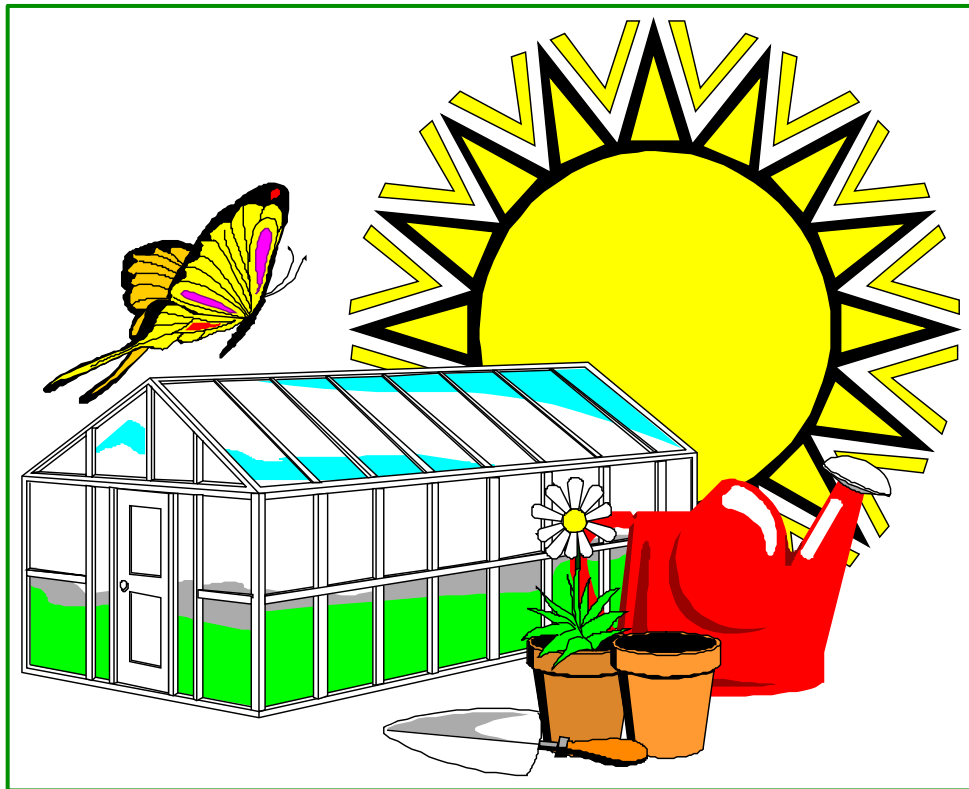


School Greenhouse Curriculum



Taking an Integrated Pest Management Approach

Table of Contents

Curriculum Introduction

Provides background in integrated pest management (IPM) and the 6 steps of IPM; briefly discusses the connections between pesticide use, the environment and human health, provides general resources for the five lessons.

Anyone’s Town.....Lesson 1

First published in 1962, the book Silent Spring, by Rachel Carson, alerted the world to the dangers of misusing chemical pesticides. The effects of chemical pesticide use described by Carson can occur in any town, in any place. This activity is designed to introduce students to possible environmental and health hazards of chemical pesticides and allow them to begin exploring other means of managing pests besides using synthetic, chemical pesticides. Students will discuss the term “pest” and tactics used to manage pests, read an excerpt from Silent Spring, discuss IPM, and apply the steps of IPM to a given scenario.

Whatcha Got There?.....Lesson 2

“What’s that?” This is usually the first sentence uttered when an organism is found in an unexpected or unwanted place. Properly identifying the organism is the first step in a successful integrated pest management (IPM) plan, and understanding its biology is the second step. This lesson allows students the opportunity to scout for pests and signs of injury in the greenhouse, properly identify the organisms they find, and learn about the pest’s biology.

How Many Pests Are There?.....Lesson 3

“What should I do? I found a pest!” After finding an unwanted organism or disease in the greenhouse, it must be scientifically determined if action needs to be taken to manage the pest. Routine scouting for pests and monitoring their populations are the foundations for making your integrated pest management (IPM) plan successful. This lesson has students routinely scouting for pests they identified in the previous lesson, create a scouting report, and maintain accurate records. They will also have the opportunity to design and employ different monitoring techniques.

Aphids, Aphids, Everywhere!.....Lesson 4

“Aphids are destroying the plants in the greenhouse! What do I do now?” First, it must be determined if action is necessary and if so, what actions should be taken? What are the costs and benefits of managing the pest versus doing nothing? In this activity, students will research, recommend, and possibly implement different management tactics if the tactics are found to be

warranted and cost effective. Focus will be directed at using biological control (biocontrol) options to address current pest problems in the greenhouse

We Have What You Want!.....Lesson 5

In the 21st century, consumers are driving the market towards items grown and built in more environmentally friendly ways. It is the perfect time to give them what they want. In this lesson, students will design advertisements educating the public about IPM and the dangers of pesticide use, while promoting the use of IPM in raising the greenhouse crops.