Growing In Peat Free

How to choose the Right Mix

Considerations:

- Crop grown
- Indoors or outdoors
- Look at irrigation used on Nursery
- Fertilisation choice for mix to suit crop.
- Cost

Differences between in peat and peat free mixes

Structural

- Avg. Moisture Content 64% compared to 51%
- Avg. Air content 14% compared to 22%
- Avg. Water Holding Capacity 71% compared to 63%

All data averages from mixes before use

Chemical

- Lower Cation Exchange Capacity

Difference in fertilisation in peat free mixes compare to peat mixes

General considerations

- More leaching in Peat Free mixes
- Watering techniques require wetting Agents

Fertiliser choice

- Scope for granular organic fertiliser use (DCM)
- CRF type choice is important
- Liquid feed must be tailored to analysis

Peat Free Mix Design

- Woodfibre- Aeration, water holding.
- Coir – Water Availability
- Green Compost-water availability, nutrient adsorption, soil biology
- Bark -good pH, aeration, structure
- Perlite -aeration and soil structure
- Granulated clay -Nutrient adsorption
- Wetting agent: improved water uptake and retention

Nutrition Needed in the Peat Free Mix

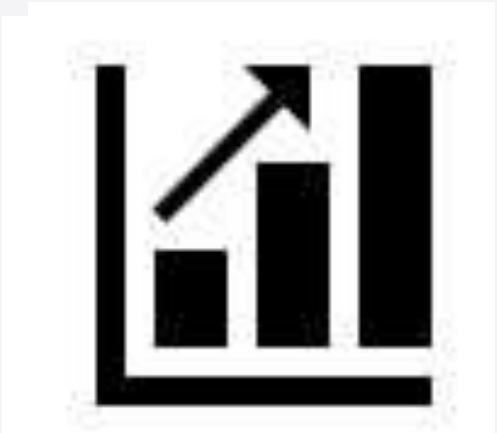
- Slow-release Nitrogen fertiliser
  - Stops N lock up by wood fibre
- Granular Organic Fertilisers (DCM)
  - Provides comprehensive nutrition early in crop
- CRFs (Osmocote 5, Sincrocell, etc.)
  - Provide comprehensive nutrition later in crop
- Liquid feeds (Calcium nitrate, etc.)
  - Allows reactive tailoring of feed to situation

WHY USE DCM IN PEAT FREE CROPS

- Good Nutrient uptake in crops and less leaching.
- Works in all Peat free mixes from the different compost Manufactures either incorporated or top dressed.
- Works well with Controlled Release mineral fertiliser.
- Works well with liquid fertiliser.
- Gives good soil life which encourages good rooting in crops.

Benefits of DCM?

DCM Minigran ® Fertilisers & Soil Improvers



Healthy plants

Performance/Efficiency/Yield

What is?

DCM Minigran Technology

Efficient Controlled Organic Release

Uniform distribution

Mixture of vegetable, animal and mineral ingredients

What is?

DCM Minigran Technology

Each ingredient has its own N-P-K content

Each carbon component is a feeding source for soil life

Mixture of vegetable, animal and mineral ingredients

What is?

