

Ornamental Noxious Weed Management Pocket Guide



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This brochure was created to increase awareness of Noxious Weeds, the importance of identification, the importance of a weed management program, and some methods of weed control based on local, state and national research-based information.

How do I control weeds on my property?

1. Identify the weeds on your property.
2. Once a weed is identified, understand the life cycle of the weed
 - winter or summer annual
 - biennial
 - simple or creeping perennial
3. Understand the types of controls
 - Preventative
 - Cultural
 - Mechanical
 - Biological
 - Chemical
4. Develop a weed management plan
 - planning saves money and increases effectiveness
 - include long term monitoring to address any reinfestations.
 - timing is a critical part of successful weed control. Regardless of which combination of control methods are used, implementing those control methods at the correct stage of weed development will increase the chances for successful weed control in the shortest period of time, with the least cost.

It takes consistent
persistence to win the
war on weeds!

What are noxious weeds?

Noxious weeds are non-native plants that disrupt native vegetation because they have no natural controls and are able to adapt to varied conditions. As a result of the Colorado Noxious Weed Act, these weeds have been placed on three separate lists (weed names are color-coded corresponding to the list they are on):

List A plants: Eliminated everywhere

List B plants: Spread should be stopped

List C plants: Control is recommended



Palisade Insectory - Home of Colorado's Biological control program (CO Dept of Ag)

Effective management occurs over time and requires repeated exposure to the recommended techniques and control methods. After years of investment in mitigating the weeds on your property, the plant will eventually be destroyed.

This brochure is not meant to be all inclusive or restrictive, but offers guidelines and recommendations. References and photographs for this guide are thanks to the following sources:

US Department of Agriculture. <http://plants.usda.gov/java/factSheet>

Colo. Dept. of Ag. - Noxious Weed Management Program
www.colorado.gov/ag/weeds

Colo. Weed Management Association - Noxious Weed Info.
www.cwma.org/

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Weed Control Methods

Preventive: Prevention is the first and, perhaps, the most important step in a weed control program. In addition, prevention is probably the most cost-effective method of weed control. Methods include: maintaining healthy pastures, using weed-free crop seed, weed-free manure and hay, and clean harvesting and tillage equipment, as well as the elimination of weed infestations in areas bordering cropland, and in irrigation ditches and canals.

Cultural: Methods include, and are not limited to: Establishing and managing an adequate population of desirable vegetation to compete with the weeds; utilizing livestock (cattle, goats, sheep) when possible; mulching; burning; and even plastic weed barriers.

Mechanical: Methods include, and are not limited to: Hand-pull, hoe, mow and tillage.

Biological: Biological weed control involves the utilization of natural enemies for the control of specific weed species. Biological weed control is never 100% effective, and can take 5 to 10 years for success. However, this method can be successful especially when combined with other control methods.

Chemical: Always **read the label** before using any herbicide! Weed control with herbicides is an effective tool for many target weed species. However, there are several aspects to consider when choosing a chemical program. These include: ID of target weed; herbicide selection; timing of application; desirable crops or plant species near control areas; the number of applications per year, and the number of years for treatment. Sprayer calibration methods can be obtained from your local Extension office.

(*Sprayer Calibration Fundamentals*)
www.ext.colostate.edu/pubs/farmmgt/05003.html

Always add a nonionic surfactant @ 0.32 oz/ gal (1qt/100 gal) unless otherwise noted.

Purple loosestrife

Lythrum salicaria L.



Keys to Id

- Showy pinkish-purple flowers bloom in long vertical racemes
- Smooth Lance-shaped leaves
- Four sided stem.



Identification

- Lifecycle: Perennial
- Growth form: Forb or woody sub-shrub
- Flower: Purple/magenta with 5-7 petals arranged in long vertical racemes.
- Seeds/Fruit: Fruits are many-seeded capsules, seeds are small and ovoid.
- Leaves: Simple, entire, opposite or whorled
- Stems: Annual stems arise from a perennial rootstock. Stems are erect, 1.5-8 feet tall. Plants become taller and bushier as the rootstock matures.
- Roots: Short rhizomes and taproot.
- Other: Sometimes confused with fireweed (*Epilobium* spp.), which have 4-petaled flowers.

