	Propagation	Grow B	loom
NUTRIENTS:			
Formulex	Seedlings and clones. 5 ml/litre – EC 1.0, pH 6.0.		
IONIC Soil Grow		Plants in vegetative grow 7 ml/litre – pH 5.5–6.2.	th. (NB: Continue with GROW nutrients for first week of flowering)
IONIC Soil Bloom			Plants in flowering stage of growth. 7 ml/litre – pH 5.5–6.2.
IONIC PK Boost			Plants in flowering stage of growth. 1 ml/litre – weekly.
ADDITIVES:			
Liquid Silicon		See overleaf for dosage in	formation.
GROWTH ENHANC	ERS:		
SuperDrive	Add to nutrients throughout	life of crop. Add weekly or	with tank change. 1 ml/litre.
GreenMyst Humic	Pre-treat soil, 5 ml/litre.	5 ml/litre – apply weekly.	
Clonex Mist	Mist cuttings every 2–3 days.		
Nitrozyme		Mist and add to nutri- ent, dosage overleaf	
GreenFuse ROOT	Seedlings and clones. 1 ml/litre, apply to roots.		
GreenFuse GROW		Vegetative plants. 1 ml/litradd to nutrient.	e – (NB: Continue with GROW formulation for first week of flowering)
GreenFuse BLOOM			Flowering plants. 1 ml/litre – add to nutrient.
Lighting:	Eighteen hours	Т	welve hours

IONIC Sched	ule – Coco			Basic in using t	structio hese pro						
	Propagation	Grow		Bloo	m						
NUTRIENTS:											
Formulex	Seedlings and clones. 5 ml/litre – EC 1.0, pH 6.0.										
IONIC Coco Grow				egetative growth. (NB: Continue with GROW nutrients for first week of flowering)							
IONIC Coco Bloom						in flowe tre – pH		ige of gr 2.	owth.		
IONIC PK Boost							in flowe tre – we		ge of gr	owth.	
ADDITIVES:											
Liquid Silicon		See overleaf for dosage information.									
GROWTH ENHANCE	ERS:										
SuperDrive	Add to nutrients throughout	ut life of crop. Add weekly or with tank change. 1 ml/litre.									
GreenMyst Humic	Pre-treat coco, 5 ml/litre.	5 ml/litre – apply weekly.									
Clonex Mist	Mist cuttings every 2–3 days.										
Nitrozyme			l add to nutr age overleaf	j-							
GreenFuse ROOT	Seedlings and clones. 1 ml/litre, apply to roots.										
GreenFuse GROW		Vegetative plants. 1 ml/litre – add to nutrient.			(NB: Continue with GROW formulation for first week of flowering)						
GreenFuse BLOOM		Flowering plants. 1 ml/litre – add to nutrient.									

	Propagation	Grow	Bloom			
NUTRIENTS:						
Formulex	Seedlings and clones. 5 ml/litre – EC 1.0, pH 6.0.					
IONIC Grow		Plants in vegetative grow 7 ml/litre – pH 5.5–6.2.		Continue with GROW nutrients rst week of flowering)		
IONIC Bloom				ss in flowering stage of growth. /litre – pH 5.5–6.2.		
IONIC PK Boost				Plants in flowering stage of growth. 1 ml/litre – weekly.		
ADDITIVES:						
Liquid Oxygen		See overleaf for dosage information.				
Liquid Silicon		See overleaf for dosage information.				
GROWTH ENHANCE	RS:					
SuperDrive	Add to nutrients throughout life of crop. Add weekly or with tank change. 1 ml/litre.					
Clonex Mist	Mist cuttings every 2–3 days.					
Nitrozyme		Mist and add to nutri- ent, dosage overleaf				
GreenFuse ROOT	Seedlings and clones. 1 ml/litre, apply to roots.					
GreenFuse GROW		Vegetative plants. 1 ml/li add to tank weekly.		Continue with GROW formulation rst week of flowering)		
GreenFuse BLOOM			Flow	ering plants. 1 ml/litre – add to tank weekly.		

