacy and safety) data with APVMA |
| Bombardier | plant extract | not registered | stress resistance | not registered | Proprietary plant extracts | not registered | aid in adverse conditions: heat, cold, frost stress; soil constraints; disease pressure | all crops | Kimitec | liquid | Yes | 5.5-7.5 | 29.6% folic acid, 16.6% free amino acids, 7.9% saccharides | https://sustainablefarming.com.au/au/trials-database/ |
| Bombardier Sugar | plant extract | not registered | growth stimulant/ regulator | not registered | Proprietary plant extracts | not registered | promote sugar formation and ripening including colour in fruiting crops | all fruiting crops | Kimitec | liquid | Yes | 5-7 | 38.3% oligosaccharides (w/v), 19.8% folic acid (w/v) 10.3% amino acids (w/v), 6.6% Total N (w/v) | https://sustainablefarming.com.au/au/trials-database/ |
| Eco-Oil Hippo (Commercial) | plant extract | insecticide | - | - | Emulsifiable botanical oil | acaricide (carnine mite, two-spotted spider mite, insecticide (aphids, whitefly, scale, mealy bug); adjuvant (improves wetting and sticking of sprays insecticides, fungicides, foliar fertilisers) | - | horticultural crops , see label | Organic Crop Protectants Pty Ltd, New South Wales | liquid | Yes | - | Emulsifiable botanical oils 850 g/L (oils not specified) | https://sca.com.au/wp-content/uploads/2014/08/OCPS24-Fit-o-Git+Comm+Flyer_FA_18.pdf |

| Trade Name | Source | Product type | | Ingredients | | Registered Use (APVMA Registered) | Use Has been used as / for (not registered) ² | Crop | Manufacturer | Formulation | Australian Certified Organic | pH | Analysis | Trial Information |
|---|-----------------|--|---|--|---|---|--|---|--|-------------|------------------------------|-------------------------------|---|---|
| | | Registered Product Type (APVMA Registered) | Has been used as / for (not registered) | Active Ingredient(s) (APVMA Registered Products) | Main ingredient(s) of non registered products | | | | | | | | | |
| Fly Bye | plant extract | not registered | pest deterrent | not registered | 4-(p-hydroxyphenyl)-2-butanone, 4-(p-hydroxyphenyl)-2-butanone acetate | not registered | fruit fly | fruit fly susceptible crops | Nutri-Tech Solutions (NTS) | liquid | Yes | n/a | 4-(p-hydroxyphenyl)-2-butanone 0.5g/L, 4-(p-hydroxyphenyl)-2-butanone acetate 0.25g/L | - |
| GC-3 | plant extract | not registered | disease suppressant | not registered | cottonseed oil, corn oil, garlic extract, oleic acid, lauric acid, sodium bicarbonate | not registered | powdery mildew | susceptible crops | Zadco (JH Biotech) | liquid | Yes | n/a | Cottonseed oil 30%, corn oil 30%, garlic extract 23%, oleic acid 2%, lauric acid 1%, sodium bicarbonate 2%, water 12% | - |
| GC-Mite | plant extract | not registered | miticide | not registered | cottonseed oil, clove oil, garlic extract, oleic acid, lauric acid, sodium bicarbonate | not registered | control of mites and insects | all crops | Zadco (JH Biotech) | liquid | Yes | n/a | Cottonseed oil 40%, clove oil 5%, garlic extract 10%, oleic acid 2%, lauric acid 1%, sodium bicarbonate 2%, water 26% | - |
| GrowGreen Xtend Plant Oil Adjuvant | plant extract | wetting agent | - | Emulsified vegetable oil | - | addition to horticultural sprays to increase spray deposition and penetration, droplet spread and uptake on the target to assist spray drift control and rainfastness | - | all crops | GrowGreen Pty Ltd, Queensland | liquid | Yes | - | Emulsified vegetable oil 832 g/L (Blend of highly degummed canola oils blended with vitamins A & E) | - |