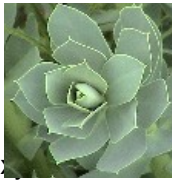
Control

- **Mech:** Hand removal, prior to seed set, of isolated individuals on small infestations. Remove the entire rootstalk. Flowerheads must be cut and disposed of properly before a herbicide is applied.
- **Bio:** Inappropriate, as eradication is the goal. A root feeding weevil (*Hylobius transversovittatus*).

HERBICIDE	RATE	TIMING
Triclopyr (Garlon 3A)	1-2 qts./acre 1.3-2.5 oz/gal water	Summer. If plants are flowering, cut and properly dispose of flower heads before applying
Glyphosate* (Rodeo - aquatic safe) *nonselective	1-2 qts./acre 1.3-2.5 oz/gal water	Summer during the flowering stage. Cut and properly dispose of flowerheads before applying Rodeo.

Myrtle Spurge

Euphorbia myrsinites



Keys to Id

- Low growing, blue green waxy leaves
- Flowers are yellow-green pedal like bracts;
- Contains milky sap.



Identification

- Lifecycle: Perennial
- Growth form: Forb
- Flower: Yellow-green bracts that bloom in the early spring.
- Seeds/Fruit: Hard, round
- Leaves: Alternate, blue-green, fleshy, trailing stems.
- Stems: Mature plants are 4-6" tall and can reach 18" laterally along the ground.
- Roots: Taproot.
- Other: The plant exudes a milky sap that can be irritating to the skin.

Control

- **Mech:** Hand removal, with care, avoid milky sap. Remove the entire rootstalk. Remove any seed source.
- **Bio:** Inappropriate, as eradication is the goal.

HERBICIDE	RATE	TIMING
2,4-D Ester	2 qts./acre	Spring/fall regrowth; 4.0 lbs. active ingredient/acre.
Dicamba + 2,4-D (amine or ester)	1 pint Dicamba + 2-3 pints 2,4-D	Spring/fall regrowth; 4.0 lbs active ingredient/gallon.
Picloram (Tordon 22K) *Restricted Use*	1 quart/acre	Flowering growth stage during spring or to fall regrowth.

Cypress Spurge

Euphorbia cyparissias



Keys to Id

- Flowers are yellow-green.
- Leaves are narrow covering multi-branched stems.



Identification

- Lifecycle: Perennial
- Growth form: Forb
- Flower: Tiny, lime green to white; clustered in small, cup-like structures. May-Sept.
- Seeds: The three-capsuled fruits explode at maturity, ejecting the seeds.
- Leaves: Alternate, stalkless, narrow.
- Stems: Mature plants are about 1-1.5 feet tall.
- Roots: Long indeterminate roots, spread in horizontal and vertical planes, and short determinant roots, spread strictly horizontal.
- Other: The entire plant exudes white, milky sap that can be irritating to the skin. Handle with protective clothing, sap is an irritant.
- Exotics: Distinguished from leafy spurge by its slender stems with numerous, crowded, narrow leaves.

Control

- **Mech:** Dig or hand pull entire plant. Tillage not effective, it may only encourage spread.
- **Bio:** Inappropriate, as eradication is the goal. Do not graze with livestock, plant is toxic (sheep can tolerate grazing this plant).

HERBICIDE	RATE	TIMING
Picloram (Tordon 22K) *Restricted Use	2 - 4 pint/acre	Apply spring (full bloom) or fall (during regrowth).
Dicamba + 2,4-D	1 qt Dicamba + 2 qts 2,4-D	Apply in the flowering stage.

Bohemian knotweed

Polygonum x bohemicum

Keys to Id

- Stems zig-zag, are hollow, have purple spots, and are swollen at the nodes
- Small showy green-white flowers.
- Large spade shaped bright green leaves.
- Bamboo like perennial, can reach 16 ft tall.



Japanese knotweed

Polygonum cuspidatum

Keys to Id

- Broad spade shaped bright green leaves with bumps on underside.
- Flower clusters are longer than Bohemian.