DCM Minigran Technology

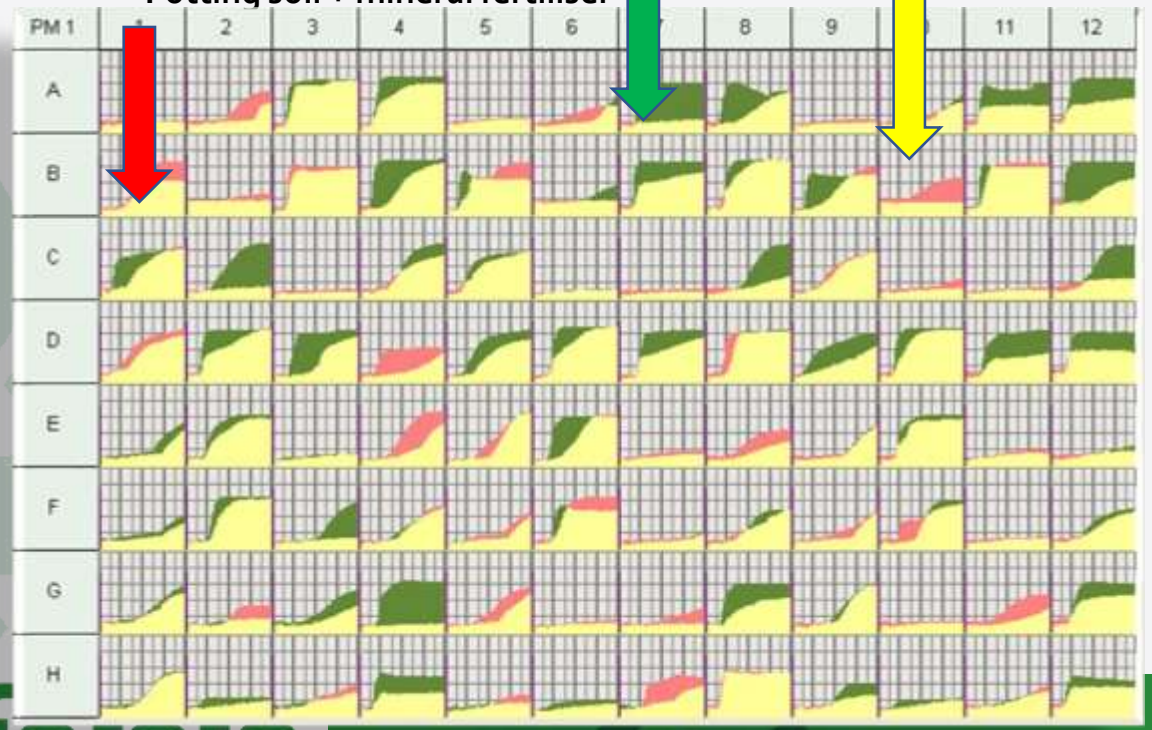
Each carbon ingredient is a feeding source for soil life

Red: decreased amount of soil life

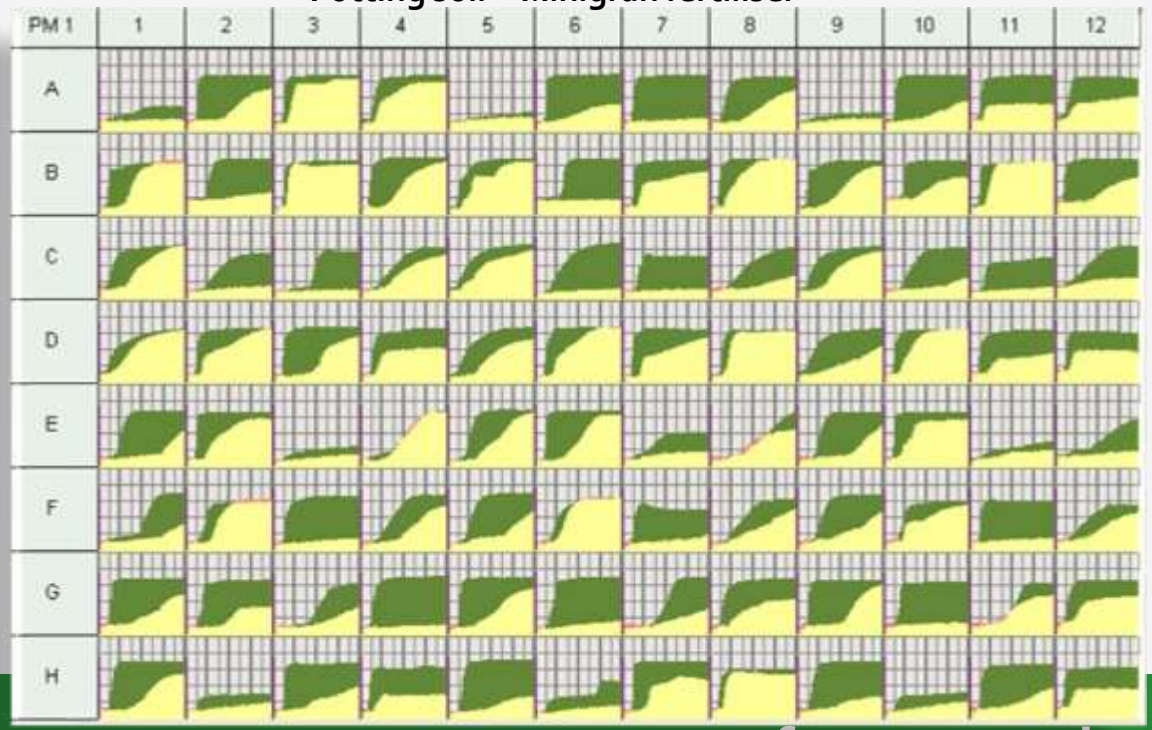
Green: increased amount of soil life

Yellow: existing amount of soil life

Potting soil + mineral fertiliser



Potting soil + Minigran fertiliser



Cyclamen 10cm crop

What is?

