



# QUICKSOIL SAMPLING GUIDE

JULY 2022

[www.novumlifesciences.com.au](http://www.novumlifesciences.com.au)

 (07) 41 325 000

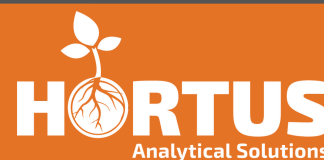
ADDRESS 1/5 SCOTLAND ST  
:< BUNDABERG EAST  
QLD 4670

POST SAMPLES TO: LOCKED BAG 3901  
BUNDABERG  
QLD 4670



# HORTUS QUICKSOIL SAMPLING

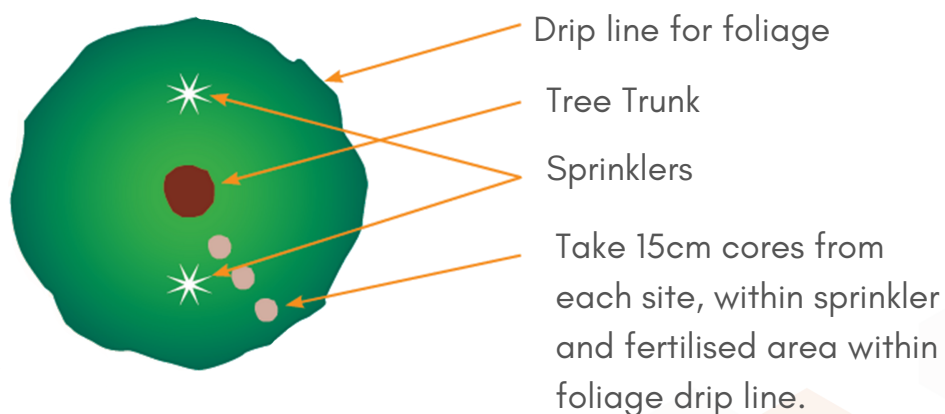
## GUIDE



### Quicksoil Tests

- **EC** - BALANCE THE UPTAKE OF NUTRIENTS AND WATER
- **pH** - AFFECTS AVAILABILITY OF NUTRIENTS
- **NO<sub>3</sub>** - FOR VEGETATIVE GROWTH AND YIELD
- **Ca** - FOR CATION BALANCE AND QUALITY
- **K** - FOR YIELD AND QUALITY
- **Mg** - FOR SUGAR PRODUCTION
- **Na** - TO ASSESS SALINITY
- **Cl** - TO ASSESS THE EFFECTS ON NITRATE AND TOXICITY

## SAMPLING TREE CROPS UNDER TREE SPRINKLERS

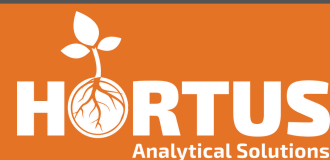


Sample at least 10 sites (30 cores) through the crop, mix very thoroughly, and send a 500g sub-sample to the laboratory.

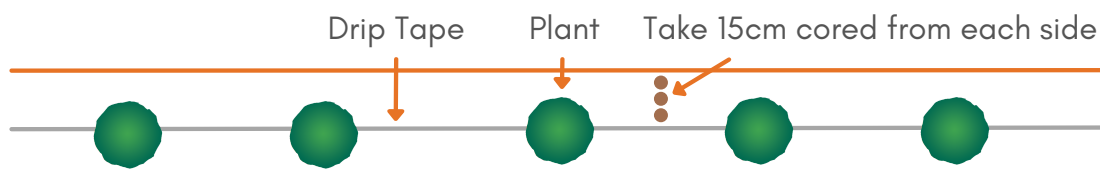


# HORTUS QUICKSOIL SAMPLING

## GUIDE



## ROW CROPS



Sample at least 10 sites (30 cores) through the crop, mix very thoroughly, and send a 500g sub-sample to the laboratory.