Basic instructions only – for more information and tips on using these products go to www.growthtechnology.com

IONIC Schedule – Hydroponics

Eighteen hours

Lighting:





IONIC® – The Ultimate Solution

A Single Pack Nutrient Solution for use in Hydroponic, Soil and Coco cultivation.

IONIC is available in three distinct formulations:

IONIC GROW supplies the needs of the plant during the vegetative stage of its growth cycle

IONIC BLOOM is dedicated to the fruiting and flowering stage of plant

IONIC PK BOOST is designed to maximise yields in the final stages of growth.

The IONIC Advantage

- Full professional formulations with absolutely no compromise.
- Single pack for accuracy and ease of use.
- Stabilised pH for lowest maintenance and best results.
- Full range of formulations to cover every need.
- Dedicated HW formulations for ease of use in hard water

	Application	Ideal pH	Ideal EC
IONIC GROW Vegetative Growth	Hydroponics – active and passive, including NFT, Flood & Drain and Deep Water Culture. Aeroponics – Rockwool, Perlite and clay pebbles.	5.5–6.2 5.5–5.8 (Rockwool)	2.0 mS/cm 1.5 mS/cm (Rockwool)
IONIC HW GROW Vegetative Growth	As above in hard water areas.	5.5–6.2 5.5–5.8 (Rockwool)	2.0 mS/cm 1.5 mS/cm (Rockwool)
IONIC BLOOM Flowering	The flowering cycle in hydroponic systems as above.	5.5–6.2 5.5–5.8 (Rockwool)	2.0 mS/cm 1.5 mS/cm (Rockwool)
IONIC HW BLOOM Flowering	As above in hard water areas.	5.5–6.2 5.5–5.8 (Rockwool)	2.0 mS/cm 1.5 mS/cm (Rockwool)
IONIC Soil GROW Vegetative Growth	For all plants in soil – indoors or outside. Use with any type of soil – natural or artificial. Ideal for systems such as Autopot, drippers and hand watering.	5.5–6.2	1.5 mS/cm
IONIC Soil BLOOM Flowering	The flowering cycle – plants in soil as above.	5.5–6.2	1.5 mS/cm
IONIC Coco GROW Vegetative Growth	For all plants growing in coco. Suitable for coco in slabs or in loose form. Ideal for systems such as Autopot, drippers and hand watering.	5.5–6.2	1.5 mS/cm
IONIC Coco BLOOM Flowering	The flowering cycle – plants in coco as above.	5.5–6.2	1.5 mS/cm
IONIC PK BOOST Flowering	Flowering supplement for enhanced yields and fragrance. Use with Hydro, Soil and Coco nutrients and in all systems.		
IONIC UV	Replenishing solution to be used in conjunction with UV sterilisers.		

Making up IONIC nutrients

For all IONIC formulations:

- 1. Calculate total tank volume.
- 2. Add IONIC at 7 ml/litre (e.g. for a 10 litre tank add 70 ml).
- 3. Stir thoroughly.
- 4. Check conductivity of the solution. (See table above for recommended values.)
- 5. Check pH of solution. Ideal range 5.5-6.2.
- If required add Growth Technology pH UP or pH DOWN.

IONIC PK BOOST

PK BOOST is a nutrient supplement designed to be used for the final six weeks before harvest. PK BOOST allows the grower easy control of the extra phosphorus and potassium that can lead to bumper yields. PK BOOST is an ideal addition to any of the IONIC BLOOM formulations but it can also be used very effectively with any good quality nutrient solution of the BLOOM variety.