| Kendal | plant extract | not registered | growth stimulant/ regulator | not registered | plant extracts (no further information given) | not registered | crop health | all crops | Valagro | liquid | No | 4.8 | Nitrogen 3.5%, Potassium 12.9%, Organic carbon (soluble in water) 3% | - |
| Kendal Root | plant extract | not registered | growth stimulant/ regulator | not registered | plant extracts (no further information given) | not registered | root growth | all crops | Valagro | liquid | No | 6.1 | Nitrogen 9%, Potassium 7.5% | - |
| Megalof | plant extract | not registered | growth stimulant/ regulator | not registered | plant extracts (no further information given) | not registered | crop health, stress tolerance | all crops | Valagro | liquid | No | 6.5 | Nitrogen 3%, Potassium 6.6%, Organic carbon (soluble in water) 9% | - |
| Natural Wet | plant extract | not registered | wetting agent | not registered | saponin from <i>Yucca schidigera</i> | not registered | wetting | all crops | Zadco (JH Biotech) | liquid | Yes | n/a | Saponin 10%, Water 90% | - |
| Nutri-Stim saponins | plant extract | not registered | wetting agent | not registered | saponins | not registered | water tension | all crops | Nutri-Tech Solutions (NTS) | granular | Yes | n/a | Saponins 70% | - |
| Photon | plant extract | not registered | stress resistance | not registered | dicarboxylic acids | not registered | stress | all crops | Sipcam (Agricrop) | granular | No | 7.5 | 500g/kg blend plant derived dicarboxylic acids | - |
| plantjuice | plant extract | not registered | growth stimulant/ regulator | not registered | algae extract (<i>Ulva</i> spp.) | not registered | crop health | all crops | Pacific Bio | liquid | No | 11.5-12.5 | Na auxins (IAA) 295 ng/g FW, 1.4% K, 2.6 g/L S, 2.2 g/L N | - |
| PyGanic | plant extract | insecticide | - | pyrethrins | - | greenhouse thrips passion vine hopper macadamia lace bug diamondback moth pea aphids beet armyworm potato aphids fruitfly rutherjelen bug spiders | - | avocados brassicas capsicums chillies eggplants grapes kiwifruits lettuces macadamias stone fruits strawberries tomatoes leafy vegetables legume vegetables | Sumitomo Chemical Australia Pty Ltd | liquid | Yes | n/a | 13g/L Pyrethrins | https://www.sumitomo-chem.com.au/sites/default/files/interstore/pyganic_brochure_2022_1.pdf |
| Radifarm | plant extract | not registered | growth stimulant/ regulator | not registered | plant extracts (no further information given) | not registered | root growth | all crops | Valagro | liquid | No | 5.0 | Nitrogen 3%, Potassium 8%, Zinc 0.10%, Organic carbon (soluble in water) 10% | - |
| Rhino High Tech | plant extract | not registered | crop nutrition | not registered | plant extracts | not registered | improving fruit formation, increasing fruit set, lengthening rachis (grapes) | berries grapes fruiting vegetables nuts citrus | Kimitec | liquid | No | n/a | 2.9% NATCA, 3.2% TCA, 8.7% Free Amino acids, 1.9% Total N, 1.9% Organic N, 7.7% K | https://sustainablefarming.com.au/au/au/trials-database/ |
| Sealeaf Origin | plant extract | not registered | growth stimulant | not registered | amino acids, seaweed extracts, nitrogen, potassium | not registered | crop health | all crops | Agronutrition | liquid | No | 8 | Nitrogen 6%, potassium 4%, amino acids 6%, seaweed extracts | - |
| Sero-X | plant extract | pest deterrent | - | Extract of butterfly pea (<i>Citroia ternatea</i>) | - | Suppression of diamondback moth in brassicas. Control/Suppression of green mirids, silver leaf white fly (Biotyph B) and Heliothis in cotton. Reduction in formation of the microsclerota of <i>Verticillium dahliae</i> in cotton. | - | brassicas, cotton | Innovate AG Pty Ltd, New South Wales | liquid | No (SXC allowed input only) | - | <i>Citroia ternatea</i> extract at 400 g/L. Extract contains different cyclic peptides (cyclotides). | https://innovate-ag.com.au/pestick/2021/06/0-2021-Sero-X-Technical-Manual-Email-Version.pdf |