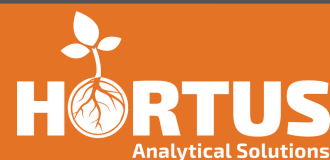
## HOW TO SAMPLE

Sample 3 cores across the wetted root zone at 10 sites across the block to 15cm



# HORTUS QUICKSOIL SAMPLING

## GUIDE



## WHY BALANCE NUTRIENTS IN THE ROOT ZONE

- Maintain consistent plant growth
- Optimise plant height
- Reduce rank vegetable growth
- Allow for even fruit setting
- Fill fruit evenly to improve internal quality
- Maintain availability of essential nutrients
- Reduce effects of adverse weather on fruit

## SUBMITTING SAMPLES

- Complete your Analysis Request Form online at :  
<https://au.agpro.technology/Login>
- Post your sample to:

**Novum Lifesciences**  
**Locked Bag 3901**  
**Bundaberg, QLD 4670**



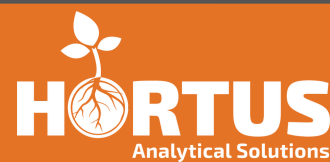
POST SAMPLES TO: LOCKED BAG 3901  
BUNDABERG QLD  
4670





# HORTUS QUICKSOIL SAMPLING

## GUIDE



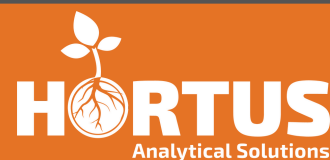
## FRUIT QUALITY ISSUES

- **Controlled filling of fruit reduces hollowness**
- **Increase the levels of calcium in the fruit walls**
- **Reduces splitting or soft fruit after/ during wet weather by maintaining EC levels**



# HORTUS QUICKSOIL SAMPLING

## GUIDE



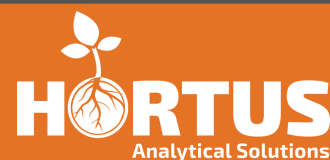
## WHY BALANCE NUTRIENTS IN THE ROOT ZONE?

- **Maintain consistent plant growth**
- **Optimise plant height**
- **Reduce rank vegetative growth**
- **Allow for even fruit setting**
- **Fill fruit evenly to improve internal quality**
- **Maintain availability of essential nutrients**
- **Reduce effects of adverse weather on fruit**



# HORTUS QUICKSOIL SAMPLING

## GUIDE



## FACTORS AFFECTING ROOT GROWTH

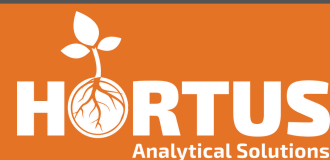
- Physical structure, particle size, compaction
- Moisture content • Salinity - EC
- pH and calcium content
- Phosphate concentration
- Soil temperature





# HORTUS QUICKSOIL SAMPLING

## GUIDE



## EARLY GROWTH TO BUDDING

### Underwatering

- Poor growth
- Reduced uptake of nitrogen and calcium
- Reduced vine growth

### Overwatering

- Leaching of base fertilizer
- Increased susceptibility to root diseases
- Lush vegetative growth and poor flowering
- Shallow root system
- Susceptibility to sudden wilt



## FLOWERING TO EARLY FRUIT SET

### Underwatering

- Small vines
- Low nitrogen and calcium uptake
- Falling flowers and dropping of small fruit

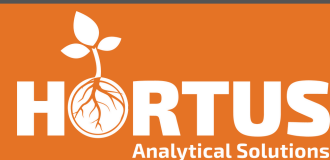
### Overwatering

- Excessive vegetation growth
- Poor flower and fruit set due to low sugars
- Poor pollination
- Shallow root system
- Increased disease risk



# HORTUS QUICKSOIL SAMPLING

## GUIDE



## FRUIT SET TO FRUIT FILL

### Underwatering

- Small fruit size
- Dropping small fruit
- Small vines
- Sunburn

### Overwatering

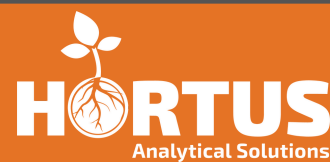
- Poor fruit set
- Excessing vine growth
- Poor flesh structure due to low calcium balance





# HORTUS QUICKSOIL SAMPLING

## GUIDE



## MATURITY & HARVEST

### Underwatering

- Small fruit size
- Early maturity of young melons
- Low yields

### Overwatering

- Stem end break down
- Prone to ground rots
- Low sugars
- Slow to mature
- Soft fruit