Control

- **Mech:** Ineffective due to complex root systems.
- **Bio:** Inappropriate, as eradication is the goal.

HERBICIDE	RATE	TIMING
Glyphosate* (Rodeo, or other aquatic safe product) *non-selective herbicide	3.2 to 3.8 oz / gal water	Spring, pre-bud to blooming. Apply to wet, not dripping. Can stem inject.
Imazapyr** (Arsenal, Stalker, Habitat) **Do not use in ornamental setting.	1.3 oz / gal water	Spring, pre-bud to blooming. Apply to wet, not dripping.

Dyer's woad

Isatis tinctoria



Keys to Id

- Very small yellow flowers.
- Distinctive dark purple seed pods.
- Blue-green leaves with white vein on top.



Identification

- Lifecycle: Winter annual or biennial.
- Growth form: Forb
- Flower: Bright yellow and clustered. Late spring.
- Seeds: Seedpods are black or purplish-brown, one-celled, with a single seed.
- Leaves: Two types: basal and stem; slightly hairy.
 - Basal rosette: 3-4 in, oblong, lance-shaped, and connected to the stem by a petiole.
 - Stem: simple, alternate, bluish-green, with a whitish nerve on upper surface. These leaves clasp the stem with ear-like projections.
- Stems: Mature plants reach 4 ft tall.
- Roots: It has a thick taproot; reaches 5 ft in length.

Control

- **Mech:** Hand pull or dig and remove all parts of the plant. Monitor for infestations over long term.
- **Bio:** Inappropriate, as eradication is the goal.

HERBICIDE	RATE	TIMING
Metsulfuron (Escort)	0.5 oz / ac	Apply at bolt to bud growth state (Early spring).
Chlorsulfuron (Telar)	1 oz / ac	Apply at bolt to bud growth state (Early spring).

Giant reed grass

Arundo donax

Keys to Id

- Leaves are blue-green.
- Can reach 20 ft. tall.
- 3 ft long seed heads.



Identification

- Lifecycle: Perennial
- Growth form: Grass
- Flower: Dense plume at top of tall stalk.
- Seeds: Rarely produces, mostly infertile.
- Leaves: Blue-green with heart shaped base, elongate, 1-2 inches wide and 1 ft long.
- Stems: Resemble corn stalk, hollow.
- Roots: Rhizomatous, fibrous, forms dense mat.
- Seedling: can sprout from very small root fragment.

Control

- **Cultural:** Maintain healthy riparian plants.
- **Mech:** Dig or pull, and remove entire root system of smaller plants. Combine with herbicide treatments to obtain effective control. Monitor for any new plants and remove immediately.
- **Bio:** Inappropriate, as eradication is the goal.

HERBICIDE	RATE	TIMING
Imazapyr** (Arsenal, Stalker, Habitat) **Do not use in ornamental setting	4-6 pts / ac	Wet foliage. Active growth stage.
Glyphosate* (Rodeo, or other aquatic safe product) *non-selective herbicide	1.5% solution (Direct on foliage)	Active growth stage.

Scentsless Chamomile

Matricaria perforate

Keys to Id

- Flowers have a yellow center disk, with white petals around.
- Odorless when crushed.
- Leaves are alternate, finely divided.



Corn Chamomile

Matricaria perforate

Keys to Id

- Flower petals are shorter than scentsless.
- Looks similar to mayweed but is odorless when crushed.



Mayweed Chamomile

Matricaria perforate

Keys to Id

- Leaves resemble fennel.
- Foul odor when crushed.



Control

- **Mech:** Hand pull or dig when soil is moist and infestations are small, be sure to pull up all roots. Mowing is not effective, stop seed spread by removal.
- **Bio:** Goats or sheep can be effective. There are no insect biological controls currently available in Colo.

HERBICIDE	RATE	TIMING
Metsulfuron (Escort XP)	0.33 oz/ac	Apply in rosette to bolting growth stage.
Chlorsulfuron (Telar)	0.33 oz /ac	Apply in rosette or bolting growth stage.
Aminopyralid (Milestone)	7 fl oz/ac	Apply in rosette growth stage.

