PESTICIDE BASICS

• Always read and follow the label for safety. Plus, it’s the law!
• Identify your problem first. Each product only works on certain pests.
• Look for organic-approved labeling such as that from the Organic Materials Review Institute (OMRI) or an equivalent.
• Remember that “organic” does not mean a product is safe or non-toxic.

RESOURCES

Need help identifying your problem? You can send a photo of the plant or insect in question to greenline@phipps.conservatory.org and Phipps Master Gardeners will help you with identification.

For more information, visit phipps.conservatory.org/pest.

WHAT IS IPM?

Integrated Pest Management (IPM) uses all tools and techniques at your disposal to manage pests, instead of relying solely on pesticides.

• Focus on preventing problems in your lawn and garden.
• Use physical controls often instead of chemicals.
• Spray plants off with water once a week.
• Prune out infested parts of plants.
• Remove pests by hand.
• Reducing chemical usage promotes beneficial insects, which help control pests.
• Only about 0.1% of all known insects are potential pests!
**GREEN**

- Use eco-friendly landscape practices to promote healthy plants that resist pests.
- Choose pest- and disease-resistant plant varieties.
- Add plants that attract beneficial insects to your garden.
- When needed, lower-risk insecticides like horticultural soaps and oils may be used, always following the label.
- Accept some weeds: dandelions and clover are beneficial to pollinators and other insects.
- Suppress weeds physically or pull them out by the root before they set seed.

**YELLOW**

- After you identify the pest, use biologically-based insecticides, such as Bt products, spinosad or neem oil if needed.
- As a last resort, use a pyrethroid, such as cyfluthrin or deltamethrin.
- A lower-risk option for grub control is the active ingredient chlorantraniliprole.
- Always follow the product label to avoid impacting non-target organisms.
- For difficult areas, use vinegar to manage weeds. Use care as this is a broad spectrum herbicide that can damage desirable plants.

**RED**

- Never use a pesticide without knowing a pest is actually present.
- Avoid higher-risk, broad-spectrum synthetic insecticides, such as those listed below:
  - Organophosphates (e.g., malathion, trichlorfon, chlorpyrifos)
  - Carbamates (e.g., carbaryl)
  - Neonicotinoids (e.g., imidacloprid, clothianidin, acetamiprid, dinotefuran)
- Avoid using herbicides, including fertilizer-herbicide mixes (“weed and feeds”).

**LABELS**

- Always read and follow the label instructions on any pesticide.
- The list of active ingredients is on the front in small print.
- Be sure the label has an “EPA Reg. No.”
- Look for the signal word “CAUTION” on the front label, which indicates a relatively lower-risk product.
- Avoid products with signal words such as “WARNING,” “DANGER,” and “DANGER — POISON.”
- View and download a detailed guide on how to read pesticide labels on our website at phipps.conservatory.org/pest.