| Sweet Syntrol Horti Botanical Oil Concentrate | plant extract | not registered | growth stimulant/ regulator | not registered | plant extracts (no further information given) | not registered | ripening | all crops | Valagro | liquid | No | 3.5 | Calcium 7.2%, Magnesium 0.6% | - |
| Timorex Gold | plant extract | wetting agent | - | Emulsifiable botanical oil | - | improves rainfastness, drift control, wetting and sticking, biological activity of sprays | - | all crops | Organic Crop Protectants Pty Ltd, New South Wales | liquid | Yes | - | Emulsifiable botanical oil 850 g/a (100% canola oil) | - |
| Transit Duo | plant extract | fungicide | - | Tea tree oil (<i>Melaleuca alternifolia</i>) | - | Preventative control of foliar diseases (powdery mildew, Botrytis grey mould) | - | horticultural crops (capsicum, cucurbits, tomato - powdery mildew) and grapes (Botrytis grey mould, powdery mildew) | Stockton (Israel) Ltd, Israel / Syngenta Australia Pty Ltd, NSW | liquid | No | 8.9 - 9.6 | Tea tree oil (<i>Melaleuca alternifolia</i>) at 222 g/L (28% w/v), ethanol (4% w/v) | Trials undertaken by manufacturer (protected data with APVMA) |
| Vitazyme | plant extract | not registered | nutrient availability | - | tannins, lignins and complex aromatics | - | nutrient uptake | all crops | Valent BioSciences Corporation, USA / Sumitomo Chemical Australia Pty Ltd, NSW | liquid | No | 4 | zinc 0.5% | - |
| Vitazyme | plant extract | not registered | growth stimulant/ regulator | not registered | brassinosteroids and tricontanol | not registered | stimulates root growth | all crops | Sustainable Farming Solutions | liquid | Yes | 3.5-4.2 | Highly active plant stimulants from fermentation process | https://sustainablefarming.com.au/au/au/trials-database/ |
| Vitazyme ST (seed treatment) | plant extract | not registered | growth stimulant/ regulator | not registered | brassinosteroids and tricontanol | not registered | vigour in seedlings and improved root development | all direct sown crops | Sustainable Farming Solutions | liquid | Yes | 3.5-4.2 | Highly active plant stimulants; fulvic & amino acids | https://sustainablefarming.com.au/au/au/trials-database/ |
| Viva | plant extract | not registered | growth stimulant/ regulator | not registered | plant extracts, humic acid | not registered | soil biology | all crops | Valagro | liquid | No | 6.2 | Nitrogen 3%, Potassium 8%, Iron 0.02%, Organic carbon (soluble in water) 8% | - |
| Weed Zap | plant extract | not registered | herbicide | not registered | clove oil, cinnamon oil, cottonseed oil, oleic acid, lauric acid | not registered | weeds | all crops | Zadco (JH Biotech) | liquid | Yes | n/a | Clove oil 19%, Cinnamon oil 19%, Cottonseed oil 19%, oleic acid 19%, lauric acid 19%, inert ingredients: lactose and water 5% | - |
| Yieldon | plant extract | not registered | growth stimulant/ regulator | not registered | plant extracts (no further information given) | not registered | - | seed crops | Valagro | liquid | No | 6.5 | Nitrogen 3%, Potassium 2.5%, Molybdenum 0.2%, Manganese 0.5%, Zinc 0.5%, Organic carbon (soluble in water) 10% | - |
| Alcygol B2M | seaweed extract | not registered | crop nutrition | not registered | <i>Asophyllum nodosum</i> seaweed | not registered | crop health | all crops | Agronutrition | liquid | No | 6.9 | Magnesium 3%, Sulphur 4.4%, Boron 3%, seaweed extracts | - |