Sulfur Cinquefoil

Potentilla recta

Keys to Id

- Leaves - palmately compound, 5-7 toothed leaflets.
- Flowers are light yellow with five petals.
- Leaf stalks have perpendicular hairs.



Identification

- Lifecycle: Perennial
- Growth form: Forb
- Flower: Light-yellow with 5 petals, deeply notched.
- Seeds/Fruit: Each flower produces numerous small seeds (.05 in long) that are slightly flattened.
- Leaves: Alternate, palmately compound with 5-7 toothed leaflets on each leaf. Stalks have conspicuous perpendicular hairs,
- Stems: Reaches 1-1.5 ft tall with one to several stems growing from well-developed rootstocks.
- Roots: Fibrous roots and lateral rhizomes

Control

- **Mech:** Hand pull or dig when soil is moist and infestations are small, be sure to pull up all roots. Mowing is not effective, stop seed spread by removal.
- **Bio:** Animals dislike due to high tannin content. There are no insect biological controls currently available.

HERBICIDE	RATE	TIMING
Picloram (Tordon 22K*) *Restricted	1 pint/acre	Surfactant is absolutely necessary. Apply in summer or at fall regrowth.
Aminopyralid (Milestone)	6 oz/acre	Surfactant is absolutely necessary. Prebud / early flower (late spring or early summer).

Yellow toadflax

Linaria vulgaris P. Miller



Keys to Id

- Yellow flowers that are like snapdragons with deep orange centers.
- Stems that are woody at the base and smooth to the top.



Identification

- Lifecycle: Perennial
- Growth form: Forb
- Flower: Bright yellow and resemble snapdragons, singly on ends of branches, sharp thorns below.
- Seeds: Capsules are round-ovate, and two-celled. Seeds are brown or black, circular, and surrounded by a notched wing.
- Leaves: Soft, lance-shaped, and pale green. Mainly alternate; lower leaves appear to be opposite.
- Stems: Mature plants are 1-3 feet tall with 1-25 smooth erect floral stems covered with cottony hairs
- Roots: Deep taproot, long horizontal roots that can develop adventitious bud sprouts.
- Other: Closely related to Dalmatian toadflax (whos leaves are shorter, wider, and clasp the stem.)

Control

- *Mech:* Hand pulling, digging, or tilling is NOT recommended for eradication.
- *Bio:* *Calophasia lunula*, a predatory noctuid moth, *Eteobalea intermediella*, a root boring moth and *Mecinus janthinus*, a stem boring weevil are currently available in Colorado.

HERBICIDE	RATE	TIMING
Picloram (Tordon 22K*) *Restricted	1.5 qts/acre 1 oz/gal	Apply at mid-flowering to late fall
Chlorsulfuron (Telar)	1.25 oz/acre added to Tordon	Apply at mid-flowering to late fall (Aug thru Sept)

Absinth wormwood

Artemisia absinthium



Keys to Id

- Small yellow flowers.
- Silver-grey leaves.
- Well branched, can reach 3 ft in height.
- Sage like odor.



Identification

- Lifecycle: Perennial
- Growth form: Forb
- Flower: Small, yellow, inconspicuous, numerous 1/4 in wide. July - August.
- Seeds: One seeded fruit, 1/16 in long, smooth, flat and light gray-brown in color.
- Leaves: Divided into deeply lobed leaflets, light green to olive green color, 2-5 in long.
- Stems: 20 or more stems grow from woody crown. Covered with fine silky hairs.
- Roots: Taproot to 2 in diameter with shallow lateral branches up to 6 ft long.
- Other: Strong sage-like odor.

Control

- *Mech:* Hand pull or dig, remove all parts of plant. Repeated short mowing can stress plant.
- *Bio:* None currently available in Colorado.

HERBICIDE	RATE	TIMING
Picloram (Tordon 22K*) *Restricted	1 pint / acre	Apply at spring, after reaches 12", before flowering.
2,4-D + Clopyralid (Curtail)	2 qts / acre	Apply at spring, after reaches 12", before flowering.
Dicamba (Banvel, Clarity, or Vanquish)	1 qt / acre	Apply at spring, after reaches 12", before flowering.

