



# WEED TREATMENT OPTIONS

**Abby Perry, Ag & Natural Resources Extension Educator**

**B-1397 | August 2024**



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This table is intended to help users identify various Integrated Pest Management (IPM) weed treatments for a wide range of weed species. The list contains weed species from the Wyoming Designated Noxious Weed list as well as “repeat offenders” from county lists. Common garden/landscape weeds are also included.

Weed specialists at local weed and pest offices, county extension offices, or conservation offices can assist in weed identification. UW Extension also offers online weed identification resources, including *Weeds of the West*, which can be found at <https://bit.ly/weeds-west>.

The most effective control method for any weed species is prevention. This means being vigilant in managing current weed populations to keep the spread contained and learning about effective control methods, such as those presented in this table. Additional control methods may include limiting disturbances, proper disposal, watching out for plants that look unfamiliar, and most importantly, preventing weeds from producing seeds. Keep in mind that it is possible to accidentally introduce new weeds onto your property by bringing in soil or soil amendments (such as inadequately treated compost or manure) that contain weed seed.

Many of the plants on this list can cause skin irritation when handled. Some weeds, like spotted and diffuse knapweed, are thought to cause serious illness. It is important to wear gloves before hand pulling or handling plants.

For effective control when hand pulling, it’s important to remove the entire root. If the entire root is not removed, it will be necessary to revisit the location and repeat the process. Certain weeds, such as Canada thistle, can start a new plant with less than a half inch of root material. Hand pulling when the ground is damp can aid in the removal process.

Proper disposal of the removed plant material is important to help keep weed populations contained. Bagging or burning removed material are good options to help with containment, but the site should still be monitored for new seedlings. Seeds can remain alive in the soil and sprout in the years to come, so it is important to keep weeds from producing seed.

Use caution when using removed materials in a compost pile. Piles need to be regularly maintained (watered and rotated) and reach internal temperatures of 140°F for a minimum of three days to kill weed seeds.

Note that treatment methods can behave differently in different ecosystems across the state and within different landscape settings (i.e., rangelands compared to raised garden beds). Consult your county weed and pest office to assist in developing a management and safety plan that helps you achieve your desired results. When a variety of effective control methods are available for one single weed, consider trying more than one strategy. Combining more than one tool to gain control often leads to better overall control.

The Wyoming Weed and Pest Council offers additional information about effective biological control options for weed treatment in Wyoming at <https://wyoweed.org/biological-control>. Contact your local weed and pest office or the Wyoming Weed and Pest Council directly about sourcing biological control agents and a treatment plan.

When herbicides are indicated as an effective treatment option in this table, that means there are several effective herbicide options

to choose from. Consult your local weed and pest office to see what options are suitable for your situation.

When selecting an herbicide treatment, always read the label and follow the recommended application rate. Timing and location are very important considerations when it comes to applications. Some herbicides will kill every plant they contact, while other herbicides are more selective. It is also important to know when other plants can be planted in the application area, especially in garden and landscape settings; this information is available on the label. The Wyoming Weed and Pest Council (<https://wyoweed.org/learn-about-pesticides>) and Barnyards & Backyards site (<https://bit.ly/weed-resources>) both have additional resources to help get you started. When in doubt, contact your local weed and pest office, extension office, or conservation district office for additional support.

## Further reading

*Weeds of the West*, University of Wyoming  
Extension: <https://bit.ly/weeds-west>

Weed Research & Information Center, University of California, Davis: <https://bit.ly/uc-weed-research-center>

“Montana Noxious Weed Treatment,” Natural Resources Conservation Service: <https://bit.ly/mt-nrcs-weeds>

## Key



**Red X:** Not an effective means of control.



**Yellow check:** Indicates medium control over weed species; or that the control method has a lot of control potential but not as much research has been done; or the management method may have limitations. For instance, research indicating smothering is an effective control method for specific plants is limited, but inferences can be made based on the individual plant’s characteristics, such as root structure or response to shading.



