Fertigation Program for Continuously Harvested Cucurbits

Greg Owens, Snr Extension Officer and Mark Traynor, Snr Technical Officer, DRDPIFR Darwin

This fertigation program is recommended for bitter melon, zucchini, squash, cucumber etc that are harvested over several weeks.

pH Adjustment:

Do a soil test after incorporation of a green manure crop to test pH and calculate lime requirement.

Virgin soils in the Darwin region will require up to 2000 kg/ha Aglime. This will supply 600kg/ha of calcium. As the pH at the soil changes over time, less lime will be required to correct pH. Any extra calcium needed would be applied as gypsum in the base fertiliser.

Base Fertiliser:

84N:138P:72K:1100Ca

NPK	500-600 kg/ha	14:14:12
Superphosphate	500-600 kg/ha	0:9:0
Gypsum	1100-2000 kg/ha	

Use the high rates for high production crops.

Injected Fertiliser: (through the irrigation system)

Brew 1 - Before flowering:

25N:5P:18K units per ha per week

KNO_3	47 kg/ha/week	potassium nitrate
M.A.P.	20 kg/ha/week	mono-ammonium phosphate
UREA	37 kg/ha/week	

Brew 2 - After flowering:

12N:5P:18K:5Ca units per ha per week - approximately 5th week onwards

Solution A - Injection 1:

$Ca(NO_3)_2$	25 kg/ha/week	calcium nitrate
KNO_3	24kg/ha/week	potassium nitrate

Solution B - Injection 2:

M.A.P.	20 kg/ha/week	mono-ammonium phosphate
KNO_3	24 kg/ha/week	

Solutions A and B must be injected separately.

DO NOT MIX SOLUTIONS A & B!!

Calcium nitrate and M.A.P. can not be mixed as they solidify and block irrigation lines.

DEPARTMENT OF REGIONAL DEVELOPMENT, PRIMARY INDUSTRY, FISHERIES AND RESOURCES

Crops, Forestry and Horticulture Division

GPO Box 3000
Darwin NT 0801
Tel: 08 8999 2357
Fax: 08 8999 2049
Email: horticulture@nt.gov.au
Web: www.horticulture.nt.gov.au

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Trace elements:

$ZnSO_4$	30 kg/ha	zinc sulphate
$MnSO_4$	10 kg/ha	manganese sulphate
Solubor®	2 kg/ha	soluble boron
Moly	1 kg/ha	sodium molybdenate

Put half total trace element amounts into first Brew 1 injection.

Spread other half total amounts over the next 3 or 4 injections.

Injection Schedule

Brew	Week	Injection Date	KNO_3	$Ca(NO_3)_2$	UREA	MAP	$ZnSO_4$	MnSO4	Solubor®	Moly
1	1	Mon								
		Thurs								
1	2	Mon								
		Thurs								
1	3	Mon								
		Thurs								
1	4	Mon								
		Thurs								
1	5	Mon								
		Thurs								
1 or *2	6	Mon								
		Thurs								
2	7+11	Mon								
		Thurs								
2	8+12	Mon								
		Thurs								
2	9+13	Mon								
		Thurs								
2	10+14	Mon								
		Thurs								

*Depends on flowering