

## Best Management Practices

### Major Findings

## In General

- \* Most growers do the "right things" regarding Best Management Practices.
- \* However, there is plenty of opportunities for improvements.

*Growers must do better !*

## Preventing Diseases

- \* Only 44% keep plants in a separate greenhouse until proven pest/disease free
- \* 60% would throw away plants too soon
- \* A minority (28%) would "invest" in finding out what is the problem
- \* 81% scout their crop and spot-treat while 65.4% (!?) spray on a regular basis

## Preventing Diseases

- \* 84% heat & vent to reduce RH
- \* 80% use Horizontal Air Flow
- \* Only 12% monitor RH with a sensor
- \* 81% use conventional drenches
- \* Only 19% use biological drenches


## Preventing Insects

- \* Only 89% scout their crop and treat where they see the insect
- \* 37% spray/drench entire crop when the problem is only on a spot
- \* 56% spray on a regular basis
- \* Only 7% use biologicals

## Basic Instruments

- \* 85% own a pH meter
- \* 65% own an EC meter

*Why not 100%?*



## *pH meters*

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Those who own a pH meter seem to use it:

- \*26% never
- \*13% once a month
- \*22% twice a month
- \*39% once a week
- \*62% do not do graphical tracking of pH and EC



## *Fertility*

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- \*36% test injector once a month
- \*72% service injector once a year
- \*23% do not consider nutrients in the water
- \*15% never check water alkalinity




## *Controlling Plant Height*

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- \*65% use growth regulators
- \*46% use limited watering
- \*27% use DIF
- \* 8% DIP
- \*27% use low P fertilizers
- \* 4% brushing/shaking


Some said they use manual pruning !!!!



## *Structures*

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- \*52% have "inflating" fans taking air from inside the greenhouse
- \*100% have naturally ventilated greenhouses
- \*72% have side vents & down-wind roof vents
- \*28% have roof vents that open into the wind




These basic concepts have been around for many years and still, they are not adopted by all growers.

Then the questions is:



# WHY?




*Research needs*

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**\*Production**

- 45% improved use of growth regulators
- 35% improved production protocols
- 30% effects of different day/night temp.
- 20% improved soilless media




*Research needs*

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**\*Molecular/Genetics**

- 67% breed for disease resistance
- 58% screening of plant material for diseases
- 33% breed for less PGR usage
- 33% breed for reduced water stress
- 25% breed for cold tolerant plants



*Research needs*

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**\*Diseases/Insects**

- 50% reduction of fungus gnats in soilless media
- 41% improved application of pesticides
- 36% biological control of diseases & pests
- 18% improved knowledge of injury due to micronutrient
- 14% Invasive pathogen species from off-shore bedding plant propagation