**Green check:** An effective control method.



**Gray column:** Weed is on the Wyoming Designated Noxious Weed list.



**White column:** Weed is on multiple county-declared weed lists.



**Asterisk:** A common garden weed, not county declared or state designated.

	Annual mustards*	Baby's breath	Black henbane	Crabgrass*	Cheatgrass	Common burdock	Common cocklebur	Common mallow*	Common mullein	Common ragweed*	Curlycup gumweed	Curly dock	Dandelion*	Dyers woad	Ceyer larkspur	Field bindweed	Halogeton
<b>Hand Pulling</b>	✓	✓	✓	✓	✓	✓	✗	✓	✓	✓	✗	✓	✓	✓	✓	✓	✓
<b>Herbicide</b>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
<b>Tilling</b>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✗	✓	✓	✓	✓
<b>Mowing</b>	✓	✓	✗	✗	✓	✓	✓	✓	✓	✓	✗	✗	✓	✓	✓	✓	✓
<b>Revegetate/Outcompete</b>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✓	✓	✓	✓	✓
<b>Smothering</b> (cardboard, tarp, mulch)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✓	✓	✓
<b>Grazing</b>	✓	✗	✗	✓	✓	✗	✗	✗	✗	✗	✗	✗	✗	✗	✓	✗	✗
<b>Biological Control</b>	✗	✗	✗	✗	✗	✗	✗	✓	✗	✗	✗	✗	✗	✗	✓	✗	✗

	Hoary alyssum	Houndstongue	Kochia*	Knapweed, Diffuse	Knapweed, Russian	Lambquarters*	Leafy spurge	Medusahead rye	Ox-eye daisy	Palmer amaranth	Perennial Pepperweed	Perennial sowthistle	Pigweeds (Amaranthus spp.)	Poison hemlock	Puncturevine	Purple loosestrife	Quackgrass
<b>Hand Pulling</b>	✓	✓	✓	✓	✓	✗	✓	✓	✓	✓	✓	✓	✓	✓	✗	✗	✗
<b>Herbicide</b>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗
<b>Tilling</b>	✓	✓	✓	✓	✓	✗	✓	✓	✗	✓	✓	✗	✗	✓	✗	✗	✗
<b>Mowing</b>	✗	✓	✓	✓	✓	✗	✓	✓	✗	✓	✗	✗	✗	✓	✓	✓	✓
<b>Revegetate/Outcompete</b>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
<b>Smothering</b> (cardboard, tarp, mulch)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
<b>Grazing</b>	✗	✗	✓	✗	✗	✓	✗	✓	✗	✓	✗	✗	✗	✓	✓	✓	✓
<b>Biological Control</b>	✗	✓	✗	✓	✓	✗	✓	✗	✗	✗	✗	✗	✗	✗	✓	✗	✗

	Russian olive	Saltcedar	Scotch broom	Skeletonleaf bursage	St. Johnswort	Sulfur Cinquefoil	Thistle, Bull	Thistle, Canada	Thistle, Musk	Thistle, Plumless	Thistle, Russian*	Toadflax, Scotch	Toadflax, Dalmatian	Vernonata	Whitetop (hoary cress)	Wild licorice	Yellow starthistle
<b>Hand Pulling</b>	✓	✓	✓	✓	✓	✗	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
<b>Herbicide</b>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
<b>Tilling</b>	✓	✗	✓	✗	✓	✗	✓	✓	✓	✓	✗	✓	✓	✓	✓	✓	✓
<b>Mowing</b>	✓	✓	✓	✗	✓	✓	✓	✓	✓	✓	✗	✓	✓	✓	✓	✓	✓
<b>Revegetate/Outcompete</b>	✓	✓	✗	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
<b>Smothering</b> (cardboard, tarp, mulch)	✗	✗	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
<b>Grazing</b>	✗	✓	✓	✓	✗	✓	✓	✓	✓	✓	✓	✓	✗	✓	✓	✓	✓
<b>Biological Control</b>	✗	✓	✗	✗	✓	✗	✓	✓	✓	✗	✓	✓	✗	✗	✗	✗	✗





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<b>Herbicide</b>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
<b>Tilling</b>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✗	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✓	✓	✓	✓	✗	✗	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✓	✓	✓	✓	✓	✓	✓	✓		
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<b>Biological Control</b>	✗	✗	✗	✗	✗	✗	✗	✓	✗	✗	✗	✗	✗	✗	✓	✗	✗	✗	✗	✗	✓	✓	✓	✗	✓	✗	✗	✗	✗	✓	✓	✗	✗	✓	✓	✓	✓	✓	✓	✓	✗	✓	✓	✓	✗	✗	✗	✗	✗		

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**Key**

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