

AMINO

PLANT DERIVED AMINO + CARBON + BIOLOGY



**GREATER PLANT
PRODUCTIVITY DURING
ESTABLISHMENT,
FLOWERING, FRUIT SET
AND TIMES OF STRESS.**



Product Suitable for
ORGANIC FARMING

MICROSOIL
liquid fertiliser



L-Amino Acids are scientifically proven to bioactively reduce crop stress, increase nutrient uptake and increase plant energy production.

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Amino is a full spectrum L-Amino acid that is plant derived making it highly available to all agricultural crops. Its unique combination includes a range of beneficial biology, trace minerals, carbohydrates and enzymes.

Plants gain their proteins from amino acids that are produced via complex biochemical processes that consume vast amounts of energy within the plant. Amino provides plants with 19 of these amino acids with saved energy diverted to enhancing plant performance.

Amino can be foliar or soil applied on its own or with fertiliser and crop protection products. It is quickly mobilised within the plant to areas where it is most needed.

The importance of amino acids is often overlooked in relation to crop results. From resisting disease and temperature stress, to providing nutrition, or enhancing flowering and fruit set, amino acids are the building blocks of plant performance.

CROPS

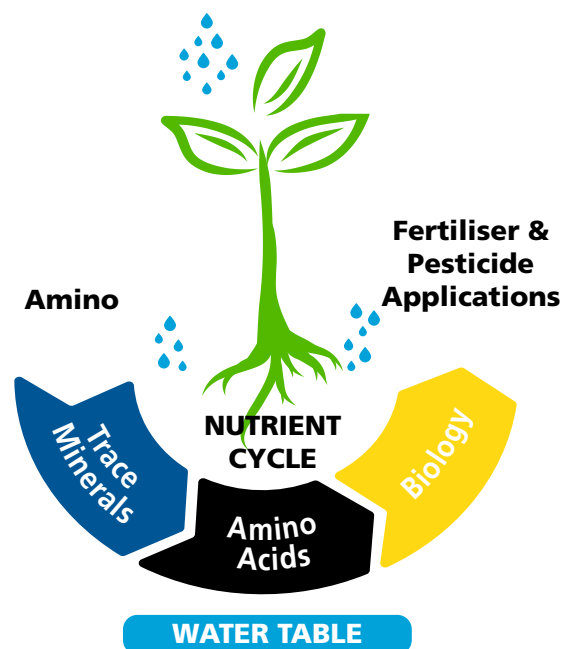
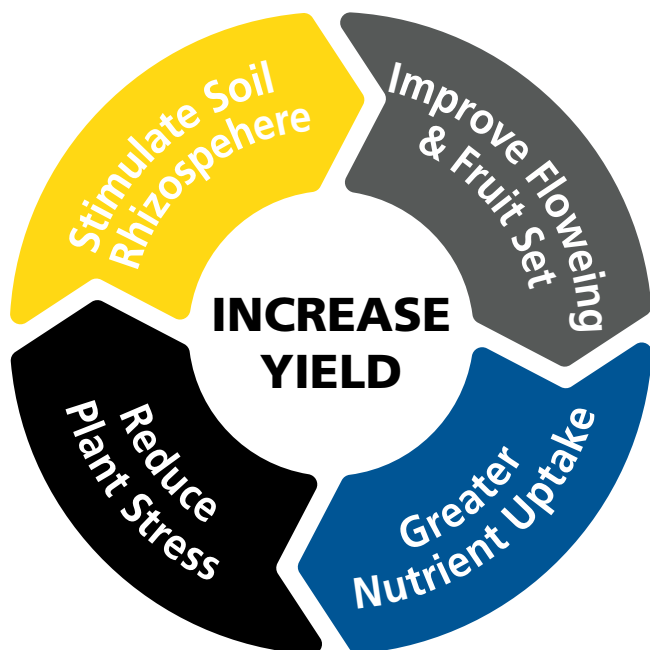
Amino is currently used in the following sectors:

- Horticulture
- Broad acre cropping
- Viticulture
- Cotton
- Pastures
- Tree crops



Add to your fertiliser applications to improve their plant uptake.