| Alcygol MoB | seaweed extract | not registered | crop nutrition | not registered | <i>Asophyllum nodosum</i> | not registered | crop health | all crops | Agronutrition | liquid | No | 8 | Boron 4%, Molybdenum (%age not stated) and seaweed extracts | - |
| Alcygol Total | seaweed extract | not registered | crop nutrition | not registered | <i>Asophyllum nodosum</i> seaweed | not registered | crop health | all crops | Agronutrition | liquid | No | 7.7 | Nitrogen 9%, phosphorus 2.3%, magnesium 4%, trace elements, seaweed extracts | - |
| Alcygol 22M | seaweed extract | not registered | crop nutrition | not registered | <i>Asophyllum nodosum</i> seaweed | not registered | crop health | all crops | Agronutrition | liquid | No | 1.8 | calcium 17%, L-free amino acids, 11% total nitrogen (organic) 1.3% | - |
| Algonia K | seaweed extract | not registered | crop nutrition | not registered | <i>Asophyllum nodosum</i> seaweed | not registered | crop health | all crops | Agronutrition | powder | Yes (NASAA) | 10 | Sulphur 8%, Zinc 4%, Magnesium 3%, Manganese 4%, seaweed extracts | - |
| Aminocal | seaweed extract | not registered | crop nutrition | not registered | amino acid chelated calcium | not registered | crop health | all crops | Agronutrition | liquid | SXC certified | 6.24 | Potassium 17%, seaweed extracts | - |
| Bio Kelp | seaweed extract | not registered | crop nutrition | not registered | kelp extract, potassium | not registered | crop health | all crops | SLTEC | liquid | No | 8.5-9.5 | 20% Kelp, 3.2% K | - |
| BioMAX Kelp Powder | seaweed extract | not registered | soil biology stimulant | not registered | Soluble seaweed (<i>Asophyllum nodosum</i>) extract powder | not registered | enhanced soil microbial activity, soil and plant health | vegetable crops (legumes, onions, carrots, potatoes) + others | LawrieCo Pty Ltd trading as LawrieCo, South Australia | powder | Yes | 10 - 10.5 (at 20 °C, 200 g/L) | Ingredients expressed as w/w%: <i>Asophyllum nodosum</i> extract > 93.5%, water < 6.5%. All %w/w%: Nitrogen > 0.5%, Potassium (as oxides) > 12.4%, Potassium (as organic) > 1.7%, Sulphur 1.0 - 2.0%, Calcium 0.2 - 0.5%, Magnesium 0.2 - 0.6%, Boron 0.0075%, Iron 0.02%, Manganese 0.004%, Copper 0.001%, Zinc 0.005%, Carbon (organic) > 20% | - |
| Farm Saver liquid kelp | seaweed extract | not registered | growth stimulant/ regulator | not registered | three kelp species, <i>Laminaria</i> spp., <i>Sargassum</i> spp., <i>Asophyllum nodosum</i> . | not registered | nutrition, stress | all crops | Nutri-Tech Solutions (NTS) | liquid | Yes | 9.5-10.5 | Potassium 1.5%, Iron 0.11%, Sulphur 0.11%, Calcium 450mg/L, Magnesium 170mg/L | - |
| FertiGold | seaweed extract | not registered | soil biology stimulant | not registered | green seaweed <i>Enteromorpha prolifera</i> | not registered | reduced plant stress, increased microbial activity, soil structure | all crops | Seawins | powder | SXC certified | 5 - 7 | Seaweed polysaccharides 45%, alginate acid 21%, nitrogen (N) 1%, potassium(K) 4.6%, calcium (Ca) 1.9%, iron (Fe) 0.13%, boron (B) 0.03%, organic matter 40% | - |

| Trade Name | Source | Registered Product Type (APVMA Registered) | Product type | Active Ingredient(s) (APVMA Registered Products) | Ingredients) | Registered Use (APVMA Registered) | Use | Crop | Manufacturer | Formulation | Australian Certified Organic | pH | Analysis | Trial Information |
|-----------------------|-----------------|--|-----------------------------|--|--|-----------------------------------|--|--|--------------------------------|----------------|------------------------------|------------|--|---|
