

Get the upper hand on weeds in the vegetable garden

Weed management in a garden can be easy or difficult depending on the size of the garden, the species of weeds, and the management options available.

To prioritize weeding efforts ask yourself some questions: Do I want to eliminate every weed in the garden? Are there certain weeds I will tolerate, but others I want completely removed? How successful am I likely to be with my control methods?

The answers to these questions will help create a weed control strategy.

What makes a weed?

Weeds are unwanted plants that interfere with what we, as gardeners, are trying to accomplish. They can be extremely competitive, hard to get rid of, and rarely have redeeming attributes. If you think a plant is a problem, make sure you know what plant it really is.

Proper identification of “weeds” is critical. Improper identification can lead to decreased efficacy of your control efforts and lots of frustration. If unsure of identification, you can take a plant sample to your local University of Wyoming Extension office, weed and pest district office (wyoweed.org), or use resources on the Barnyards and Backyards (www.uwyo.edu/barnbackyard) or University of Wyoming Extension websites (www.uwyo.edu/uwe).

Now you know what plant it is, learn about its biology. The biology of a weed is very important for choosing the most effective type of control and timing of application. Is the weed an annual or perennial? Does it reproduce via seeds or underground rhizomes? Do the seeds of this weed continue to ripen even after it’s pulled?

Weed control

Get a fast start on weed management. The more time problem plants have for establishment and reproduction, the greater the amount of time, money, and work needed to remove them.

There are three general weed management categories: chemical, cultural and mechanical, and biological control.

Chemical

Chemical control is using herbicides to control weedy plants. Chemicals used in the garden can be purchased at local home and garden stores, nurseries, or weed and pest districts. Herbicides can provide long- or short-term control for many weeds. They can be naturally derived (organic) or produced in a laboratory (synthetic). Be sure the herbicide is labeled for use around edible crops.

Reading the label is critical before applying any type of herbicide. The label describes how to apply effectively and what to do to avoid unintended effects on any other plants

or animals. This applies to organic products as well as synthetic. Just because a product is organic does not mean it won't have the potential to harm humans or other plants and animals.

There are also many make-it-yourself recipes for home-made herbicides on the internet. Please understand these mixtures have not been approved by the EPA. Their toxicity to humans, animals, plants, and insects has not been scientifically tested. They also have not been tested for their effectiveness. (Doing things like repeatedly applying salt in an area can have unintended side effects on soil and may decrease the ability to grow plants in the future. Vinegar, salt, and other substances are chemicals and adequate care should be taken with their use.)

Herbicides are selective or non-selective and can be applied during the spring, summer, or fall. Non-selective herbicides will harm any plant they contact, while selective herbicides only affect certain types of plants.

For example, an herbicide effective at controlling broadleaf weeds will not only kill the broadleaf weeds in your garden, but also any broadleaf vegetables (tomatoes, beans, peas, etc.) or broadleaf ornamental plants in the landscape it contacts (shrubs, flowers, and trees), while not killing non-broadleaf plants such as weedy grasses.

Certain types of herbicides will remain active quite a while after application, while others will not. Herbicides that remain active are often used to help kill weed seedlings as they germinate from seeds in the soil. Herbicides that do not break down easily may also remain active in plant material. Herbicide and fertilizer combinations that are often used for weed control in lawns can remain active in lawn clippings. Only use untreated lawn clippings as mulch in the garden.

For questions not answered by reading the label of an herbicide, contact your local University of Wyoming Extension office or weed and pest district for more help.

Cultural and mechanical

Mechanical and cultural weed control involves the types of activities used in and around the garden. Methods can vary depending on the size of garden and weed species.

Mechanical methods - Plants can be physically removed, or certain plant parts can be harmed such as mowing off seed heads before the seed ripens. The timing of mechanical treatment depends on the specific weed. Mechanical treatments such as tilling also have the potential of spreading weeds. Chopping up the rhizomes of Canada thistle, for example, during tilling can spread new plants to different areas of the garden since new plants



can start from pieces of chopped up rhizomes less than an inch long.

Hand pulling weeds is one of the oldest and most common weed control methods. Hand pulling can be very effective because it physically removes the plant from the area. Properly dispose of pulled weeds. Weeds can be composted only if the compost pile gets hot enough to kill weed seeds.

Hand pulling can stimulate some weeds with large rhizomatous root systems to produce more shoots. Hand pulling needs to be implemented throughout the growing season for effective control.

Cultural practices – Such as cleaning equipment, not bringing in contaminated soil or compost, and buying seed completely free of weed seeds are effective methods for preventing new weed populations from starting in the garden. This can sometimes be a challenge depending on the size of the garden and who is allowed to use the space.

Mulching is another effective method for controlling weeds in the garden. A variety of products can be used as mulch in the garden such as plastic, natural wood material, or grass clippings. Mulch can be effective at shading out weeds and keeping them from germinating. Mulch also helps conserve water, helps add organic matter, and cools the soil (natural mulches), or adds

heat to the soil for heat-loving vegetables (black plastic mulch). If using natural products, make sure they are herbicide-free.

Mulch works well for all of the same reasons listed above for fruit trees and shrubs. It also decreases the likelihood of damaging these plants when using weed eaters.

Crop rotation is an easy cultural practice that helps break up weed and disease cycles. Switching up what vegetables are in each garden bed or specific location will affect each weed differently. Some vegetables such as squash will help shade out certain types of weeds, while other types of vegetables will compete with the roots of weeds. Planting crops dense enough to not impact yields but reduce the number

of weeds able to establish can be an important strategy as well.

Biological controls

Biological control might be the least effective control method for backyard gardeners. Biological control methods most often only keep a weed population in check and prevent its spread (thus may be suited for larger acreages). It will generally not eliminate a population since the biological control needs a host to feed on and keep alive for the next generation. Biological controls can range from tiny insects to larger herbivores. Obviously, insects are the most common biological control for gardens and landscapes.

Final thoughts

No matter what method you choose, early response to weed issues in the garden is critical. Controlling a small population is much easier than a large population. Early control also helps decrease the risk of weeds going to seed, establishing large root systems, and having a negative impact on vegetable crop production. Also, implementing multiple methods of weed control (Integrated Pest Management) can be an effective approach for many. For more weed control-related questions, visit your local University of Wyoming Extension office.

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Brian Sebade is picky about what weeds he eats and is pretty fussy about their relationship with gardens. He is a University of Wyoming Extension educator based in Albany County and serving southeast Wyoming. He can be reached at (307) 721-2571 or bsebade@uwyo.edu.



Some weeds can be tasty on a dinner plate. See this [edible weeds of the garden](#) article in the Winter 2018 [Barnyards&Backyards](#) magazine or bit.ly/yummyweeds.