



# CHANGING THE GAME TROPICAL FRUITS



We help growers maximize the potential of crops, sustainably...

**SPRAY  
GRO**  
LIQUID FERTILIZERS  
AUSTRALIA  
**SIMON**  
A G R I

# PROGRESSIVE VS TRADITIONAL

## Precision Farming

- How much % of Nitrogen is in my plants per KG of leaf tissue samples?
- From my leaf samplings, xx% increase in %N/KG leaf samples from planting to growing and reproductive stages correlates to an increase in tonnage between xx% to xx%
- Which fields or stages will require more steady, sustained supplementation?

## Conventional Farming

- I put xxxKG Nitrogen per hectare in 3-5 split application timings
- For the last 3 seasons, xxxKG of NPK equates to more or less XXX tons per hectare
- Fertilization application rate will be uniform across fields for a more stable yield
- We have been following this protocol for decades - why change?

## What happens to applied granular NITROGEN?

**30-45%**  
Plant Uptake

**10-35%**  
Soil Organic N

**5-25%**  
Denitrified

**0-10%**  
Leached

## NPK + TRACE ELEMENTS FUNCTIONAL VALUE

UNDERSTANDING NPK + TE

NUTRIENT	FUNCTIONAL VALUE	NUTRIENT	FUNCTIONAL VALUE
<b>NITROGEN</b> (1-6%)*	Nitrogen essential for leaf development and photosynthesis	<b>COPPER</b> (2-50ppm)*	Copper aids in pollen formation crucial for effective pollination and fruit setting
<b>PHOSPHORUS</b> (0.05-1%)*	Phosphorous promotes root growth, flowering and fruit setting	<b>MANGANESE</b> (5-500ppm)*	Manganese aids in pollen germination and growth of pollen tubes for successful fruit setting
<b>POTASSIUM</b> (0.3-6%)*	Potassium serves as activator for biomass production, biosynthesis of sugars and starches for bigger and better fruits	<b>BORON</b> (2-75ppm)*	Boron for growth and translocation of sugar, calcium, water, potassium & sulfur
<b>IRON</b> (10-1000ppm)*	Iron converts nutrients into energy, supporting the tree's vitality and productivity	<b>ZINC</b> (5-100ppm)*	Zinc for rapid crop response against stress, while promoting reproductive development, flowering, fruit setting and fruit quality

\*Approximate Concentration in Plants Plant Analysis - A Diagnostic Tool, University of Wisconsin, Bulletin A2289 Table 27, p.120, Agronomy Handbook 2014 Edition, Don Ankerman, B.S. & Richard Large, Ph.D.

# GAMECHANGER

## PACKAGE of TECHNOLOGY



## THE SPAD METER



### What is the optimal nutrient level?

Source: Plant Analysis - A Diagnostic Tool, University of Wisconsin, Bulletin A2289, Agronomy Handbook, 2014 Edition, Don Ankerman, B.S. & Richard Large, Ph.D.

