



Information

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Check out the Pesticide Education and Assessment Program web site at <http://pesticide.umd.edu>

Understanding Pesticides

Pesticide Information Leaflet No. 27

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February 1999

Definition

A pesticide is any substance that is used to control pests by killing them, by interfering with their reproduction, or by other means. The following are all types of pesticides:

Antifoulants control fouling organisms on boat hulls.

Avicides control birds.

Defoliants cause leaves to drop from a plant.

Desiccants promote drying or loss of moisture in plant tissues.

Disinfectants control bacteria, molds, and mildew.

Fungicides control fungi that cause plant disease; also molds and mildews.

Growth regulators are substances other than fertilizers or food that alter the growth or development of a plant or animal.

Herbicides control weeds or unwanted plants.

Insecticides control insects and related arthropods such as mites and ticks.

Molluscicides control snails and slugs.

Rodenticides control rats, mice, and other rodents.

Wood preservatives control insects and fungi that damage wood.

Regulation of pesticides

The Environmental Protection Agency (EPA) is responsible for regulation of pesticides in the U.S. No pesticide may be sold in the U.S. before the EPA has reviewed the manufacturer's application for registration and determined that use of the product will not present an unreasonable risk to humans or the environment. A pesticide that passes EPA's scrutiny will be registered for use on specific crops or sites, with specific directions for how the product is to be used. The presence of an EPA

registration number on the product's label indicates that the product has been reviewed by the Agency; any product claiming to kill or control pests that does not bear an EPA registration number is illegal in the U.S. and should not be used.

Benefits

When used properly, pesticides can benefit humans and the environment. Pesticides control important crop pests, allowing us to have a plentiful and diverse food supply. They prevent diseases of humans and animals. They control pests that infest our homes, schools, hospitals, food warehouses, and other buildings.

Risks

Pesticides are designed to be toxic to the pests they control. They may also pose risks to humans and wildlife. The EPA evaluates pesticides to determine that they should not cause undue harm when used as directed on the label. Therefore, it is extremely important that pesticides be used only in strict accordance with the label. A pesticide should never be used on a crop, plant, or site for which it is not labeled, and should never be applied more frequently or at a different rate than the label allows. Risk is a factor of both toxicity and exposure; by choosing alternative measures when feasible; using pesticides sparingly; wearing

the proper protective gear (as indicated on the label); and applying, storing, and disposing of pesticides properly, any potential risk can be minimized.

Responsible use

Pest control involves more than simply identifying a pest and using a control tactic. The treatment site, whether an indoor or outdoor area, usually contains other living organisms which could be affected by the pest control measures you choose. Air flow, water, soils, structures, objects, and surfaces should be considered, too, to avoid unwanted effects. Both pesticides and non-chemical means of control can impact the system. Unless you consider the possible effects on the entire system within which the pest exists, your pest control efforts could cause harm or lead to new pest problems.

Further information on pesticides

To find out more about pesticides, visit the Pesticide Education and Assessment Program (PEAP) and Integrated Pest Management (IPM) home pages, accessible on the Internet at <http://pest.umd.edu>. You can also call the University of Maryland Home and Garden Information Center at 1-800- 342-2507 or your county Cooperative Extension office, listed in the blue pages of your telephone book.