



COLORADO ENVIRONMENTAL PESTICIDE EDUCATION PROGRAM

Pesticide Fact Sheet #117
CEPEP 5/00
Updated 6/06

PESTICIDE ALTERNATIVES

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This fact sheet covers alternatives to pesticides including preventing pesticide applications, non-chemical controls, and natural pesticides.

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Pesticide Alternatives

More and more people want alternatives to synthetic pesticides for controlling pests in their homes, on their pets, and at work. The first step in reducing or eliminating pesticides is to prevent the pest problem.

Prevention

- Remove water sources
- Remove food sources
- Remove or destroy shelter
- Remove breeding sites
- Remove sources of preventable plant stress
- Use preventive cultural practices



When prevention is not possible or fails to reduce pests to acceptable levels, non-chemical controls can be used. Non-chemical pest controls often are slower acting than synthetic pesticides. They also require more effort.

Non-chemical Controls

- Biological controls
 - Predators and parasites
 - Pathogens
- Mechanical measures
 - Hand picking weeds and insects
 - Trapping
- Soaps and oils

Chemical Controls

Natural or Botanical Pesticides are available as alternatives to synthetic pesticides. These products generally are made from plant extracts. Examples include pyrethrum, neem, garlic oil, and sabadilla. Botanical pesticides are generally safe for warm-blooded animals, but some are toxic to fish and other cold-blooded animals.

A common misconception is that pesticides made from natural substances are intrinsically safer in all respects than synthetically produced or commercial pesticides. All substances, whether they are synthetic or naturally derived, involve some degree of risk when they are used to control pests. One such risk is allergenicity (see Pesticide Fact Sheet [Pesticide Sensitivity and Hypersensitivity](#)).

References and Resources

Relf, D. November 1997. *Natural Pesticide Products*. Environmental Horticulture, Virginia Cooperative Extension, Blacksburg, VA.

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