#### Plant Tissue Nutrient Sufficiency Guide Ranges\* Per KG Leaves

	Percentage (%)						Parts Per Million (ppm)				
	N	S	P	K	Mg	Ca	B	Zn	Mn	Fe	Cu
<b>Avocado</b>	1.60 - 2.20	0.20 - 0.60	0.10 - 0.25	1.00 - 2.00	0.30 - 0.80	1.00 - 3.00	50 - 100	30 - 50	30 - 80	50 - 150	5 - 15
<b>Banana</b>	2.0 - 3.5	0.1 - 0.3	0.2 - 0.5	2.5 - 4.5	0.2 - 0.5	0.5 - 2.0	20 - 100	20 - 50	40 - 300	50 - 200	5 - 20
<b>Cacao</b>	2.5 - 4.0	0.15 - 0.5	0.15 - 0.6	1.5 - 3.0	0.2 - 0.6	0.3 - 1.0	20-60	15 - 60	20 - 400	50 - 300	4 - 20
<b>Citrus</b>	2.40 - 3.00	0.20 - 0.40	0.25 - 0.30	1.00 - 2.00	0.25 - 0.70	3.50 - 5.50	30 - 60	25 - 70	30 - 100	60 - 150	10 - 20
<b>Coffee</b>	2.0 - 3.5	0.1 - 0.4	0.1 - 0.5	1.0 - 2.5	0.2 - 0.6	0.3 - 1.0	20 - 100	15 - 60	20 - 400	50 - 300	4 - 20
<b>Dragonfruit</b>	2.5 - 3.5	0.15 - 0.5	0.2 - 0.5	1.5 - 3.5	0.3 - 0.8	0.5 - 2.0	20 - 50	20 - 50	40 - 200	50 - 200	5 - 20
<b>Grapes</b>	1.5 - 2.5	0.1 - 0.4	0.1 - 0.4	1.0 - 2.5%	0.2 - 0.5	0.5 - 3.0	20 - 100	15 - 60	20 - 400	50 - 300	4 - 20
<b>Jackfruit</b>	2.0 - 3.5	0.1 - 0.4	0.1 - 0.5	1.0 - 2.5	0.2 - 0.6	0.5 - 3.0	20-60	15 - 60	20 - 400	50 - 300	4 - 20
<b>Lanzones</b>	2.0 - 3.5	0.1 - 0.4	0.1 - 0.5	1.0 - 2.5	0.2 - 0.6	0.5 - 3.0	20-60	15 - 60	20 - 400	50 - 300	4 - 20
<b>Mango</b>	1.00 - 2.00	0.15 - 0.35	0.10 - 0.35	0.80 - 1.50	0.15 - 0.50	1.50 - 5.00	25 - 50	20 - 50	50 - 100	50 - 200	8 - 20
<b>Papaya</b>	2.0 - 3.5	0.1 - 0.4	0.1 - 0.5	1.0 - 3.0	0.2 - 0.5	0.5 - 3.0	20-60	15 - 60	20 - 400	50 - 300	4 - 20
<b>Pineapple</b>	2.5 - 3.5	0.15 - 0.5	0.2 - 0.5	1.5 - 3.5	0.3 - 0.8	0.5 - 2.0	20-50	20 - 50	40 - 200	50 - 200	5 - 20
<b>Strawberry</b>	2.0 - 4.0	0.1 - 0.4	0.2 - 0.5	1.0 - 3.0	0.2 - 0.5	0.5 - 3.0	20 - 100	15 - 60	20 - 400	50 - 300	4 - 20

\*SPAD Meter: designed to help users improve crop quality and increase yield by providing an indication of the amount of chlorophyll which can be translated to the % N per KG of leaf sample \* refer to GameChanger conversion App

# NITROBOOST<sup>®</sup>

"The Growth & Yield Booster"

- 21 to 30 Days Smart-Release NITROGEN
- NanoTech: 4x to 30x plant absorption efficiency
- Superior growth & yield performance

**NanoTech: efficient absorption & translocation**

**Methanal component serves as sticker during foliar spray**

**Smart Release Nitrogen- long chain methylene urea, high Nitrogen level**

**Low salt index, no burn**

**Superior growth & yield performance**



**SMART RELEASE**  
NITROGEN<sup>™</sup>  
SERIES

**NPK**  
30.75 - 0 - 0

Plus Chelated Trace Elements  
**ZINC & BORON**

# COMPLETO+<sup>®</sup>

"Enhancing Crop Quality,  
Volume Plus BRIX"

- 14 Days Smart-Release NITROGEN
- 4x to 30x plant absorption efficiency
- Enhances crop quality & performance

**N** Nitrogen essential for leaf development and photosynthesis

**P** Phosphorous promotes root growth, flowering and fruit setting

**K** Potassium serves as activator for biomass production, biosynthesis of sugars and starches for bigger and better fruits

**B** Boron for growth and translocation of sugar, calcium, water, potassium & sulfur

**Cu** Copper aids in pollen formation crucial for effective pollination and fruit setting

**Fe** Iron converts nutrients into energy, supporting the tree's vitality and productivity

**Mn** Manganese aids in pollen germination and growth of pollen tubes for successful fruit setting

**Zn** Zinc for rapid crop response against stress, while promoting reproductive development, flowering, fruit setting and fruit quality at harvest