DCM Minigran Technology

Each ingredient has its specific release

Less leaching!

Efficient Controlled
Organic Release

What is?

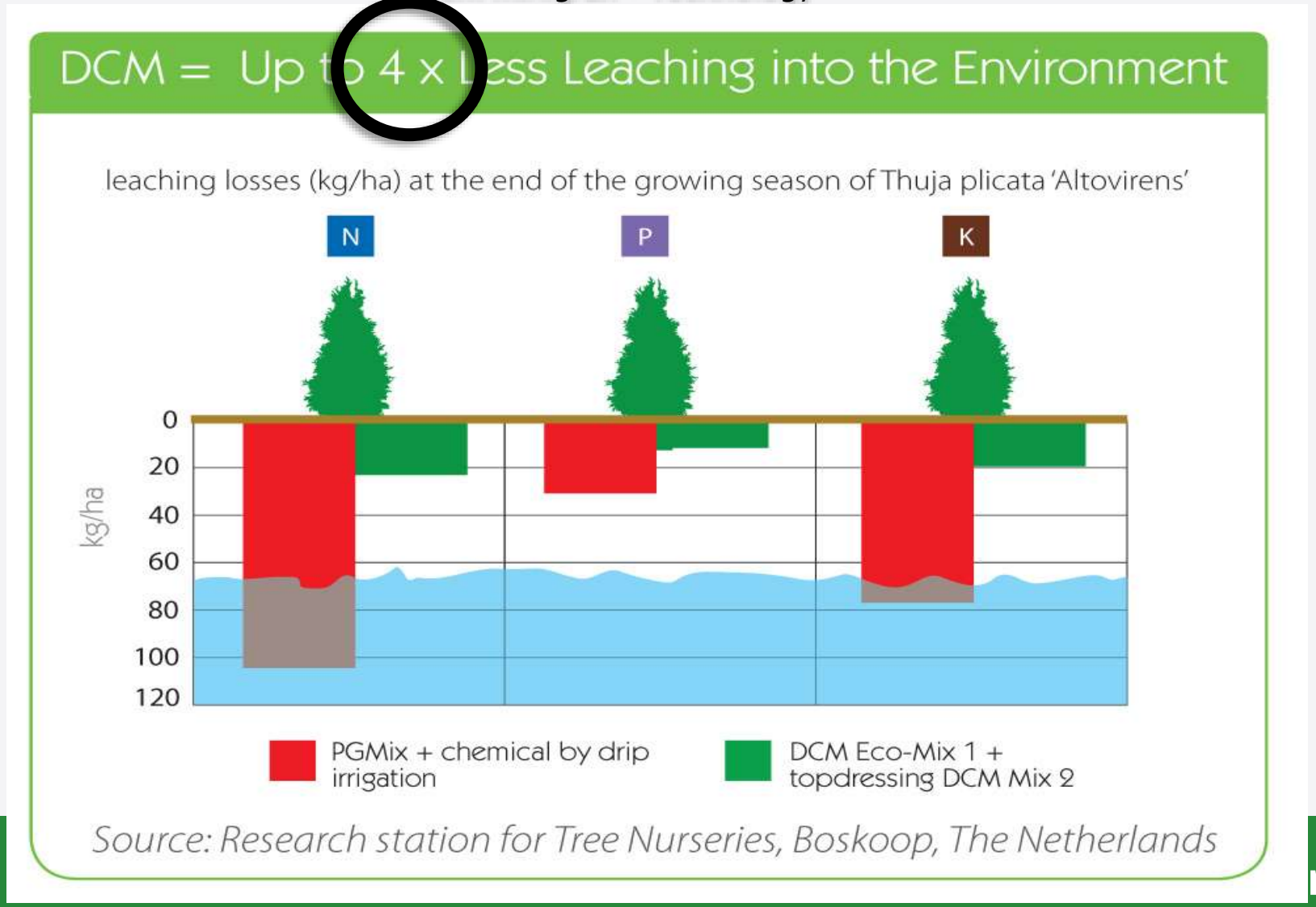
DCM Minigran Technology

Each ingredient has it’s specific release

CACAO SHELLS | GRAPE SEED MEAL | CORN GLUTEN MEAL | BLOOD MEAL | BONE MEAL | FEATHER MEAL | SOY MEAL | VINASSE EXTRACT

What is?

