

# FACT SHEET 7.1 INTEGRATED PEST MANAGEMENT

Along with the many benefits of hobby farming can come challenges, including the control of pests and disease. Integrated Pest Management (IPM) is an ecologically based approach for preventing, monitoring, and controlling pests, while eliminating or reducing the use of pesticides.

PESTICIDE USE CAN BE HARMFUL TO PLANTS, ANIMALS, PEOPLE AND THE ENVIRONMENT, PARTICULARLY SURFACE AND GROUNDWATER RESOURCES. USING AN IPM APPROACH TO CONTROL PESTS, WEEDS, AND DISEASE CAN HELP MINIMIZE PESTICIDE USE.

# **IPM TECHNIQUES**

### **Prevention**

Prevention is the first line of defense for pest control. It often includes modifications in cultural practices to prevent or reduce pest populations by making their environment less favorable. Changes may include rotating crops, planting pest-resistant varieties, improving soil structure for better microbial activity or implementing good housekeeping measures. Prevention can also include creating suitable habitat for the natural enemies of pests to thrive – a form of biological control to better manage pest populations.

# **Monitor and Identify**

Monitor your hobby farm area for pests, weeds, and/or disease and be sure to identify specific problem areas. Population levels should be noted along with those of any natural enemies. Remember that not all insects, weeds, or other pests require control and some can be beneficial.

# **Set Action Levels**

The presence of a single pest (or two) does not necessarily mean that there is a problem requiring control. Setting an action level or threshold for applying pest controls helps to determine at what point action to reduce the population should be taken. This limit will be different for each hobby farm and is based on the level at which the pest becomes a threat or surpasses the point tolerable.

# **CAUTION!**

Pesticide use should be limited since these chemicals can:

- Pose a threat to human and animal health
- Pollute groundwater and surface water
- · Disrupt biological activity in healthy soil
- Eliminate non-target species including pollinators
- Persist in crops and enter food supplies



#### Control

Once action levels have been met and it is clear that prevention methods are no longer effective then pest control may be necessary. Evaluating the proper controls should begin with mechanical options including trapping, weeding or barrier methods. If these are not effective then chemical controls can be considered starting with those that are target specific as opposed to those that broadcast spray non-specific pesticides.

#### **Evaluate and Record**

Once control methods have been implemented, an evaluation of the effectiveness of your efforts should be completed and recorded. Since pest problems can often exhibit trends and patterns, it is recommended that your monitoring, outbreak, and treatment method information be recorded. This will help next season to select more effective prevention and control methods if needed.

IPM IS NOT A SINGLE CONTROL METHOD, BUT A DECISION-MAKING PROCESS THAT REVOLVES AROUND MONITORING, PREVENTION, CONTROL AND EVALUATION. IPM CAN SUCCESSFULLY BE USED FOR ANY SIZE HOBBY FARM.

#### WATER QUALITY BENEFIT

IPM aims to help naturally regulate pest populations to a level where they have no impact on your hobby farm activities. Creating an undesirable environment for disease, certain insects, rodents and other unwanted pests can help eliminate the need for pesticide use that could otherwise have lasting environmental and water quality impacts.

#### **HELPFUL LINKS**

www.ag.umass.edu/greenhouse-floriculture/fact-sheets/integrated-pest-management www.extension.unh.edu/Integrated-Pest-Management/IPM-Publications www.nrcs.usda.gov/wps/portal/nrcs/detail/national/home/?cid=nrcs143\_023552 www.npic.orst.edu/pest/ipm.html