



# Garden for Health

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# Organic Gardening

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# Basic Tenets

- Basic Definition
  - Gardening conducted without the use of synthetic fertilizers or pesticides
    - Made from petroleum and chemical sources
- Natural Methods
  - Weed, Pest, and Disease Control
- Good Soil Husbandry





# Soil Husbandry

- Recycling
  - Organic Matter
    - Compost
    - Manure
      - Green Manure Crops
      - Animal Manure
    - Mulch
  - Organic Byproducts
    - Blood Meal
    - Feather Meal
    - Gin Trash
- Natural Minerals
  - Ground Rock Phosphate
  - Limestone
- Soil Tillage



# Weed, Pest, and Disease Control

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- Natural Methods
  - Crop Rotation
  - Sanitation
  - Avoidance
  - Environment Modification
  - Biological Controls



# Crop Rotation

- Repeating crop sequence
- Considerations
  - Crop Commonalities
    - Pest Susceptibility
    - Nutritional Needs
  - Soil Implications
    - Erosion
    - Nutrient  
Deposition/Consumption





# Sanitation

- Green Thumb, Clean Thumb
  - Pasteurization of potting medium
  - Aerobic compost pile
  - Hand washing
  - Pruning
  - Roguing
  - General tidiness
- Limits Disease, Deters Pests







# Avoidance

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- Timely strategy
  - Growth of plants during period of minimal risk for pest/pathogenic infestation
    - Corn: Late Winter/Early Spring
      - Limit potential for cornworm infestation
    - Melons: Beginning of Warm Season
      - Avoidance of seasonal viruses
  - OR environmental conditions
    - Warm Season Perennials (e.g. citrus, figs, ginger):  
Beginning of Warm Season
      - Build tolerance to cold



# Environmental Modification

- Minimizing favorability of garden for pest habitation/plant infection
  - Pruning
    - Facilitate air movement
    - Allowance of light penetration
  - Microclimate Planting
    - Avoid cold damage
  - Humidity Control
  - Soil pH Management
    - Lower pH: potatoes/sweet potatoes
    - Raise pH: cruciferous club root prevention





# Biologic Controls

- Pest Management

- Reverse Symbiosis

- Encourage Predatory Populations

- Spiders, bats, lizards, toads, insects, snails
      - Combat destructive insects and mites
      - Plant variety, avoidance of synthetic fertilizers

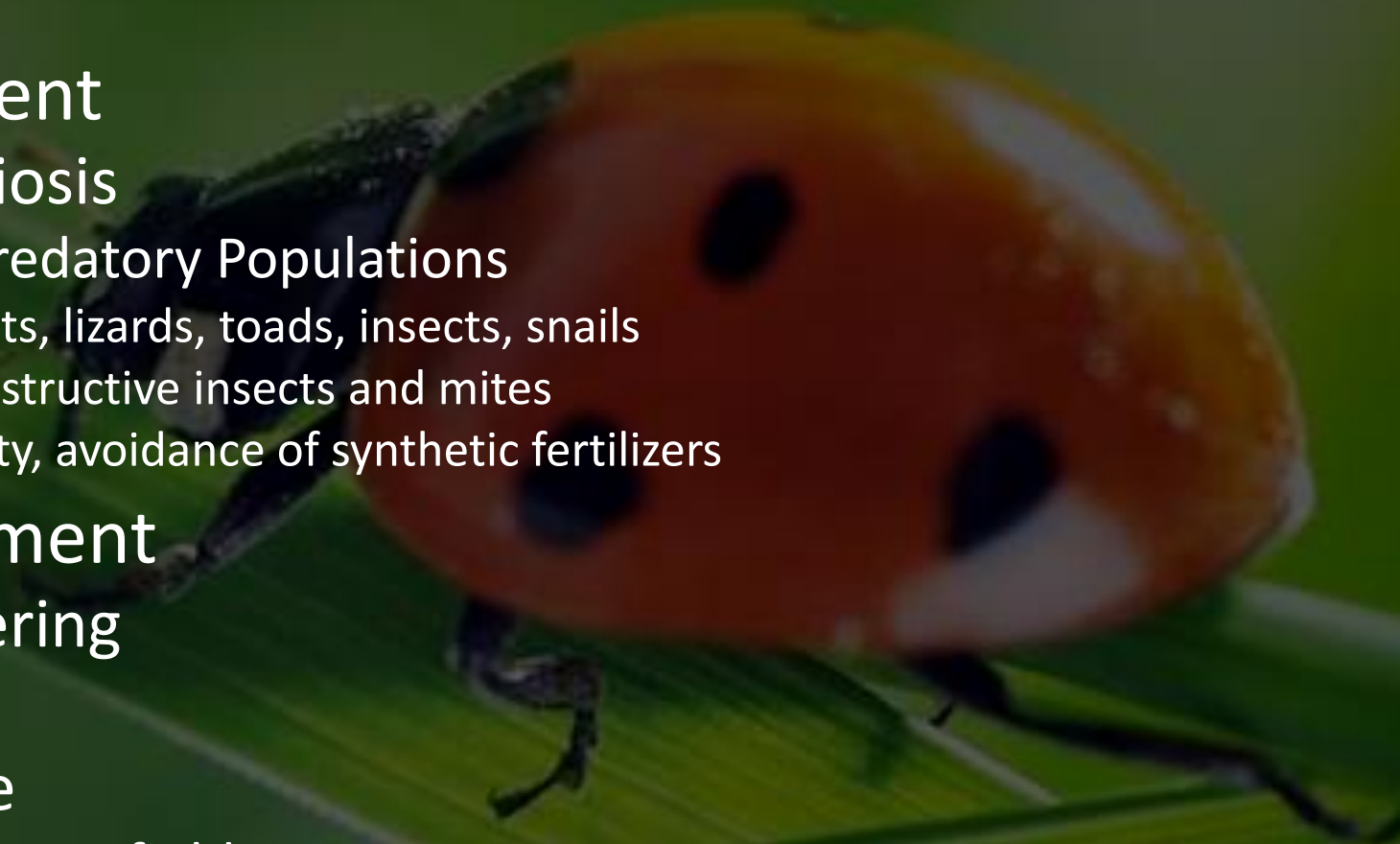
- Weed Management

- Mulch smothering

- Plant power

- Weeder Geese

- Weed strawberry fields







## Synthetic Chemicals

- Remain active
- Contain contaminants
- Damaging salts
- Microorganism inhibition
- Toxic
  - Applicant threat



# Additional Concerns

- Plastic
- Sewage Sludge and Animal Manure
  - Potential health hazards
    - Heavy metal and pathogen accumulation
  - Raw Manure
    - Ammoniums and Proteins
    - Complex undigested compounds
- Fossil Fuels
  - Person Power > Machines
  - Transportation





A photograph of a vegetable garden. In the foreground, there are several rows of young green plants, possibly lettuce or spinach, growing in dark mulch. A wooden fence runs across the middle ground, separating the garden from a background of dense green trees. A person wearing a blue shirt and jeans is visible in the background on the left side, standing near the fence. The word "Questions?" is overlaid in white text in the center of the image.

Questions?