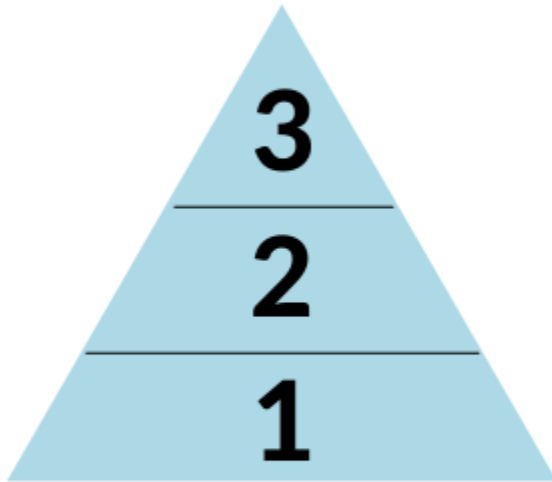




Notes with Answers for IPM Module

Definition of IPM

Name the building blocks of IPM.



1. *Knowledge*
2. *Decision making aids*
3. *Control Methods*

Identify the three components, or main aspects, of the definition of IPM.

1. *It is a decision making process.*
2. *It utilizes all available pest management tactics.*
3. *It can reduce risks to human health and the environment.*



Notes with Answers for IPM Module

The top of the IPM pyramid: Toolbox of pest management tactics

Describe the following pest management techniques.

Mechanical Controls

Either remove pests completely or prevent pests from accessing the plants. Includes barriers, traps, and handpicking.

Cultural Controls

Avoidance

Using cultural practices to keep pests away from plants, or avoiding environmental conditions that favor pests.

Eradication

Eliminating a pest or a key component in the pest's life cycle.

Sanitation

Eliminating the source of some pest problems. Includes fall cleanup to prevent overwintered pests. Also includes pruning out diseased tissue and cleaning tools and work areas.

Biological Controls

Conservation

Encourages beneficial organisms by preventing their destruction or providing additional resources.



Notes with Answers for IPM Module

Biological Controls, continued

Augmentation

Periodic release of natural enemies of the offending pest to supplement existing natural enemies.

Importation

Releasing foreign natural enemies against non-native pests. This is done through state and federal agencies.

Chemical Controls

Compare and contrast synthetic and organic chemical products.

Properties of organic pesticides	Properties of both	Properties of synthetic pesticides
<i>Derived from a natural source.</i>	<i>Toxicity can range from low to high depending on the active ingredient.</i>	<i>Derived from a lab; derived from chemicals.</i>



Notes with Answers for IPM Module

Describe the following chemical control categories.

Selective herbicide	<i>Herbicide that has activity on one group of plants, but little to none on other groups of plants.</i>
Nonselective herbicide	<i>Herbicide that has activity on/ injures any plant tissue it comes into contact with.</i>

Contact Herbicide	<i>Causes localized injury to plant tissue when it comes in direct contact. Requires good coverage to coat the plant. Kills above the ground only.</i>
Systemic Herbicide	<i>Herbicide that is either taken up through the roots or the leaves and moves internally through the plant.</i>

Pre-emergent Herbicide	<i>Herbicide that prevents germination and growth of seeds and young seedlings.</i>
Post-emergent Herbicide	<i>Herbicide that is applied to established plants.</i>



Notes with Answers for IPM Module

Pesticide safety

Fill in the toxicity category that matches the signal word.

Danger	Highly toxic
Warning	Moderately toxic
Caution	Slightly toxic
Caution	Low toxicity

Explain why it is important to understand each component of a pesticide label.

Identifying information	<i>If you have identified a specific pest issue, you'll need to find the recommended active ingredient.</i>
Signal Word	<i>Signal words are tools to quickly identify the relative toxicity of a pesticide.</i>
On what and where the pesticide can be used.	<i>You will need to know where the pesticide can be used, as well as where it is prohibited. This protects plants and the environment.</i>
Identify pest the product controls	<i>You'll want to be certain the pesticide will work on your identified pest.</i>



Notes with Answers for IPM Module

	<i>You also want to choose the most selective pesticide possible.</i>
How much and how often to use the product	<i>By following the proper amount and frequency guidelines, pesticide use is less likely to have unintended outcomes from over or under use.</i>
Timing of application	<i>Timing of the application may vary to reduce harm to the host plant or to be more effective to the pest.</i>
Safety information	<i>This additional information reduces risk to the consumer.</i>
Time to reentry and/or harvest	<i>This information reduces risk to the consumer.</i>