#### **UF IFAS Extension** UNIVERSITY of FLORIDA

# **UF/IFAS Extension Hendry County**

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## **Pesticides and Pesticide Formulations**

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A pesticide is any chemical which is used by man to control pests. The pests may be insects, plant diseases, fungi, weeds, nematodes, snails, slugs, etc. Therefore, insecticides, fungicides, herbicides, etc., are all types of pesticides.

A pesticide chemical can rarely be used as originally manufactured. Typically, the pesticide must be diluted with water, oil, air or a chemically inactive (inert) solid so that it can be handled by application equipment and spread evenly over the area to be treated.

In addition, in most cases the basic active ingredient cannot be added directly to water or mixed in the field with solids, so the manufacturer must further modify his product by combining it with other materials such as solvents, wetting agents, stickers, powders, or granules. The final product is called a pesticide formulation and is ready for use either as packaged or diluted with water or other carriers.

### **Goals of This Module**

- Learn the different types of labeled pesticides.
- Be able to determine what type of pesticide should be used to control different pests.
- Understand that different pesticides attack pests in different ways and that these differences require that pesticides are used according to label directions.
- Learn the definitions and abbreviations for types of formulations.
- Determine what to consider in choosing the best formulation and when to use it.
- Understand the dangers of these formulations and the steps you need to protect yourself.

If you must use a pesticide, be sure you know which type of pesticide you need to use, as well as how and when to apply it effectively.

Choosing the pesticide and the right formulation can make the difference between successful control or a failed application that does more harm than good.