**SMART RELEASE**  
NITROGEN<sup>™</sup>  
SERIES

**NPK 19-9-19**

Plus Chelated Trace Elements  
**N, P, K, B, Cu, Fe, Mn, Zn**

# MANGO

<b>BUD ELONGATION</b> 12-15DAFI	<b>COMPLETE+</b> 160ml/200L H2O	<b>COMPLETE+</b> 320ml/200L H2O	<b>COMPLETE+</b> 160ml/200L H2O	<b>COMPLETE+</b> 320ml/200L H2O	<b>COMPLETE+</b> 320ml/200L H2O	<b>FRUIT ENLARGEMENT</b> 61-90DAFI	<b>COMPLETE+</b> 320ml/200L H2O
<b>Pre-Bloom</b> 24-28 DAFI	<b>COMPLETE+</b> 320ml/200L H2O	<b>COMPLETE+</b> 320ml/200L H2O	<b>COMPLETE+</b> 320ml/200L H2O	<b>COMPLETE+</b> 320ml/200L H2O	<b>3rd HUGAS</b> 55-58DAFI		
					<b>2nd HUGAS (1-2 days before Wrapping)</b> 45-48DAFI		
					<b>1st HUGAS</b> 35-38DAFI		

**NITROBOOST** @320ml/200L H2O 3-5 months before flower induction

# CITRUS

<b>Nursery</b> <12 months	<b>COMPLETE+</b> 3-5L/HA per HA	<b>COMPLETE+</b> 5L/HA mo or 500ml/200L drum for 20 trees	<b>COMPLETE+</b> 5L/HA or 500ml/200L drum for 10-15 trees applied 2x/month
<b>Developmental</b> 1-10 years old	<b>NITROBOOST</b> 5L/HA mo or 500ml/200L drum for 20 trees	<b>COMPLETE+</b> 5L/HA or 500ml/200L drum for 10-15 trees applied 2x/month	
<b>Fruiting-Maturity</b> 11-30 years old			

# DRAGON FRUIT

<b>NITROBOOST</b> (5L/HA)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<b>COMPLETE+</b> (5L/HA)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

# PINEAPPLE

<b>NITROBOOST</b> 3-5L/HA	<b>COMPLETE+</b> 3-5L/HA
45DAP, 75DAP, 105DAP, 135DAP, 165DAP, 195DAP, 225DAP, 255DAP, 285DAP, 315DAP, 345DAP, 12DAFI	60DAP, 90DAP, 120DAP, 150DAP, 180DAP, 210DAP, 240DAP, 270DAP, 300DAP, 330DAP, 360DAP, 12DAFI, 50DAFI, 80DAFI, 110DAFI

# BANANA

<b>NITROBOOST</b> (5L/HA)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<b>COMPLETE+</b> (5L/HA)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

# MELON

<b>10DAT</b>	<b>14DAT</b>	<b>25-28DAT</b>	<b>42-45DAT</b>	<b>55DAT</b>
<b>COMPLETE+</b> 300ml/16L H2O	<b>NITROBOOST</b> 300ml/16L H2O	<b>COMPLETE+</b> 300ml/16L H2O	<b>COMPLETE+</b> 300ml/16L H2O	<b>COMPLETE+</b> 300ml/16L H2O

# NITROBOOST<sup>®</sup>

"The Growth & Yield Booster"

Crop	Foliar Rate (Liters/Ha)	Recommendations
Vegetables	3-6	<ul style="list-style-type: none"> <li>Apply every 21-30 days from mid-crop</li> </ul>
Brassicas	3-10	<ul style="list-style-type: none"> <li>Apply at early head development</li> <li>Repeat every 21-30 days</li> </ul>
Onions	2-10	<ul style="list-style-type: none"> <li>Apply from when sufficient leaf exists to intercept spray</li> <li>Apply at bulb development at intervals of 21-30 days</li> </ul>
Sugarcane	2-10	<ul style="list-style-type: none"> <li>Apply at 60 DAP, 80 DAP and 100 DAP (Days After Planting)</li> <li>Option to apply at intervals of 14 days as needed from 120 DAP to 200 DAP via drone to further push yield volume</li> <li>Alternating application with COMPLETO+ as needed especially with ratoon crop</li> </ul>
Corn	3-10	<ul style="list-style-type: none"> <li>As Urea Booster (in addition to granular side dress) spray 3-5 liters per hectare at 25-30 DAT (Days After Transplant) to maximize yield</li> <li>As Side Dress Urea Replacement, spray 10 liters per hectare at 25-30 DAT</li> <li>Follow-up spray at 50 DAT with COMPLETO+ at the rate of 3-5 liters per hectare to maximize yield increase</li> </ul>
Rice	3-10	<ul style="list-style-type: none"> <li>As Urea Booster (in addition to granular side dress) apply 3-5 liters per hectare at 25-35 DAT (Days After Transplant) to maximize yield</li> <li>As Side Dress Urea Replacement, spray 10 liters per hectare at 35 DAT</li> <li>Follow-up spray at 50 DAT with COMPLETO+ at the rate of 3-5 liters per hectare to maximize yield increase</li> </ul>
Fruit Trees	3-10	<ul style="list-style-type: none"> <li>Apply 2-5 months before flower induction</li> <li>Apply in seedling and young trees for vigor</li> <li>Do not apply at flowering stage or post flowering stage</li> </ul>
Banana	2-10	<ul style="list-style-type: none"> <li>Repeat every 21-30 days until 4 weeks before harvest</li> <li>Triple the rate per hectare when applied via fertigation</li> </ul>
Pineapple	2-10	<ul style="list-style-type: none"> <li>Apply every 21-30 days from fruit set up to 4 weeks before harvest</li> <li>Triple the rate per hectare when applied via fertigation</li> </ul>
Turf (GRASS)	10-50	<ul style="list-style-type: none"> <li>Apply at 1:20 water dilution at 4-6 weeks interval for optimum turf (grass) growth</li> <li>Can be applied as foliar spray at 1:10 dilution rate or drench at 1:20 dilution rate</li> <li>SRN can release over 20-30 days on leaf surface and up to 8-10 weeks in the soil</li> </ul>
Cutflowers	2-10	<ul style="list-style-type: none"> <li>Do not apply as foliar spray when plants are already in bloom</li> <li>To apply as foliar, use lower rate (5 liters) at 1:100 dilution; as drench or via fertigation use higher rate (10 liters) at 1:100 dilution</li> </ul>

