

Pesticides for the Home Garden and How to Use Them

Know you have a pest before using a pesticide.

Most insects, spiders and mites do no damage. In fact, some are beneficial because they attack and kill pest species. Even an insect species or plant disease that is normally considered to be a pest does no damage unless it has exceeded your personal tolerance for damage. Many weeds can be easily removed without using a pesticide; others are very difficult to control. You need to identify the species causing damage before you begin to consider what control measure to use. If you do not know ask an expert.

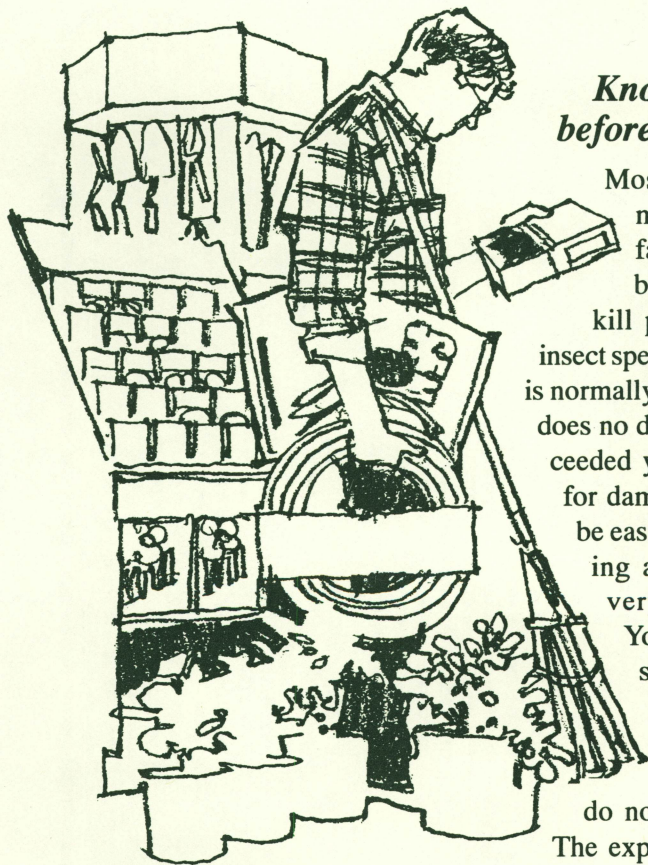
The expert may be a Cooperative Extension Agent, a master gardener, a trained sales person at the garden store, or an experienced gardener next door.

Take time to read the label.

All pesticide labels have vital information you should know before using the product. No pesticide takes care of all pests; that is why there are so many pesticides.

The label lists the specific insects, weeds or plant diseases it is effective against. If the pest or plant you have is not listed on the label, you have the wrong pesticide and you should not use it. Read all the instructions every time you use a pesticide; you may have forgotten or missed something important.

Pesticides that give rates in pounds per 100 gallons or pounds per acre are not formulations manufactured for home owners. Serious errors can be made in rates, they are usually more toxic than home owner materials, and the size of container is so large that you will not use it up before the pesticide becomes ineffective.



by Hugh W. Homan,
Gene P. Carpenter
and Edward J. Bechinski



University of Idaho

College of Agriculture

Cooperative Extension System

CIS 1019

Sample Pesticide Label

PRECAUTIONARY STATEMENTS HAZARDS TO MAN AND ANIMALS

Be sure to follow all
safety precautions for
your own protection

WARNING: May be fatal if swallowed or inhaled. May be absorbed through the skin. Avoid contact with skin, eyes and clothing. Wear long sleeved shirt, pants and neoprene gloves. Wash thoroughly after handling. Do not contaminate food or feed. Do not use on humans or pets. Do not allow humans or pets in sprayed area until spray has dried completely. **STATEMENT OF PRACTICAL TREATMENT:** Wash contaminated skin with soap and water. If in eyes flush with a gentle stream of clean water for 15 minutes and contact physician. If swallowed, contact physician immediately. **DO NOT INDUCE VOMITING** as vomitus may cause aspiration pneumonia. Do not give anything to unconscious person. If inhaled remove victim to fresh air. Supply respiration if needed. **NOTE TO PHYSICIAN:** Treat symptomatically to relieve distress from effects of exposure.

