The National Organic Program’s Permitted Pest and Weed Management Practices

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Objectives
Students will be able to discuss:
1. The NOP’s 3-tiered approach for pest management
2. Permitted practices for weed management
3. The Organic Materials Review Institute (OMRI) and the Washington State Department of Agriculture (WSDA) Organic Food Program

Crop pest, weed, and disease management practice standard

- Promotes a holistic approach to pest management.
- Discourages product substitution.
- Crop management practices must be used to limit buildup of and to manage crop pests, weeds, and diseases.
- Three levels of pest management.

Level A – Design a System Resilient to Pests

1. Preventive measures
2. Crop rotation
3. Soil and crop nutrient management
4. Cultural practices that enhance crop health

Level B

Mechanical, physical and biological methods

Pertinent regulations

Subpart C - Organic Production and Handling Requirements
- § 205.206: Crop pest, weed, and disease management practice standard.

Weed Management Practices – Level B

1. Mulching with fully biodegradable materials.
2. Mowing.
3. Livestock grazing.
4. Hand weeding and mechanical cultivation.
5. Flame, heat, or electrical techniques.
6. Plastic or other synthetic mulches:
   - Must be removed from the field at the end of the growing season.

Level C
Biopesticides and National List Allowed Materials

- Biological or botanical substance.
- Materials from the National List of Allowed and Prohibited Substances.
- Document conditions for use in the organic system plan.

Citric Acid Types

- Active Ingredient: Citric Acid
- Vinegar included as an inert ingredient
- Alldown, Ground Force

Biological or Botanical Substances

Nonsynthetic Herbicides

- Matran EC, Avenger AG and GreenMatch EX, Weed Zap
Essential Oil Types
Matran EC, Avenger AG and GreenMatch EX, Weed Zap
- 50% clove leaf oil
- 55% d-limonene
- 50% lemon grass oil
- 45% clove oil
- 45% cinnamon oil

Corn Gluten Meal
- Byproduct of the corn wet-milling process.
- Potential as a natural preemergence herbicide.
- Inhibits root growth of germinating plants.
- Contains 10% nitrogen.

Medium-chain Fatty Acids
Active ingredients:
- 47% Caprylic acid
- 32% Capric acid

Allowed Synthetic Substances
1) Herbicides, soap-based— for use in farmstead maintenance (roadways, ditches, right of ways, building perimeters) and ornamental crops.

Organisms or their extracts

OPPORTUNE™
Pre and Post-Emergent Herbicide
For the control of listed annual grasses, broadleaf and woody weeds.
Active ingredients: Nitrilised non-selective Shearomics acidichlorides
Other ingredients: ................................................................. 17%
Total: .............................................................................. 100%
Product contains not less than 1 mg/hri Thiosulfin A.

Soap-based Herbicides
- Racer Concentrate Non-Selective Herbicide
- Final-San-O
- Axxe
Allowed Synthetic Substances

1) Herbicides, soap-based—for use in farmstead maintenance (roadways, ditches, right of ways, building perimeters) and ornamental crops.

2) Mulches
   i. Paper
   ii. Plastic mulch
   iii. Biodegradable biobased mulch film

Biodegradable Biobased Mulch Film

- Must be produced without organisms or feedstock derived from excluded methods.
- Mulch and pigment made from Mater-Bi corn starch.

Paper Mulches

- Newspaper or other recycled paper, without glossy or colored inks.

http://agsyst.wsu.edu/MulchReport03.pdf

Plastic Mulches

- Plastic mulch and covers: petroleum-based but not polyvinyl chloride (PVC)


Figuring out what is allowed
Organic Materials Review Institute

www.omri.org

- Nonprofit organization
- Reviews of substances for use in organic production, processing, and handling.
- Provides guidance on the suitability of material inputs under the USDA NOP standards.

What OMRI does not do

1. Review based on ingredients not on effectiveness.
2. Indicate whether federal and state registration has been obtained.

OMRI Brand Name Product List

Product applications are reviewed by OMRI staff. Summary and recommendation evaluated by an independent Review Panel of experts for compliance with the NOP National List.

Products listed by OMRI as restricted:

- May be used only for certain uses or only under specific documented conditions.
- Organic certifying agency should be consulted on use of restricted products.

OMRI Brand Name Product List

Products that comply are listed. Allows use of the OMRI Listed® seal on labels and in advertising and promotions, indicating suitability for use in certified organic production.

Washington State Department of Agriculture

- Reviews products for compliance with the National Organic Standards.
- Issues a material registration certificate.