Bouncingbet

Saponaria officinalis L



Keys to Id

- Light pink to white flowers clustered at ends of branches.
- Leaf is smooth and narrow.



Identification

- Lifecycle: Perennial
- Growth form: Forb
- Flower: Crowded at the ends of branches, and have five petals that are generally pink and slightly notched at the apex. July-Sept.
- Seeds/Fruit: Fruits are many-seeded capsules. Seeds are dull-black and kidney-shaped.
- Leaves: Opposite, smooth, narrow, 2-4 in long and have three distinct veins from the base.
- Stems: Reaches 3 ft tall; has stout, erect, smooth, branching stems.
- Roots: Rhizomatous root system.
- Natives: Mouse-ear has separate (usually white) petals instead of united petals.

Control

- *Mech:* Reproduce from roots, only dig new infestations, make sure to remove entire plant and root.
- *Bio:* None currently available in Colorado. Do NOT graze, plant is poisonous and unpalatable.

HERBICIDE	RATE	TIMING
Chlorsulfuron (Telar)	1 oz / acre	Apply at bolting to bud growth stage; (Late Spring to Mid Summer)
Roundup Ultra* *non-selective herbicide	2 oz. / gal water	Apply at early plant growth (Spring)

Dame's Rocket

Hesperis matronalis



Keys to Id

- Flowers are white or purple with four petals.
- Leaves are lanced shaped with toothed margins and 2-4" long.



Identification

- Lifecycle: Biennial or short-lived perennial; member of the mustard family.
- Growth form: Forb
- Flower: White or purple with 4 petals. Flowers are clustered in loose terminal stalks. May-Sept.
- Seeds/Fruit: Fruits are many seeded, long and narrow and cylindrical. Seeds are small (3-4 mm long), angular, grooved and dark reddish-brown
- Leaves: Alternate, 2-4 in long, lance-shaped, with finely toothed margins.
- Stems: Mature plants range from 4 in to 3 ft tall.
- Roots: Shallow fibrous root system.
- Impact: Commonly planted as an ornamental

Control

- *Mech:* Hand pull/dig when soil is moist, remove flowers before the plant sets seed.
- *Bio:* None currently available in Colorado

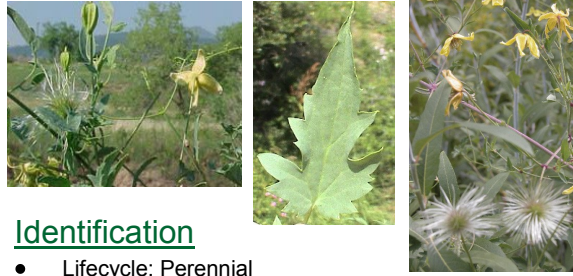
HERBICIDE	RATE	TIMING
Roundup Ultra* *non-selective herbicide	4-5 qts/acre 4-5 oz/gal	Apply during flowering stage until full-bloom before seed production.
Glyphosate* *nonselective	1-2 qts/acre 1.3-2.5 oz/gal water	Summer during the flowering stage.

Chinese clematis

Clematis orientalis

Keys to Id

- Showy solitary yellow flower with 4 petals.
- Flowers produce feathery long tail seeds.
- Semi-woody vine.



Identification

- Lifecycle: Perennial
- Growth: Herbaceous, to woody vine.
- Flower: Solitary, with 4 yellow sepals (petal-like structures), often nodding. June-Sept.
- Seeds/Fruit: Each flower produces numerous feathery long-tailed achenes (single seeded fruits) which are conspicuous as the fruits mature.
- Leaves: Opposite, having 3 leaflets.
- Stems: Vigorous climbing vines up to ten feet long.
- Other: Flowers are delicately scented. Materials exuded from freshly crushed leaves and stems have blister causing agents.

Control

- *Mech*: Hand pull or dig to remove all parts of plant. Combine with chemical treatments. Do not let plant flower or disperse seed.
- *Bio*: None currently available in Colorado.

