

Proper use of Pesticides, Herbicides and Fertilizers

A pesticide is a substance or mixture of substances intended for preventing, controlling, repelling or destroying pests such as weeds or insects. Herbicides are a subset of pesticides, used to control growth of unwanted plants such as weeds. A fertilizer is a substance that contains essential plant nutrients such as nitrates and phosphates used to promote healthy plant growth.

Pesticides, herbicides and fertilizers can be of great benefit when used correctly. Pesticides and herbicides are designed to protect plants from insects or weeds, while fertilizers allow plants to grow healthier and more rapidly than under normal circumstances. While these products can be beneficial, their excessive and incorrect use can adversely affect the environment, flora and fauna and ultimately human health.

Stormwater runoff containing these chemicals can enter into water bodies killing or damaging a variety of organisms. The nitrogen from fertilizers that are washed into water bodies by stormwater runoff depletes the oxygen in the water creating "dead zones". Fertilizers can disrupt natural biological communities by increasing plant and microbial growth and changing the natural water ecosystem subsequently disrupting the food chain. When these chemicals dissolve in storm water they can migrate into our drinking water supplies or end up in surface waters.

Proper use of Pesticides and Fertilizers:

South Florida soils allow nutrients to drain away from plants roots system quickly, so fertilize responsibly. Always know when, how often, and what type of fertilizer to use. Lawn fertilization programs should begin in early October, not early May. Do not fertilize healthy trees and shrubs; they should only be fertilized if they are growing poorly. If trees or shrubs need to be fertilized, fertilize when plants are dormant in late fall or early spring. Over fertilization will produce unnecessary growth requiring more pruning. Whenever possible, organic pesticides should be used. If a pesticide is necessary, it is important to determine the exact type of pest.

Avoid polluting by doing the following:

- ✓ Carefully read the manufacturer's directions.
- ✓ Always follow the pesticide, herbicide or fertilizer guidelines exactly.
- ✓ Buy and apply only the recommended amount of the product.
- ✓ Apply chemical to grass or landscape area avoiding driveways, sidewalks and impervious surfaces.
- ✓ Do not apply chemicals near water systems such as wells, streams, canals, or lakes.
- ✓ Clean up excess always avoiding getting them into the storm drains.
- ✓ Chemical leftovers should always be properly stored.
- ✓ Take precautions to prevent spills and know what to do if a spill occurs.

For more information visit:

[UF/IFAS Extension: Florida-Friendly Landscaping: The Smart Way to Grow.](#)

Remember, ONLY RAIN DOWN THE DRAIN!

