

Everyone Can Garden! Vegetable Gardening for People with Physical and Other Limitations: **Pest Management in Your Vegetable Garden, June 1, 2021**

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Ohio AgrAbility's mission is to promote success in agriculture for Ohio's farmers and farm families who are coping with disability or a long-term health condition. Ohio AgrAbility provides education and resources to farmers, agricultural businesses and groups, healthcare, education and disability professionals, and anyone interested in making farming safe and accessible.

The Ohio State University Extension Master Gardener Volunteer

(MGV) program provides intensive training in horticulture to interested Ohio residents who then volunteer their time assisting with educational programs and activities for Ohio residents through their local OSU Extension county office.

Be Aware of Your Limits

- Modify work practices – activities
- Be aware of environmental factors.
- Medications can cause sensitivity to sun, heat, certain plants, numbness/neuropathy.
- Fatigue, heat stress, dehydration

Safety First! Prevent Slips, Trips and Falls

- Be aware of your environment.
- Wear the right shoes.
- 2 - 3 points of contact
- Keep your hands free.

Use Safe Lifting Techniques

- **Wide stance** - feet should be shoulder width apart, head in neutral position over shoulders.
- **Keep object close** and in line with your **nose & toes**.

- **Bend at your legs, not your back.**
- Use stomach muscles and breathe **OUT** when you lift.
- Use the strongest part of your body – **your legs!**

Water is essential... and hoses can be heavy!

- Plant your garden near a water source or have a plan to get the water to the garden.
- Stay hydrated. Always keep an insulated water bottle with you.

Protect your fingers, hands, and wrists. Save your fingers.

- Avoid repetitive use of your fingers.
- Use neutral hand position (natural bend at your wrist, thumb on top (towards the sky)).
- Poor hand position – no bend at wrist, thumb and hand twisted into uncomfortable position.
- Use grippy gloves (textured palm and fingers to add grip without little effort).
- Use tools with a "spring action design" to reduce hand strain.

Ergonomic tools are designed to keep the body in a neutral position.

- Made with large, soft handles.
- Depression or ridge on top of the tool.
- Curved to fit the natural contour of the hand.
- Keeps wrist in neutral position with thumb on top.

Long handled tools

- Work standing or sitting.
- Provides more leverage.
- Two-handed grip distributes the workload to larger muscle groups.
- Ergonomic handles can be added for ease of use/comfort.

Integrated Pest Management (IPM) Involves Multiple Strategies

Cultural

- Resistance
- Rotation
- Sanitation
- Traps

Biological

- Pathogens
- Parasites
- Predators

Chemical

- Botanicals
- Soaps/oils
- Synthetics
- Desiccants

Using Integrated Pest Management (IPM)

- Step 1 – know the plant.

- Step 2 – know the problem.
- Step 3 – determine the options.

IPM Cultural Practices

- Use resistant host plants.
- Fall garden clean up.
- Eliminate pest hiding places.
- Eliminate weeds.
- Rotate crops.
- Hand-pick pests.
- Tolerate some damage.
- Plant earlier or later to avoid pest.
- Plant/pest interactions
- Use traps, borders, and barriers.

IPM Biological Practices

- Natural enemies of pests
 - Predators
 - Parasites
 - Pathogens
- To encourage natural enemies
 - Provide habitat for natural enemies.
 - Provide food source for natural enemies.
 - Plant attractant plants
 - Use "soft" pesticides.

IPM Chemical Practices

- Use as last resort for pest management
- Target the specific pest.
- Know the life cycle of the pest.
- Use the least "toxic" for the pest

Pest management

- Weeds
 - Hand removal
 - Herbicides
 - Preen
 - Active ingredient – trifluralin
 - Avoid glyphosate in season.

BEFORE Seeding: Broccoli, Brussels Sprouts, Cabbage, Carrots, Cauliflower, Celery, Collard, Black-Eyed Peas, Field Peas, Green Peas, Kale, Lentils, Lima Beans, Mustard Greens, Okra, Radish, Southern Peas (Cow Peas), Snap Beans, Turnip Greens.

AFTER Seeding or Transplanting: Cantaloupes, Cucumbers, Watermelons. Apply after plants have developed 5 or more leaves.

AFTER Planting: Potatoes - May be applied after planting, before or after emergence. Use care not to damage seed pieces in cultivating nor allow treated soil to contact emerged plant foliage.

BEFORE Transplanting: Celery, Broccoli, Brussels Sprouts, Cabbage, Cauliflower, Eggplant, Peppers, Onions, Tomatoes.

Perennial Vegetables: Asparagus - Apply prior to spear emergence of established plants.

Mulching for weed control and to retain moisture.

- Black plastic
- Landscape fabric
- Organic materials
 - Straw
 - Grass clippings
 - Compost
 - Leaf humus
 - Newspaper

Pest management

- Insects and diseases
 - Identify pest first and foremost.
 - Understand the life cycle and behavior.
 - Use targeted controls for the specific pest.
- Rodents
 - Exclusion, fencing

Handouts, videos and resources for this webinar series can be found at the Ohio AgrAbility website

<https://agrability.osu.edu/resources/webinars-and-handouts-2020-2021>



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