DCM Minigran ® Technology



What is?

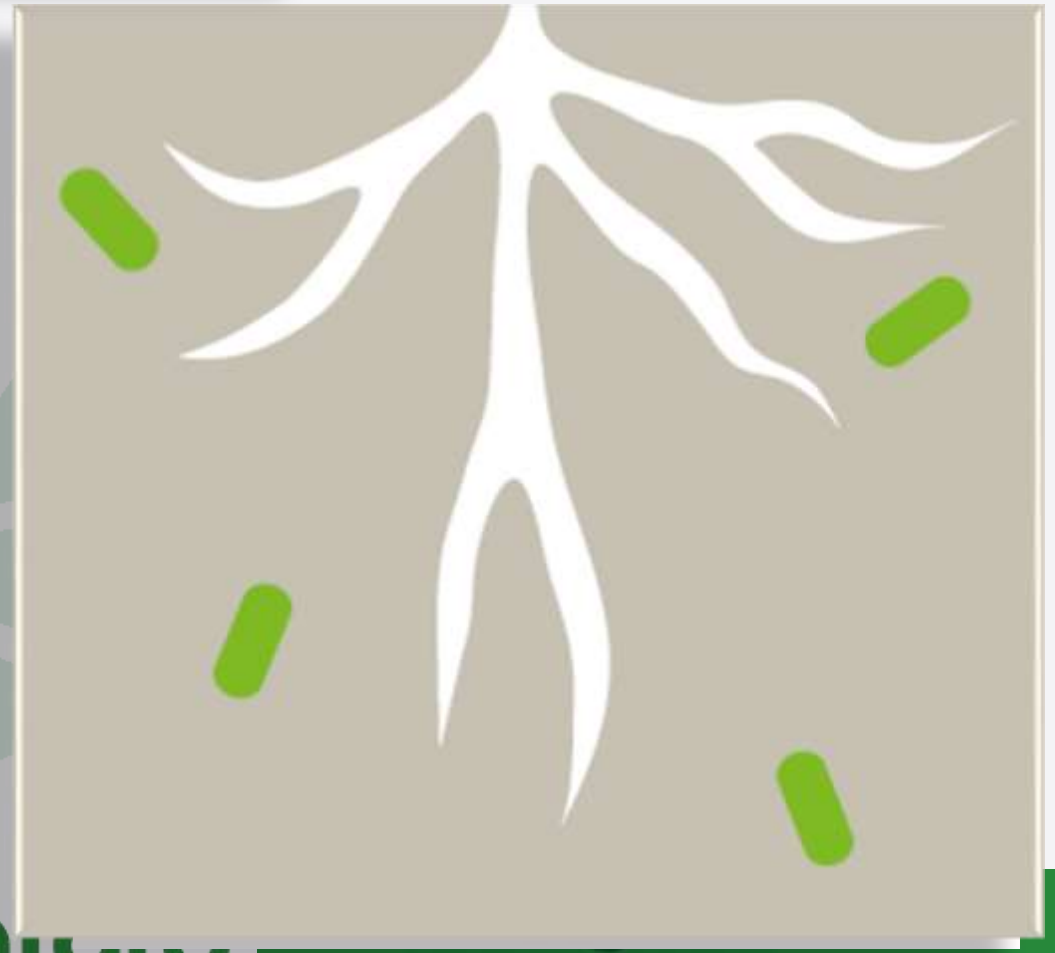
