

● BASIC INFORMATION ABOUT PESTICIDES ●

WHAT IS A PESTICIDE?

By law, a pesticide is "any substance or mixture of substances intended for preventing, destroying, repelling, or mitigating any pest." This definition includes insecticides, herbicides, fungicides, rodenticides, and antimicrobials as well as plant growth regulators, defoliants and desiccants.

It is important to note what this definition does *not* include. Pesticides kill or damage pests, but they don't solve pest problems. Solving a pest problem requires identifying the factors that allow the pest to thrive, and then changing those conditions so that the pest is no longer successful. At best, pesticides provide short-term respites from pests, and require repeated treatments to keep pest populations low.

Pesticides are unique chemicals. Designed to kill or damage living things, they are, as the National Research Council has written, "perhaps the only toxic substances that are purposefully applied to the environment."¹

A Legal Definition

The term pesticide is defined by the national pesticide law, the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA). According to FIFRA, a pesticide is "any substance or mixture of substances intended for preventing, destroying, repelling, or mitigating any pest."² FIFRA also adds plant growth regulators, defoliators, and desiccants to the legal definition of pesticides.²

"Pesticide" is commonly used as a synonym for insecticide, a substance which targets insect pests. However, under the legal definition all "icides" are pesticides: fungicides to kill molds and fungi, herbicides to kill plants, rodenticides to kill rodents, and antimicrobials for killing bacteria and viruses.³

What a Pesticide Is Not

A comprehensive definition of the term pesticide also needs to include what pesticides *don't* do. Pesticides kill or damage pests, sometimes very effectively. What they don't do is solve pest problems. Killing pests, in and of itself, is never the answer to a pest problem. Pest problems get solved when we



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figure out the causes of the problem, the factors that have allowed a pest to thrive. When these factors are addressed, a pest problem is truly solved.

Simply killing pests, instead of solving pest problems, leads to routine and repeated use of pesticides as pests need to be killed over and over again. The enormous amounts of pesticides that are currently used, after decades of widespread use, are a simple demonstration of this fact. There are over 800 different pesticides and over 20,000 products currently registered for use in the U.S.; total pesticide use is over 4.5 billion pounds annually.⁴ An estimated 4.4 billion applications are made annually in homes, yards, and gardens.⁵

If pesticides really solved pest problems, these enormous numbers would shrink.

References

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