AMINO

Contains the 19 essential amino acids required by plants to produce protein and maximum yield.



PROVEN
LIQUID
FORMULATION

Amino Cauliflower Trial - Tissue Tests

		Desired Tissue Levels	Control	Amino Soil Applied	% Variation Control v Treated
N	%	5.0	5.0	5.2	4.0%
P	%	0.6	0.7	0.7	0.0%
K	%	4.5	3.0	4.2	40.0%
Ca	%	1.8	1.0	1.9	90.0%
Mg	%	0.3	0.3	0.7	133.0%
B	mg/kg	40.0	46.0	90.9	98.0%
Na	%	0.1	0.8	0.4	- 48.0%

All plots received 350kg/HA Osmocote as a base rate of fertiliser



Unique formulation of full spectrum amino acids, trace minerals and beneficial biology.

The biology in Amino are proven to increase nutrient uptake and reduce the effects of fungal disease in plants.

Application Timing	Litres/HA	Ingredients
Commencement of flowering	5 - 10	10% amino acids, 2% N, 10% sugars, 15% organic carbon, beneficial biology, trace minerals, enzymes.
Fruit set	5 - 10	
Key periods of temperature stress	5 - 10	
With nutrient applications	5 - 10	

Application Method: Fertigation or foliar spray.

Application Notes: Do not apply with Copper Fungicide. Dilute with 70-100+L water/HA. If using high volumes of water for foliar sprays use 500-1000mls/100L water.

AMINO ACIDS AND THEIR FUNCTIONS

Amino	Important Function in Plants
Glycine	Main Amino for chelation and a key part of chlorophyll production . Forms leaf tissue and helps resistance to stress .
Alanine	Provides greater synthesis of chlorophyll and increased photosynthetic activity .
Valine	Aids plant resistance mechanisms under stressful conditions and promotes seed germination.
Leucine & Isoleucine	Improves fertilisation, fruit set, quality and increases production.
Proline	Accumulates during adverse weather conditions and plays a fundamental role in the water balance of plant cells. Increases the percentage of pollen grain germination especially under adverse temperatures.
Phenylalanine & Tryptophan	Precursor of alkaloid compounds that resist pathogen and herbivore attack . Improves plant pigment.
Tyrosine	Generates energy in the krebs cycle within the plant and stimulates plant immune systems .
Cysteine	Are abundant in defensin proteins that are powerfully active against pathogenic bacteria, fungi and viruses . Generate resistance to abiotic stresses.
Methionine	Precursor of ethylene that improves the quality and yield of crops . Favours the assimilation of nitrates and early crop growth.
Serine	Activates plant resistance mechanisms under adverse environmental conditions.
Threonine	Aids cell metabolism providing energy to the plant for growth.
Lysine	Involved in resistance to external stresses plus chlorophyll synthesis.
Arginine	Stimulates root growth . Rejuvenates plant cells. Improves translocation in phloem and solubilises nutrients in the rhizosphere. Precursor to auxin synthesis.
Histidine	Maintains healthy tissues and gives the plant solar radiation protection .
Aspartic acid	Participates in most metabolic processes in the plant.
Asparagine	Transports nitrogen to the plant .
Glutamic acid	The precursor of other Amino acids, it stimulates plant growth . Aids in stress resistance . Increases germination power of pollen grain and elongation of the pollen tube . Foliar application allows the plant to synthesise the amino acids required in that moment. Assimilates nitrogen for the plant.

ABOUT SWITCH AG

Significant investment into Research & Development over the last 18 years has seen Switch Ag develop, manufacture and supply an extensive range of high quality products for agricultural production. The range of independently tested, innovative products includes:

- Liquid fertilisers
- Plant stress relief products
- Plant and soil stimulants
- Carbon based Granular Fertilisers
- Crop protection products

switchAG
fertilisers



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