

Getting Started with Integrated Pest Management

Pests come in many forms--from insects, plant diseases and weeds threatening our food and fiber crops, to human disease-carrying mosquitoes, ticks and rats. Whenever pests become a problem, **Integrated Pest Management (IPM)** is the answer. **IPM is a sustainable approach to managing pests** that combines biological, cultural, physical, and chemical tools in ways that minimize economic, health and environmental risks. IPM integrates a variety of methods to sustainably safeguard our food, our health and the environment from pests. IPM emphasizes least-



impactful methods first and can include methods such as conserving natural enemies, pulling, tilling, mulching or burning weeds, maintaining proper physical conditions in food storage, installing barriers such as screens or row covers to keep pests out, physical destruction of pests, and other strategies. At times, pesticides may be necessary. When pesticides are needed, emphasis is on precise and targeted applications of carefully selected products used primarily in combination with non-chemical methods. IPM is the basis of sound sustainable pest management in both organic and conventional systems and is an essential part of good land stewardship.

IPM relies on:

- **Prevention** practices such as selecting disease-resistant and weed-free seed, eliminating alternate pest hosts, blocking pest entryways, and using and good sanitation methods to prevent pests from invading and multiplying;
- **Avoidance** methods such as applying repellents, avoiding pest-infested habitat, adjusting planting or harvesting dates, planting cover or trap crops, or crop rotation;
- **Monitoring** the use of accurate identification and systematic assessment and recordkeeping of pests, damage, crop conditions and weather to make sound treatment decisions; and
- **Suppression** using combinations of cultural, physical, biological or chemical means to suppress pest populations so that they don't reach damaging levels.

Some examples of IPM methods:

- Covering plants or installing fences to keep pests out
- Eliminating standing water to minimize disease risk
- Making pest management decisions based on risk models and weather, scouting, and/or trap data.
- Conserving or augmenting natural enemies and pollinators.
- Mulching, tilling, heat-treating or hand-pulling weeds.





IPM relies on pest monitoring, sometimes with the use of traps or nets to keep tabs on pests and avoid unnecessary sprays.



Benefits of IPM

IPM helps control costs and maintain or improve profitability while positively impacting the environment and human health. IPM typically reduces the use of higher risk pesticides, sometimes eliminating the need for pesticides altogether. IPM works well in schools, businesses, homes, and gardens, too. The benefits of IPM include:

- Protecting the natural resources
- Protecting wildlife, beneficial insects and endangered species
- Preventing the degradation of soil, water, and air quality
- Ensuring a safe supply of food and fiber products
- Sustaining the viability of farms and other natural resource-based businesses
- Safeguarding the health of workers and their families
- Safeguarding human health and the environment in and around schools, businesses, parks and homes.

Want help getting started? Need help solving a pest problem?

- County Extension Offices (technical support and problem solving): <u>http://extension.umaine.edu/county-offices/</u>
- UMaine Extension Pest Management Office (pest identification and problem-solving): www.umaine.edu/ipm, 1-800-287-0279
- Natural Resources Conservation Service (technical and financial resources for IPM planning and implementation): www.nrcs.usda.gov/wps/portal/nrcs/site/me/home/207-990-9100
- ME Organic Farmer and Gardener Association: http://mofga.org/AgriculturalServices/tabid/130/Default.aspx
- Northeastern IPM Center: <u>www.northeastipm.org</u>
- ME Department of Agriculture, Conservation and Forestry:
 - Board of Pesticides Control (pesticide information and licensing): <u>www.thinkfirstspraylast.org</u>.
 - IPM Program (IPM planning tools): <u>www.maine.gov/ipm</u>
 - <u>http://www.gotpests.org</u> (DIY pest ID and management tips)

This Message Brought to You by....The Maine Integrated Pest Management (IPM) Council – an 11-member panel established by state legislature to identify, promote and enhance the use of IPM practices that reduce or minimize harmful environmental and human health impacts of pesticides and other pest management tactics.

Find out more at <u>www.maine.gov/ipmcouncil</u> or contact: Hillary Peterson, 207-215-4793, <u>hillary.peterson@maine.gov</u> or Jim Dill, 800-287-0279, <u>james.dill@maine.edu</u>