DCM Minigran Technology

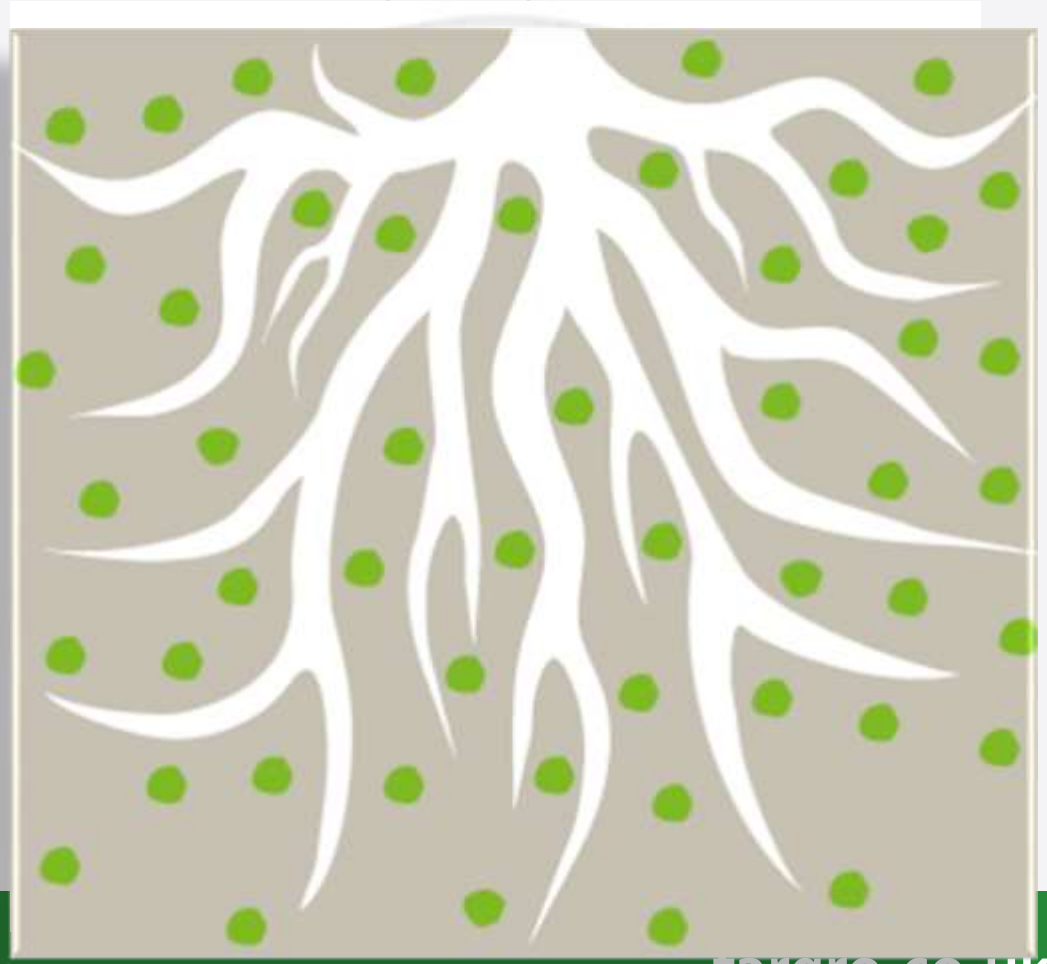
Uniform distribution

What is?

