Organic, IPM and Calendar based Pest Management Compared

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Choosing a Pest Control Strategy

- Personal philosophy
- Dedication to an idea

Choosing a Pest Control Strategy

- Personal philosophy
- Dedication to an idea
  - “I don’t care, I don’t like Bugs”
  - “I want to save the world”
  - ”I want it to look nice”
  - “I want to make money”
  - “I want to do this and not loose money”

Choosing a Pest Control Strategy

- Understand your Market
- Understand your Production System
- Understand your Cost of Production

Organic Systems

Organic Systems

- USDA - “A production system that is managed to respond to site-specific conditions by integrating cultural, biological, and mechanical practices that foster cycling of resources, promote ecological balance, and conserve biodiversity."

Organic systems

- Understanding and manipulating the system
  - Natural predators
  - Timing of operations
  - Multiple year strategy
- Management time requirement can be High

Organic Systems

- Hand or mechanical labor
- Pesticides are available

Organic Systems

Certified Organic

Check with certification agency and inspector for approved inputs and practices.

Organic Systems

- Low to ???? Environmental Impact
- Capital requirement often low
  - Cost of labor may be a consideration

IPM

Integrated Pest Management

IPM Definition

- Integrated Pest Management (IPM) is an effective and environmentally sensitive approach to pest management that relies on a combination of common-sense practices. IPM programs use current, comprehensive information on the life cycles of pests and their interaction with the environment. This information, in combination with available pest control methods, is used to manage pest damage by the most economical means, and with the least possible hazard to people, property, and the environment.

- The IPM approach can be applied to both agricultural and non-agricultural settings, such as the home, garden, and workplace. IPM takes advantage of all appropriate pest management options including, but not limited to, the judicious use of pesticides. In contrast, organic food production applies many of the same concepts as IPM but limits the use of pesticides to those that are produced from natural sources, as opposed to synthetic chemicals.

IPM System

- Requires knowledge of the system
- Monitoring the system (Scouting) is important

IPM System

- Includes many components of Organic and Scheduled systems

- GMOs
- Cover Crops
- Natural Predators
- Pesticides
- Resistant Varieties
- Preventative Pesticides

IPM System

- Potential Environmental Impact

Scheduled Systems

Scheduled System

- Pest control is planned in advance
  - Focused on preventing pest outbreaks
- Requires low management time
- Requires general knowledge of likely pests

Scheduled System

- High Cost
- Pest control whether its needed or not

Scheduled System

- Environmental Impact can be Moderate to High
  - Pest resistance
  - Risk of applying pesticides at wrong time
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Systems compaired

- Organic system
  - Capital requirements
  - Management time/effort
  - Potential Environmental Impact
- IPM system
  - Capital requirements
  - Management time/effort
  - Potential Environmental Impact
- Scheduled system
  - Capital Requirements
  - Management time/effort
  - Potential Environmental Impact