ENVIRONMENTAL HAZARDS: This product is toxic to fish, aquatic invertebrates and birds. Do not apply directly to wetlands. Do not contaminate water when cleaning equipment. Do not discard excess spray in water or wetlands. Do not use immediately before rainstorm or irrigation of lawn or garden. **PHYSICAL OR CHEMICAL HAZARDS:** Do not store near heat or open flame. **NOTICE:** Seller makes no warranty, expressed or implied, concerning the use of this product other than indicated on the label. Buyer assumes all risks of use and handling when such use and handling is contrary to label instructions.

First aid - what
you should do if
you have an
accident

Information for
your M.D. in
case of an
accident

What to do to
prevent harming
the environment

JUMPSTART'S BUG KILLER

KILLS BUGS

This product may not be used
indoors.

ACTIVE INGREDIENTS
Asphyxiaphis (Methyl-
ethyl-carboxyl ketone) 10%
INERT INGREDIENTS 90%

Keep out of reach of children
WARNING
See side panel for additional
precautionary statements

NET CONTENTS 1 PINT

EPA Est. No. 17X-NI-1
EPA Reg. No. 17X-001-A

Wimpywoof & Pegaloomer, INC.
2 X 00 Deadhead Road
Totalzip, NI 00000

**VEGETABLE AND
ORNAMENTAL SPRAY**
provides rapid knockdown, instant kill
and residual control of insect pests and
mites.

**IT IS A VIOLATION OF
FEDERAL LAW TO USE
THIS PRODUCT IN A
MANNER INCONSISTENT
WITH ITS LABEL.**

DIRECTIONS FOR USE:
Shake well before using. Clean sprayer
before and after each use. Carefully
measure and mix stated amount of BUG
KILLER in the appropriate amount of
water. Use medium fine spray for
vegetables and ornamentals, being sure
to cover both upper and lower surfaces
of leaves. **DO NOT USE ON** pets,
children or Canadian thistle as injury
may occur. The numbers in parentheses
tell how many days you must wait after
spraying before harvesting. **DO NOT
SPRAY BEES.**

PLANTS	PESTS
Beans (6), carrots (4)	aphids
cabbage (8),	thrips,
turnips (4)	worms

Conifers, elms
ash, maple, roses
petunias, asters
Use 1 tablespoon per gallon

STORAGE & DISPOSAL:
Store this product in the original
container in locked storage away from
children and pets. Do not reuse
container. Triple rinse container and use
rinse in spray. Securely wrap
container in several layers of newspaper
and discard in trash.

Active ingredients are the
chemicals that do the
work. Inert ingredients
are the carriers, but they
can also be toxic.

Hazard signal word:
Danger means highly toxic,
Warning means moderately
toxic, Caution means least
toxic to humans.

Directions for use - be
sure to follow these
exactly to avoid harm to
the plant, humans or
the environment. Plant
and pest must be on
label for you to legally
use

This registration number
shows that this formulation
has met all the requirements
for registration. Use it if you
correspond about the
chemical.

Follow these directions to
prevent exposing others
to the chemical and to
prevent contamination of
the environment. If the
label has a gallon per
acre rate, you have the
wrong formulation. **DO
NOT USE.**

