



## Understanding Pesticides and Pest Control

From the office of Richard Molinar and Michael Yang – UC Cooperative Extension Fresno County and in conjunction with the U.S. Environmental Protection Agency (EPA).

### What are Pesticides?

A pesticide is any substance or mixture of substances intended for:

- preventing,
- destroying,
- repelling, or
- mitigating any pest.

This applies to insecticides as well as herbicides, fungicides, and various other substances used to control pests. Under United States law, a pesticide is also any substance or mixture of substances intended for use as a plant regulator, defoliant, or desiccant.

Pesticides are useful to society - Pesticides can kill potential disease-causing organisms and control insects, weeds, and other pests. But, at the same time, most pesticides create some risk of harm to humans, animals, or the environment because they are designed to kill or affect living organisms.

### What Substances are not Regulated as Pesticides?

The following examples are not considered pesticides and not regulated by EPA:

- Drugs used to control diseases of humans or animals (such as livestock and pets) are not considered pesticides; such drugs are regulated by the Food and Drug Administration.
- Fertilizers and plant nutrients are not pesticides.
- Biological control agents include good bugs such as ladybugs that eat insect pests.
- Products which contain low-risk ingredients such as garlic and mint oil, though State requirements through Department of Pesticide Regulation may still apply.
- A pest control "device" or any instrument (other than a firearm) intended for trapping, destroying, repelling, or mitigating any pest. A gopher trap is one example.

### Are Some Pesticides Safer Than Others?

There are over 886 different pesticides for insects, weeds, diseases etc., and over 10,000 when we consider all of the different trade names. Future issues of this newsletter will discuss the differences in pesticides and what makes some safer than others. Biologically based pesticides, such as pheromones and microbial pesticides, are becoming increasingly popular and often are safer than traditional chemical pesticides.

## **Kev Totaub Txog Tej Tshuaj Tua Kab Pesticides Thiab Tej Kev Tswj**

Tshwm sim tuaj ntawm Richard Molinar thiab Michael Yang – UC Cooperative Extension Fresno County thiab nrog rau hauv U.S Environmental Protection Agency (EPA).

### **Tshuaj tua kab Pesticide yog ab tsi?**

Cov pesticide yog tej yam tshuaj, los yog ntau yam tshuaj sib tov muab los siv rau:

- Kev tiv thaiv
- Tua
- Ua rau kom kab khiav mus
- Los yog ua rau kom tej yam phem txhob huam loj tuaj

Tej yam hais li nod tsis hais tej tshuaj tua kab, tshuaj tua nroj, los yog tej tshuaj tua kab mob thiab lwm yam tshuaj siv los tswj ntau yam kab. Nyob rau hauv United States txoj cai hais txog cov tshuaj xws li pesticide nws yog ntau yam tshuaj sib tim, los yog sib tov ua ke muab siv li cov plant regulator, defoliant, los rog cov desiccant.

Pesticide – cov tshuaj tua kab nod siv tua tau tej kab mob uas yuav ua tej teeb meem, thiab tswj tau tej kab, tej nroj thiab lwm yam. Tiam sis nyob rau thaum lub caij koj siv nod nws tseem yuav ua tej teeb meem tswm sim tuaj rau tej tib neeg, tej tsiaj los yog tej chaw noj chaw nyob rau qhov tej tshuaj no yog tsim los tua tej yam xws li kab thiab tej yam muaj txoj sia luag hu tias organisms.

### **Cov tshuaj twg thiaj li tsis muaj txoj cai tswj li cov tshuaj Pesticides?**

Cov nram qab nod yog cov luag tsis suav tias yog tshuaj pesticide nyob rau hauv EPA:

- Tej tshuaj siv pab tib neeg mob, los yog tej tsiaj txhu mus rau tej tsiaj tib neeg yug – cov nod yeej tsis muaj kev txwv li cov pesticide, cov tshuaj uas tau kev tso cai los hauv Food and Drug Administration yeej tsis suav ib yam.
- Tej chiv thiab kua chiv cov nod tsis yog pesticides.
- Khoov siv thasmabxaj mus rau tej kab zoo siv los tswj tej kab phem yeej tsis suav tias pesticide
- Tej yam tshuaj uas siv yuav tsis ua teeb meem loj tshwm tuaj yog hauv State Department of Pesticide Regulation txawm tswj los muaj tej yam yuav tsis suav tias pesticides thiab.
- Rooj ntxiab cuab nas, los yog tej yam khoom cuab kom txhob muaj tsiaj qus los txov – tej nod yuav tsis suav tias pesticides.

### **Pus muaj lwm yam tshuaj siv es yuav tsis muaj teeb meem loj?**

Nws muaj tshaj li 886 yam tshuaj pesticides siv los tswj tej kab, tej nroj, tej kabmob, thiab tshaj li 10,000 yam yog cov npe tshuaj. Tuaj tom ntej no mam qhia txog ntau yam tshuaj thiab yog ua cas ib txhia tshuaj ho yooj yim siv dua lwm yam. Tej tshuaj thamabxaj siv tswj tej kab xws li cov Pheromones thiab cov Microbial nod ua li cas ho nrov npe zuj zus tuaj thiab es ho tsis muaj teeb meem loj li cov tshuaj pesticides.