| HydraSea 50 | seaweed extract | not registered | crop nutrition | not registered | seaweed extracts (<i>Ascochyllum nodosum</i>) containing macro + trace/micronutrients, proteins (enzymes, amino acids), carbohydrates, plant growth hormone-like compounds showing auxin- and cytokinin-like activity. | not registered | Foliar nutrition spray during the most vulnerable crop stages and/or during abiotic stress conditions to enhance nutrient uptake and root growth | vegetables, fruit/nut tree crops, grapes, cereals, cotton, sugarcane | BioAg Pty Ltd, New South Wales | liquid | Yes | 8.5 - 10 | 100% seaweed extract (<i>Ascochyllum nodosum</i>), Nitrogen 0.33 - 0.55%, Phosphorus 0.06 - 0.01%, Potassium 7.5 - 9.5%, Sulphur 0.96 - 1.18%, Calcium 240 - 320 ppm, Sodium 0.7 - 1.5%, Magnesium 1,920 - 3040 ppm, Boron 95 - 320 ppm, Iron 48 - 320 ppm, Manganese 160 - 480 ppm, Copper 45 - 270 ppm, Zinc 48 - 160 ppm (%=w/w%) | https://www.bioag.com.au/download/hydra-sea-50-trail-insert-download/ |
| K-kelp | seaweed extract | not registered | crop nutrition | not registered | bull kelp | not registered | nutrition | all crops | Omnia | liquid | Yes | >9 | Potassium 3.7% w/vol, Sulphur 1.3% w/vol, Kelp extracts 9-10% w/vol, amino acids, growth hormones | - |
| Liquid Kelp | seaweed extract | not registered | stress resistance | not registered | kelp extract | not registered | crop health, soil health | all crops | Eco Growth | liquid | Yes | n/a | not given | - |
| MC Cream | seaweed extract | not registered | growth stimulant/ regulator | not registered | <i>Ascochyllum nodosum</i> seaweed | not registered | crop health | all crops | Valagro | liquid | No | 3.9 | Manganese 1.5%, Zinc 0.5% | - |
| MC Extra | seaweed extract | not registered | growth stimulant/ regulator | not registered | <i>Ascochyllum nodosum</i> seaweed | not registered | crop health | all crops | Valagro | granular | No | 9.2 | Nitrogen 20%, Betains 0.2%, Mannitol 4%, Organic carbon (soluble in water) 20% | - |
| MC Set | seaweed extract | not registered | growth stimulant/ regulator | not registered | <i>Ascochyllum nodosum</i> seaweed | not registered | flowering | all crops | Valagro | liquid | No | 8.5 | Boron 0.50%, Zinc 1.5% | - |
| Nexar Ca | seaweed extract | not registered | crop nutrition | not registered | <i>Ascochyllum nodosum</i> and calcium | not registered | crop health | all crops | Agronutrition | liquid | No | 8.2 | Calcium 14%, seaweed extracts | - |
| Nexar K | seaweed extract | not registered | crop nutrition | not registered | <i>Ascochyllum nodosum</i> seaweed extracts, potassium | not registered | crop health | all crops | Agronutrition | liquid | No | 13.6 | seaweed extracts, nitrogen 4%, potassium 26% | - |
| Nexar Mg | seaweed extract | not registered | crop nutrition | not registered | <i>Ascochyllum nodosum</i> and magnesium | not registered | crop health | all crops | Agronutrition | liquid | No | 3.4 | Nitrogen 7%, magnesium 7%, seaweed extracts | - |
| Nutri-Kelp | seaweed extract | not registered | crop nutrition | not registered | <i>Ascochyllum nodosum</i> (gibberellins, cytokinins, auxins) | not registered | nutrition, soil biology, stress | all crops | Nutri-Tech Solutions (NTS) | granular | Yes | n/a | Nitrogen 1.17%, Phosphorous 0.23%, Potassium 19.12%, Sulphur 1.8%, Magnesium 0.37%, Calcium 0.34%, Silicon 670ppm, Iron 471 ppm, Boron 135ppm, Zinc 38ppm, Manganese 37ppm, Molybdenum 2ppm, Cobalt 1ppm | - |
| PhyGreen 200 | seaweed extract | not registered | growth stimulant/ regulator | not registered | <i>Ascochyllum nodosum</i> seaweed extract | Not Registered | Prevents Abiotic Stress | all crops | Rovensa ANZ (Tradecorp) | Liquid | Yes | 5 | 100% seaweed extract (<i>Ascochyllum nodosum</i>). | - |