DCM Minigran Technology

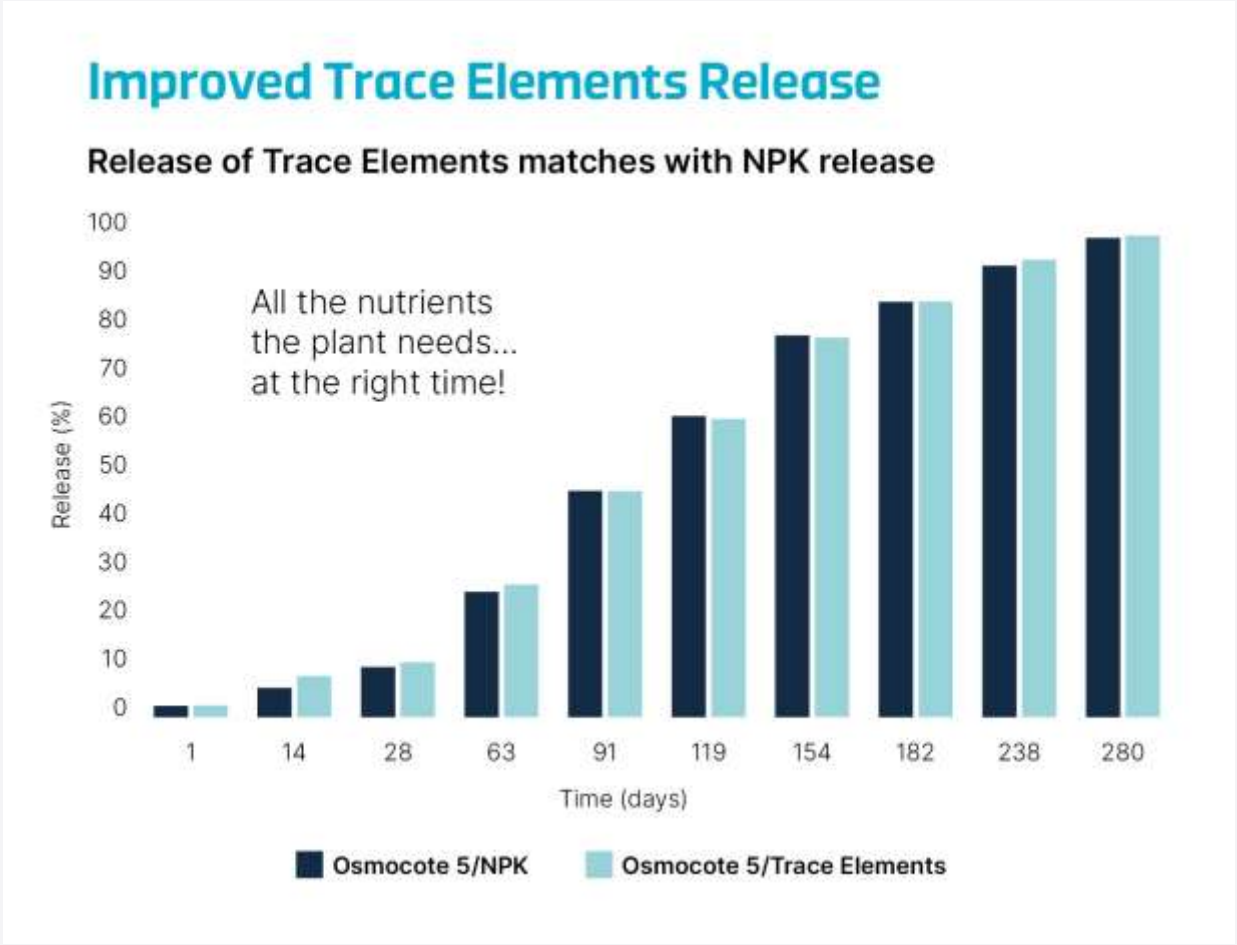
1 pellet = **94 Minigran granules**





Integration of CRFs

- DCM gives comprehensive nutrition to crop for first 4-5 months
- This can be supplement with CRFs in longer term crops



How to use CRFs

- Differing products have different nutrient and release profiles
- Important to select one that compliments organic or liquid feed correctly

Application Rates for Osmocote 5 and Osmocote Exact Standard

Recommended Rates gram per Litre	Release Pattern		Longevity	Light Feeding	Normal Feeding	Heavy Feeding
	Osmocote 5	Osmocote Exact Standard				
Bedding Plants For container and baskets use heavy feeding rate	3-Curved Release	Standard	2 - 3m	1.5 - 2	2 - 3	3 - 4
			3 - 4m	1.5 - 2	2 - 3	3 - 4
			5 - 6m	2 - 3	3 - 4	4 - 5
			8 - 9m	3 - 4	4 - 5	5 - 6
Pot Plants High K formulations available for certain crops	3-Curved Release	Standard	3 - 4m	1.5 - 2	2 - 3	3 - 4
			5 - 6m	2 - 3	3 - 4	4 - 5
			8 - 9m	3 - 4	4 - 5	5 - 6
Nursery Stock	3-Curved Release	Standard	5 - 6m	2 - 3	3 - 4	4 - 5
			8 - 9m	3 - 4	4 - 5	5 - 6
			12 - 14m	3 - 4	5 - 6	6 - 7
			16 - 18m	4 - 6	6 - 8	8 - 10
Perennials High K formulations available for compact growth/flowering	3-Curved Release	Standard	5 - 6m	1 - 1.5	1.5 - 2	3
			8 - 9m	2	2.5	3.5
			12 - 14m	2.5	3	4

These rates are a general guide. Contact your ICL Technical Area Sales Manager for specific crop rates.
Recommendations powered by AngelaWeb 3.0

Compost Analysis

Original

Sample

Research-/ordernumber: 317752/006114437
Date sampling: 25-07-2023
Date report: 08-08-2023
Test code: 310
Receiving date: 08-08-2023
Sample was taken by: Third party