# COMPLETO+<sup>®</sup>

"Enhancing Crop Quality, Volume Plus BRIX"

Crop	Foliar Rate (Liters/Ha)	Recommendations
Vegetables	3-6	<ul style="list-style-type: none"> <li>Apply every 14 days from mid-crop or when flowering starts</li> </ul>
Brassicas	3-6	<ul style="list-style-type: none"> <li>Apply at early head development</li> <li>Repeat spray every 14 days or as follow-up to NITROBOOST</li> </ul>
Onions	3-10	<ul style="list-style-type: none"> <li>Apply from when sufficient leaf exists to intercept spray</li> <li>Apply at bulb development</li> </ul>
Sugarcane	2-10	<ul style="list-style-type: none"> <li>Apply at 100 DAP and 115 DAP (Days After Planting)</li> <li>Option to apply at intervals of 14 days as needed from 130 DAP to 250 DAP via drone to further push yield volume and sweetness (Brix/PSTC)</li> <li>Best to apply after NITROBOOST when canopy closes and up to 2.5 to 4 months before harvest for higher brix factor or sugar content</li> </ul>
Corn	3-10	<ul style="list-style-type: none"> <li>Apply at 45 DAP and follow-up spray at 55 DAP to maximize yield advantage</li> </ul>
Rice	3-10	<ul style="list-style-type: none"> <li>Apply at panicle initiation</li> <li>Apply at 35 DAT (Days After Transplant)</li> <li>Follow-up at 50 DAT to maximize yield and grain quality</li> </ul>
Fruit Trees	5-10	<ul style="list-style-type: none"> <li>Apply from early bloom through fruit set and maturity</li> <li>Repeat application after 30 days</li> <li>Double rate of application per hectare at post-harvest</li> <li>Spray volume at 2,500 liters per hectare or 2-6 tank loads per tree</li> </ul>
Banana	2-10	<ul style="list-style-type: none"> <li>Apply every 14 days from fruit set to harvest</li> <li>Triple the rate per hectare when applying via fertigation</li> </ul>
Pineapple	2-5	<ul style="list-style-type: none"> <li>Apply every 15 days early in season and from fruit set to harvest</li> <li>Triple the rate per hectare when applying via fertigation</li> </ul>
Mango	5-10	<ul style="list-style-type: none"> <li>Apply at 12-15 DAFI (Bud Elongation)</li> <li>Apply at 24-28 DAFI (1st HUGAS)</li> <li>Apply at 1-2 days before wrapping (2nd HUGAS)</li> <li>Apply at 55-58 DAFI (3rd HUGAS)</li> <li>Apply at 61-90 DAFI (Fruit Enlargement)</li> </ul>
Cutflowers	2-10	<ul style="list-style-type: none"> <li>To apply as foliar, use lower rate (5 liters) at 1:100 dilution; as drench or via fertigation, use higher rate (10 liters) at 1:100 dilution</li> </ul>

## BIG TIME HARVEST, BIG TIME GROWER



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**SPRAY GRO** SIMON  
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