

V¹² Biostimulant range













V¹² Foliars

 $(V^{12} Multi^{\circ} B4512 \text{ and } V^{12} Micro^{\circ} B4514)$

 V^{12} Foliars provide balanced nutritional support, stimulate healthy growth, fight stress and combat deficiencies.

Why use V^{12} Foliars?

- Soil applied nutrition supplies the bulk of a crops nutritional needs however soil and root conditions may not always be optimal for uptake or requirements may exceed supply.
- V^{12} Foliars offer an effective means to supply broad spectrum nutrition and ensure against shortfalls.
- Quickly address a range of deficiencies.
- Provide luxury levels of nutrition during critical growth phases.
- Reduce and combat plant stress.

What are V^{12} Foliars?

- A range of nutrition products designed to supply luxury levels of nutrition to protect against yield limiting deficiencies.
- Kelp and Fulvic Acid provide a natural base to the formulations and support the use of the products with Andermatt Madumbi's various microbial products.
- A full spectrum of micro nutrients ensure against any possible deficiencies.
- Natural amino acid chelation ensures optimum delivery of plant nutrients.
- Ideal for use as recovery tonic's to re-vitalise stressed or deficient crops or incorporate into your Integrated Fertiliser Management Program to provide well balanced foliar feeding.

V ¹² Multi®	V ¹² Micro®
The all in one foliar fertiliser.N, P and K plus a full range of micronutrients.	Luxery levels of micronutrients.Ideal for resolving unidentified deficiencies.

	N	Р	K	S	Ca	Mg	Si	Fe	Cu	Zn	Mn	В	Мо		
	g/kg								mg / kg						
V ¹² Multi®	75.1	79.9	92.5	3.7		0.3		1712	175	534	348	252	39		
V¹² Micro®	11.7		15.1	35.6		6.8		30411	4075	14030	11869	6300	741		



V¹² Stage Nutrition

(V^{12} Initiate $^{\circ}$ B4513, V^{12} Shoot $^{\circ}$ B4510, V^{12} Fruit $^{\circ}$ B4511 and V^{12} Finish $^{\circ}$ K9557)

The V^{12} Stage Nutrition range offers plant vitality and nutrient solutions to support and optimise targeted growth phases.

Why use V^{12} *Stage Nutrition*?

Each growth stage has its own unique nutritional needs.

 V^{12} **Stage Nutrition** provides a tailored nutritional support for each growth stage reducing stress and preventing stage related deficiencies.

An easy to follow nutritional support program for any crop.

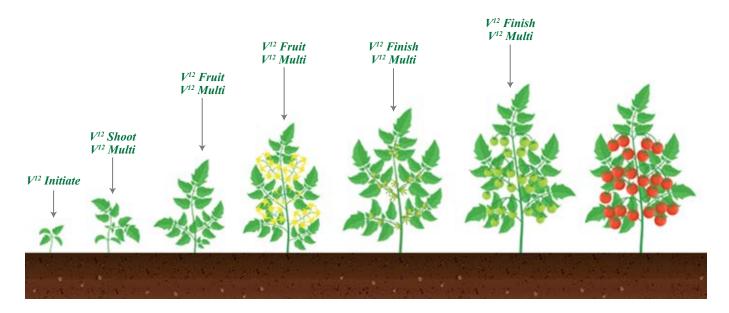
Optimise development in each growth phase to optimise yield potential.

V¹² Initiate®	V ¹² Shoot®
 Nutrition for germination and early growth phases. Improve rate of seedling emergence and produce a more even crop stand. Improved seedling vigour and strength. Set the platform for optimum yield. 	 Support and stimulate vegetative growth and photosynthesis. Improve chlorophyll levels. Protect against oxidative stress. Optimise production capacity of the crop.
 Optimise fruit fill and quality. Assist the plant in achieving maximum yield potential. Improve fruit size and quality 	 Optimise fruit development. Improve pollination success. Reduce flower and fruit drop. Produce more even, well-sized fruit. Improve fruit quantity and quality.

What is V^{12} Stage Nutrition?

- A nutritional range tailored to stimulate and optimise each major growth phase of a crop.
- Amino acids not only chelate but also support each growth stage.
- Nutrients have been carefully selected for optimum benefit.
- Boron, calcium, silica and micronutrients in V^{12} *Initiate* support rapid growth in the early stages.
- Magnesium and iron in V^{12} Shoot support photosynthesis during vegetative growth.
- High levels of boron in V^{12} *Fruit* aid in the production of pollen and to reduce deficiencies associated with flower and fruit drop.
- Targeted amino acid Tryptophan plus potassium and phosphorus in V^{12} *Finish* assists fruit full ensuring maximum yield potential is achieved.

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Biostimulants in summary

Product	Macro Biostimulants			Micro Biostimulants			Amino Acids							Vitamins					
	Kelp	Fulvic Acid	Protein Hydrolysate	Triacontanol	Brassinolide	TRP	GLY	GLU	PRO	LYS	MET	ARG	С	Е	B1	B6 +12	K Ligno-sulphanate		
V ¹² Initiate®	\checkmark	✓	✓														✓		
V12 Shoot®	\checkmark		✓	✓			√	√					√		√				
V ¹² Fruit®	\checkmark		✓		√				√	√	√								
V ¹² Finish®	\checkmark		✓			\checkmark						√							
V ¹² Multi®	\checkmark	√	√	√										√	\checkmark	√			
V¹² Micro®	\checkmark	√	√																

Product	Macro and micro elements (g/L)												
	N	Р	К	S	Ca	Mg	Mn	z	Fe	Si	Cu	Мо	Во
V ¹² Initiate®			3,718	82,979	97,24	2,2932	23,864	30,1	4,3199	90,61	0,2886	0,0533	5,256
V ¹² Shoot®	12			38,328		12,936	6,8904		28,8			5,424	
V ¹² Fruit®	9,592			3,161									22,35
V ¹² Finish®	8,46	126,9	284,82										
V ¹² Multi®	97,63	103,896	120,198	4,836		0,4459	0,4524	0,694	2,2256		0,2275	0,0507	0,328
V¹² Micro®	13,992	·	18,144	42,72	·	8,232	14,243	16,84	36,493	·	4,89	0,8892	7,56

All products in the V12 Biostimulant range are registered by Andermatt Madumbi (Pty) Ltd, Postnet Suite 20, Private Bag X6011, Hilton, 3245. Reg. No. 2009/020798/07. Details as follows:

V¹² Initiate® contains potassium, sulphur, calcium, magnesium, manganese, zinc, iron, silica, copper, molybdenum and boron. Reg. No. B4513, Act No. 36 of 1947. V¹² Multi® contains nitrogen, phosphorous, potassium, sulphur, magnesium, iron, copper, zinc, manganese, boron and molybdenum. Reg. No. B4512, Act No. 36 of 1947. V¹² Micro® contains nitrogen, potassium, magnesium, sulphur, iron, manganese, zinc, copper, boron and molybdenum. Reg. No. B4514, Act No. 36 of 1947. V¹² Shoof® contains nitrogen, magnesium, sulphur, iron, manganese and molybdenum. Reg. No. B4510, Act No. 36 of 1947. V¹² Fruit® contains nitrogen, sulphur and boron. Reg. No. B4511, Act No. 36 of 1947. V¹² Finish® contains nitrogen, phosphorus and potassium. Reg. No. K9557, Act No. 36 of 1947. No. S9557, Act No. 36 of 1947. No. S9557, Act No. 36 of 1947. No. S9557, Act No. 36 of 1947.

