



Should I Use “Less Toxic Pesticides”?

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).

We learned that a pesticide is any substance or mixture of substances intended for killing, preventing, repelling and mitigating any pest.

Do less toxic pesticides work as effective in controlling pests?

The following are examples of less toxic chemicals, which provide good worm control and can be used on many vegetable crops:

- * BT's such as Dipel, Crymax, and Centari (bio-insecticide) are very effective for controlling worms. (BT stands for *Bacillus Thuringiensis*.)

There is no need to have a “danger and poison” category pesticide applied on a crop infested with worms when you have BT's available for control. BT is very effective for worm control, and it is the least toxic chemical to use. These bio-pesticides are designed specifically for worm control and are much safer for the family and environment. Remember, every pesticide label contains signal words that will help you understand how toxic the chemical is and the chemical label is the law, and you must follow pesticide label recommendations.

Should I use the less toxic chemical on my organic farm?

The used less toxic chemicals do not mean you can apply it on your organic farm because the chemical ingredients may have come from a non-living organism made from synthetic materials. An organically approved product comes from natural living or dead organisms, plants and animals tissues, sometime referred as bio-pesticides, which can and may be used for organic farming operations. If you are a certified organic producer, you may have to contact your local certifier for more information about approved materials used on organic farms.

Is there an alternative for weed control, and what least toxic chemical can be used? Later issues will explain in more detail.

Cia kuv siv cov tshuaj tsis tshua muaj zog puas tau?

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

Peb yeej paub tias tej tshuaj (pesticide) yog cov uas luag muab ntau yam sib tov, los yog ntau yam tshuaj los sib xyaws siv los tua kab, ua kom kab khiav mus, thiab ua rau kom muaj tej yam tsis txhob huam loj tuaj.

Siv cov tshuaj tsis tshua muaj zog los tua tej kab es nws puas pab tau thiab?

Cov tshuaj piv txwv nyob ntawm nov yog cov tsis tshua muaj zog nws tswj tau tej kab nyuam dev zoo heev thiab siv tau rau ntau yam qoob:

- * BT's cov Dipel, Crymax, thiab Centari _ bio insecticide, cov tshuaj nod nws siv tua kab nyuam dev zoo heev. (BT yog txhais tias Bacillus Thuringiensis.)

Tsis tas yus yuav siv tej tshuaj muaj zog xws li “danger & poison” los tua rau tej qoob uas nws muaj kab nyuam dev coob nyob rau ntawd, rau qhov twb muaj cov tshuaj BT's nod yog muab siv rau nws kuj zoo heev li. Cov BT (bacillus Thuringiensis) yog ib cov tshuaj tua kab nyuam dev zoo heev li, thiab nws kuj yog cov tshuaj uas tsis muaj zog uas yuav txov lwm yam tau. Rau qhov cov tshuaj bio pesticides nod yog luag ua los tua cov kab nyuam dev xwb thiab nws yuav tsis muaj teeb meem loj rau yus tsev neeg thiab tej chaw nyob ua noj ua haus. Nco ntsoov tias txhua lub phlaub tshuaj daim qauv tshuaj yuav qhia yus kom yus totaub tias nws muaj zog npaum li cas thiab daim ntawv (label) yog txoj cai yus siv lawm yuav tau ua kom raws nraim li daim (label) tau qhia.

Kuv siv puas tau cov tshuaj uas tsis muaj zog heev nov rau kuv cov teb thamajxaj (organic).

Siv cov tshuaj tsis tshua muaj zog nov nws kuj tsis tau txhais tias yuav siv tau rau txhua yam, vim yog muaj tej yam tshuaj luag kuj tsis yog muab los ntawm tej xyooob ntoo los, tej yam tshuaj muaj ntau yam sib tov nyob rau hauv. Cov tshuaj uas muab los ntawm tej yam uas muaj sia los yog xws li xyooob ntoo thiab ntawm tej tsiaj los uas hu tias (bio-pesticide) nod ces yus yuav siv tau rau tej liaj teb thamajxaj (organic). Yog koj cog qoob loo thamajxaj (organic) nod ces koj yuav tau noog nrog hauv koj lub nroog cov koom haum uas lawv pom zoo rau koj (certified) es noog lawv txog kev siv tshuaj los tua kab rau koj cov liaj teb organic.

Puas muaj tej yam yuav los pab tswj tej nroj thiab tej tshuaj los siv uas yuav tsis muaj teeb meem hnyav? Tuaj tom ntej no yuav hais txog ntxiv.