FERRING NURSERY

Results

		analysis	at EC 0,67	target	low	normal	high	basi sche
	pH	6,7	6,7	5,9				
mS/cm 25°C	EC	0,9	0,9	< 1,8				
Cations mmol/l	NH_4	< 0,1	< 0,1	< 0,1				
	K	3,2	3,1	1,6				
	Na	1,9	1,9	< 3,5				
	Ca	0,8	0,8	1,2				
	Mg	0,4	0,4	0,5				
Anions mmol/l	NO_3	2,6	2,5	4,0				
	Cl	2,0	2,0	< 3,5				
	S	1,2	1,1	0,8				
	HCO_3	< 0,1	< 0,1					
	P	0,33	0,32	0,50				
Micro-nutrients µmol/l	Fe	10	10	10				
	Mn	1,0	1,0	2,0				
	Zn	2,9	2,9	2,0				
	B	12	12	10				
	Cu	0,5	0,5	0,7				
	Mo	0,1	0,1					
mmol/l	Si	0,14	0,14					
	K/Ca	4,0		1,3				

Original

Sample

Research-/ordernumber: 318749/006125053
Date sampling: 08-08-2023
Date report: 21-08-2023
Test code: 310
Receiving date: 21-08-2023
Sample was taken by: Third party

FERRING NURSERY

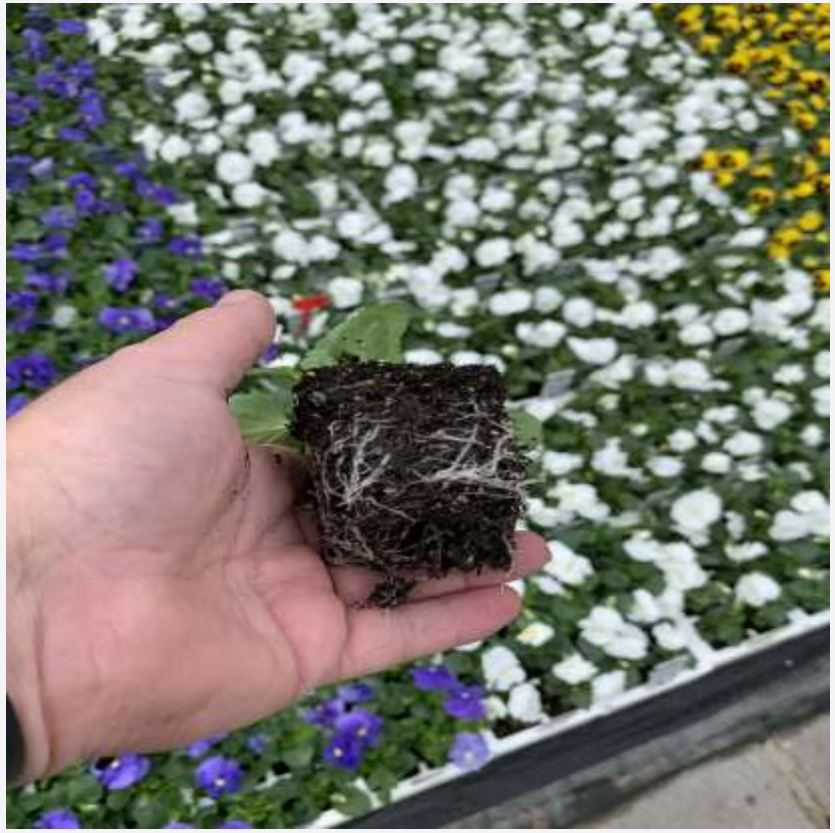
Results

		analysis	at EC 0,67	target	low	normal	high	
	pH	6,7	6,7	5,9				
mS/cm 25°C	EC	0,9	0,9	< 1,8				
Cations mmol/l	NH_4	0,1	0,1	< 0,1				
	K	3,0	2,8	1,6				
	Na	1,8	1,8	< 3,5				
	Ca	0,9	0,8	1,2				
	Mg	0,4	0,4	0,5				
Anions mmol/l	NO_3	1,9	1,8	4,0				
	Cl	1,8	1,8	< 3,5				
	S	1,4	1,3	0,8				
	HCO_3	< 0,1	< 0,1					
	P	0,40	0,37	0,50				
Micro-nutrients µmol/l	Fe	11	11	10				
	Mn	0,6	0,6	2,0				
	Zn	2,5	2,5	2,0				
	B	13	13	10				
	Cu	0,6	0,6	0,7				
	Mo	0,2	0,2					
mmol/l	Si	0,18	0,18					
	K/Ca	3,3		1,3				

Liquid Feeding

- Compost Analysis to see what is needed
- Calcium Nitrate
- 15-5-15 Cal mag Gower feed
- 13-5-20 Cal mag Finisher
- 211 feeds