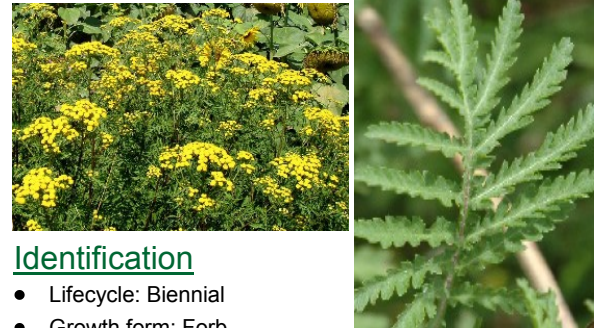
HERBICIDE	RATE	TIMING
Metsulfuron (Escort XP)	1 oz / acre	Apply at flowering growth stage.
Imazapic (Plateau)	12 fl oz / acre	Apply at flowering growth stage. (Fall)
2, 4-D Amine	2 qts. / acre (4.0 lb ai/gallon)	Apply at flowering to early post flow-
Picloram (Tordon 22K*) *Restricted	1 qt / acre	Apply at flowering growth stage. (Fall)

Common tansy

Tanacetum vulgare

Keys to Id

- Bright yellow flowers are button shaped, have no petals.
- Aromatic when crushed.
- Narrow leaflets.



Identification

- Lifecycle: Biennial
- Growth form: Forb
- Flower: Yellow; numerous; flat-topped dense clusters at the tops of the plants. Buttonlike heads lack ray flowers. July to September.
- Seeds: Yellow-brown achene with short, five-toothed crowns.
- Leaves: Alternate, deeply divided into numerous narrow, individual leaflets.
- Stems: Can reach 6 ft tall. Stems are often purplish-red and extensively branched towards the top.
- Roots: Rhizomatous.
- Other: Foliage emits a strong odor when crushed.
- Other: Considered toxic to both human and animals, in high quantities; very unpalatable.

Control

- *Mech*: Hand pull or dig to remove entire plant. Repeated mowing followed by herbicides is needed for adequate control. Infrequent tillage is not recommended for control.
- *Bio*: none currently available in Colorado.

HERBICIDE	RATE	TIMING
Metsulfuron (Escort XP)	1 oz. / acre	Apply in spring bolting to bud

Hoary Cress (Whitetop)

Cardaria draba

Keys to Id

- White flowers.
- Grows erect 10-24" in height
- Leaf is 3/4-4" long with blunt fine white hairs.



Identification

- Lifecycle: Perennial
- Growth form: Forb
- Flower: Numerous white flowers with four petals, plant has white, flat-topped appearance. May-June.
- Seeds/Fruit: Seed capsules are heart shaped, and contain two reddish-brown seeds.
- Leaves: Alternate, blue green, and lance-shaped. Lower leaves are stalked, while the upper leaves have two lobes clasping the stem.
- Stems: Mature plants reach 2 ft tall with erect stems
- Roots: Rhizomatous; 29-32 inches deep

Control

- *Mech*: Mowing several times before the plants bolt stresses it and allows for better chemical efficacy
- *Bio*: none currently available

HERBICIDE	RATE	TIMING
Metsulfuron (Escort XP)	1 oz/acre	Apply at the early bud growth stage; i.e. "broccoli" growth stage. (Early Spring to Early Summer)
Chlorsulfuron (Telar)	1 oz/acre	Apply at the early bud growth stage; (Early Spring to Early Summer)
Imazapic (Plateau)	12 fl. oz./acre + 2 pints/acre methylated seed oil or crop oil concentrate	Apply at late flower to post-flower growth stage. (Late Spring to Mid Summer)

Oxeye daisy

Chrysanthemum leucanthemum L.



Keys to Id

- Creeping perennial; Daisy-like; grows 10 inches to 2 feet tall.
- White ray flower on yellow disk; 2" diameter.
- Flower pedals are wider than native daisy flowers.



