Growth rechnology IMMOVATORS IN HORTICULTURE GTCOCO GROWERS GUIDE always go with the hand'

# GT COCO GROWERS GUIDE

GT COCO <mark>GRO</mark>		growth тесhnology													
GROWTH PERIOD	CUTTINGS	VEGETATIVE					FLOWERING**								
		WEEK 1	WEEK 2	WEEK 3	WEEK 4		WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	+ 3-4 DAYS
ccs	10.0 ml	-	-	-	-		-	-	-	-	-	-	-	-	٠
GT COCO GROW*		3.0 ml	3.5 ml	4.0 ml	4.0 ml		-	-	-	-	-	-	-	-	٠
GT COCO BLOOM*		-	-	-	-	M.	3.5ml	4.0 ml	3.5 ml	٠					
GT SILICA	2.0 ml	5.0 ml	5.0 ml	5.0 ml	5.0 ml		5.0 ml	5.0 ml	5.0 ml	5.0 ml	5.0 ml	5.0 ml	5.0 ml	5.0 ml	٠
SUPER PK		-	_	-	- 1		_	-	1.0 ml	2.0 ml	2.0 ml	1.0 ml	-	-	٠
GT FOLIAR	FINE MIST ON TOP AND UNDERSIDE OF LEAVES AT START OF LIGHT PERIOD						FINE MIST ON TOP AND UNDERSIDE OF LEAVES AT START OF LIGHT PERIOD (AVOID BLOOMS)								•
EC GUIDE ***	1.1	1.4	1.6	1.9	1.9		1.9	2.2	2.3	2.4	2.4	2.3	2.2	1.9	0.0
LIGHT HOURS		18 HOURS					12 HOURS								

# OUR PRODUCTS ARE UNMISTAKEABLE... always go with the hand

# THE BASICS



# 1. NUTRIENT STRENGTH – CONDUCTIVITY (EC)

The EC levels indicated are a guide only. Different plant varieties have different feeding habits - some like a weak nutrient solution, some like a strong nutrient solution. As a general rule of thumb, if you notice 'tip burn' on the leaves, it's an indication that the nutrient strength should be reduced. Slight yellowing of leaves or red petioles (leaf stems) can be an indicator of too little nutrient but be wary of over-reacting as these symptoms can be due to other factors such as temperature and pH. In order to achieve accurate EC levels you will need an EC meter. EC should be checked weekly. Use GT CS 2.76 to calibrate your meter and ensure accurate levels.

# 2. pH RECOMMENDED pH RANGE: 5.8-6.5

Do not ignore pH. Certain minerals will become inaccessible to the plant when the pH of the nutrient solution is outside the recommended range. For an inexpensive and easy to use test of pH, use the GT pH TEST KIT for a target pH of 6.

If using pH meters, calibrate them on a weekly basis using GT pH BUFFER 7 and GT pH BUFFER 4 to ensure accurate readings. Storing your pH meter in GT pH PROBE STORAGE will also help optimise the accuracy of your meter while ensuring its longevity. Similarly, using GT pH PROBE CLEANER on a monthly basis will further increase the accuracy and longevity of your meter. When adjusting pH levels with GT pH UP and GT pH DOWN, it is advisable to dilute them before adding to the nutrient tank.

IMPORTANT While getting EC and pH levels right in your nutrient tank is important, maintaining correct levels at the root zone is vital. Even with ideal EC and pH levels in your nutrient tank, this doesn't mean these levels are present where the action is – at the root zone. Eq. EC tends to rise and pH drops when watering cycles are too far apart. These fluctuations can be minimised by increasing frequency of watering and ensuring there is at least 10-15% run-off at each watering. Flush once a week with pH adjusted plain water to remove any nutrient build up in the coco fibre, and immediately irrigate with freshly made solution for good, uninterrupted growth.

#### **NOTES**

- RUN PLAIN pH ADJUSTED WATER FOR 3 TO 4 DAYS AFTER WEEK 8 OF FLOWERING
- AMOUNTS INDICATED ARE FOR EACH OF A AND B PER 1 LITRE OF WATER eg. 3.5ml is 3.5ml of A and 3.5ml of B (35ml of A and 35ml of B per 10 litres of water)
- IF LONGER BLOOM CYCLE NEEDED JUST ADD EXTRA WEEK(S) BETWEEN 6 AND 7
- \*\*\* EC LEVELS ARE INDICATED BASED ON USE WITH RO (REVERSE OSMOSIS) WATER

# 3. SYSTEM HYGIENE

To keep your nutrient solution clean and your plants free from damaging water-borne microbes and pathogens, use GT OXYPLUS.

