

Lesson Number 3

Title: Pesticides and Risk

Purposes / Objectives

- To define the meaning of the term 'pesticide.'
- To describe and discuss 'risk' -- in general, and risks common to agriculture.
- To list and discuss the factors that affect people's perception of risk.
- To identify ways to manage pesticide risk.

Materials

Required

- Paper
- Pencils

Optional

- Pesticide Containers (empty and rinsed, clean)

Methods

Ask the growers to answer the three questions that follow.

Take notes, and/or ask one of the growers to record the responses of the group.

First: What is a pesticide?

Ask growers to make up a definition of the word 'pesticide.' If necessary, ask questions to help guide them to this definition:

A pesticide is any substance used to control a pest, or to reduce the harmful or unwanted effects of a pest. To be considered a pesticide, a substance does not have to kill a pest. Some pesticides repel pests from a crop or site. Other types (ex. growth regulators like neem) may cause a pest to stop feeding or keep the pest from reproducing.

(A pesticide helps to manage one or more types of pests. Pesticides that control insect pests are called insecticides. Fungicides cure or prevent plant diseases. Pesticides that control weeds are called herbicides.)

Second: What is a risk?

Ask growers to construct a definition of the word 'risk.' If necessary, ask questions or give examples to help them reach this definition (or something equivalent):

A risk is the possibility of danger or harm. It is the chance of loss or injury.

Ask growers to name some risks people in Mali take.

Examples include vehicle (bus, moped, bicycle) accidents, sports injuries, living with diseases that occur naturally in a region (like malaria), diseases caused by smoking, others...

Ask growers to name some risks farmers take:

Injury from hard, heavy work.
Heat stress from hard work in hot weather.
Loss of crop (ex. to insects, diseases, bad weather.)
Illness or injury from exposure to pesticides.

The conclusion is that most of us take risks in life...some more than others. Most people do not want to take unnecessary, foolish risks.

Third: How can farmers reduce the risks involved in handling pesticides:

If you have a clean, rinsed pesticide container, read the General Precaution section of the container label. If you do not have a container, refer to the Notes section at the end of this lesson.

After reading the precautions, ask growers to summarize what the label is telling you about the product and its dangers.

Next, ask growers for their ideas about pesticide risks in general.

Try to get them to give these two answers:

1. Reduce toxicity. Reduce the risk that you will handle something poisonous.
2. Reduce exposure. When you do handle a pesticide, reduce the chance you will come into contact with it.

Summarize: Pesticide Risk = Toxicity x Exposure

The risk of handling pesticides is equal to the toxicity of the pesticide times the amount of the pesticide you're exposed to (ex. touch or breath.)

Add questions if/as appropriate.

Discussion

Summarize and review the growers' responses. Be sure all the points they want to make and any questions they ask are recorded.

Conclusion(s)

FFS Leader:

Remind the growers that Pesticide Risk = Toxicity x Exposure

The risk of handling pesticides depends on:

- how poisonous the pesticide is to humans, and
- how much you're exposed to the material.

Tell the growers we will have a lesson about how to reduce toxicity, and two lessons about how to reduce exposure.

Notes

General Precautions for Decis 12EC

This product is dangerous. Handle with caution.

While handling this product, wear gloves. Do not smoke, drink, or eat.

Do not let this product (in pure or diluted form) come into contact with your eyes. Do not breathe spray mists.

Wash carefully with soap and water and change your clothes after application.

Store this product in a secure, well-ventilated location, out of the reach of children, away from food or animal feed, away from an open flame or heat source.

Destroy the empty container. Do not reuse it.