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Problems of Trees and Vines with rapidly growing shoots - Page 1 of 2

WHY DO TREES AND VINES WITH RAPIDLY GROWING SHOOTS ALWAYS HAVE MORE PROBLEMS WITH FRUIT QUALITY, DISEASE, AND DECLINE?

Disease Susceptibility
Physiological Disorders
Post Harvest Problems
Tree or Vine Decline

All of the above problems have several things in common. They are most severe problems when ...

- Plants have vigorous shoot growth.
- They have more vigorous root stock.
- Problems are worse during Stress seasons.
- Liberal use of nitrogen is practiced.

(Many years of published research has confirmed the above).

Present practices to relieve the above problems are -

- Reduce nitrogen use
- Increase foliar calcium use
- Use fungicides
- Use post harvest treatments

None of the practices work consistently. Why? During STRESS seasons they do not have the ability to solve these problems ... only reduce them.

In order to understand why these problems exist, one must understand the hormone balance in the trees and vines ... under stress conditions.

Stress Condition:

- Flooded soil
- Dry soil followed by rain or irrigation
- Significant temperature changes

(All of the above can be increased when using high rates of nitrates)



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Tree and Vine Response to STRESS:

- Increased ethylene surge
- Gibberellic acids move to the growing point
- IAA moves more rapidly out of the growing point to the roots, leaves or developing fruit.

Photosynthates and Calcium move in the opposite direction of IAA ... away from the roots, (root hair death) ... away from the fruit (physiological disorders) ... away from other plant parts which become weakened (disease susceptibility).

If the surge of ethylene can be controlled, and the bipolar effect of IAA can be controlled, trees and vines should be much more resistant to the above problems.

Treatment:

The treatment is simple;

- 1.Fill up the trees or vines with Nitro Plus.
- 2.Foliar spray 1 gallon of Calcium 5 S every 14 days while flowers and fruit are on the plants.

Is it that simple? Yes!!

Most problems are simple, if you understand The Language of The Plant.