Bedding Peat Free Mix With DCM 2023



Peat free mix with DCM and Osmocote

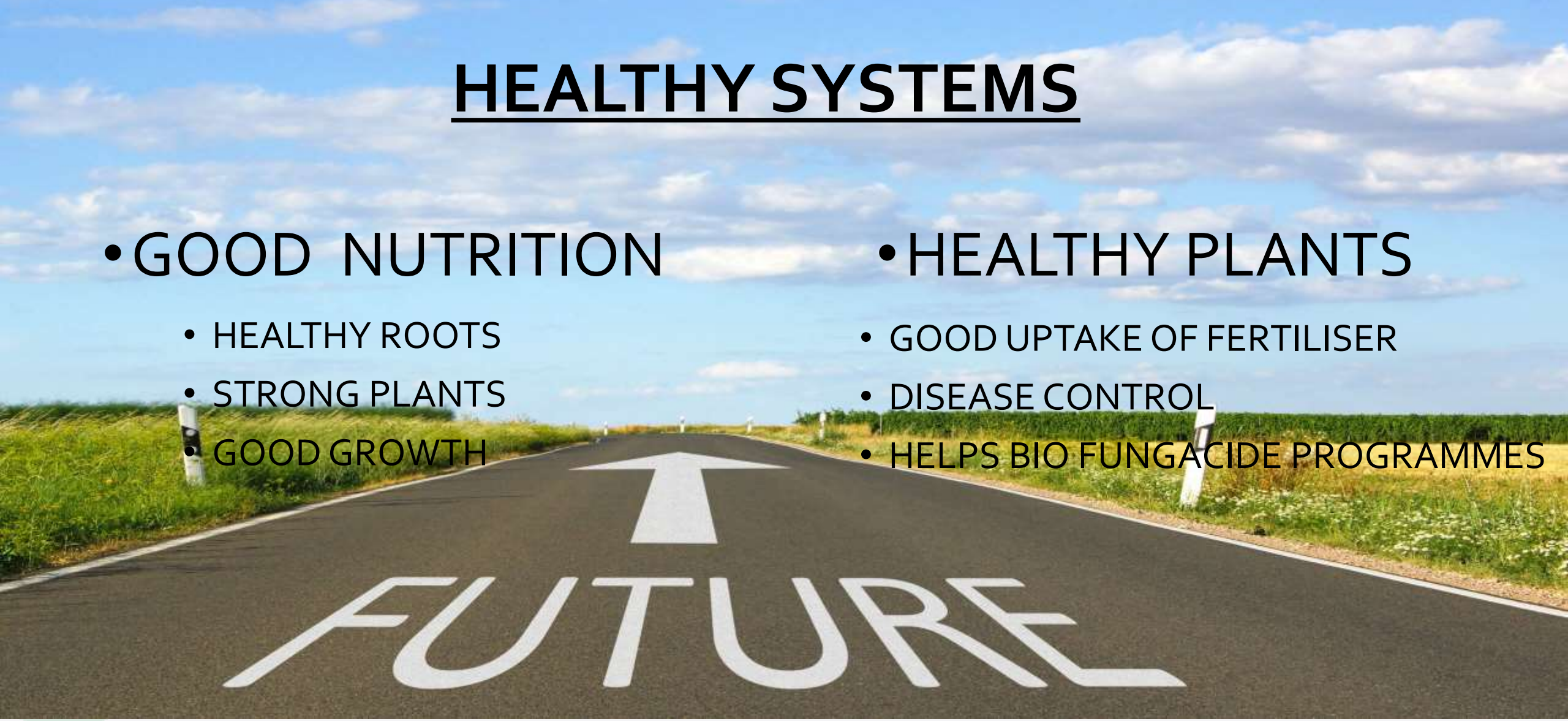
Peat free Pot Mix with DCM and liquid feed.

Peat free Ericaceous Mix with DCM and Sincrocell

Peat free with Perlite and Clay mix with DCM and Osmocote.

Peat free Roses with Osmocote and top dressed with DCM

HEALTHY SYSTEMS



- GOOD NUTRITION
  - HEALTHY ROOTS
  - STRONG PLANTS
  - GOOD GROWTH
- HEALTHY PLANTS
  - GOOD UPTAKE OF FERTILISER
  - DISEASE CONTROL
  - HELPS BIO FUNGACIDE PROGRAMMES