



How to Grow Healthy Plants by Optimizing Water & Nutrient Inputs (& by Practicing IPM & Following BMPs)

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So why does this program have such a crazy title?

- Basic idea: can we rethink nutrient and water use in Miami-Dade County?
- Nutrient and water use are part of both:
 - Integrated Pest Management (Core principles)
 - And Best Management Practices (Core principles)

Integrated Pest Management Principles – Cultural Controls

- “Cultural practices sometimes are used to reduce the numbers of pests that are attacking cultivated plants.”
- “These practices alter the environment, the condition of the host plant, or the behavior of the pest to prevent or suppress the infestation.”

Core Manual, p. 9

Integrated Pest Management Principles – Cultural Controls

- [Cultural practices] disrupt the normal relationship between the pest and the host plant and make the pest less likely to survive, grow, or reproduce.”

Core Manual, p. 9

Integrated Pest Management Principles – Cultural Controls

- Rotating crops
- Cultivating the soil
- Varying time of planting or harvesting
- Planting trap crops

Core Manual, p. 9

Integrated Pest Management Principles – Cultural Controls

- Adjusting row width
- Pruning and/or thinning
- Fertilizing

Core Manual, p. 9

Best Management Practices

- **Nutrient Management** – different approaches depending on the type of crop:
- **Fruit crops** – based on leaf samples & crop nutrient requirements
- **Nursery crops** – based on maximizing nutrient efficiency while reducing nutrient loss to the environment
- **Vegetables** – based on crop nutrient requirements

Best Management Practices

- “...water management planning must consider all uses of water, ranging from the source of irrigation water to a plant’s water use requirement.”
- “...differentiate between crop water requirements and irrigation water requirements.”