

Organic Agriculture Practices

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Soil Health and Fertility

Crop Rotation - growing different crops in the same field in a planned sequence to improve soil, reduce pests, and prevent nutrient depletion.

Composting -breaking down organic materials such as food scraps, leaves, wood, manure into nutrient - rich soil amendment.

Cover Cropping - planting certain certain crops between main crops to protect soil, add nutrients, and reduce weeds.

No - Till - avoiding plowing or tilling the soil, reduces erosion, protects soil organic matter, and retains moisture.

Soil Nutrients

Nitrogen
nutrient that helps with plant growth.

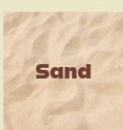
Phosphorus
nutrient that helps with energy transfer.



Potassium
Improves disease resistance and strengthens plants to handle stress.

Organic Matter
Improve soil structure, holds water better, feeds microbes

Soil Structure



Pest and Disease Management

Biological Pest Control - utilizing natural predators like ladybugs, birds, or beneficial bacteria can reduce the need for pest control.

Crop Diversity - growing a mix of crops to improve resilience and reduce pest pressure.

Trap Cropping - planting a crop that attracts pests away

Common Crop Pests in KY and Organic Control Methods



Corn earworm

(C) UK Entomology

- Pheromone traps
- Beneficial insects
- Row Cover



White grubs

(C) UK Entomology

- Beneficial nematodes
- Natural enemies (e.g., parasitic wasps)
- grubGONE (OMRI listed)



Cucumber beetle

(C) UK Entomology

- Crop Rotation
- Removing crop residue
- Row Covers



Squash bug

(C) UK Entomology

- Crop Rotation
- Removing crop residue
- Row Covers
- Neem oil
- Insecticidal soap (OMRI listed)

Water Management

Drip Irrigation - Watering plants slowly and directly to the roots through tubes or pipes with smaller drainage.

Rain Water - Water collected from rainfall.

Mulching - Covering soil with materials like wood chips, straw, leaves, or plastic, to retain moisture, suppress weed, and protect the soil.

Other Practices

- Agroforestry
- Alley Cropping
- Soil Testing
- Organic Livestock Practices

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KYSU Resources

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