#### DOSE RATES

1.0 ml per 10 litres – as a preventative 2.0 ml per 10 litres - to treat root disease 10.0 ml per 1 litre - for sterilizing systems between crops

### 4. ENVIRONMENTAL CONDITIONS

Room temperature	24-28°C
Nutrient Solution / Root zone temperature	22-24°C
Humidity	40-60%

Maintaining ideal environmental conditions is vital in order to get the best performance out of your plants and our product range.

- High temperatures and high humidity encourage plant elongation and prevent the formation of firm and dense flowers.
- High humidity stops transpiration, which in turn stops the movement of nutrients from the roots to the rest of the plant.
- · High humidity promotes fungal infections and mould.
- · High nutrient solution/root zone temperatures drastically reduce dissolved oxygen in the water and compromises root health.

# 5. LIGHTING

Maintaining ideal lighting conditions is crucial. Here are some tips for optimum growth.

# **VEGETATIVE STAGE**

18 hours of light – 6 hours of darkness

# FLOWERING STAGE

12 hours of light – 12 hours darkness

- The 'dark' period is every bit as important to the plant for optimal growth as the 'light' period. This means ABSOLUTELY NO PEEKING DURING THE DARK PERIOD! Even the smallest amount of light during the dark period can compromise optimal plant growth. Complete, uninterrupted darkness is important if you can see light, the plant can too!
- A 36 hour 'dark' period between the 18 hour VEGETATIVE STAGE and the 12 hour FLOWERING STAGE can help contribute to earlier flower formation in certain plant varieties.
- · For optimal growth, keep lights as close to the plant without scorching the tops.
- Replace lamps at least every 6 to 9 months in order to maintain high lumen efficiency and optimal growth.

# growth technology



# THE ESSENTIALS

#### **CLONEX GEL**

The 'cutting edge in plant propagation'. The world's first and leading propagating gel. Formulated specifically to initiate root growth on stem cuttings.

#### **CCS (CLONEX CLONE SOLUTION)**

Formulated specifically for cuttings. Encourages strong healthy roots and gives your plants the best possible start in life.

#### **GT COCO GROW**

Formulated to meet the needs of plants during the VEGETATIVE stage, encouraging rapid leaf and shoot development. The precision formulated mineral profile is tailored specifically to the unique characteristics of coco fibre. Organically enhanced with Fulvic Acid for increased nutrient availability and uptake.

#### GT COCO BLOOM

Formulated to meet the needs of plants during the FLOWERING stage, encouraging profuse bud and flower formation. The precision formulated mineral profile is tailored specifically to the unique characteristics of coco fibre. Organically enhanced with Fulvic Acid for increased nutrient availability and uptake.

#### **GT SILICA**

Custom built to support and strengthen plant cell walls, creating a barrier against water loss, fungal infections and attacks from pests.

# **SUPER PK**

A high quality Phosphorous and Potassium (PK) supplement designed and tested in-house to encourage heavy, dense and bountiful yields in flowering plants whilst promoting exceptional quality and taste.

#### **GT FOLIAR**

The ultimate 'ready to use' leaf feeder. Contains a complete and balanced mineral profile, amino acids, kelp, fulvic acid plus a wetting agent for quick absorption.

#### **OXYPLUS (HYDROGEN PEROXIDE 50%)**

A powerful sanitising agent designed to help guard against root disease and help keep growing systems clean and pathogen free. Also an easy way to add extra oxygen to your nutrient solution.

## **CS 2.76 (CONDUCTIVITY STANDARD)**

An accurate and reliable solution for calibrating conductivity (EC) meters.

#### **pH BUFFER 7**

An accurate and reliable solution for calibrating electronic pH meters.

#### pH BUFFER 4

An accurate and reliable solution for calibrating electronic pH meters.

#### **DH PROBE STORAGE**

For storing pH probes and extending the life and accuracy of your pH meter.

#### **pH PROBE CLEANER**

For cleaning pH probes and extending the life and accuracy of your pH meter.

#### pH TEST KIT

An alternative to pH meters. For measuring the pH of the nutrient solution. Maintenance free, inexpensive and easy to use with a unique colour matching system.

# **PH UP (POTASSIUM HYDROXIDE 480gm/L)**

For increasing the pH of the nutrient solutions. OURS IS THE STRONGEST ON THE MARKET!

#### pH DOWN (PHOSPHORIC ACID 85%)

For lowering the pH of the nutrient solutions. OURS IS THE STRONGEST ON THE MARKET!