Mixing and applying pesticides

- ◆ Read and follow label directions before applying any pesticide.
- ◆ Remove all children, pets, or anyone not involved in the treatment from the area and keep them away until the spray has dried or for as long as the label directs.
- ◆ Remove food, children's toys, pet food, or pet dishes from the area before using a pesticide. Close the windows and doors before treating near your house.
- ◆ Protect your skin by wearing clothing that covers your feet, legs, arms, and hands while mixing, handling, or using pesticides. Wear special clothing if required by the label.
- ◆ If you spill concentrated pesticides on your clothing during mixing, change clothes immediately and wash your exposed skin with soap and water. Discard clothing by putting it in a plastic bag in the trash.
- ◆ Use a separate set of equipment for applying pesticides. Mark cups, spoons, cans, and stir rods that you use exclusively for mixing pesticides and keep them in a pesticide storage area so they will never be used for food items again. Use a separate sprayer for weed killers and one for insecticides and plant disease sprays. Some weed killers leave a residue in the sprayer even after it has been rinsed that can damage plant foliage. Clean all equipment after each use.
- ◆ Do not use a pesticide when the wind may blow it on you, a susceptible plant, animal pens, patios, playpens, neighbors, or other places you do not want pesticides.
- ◆ Do not smoke, drink, or eat while applying pesticides. Wash hands before going to the toilet.
- ◆ Do not apply pesticides after transplanting during the heat of the day when the plants may be stressed.
- ◆ Do not use outdoor pesticides inside the house.
- ◆ When you have finished an application while still wearing the prescribed safety equipment, clean the sprayer, measuring spoons, pails, cans, and stirrers you have used and place them in the pesticide storage area.
- ◆ When you have finished the application, change clothes and wash them before wearing them again. Wash separately, line dry. Run the washer with soap and water with no clothes after washing the pesticide contaminated clothing. If you have spilled concentrated pesticide on your clothing, destroy the clothing.
- ◆ Take a shower immediately after applying pesticides. Be sure to wash hair and bathe thoroughly, including cleaning under fingernails.

Disposal

- ◆ When you are through spraying, if you have excess pesticide, spray it on a plant listed on the label. **Do not pour it down the drain.** Pesticides may be harmful to the beneficial organisms in your septic tank or the city sewage treatment plant. Plan ahead; mix only what you need. It is better to mix less than you need and mix another batch than to have leftover spray.
- ◆ When a container that has held a sprayable pesticide is empty rinse it 3 times by filling the container one third full of water, shaking it well, then pouring the water in the spray tank to be sprayed on target pests. These triple-rinsed containers can be placed in the trash for disposal. **Never reuse pesti-**

cide containers because they will not be totally clean and someone or something may be injured from the residues.

- ◆ When a pesticide container is empty, wrap it in newspaper and place it in the garbage can or take it to a collection site.
- ◆ Never use or dispose of an aerosol or pressurized container near heat or flame or puncture them because they might explode.

Spilled Pesticides

- ◆ When cleaning wear the protective equipment suggested by the container label.
- ◆ Spilled pesticides are dangerous to people, animals, and pets. When you have a spill, contain it with a barrier of sawdust, kitty litter, sweeping compound, or soil.
- ◆ Clean the spill immediately to prevent problems with stains and odors.
- ◆ If the spill is inside, open doors and windows to ventilate the area.
- ◆ Sweep the barrier material toward the middle of the spill to soak it up, pick it up with a dust pan, place it into doubled plastic bags, seal it, place it in the trash.
- ◆ Scrub the surface with a mixture of water and household detergent, repeat until all traces of the pesticide are gone, place cleaning materials into a sealed plastic bag and place it in the trash.
- ◆ **Do not hose down the surface until you have cleaned it thoroughly.**

Pesticide Storage

- ◆ Always keep pesticides in their original container with their label attached. Pesticides stored in food or drink bottles **may severely injure or kill an unsuspecting child or other person.** It

is illegal to store pesticides in anything except their original container.

- ◆ Storage shelves should be strong enough to hold the pesticides, preferably locked or high enough so children cannot reach them.
- ◆ Chemicals should be stored in a well ventilated, cool, dark place where they will not freeze. Heat

breaks down the active ingredient and freezing causes the pesticide to separate from its carrier. Store pesticides in a tool shed or outbuilding rather than an attached garage or basement because many pesticides have an objectionable odor.

- ◆ **To avoid storing pesticides, buy the smallest amount available to do the job each year.**

The Authors

Hugh W. Homan, Extension entomologist; Edward J. Bechinski, Extension integrated pest management coordinator; Gene P. Carpenter, Extension pesticide coordinator; all are with the University of Idaho.