| Purakelp Relax | seaweed extract | not registered | crop nutrition | not registered | bull kelp (<i>Durvillaea potatorum</i>) | not registered | crop health/ stress tolerance | all crops | Omnia SLITEC | liquid | Yes | 4 | kelp extracts 9-10% | - |
| Sea Brown Powder | seaweed extract | not registered | soil biology stimulant | not registered | brown kelp (<i>Laminaria [Saccharina] japonica</i>) | not registered | reduced plant stress, increased microbial activity | all crops | Seawins | powder | SXC certified | 8 - 10 | 10% kelp, 0.2% Cobalt, 4.3% P, 10.3%K, 0.1% S, 0.02% Mo | - |
| SeaChange Liquid Kelp | seaweed extract | not registered | crop nutrition | not registered | bull kelp | not registered | crop health | all crops | Nutri-Tech Solutions (NTS) | liquid | Yes | 3.6 - 4.6 | Potassium 1.39%, Calcium 0.09%, Iodine 22mg/L | - |
| Seenergy | seaweed extract | not registered | crop nutrition | not registered | (Tasmanian) kelp extract | not registered | crop health, stress tolerance | all crops | Sipcam (Agricrop) | liquid | No | 3.2 to 3.8 | Nitrogen 1%, Phosphorous 0.95%, Potassium 3.5%, Sulphur 7.5%, Calcium 0.6%, Magnesium 0.6%, Iron 200ppm, Manganese 6ppm, Zinc 18ppm, Copper 6ppm, Betaine 2% | - |
| Stress Buster | seaweed extract | not registered | stress resistance | not registered | polysaccharides, polyglutamic acid, osmolytes | not registered | crop health | all crops | Seawins | liquid | SXC certified | 4-6 | seaweed polysaccharides 10%, alginic acid 3%, folic acid 5%, polyglutamic acid 0.5%, amino acid 1%, total organic matter 15-20% | - |
| Super Kelp liquid | seaweed extract | not registered | crop nutrition | not registered | <i>Ascochyllum</i> sp & <i>Durvillaea</i> sp | not registered | reduces stress effects in crops | all crops | Sustainable Farming Solutions | liquid | Yes | 4-4.5 | Soluble K - 2%, Seaweed extract, alginic acid - 1.5% | https://sustainablefarming.com.au/au/au/trials-database/ |
| Super Kelp powder | seaweed extract | not registered | crop nutrition | not registered | <i>Ascochyllum</i> sp | not registered | reduces stress effects in crops | all crops | Sustainable Farming Solutions | soluble powder | Yes | 10-10.5 | Alginic Acid 12-18%, N 1.5%, K 1.7-2.2% | https://sustainablefarming.com.au/au/au/trials-database/ |
| Tri-Kelp | seaweed extract | not registered | crop nutrition | not registered | <i>Laminaria, Sargassum, Ascochyllum nodosum</i> | not registered | crop health | all crops | Nutri-Tech Solutions (NTS) | granular | Yes | n/a | Alginic acid 18%, Nitrogen 0.89%, Potassium 15%, Iron 1.07%, Sulphur 1.05%, Calcium 0.45%, Magnesium 0.17%, Silicone 445ppm, Manganese 92ppm, Zinc 48ppm, Boron 46ppm, Copper 34ppm, Cobalt 8ppm, Molybdenum 5ppm | - |
| AminoPlus | seaweed/fish | not registered | crop nutrition | not registered | fish extract 50-100%, kelp extract 25-50% | not registered | nutrition | all crops | Omnia | liquid | Yes | 4 | N: 2.1% w/vol, Natural Amino Acids, Plant growth stimulants, Trace Elements, Chelating Agents. | - |
| Eco Vital | seaweed/fish | not registered | crop nutrition | not registered | chelated fish extract, kelp, plant extracts | not registered | crop health, stress tolerance | all crops | Eco Growth | liquid | Yes | n/a | Nitrogen 2%, Phosphorous 0.6%, Potassium 0.4%, Calcium 0.5%, Magnesium 0.2%, Iron 0.07%, Zinc 750ppm, Manganese 704ppm, Copper 730ppm, Molybdenum 1ppm, Boron 34ppm, Cobalt 8ppm | - |

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