Making up IONIC PK BOOST

- 1. Make up IONIC BLOOM / IONIC BLOOM
- 2. Stir tank thoroughly
- 3. Add IONIC PK BOOST to tank at the rate of 1 ml/litre.
- 4. Stir again then check and correct the pH.
- 5. Use nutrient in the normal way. IONIC PK BOOST can be added to the tank on a weekly basis for the final six weeks before







TANK

Tank Changes – the sequence

For recirculating hydroponic systems the nutrient tank should be completely changed every 7-10 days

- 1. Empty old tank rinse thoroughly and fill with fresh water.
- 2. Add the appropriate IONIC nutrient solution usually at around 7 ml per litre. Mix thoroughly.
- 3. Maintain agitation throughout the entire process. Use pump if possible, or keep stirring.
- 4. Check EC add more nutrient if necessary mixing well until EC is at desired level (usually 1.5-2 mS).
- 5. If using PK BOOST add now at 1 ml per litre in the tank. Mix well.
- 6. If using Liquid Silicon add now at 1 ml per 2 litres in hard water areas, increasing to 1 ml per litre in soft water areas.
- 7. Check and correct the pH (ideal range 5.5–6.2). Use pH DOWN to lower pH. If pH needs raising then Liquid Silicon is the best option.
- 8. Add Liquid Oxygen at the recommended rate and make a final check of pH before allowing nutrient to circulate to
- 9. If GreenFuse (or any other organic additive) is being used, it should be added now. Liquid Oxygen should not b used at the same time as the organic growth enhancers.

The Additives

Liquid Oxygen makes an amazing difference to the success of hydroponic systems. It oxygenates and cleanses the nutrient solution, enhancing growth rates and protecting against disease. Measure dosage carefully and dilute in a litre of clean water before adding to the tank.

In normal operation: Add Liquid Oxygen at a rate of 1 ml per litre. It should be added daily, if possible. Alternatively add 2 ml per litre two or three times per week for healthy crops.

Control of root disease: Clean out and refill tank. Add Liquid Oxygen at the rate of 4 ml per litre and dose daily at that rate until healthy white roots reappear.

Between crops: Remove all roots and debris and wipe down all trays and tanks. Fill tank with clean water and add Liquid Oxygen at the rate of 15 ml per litre. Circulate through the system for 24 hours then flush system with fresh water before replanting.

For further information please visit our website www.growthtechnology.com



Liquid Silicon

adds the elusive element silicon to the hydroponic tank. It will increase growth rates and produce larger, more vigorous plants. It can also help protect plants against mildew and sucking pests. Measure dosage carefully and dilute in a litre of clean water before adding to the tank.



- 1. Make up nutrient in the normal way but do not adjust pH.
- 2. Add Liquid Silicon at the rate of 1 ml per 2 litres. Mix thoroughly.
- 3. Check and correct pH using Growth Technology pH DOWN.

In soft water areas this dosage can be doubled to good effect, but if water is already hard it may cause pH to be too high.

For further information please visit our website www.growthtechnology.com

The Growth Enhancers



Super Drive is a plant tonic, containing vitamins and essential nutrients from natural sources. It will enhance plant performance through every stage of growth. It can be added to water used for soaking RockWool, soil or coco before plants are added or cuttings are taken. Dosage: Add to water or nutrient

solutions at 1 ml per litre and apply to roots or leaves.

Nitrozyme is a concentrated extract from sea plants. It

has amazing effects on plant growth. It can be

watered into the root zone or added to nutrient tanks. It also makes an incredible foliar spray.

Dosage: Soil or coco 1-2 ml/litre; hydroponics 1 ml/2 litres; foliar 5 ml/

For further information please visit our website www.growthtechnology.com.

GreenFuse is a laboratory preparation of pure biological extracts. It works by feeding and stimulating the micro-organisms that live in the root zone of all plants. This enables the plants to take up more nutrients and thus supercharges growth rates.

GreenFuse is available in three types: GreenFuse Root is

formulated for seedlings,

cuttings and young plants. **GreenFuse Grow** is

formulated for plants in the vegetative stage of growth.

GreenFuse Bloom is formulated for plants in the

flowering and fruiting stage of growth. Dosage: 1 ml per litre. GreenFuse can be watered

into soil and coco on a weekly basis or it can be added to nutrient solutions.

For further information please visit our website www.growthtechnology.com.