Identification

- Lifecycle: Perennial, short-lived
- Growth form: Forb
- Flower: Heads are solitary at the ends of branches. Heads are white ray flowers & yellow disk flowers.
- Seeds/Fruit: Fruits have about 10 ribs.
- Leaves: Alternately arranged leaves become progressively smaller upward along the stem. The upper leaves become stalk-less and toothed. Basal and lower stem leaves are 2-5" long, spoon-shaped. Stems: Mature plants are 10-24 in tall with erect, smooth to sparsely hairy stems.
- Roots: Shallow, branched rhizomes.
- Other: Oxeye daisy is easily confused with the ornamental Shasta daisy which has a root ball and is a more robust plant with larger flowers.

Control

- *Mech*: Hand pull or dig when soil is moist and infestations are small, be sure to pull up all roots. Mowing is not effective, stop seed spread by removal.
- *Bio*: Goats or sheep can be effective. There are no insect biological controls currently available.

HERBICIDE	RATE	TIMING
Metsulfuron (Escort XP)	1 oz/acre	Surfactant is absolutely necessary. Apply at flowering growth stage. (Summer)
Chlorsulfuron (Telar)	1 oz/acre	Surfactant is absolutely necessary. Apply at flowering growth stage. (Summer)

Downy brome (Cheatgrass)

Bromus tectorum

Keys to Id

- Drooping seedhead
- Densely hairy leaves
- Green-up in early spring
- Changes to purple/tan in early summer



Virginia Tech Weed ID Guide

Identification

- Lifecycle: Summer/Winter Annual.
- Growth form: Grass
- Flower: panicles (loose, irregularly compound flowering part of plant with flowers borne on individual stalks).
- Seeds: Spikelets including awns are 0.8-2" long, nodding, with 2-8 florets.
- Leaves: Light-green and hairy. Lower sheaths are conspicuously hairy, upper sheaths are smooth.
- Stems: Erect, slender, glabrous, or slightly hairy.
- Roots: Fibrous root system.

Control

- **Cultural:** Maintain healthy stand of natives/desired perennials, carefully manage grazing to ensure protection of desired plant species.
- **Mech:** Cutting or mowing has a negligible effect, repeated hand pulling or grazing before seed set.

HERBICIDE	RATE	TIMING
Glyphosate	6 - 12 oz / acre	Apply early spring prior to seed set
Imazapic (Plateau)	2 - 12 oz / acre	Late summer to early fall before emergence

Field Bindweed

Convolvulus arvensis

Keys to Id

- Flowers are funnel-shaped, white to pink, and have two small bracts one inch below the flower base.
- Leaves are shaped like arrowheads.



Identification

- Lifecycle: Perennial
- Growth form: Forb
- Flower: bell or trumpet-shaped, white to pink in color, and are about 1 inch long, small bracts below.
- Seeds/Fruit: Seeds can remain viable for 40 years.
- Leaves: Alternate, arrowhead shaped.
- Stems: Prostrate, many feet in length.
- Roots: Rhizomatous with deep taproot.

Control

- **Mech:** Cutting, mowing, or pulling has a negligible effect unless the plants are cut below the surface in the early seedling stage.
- **Bio:** The bindweed gall mite, *Aceria mahlerbae*, and bindweed moth, *Tyta luctuosa* are effective in Colo.

HERBICIDE	RATE	TIMING
Clarity + 2,4-D Amine (temp must be below 85°)	1 qt/acre 1 oz/gal water	Just after full-bloom and/or fall. DO NOT apply near or under trees/shrubs or where soils have rapid permeability.
Tordon 22K* *Restricted Use	1 qt/acre 1 oz/gal water	Just after full-bloom and/or fall. DO NOT apply near or under trees/shrubs or where soils have rapid permeability.
Roundup Ultra* *non-selective herbicide	4-5 qts/acre 4-5 oz/gal	Apply at full-bloom and/or in fall.

Poisonous Plants

These plants are poisonous to domestic livestock

Western Whorled Milkweed

Asclepias subverticillata

Keys to Id

- Whorled linear leaves
- Greenish white flower
- Slender seed pod
- Milky latex sap



Showey Milkweed

Asclepias speciosa

Keys to Id

- Opposite elliptical leaves
- Pink/white crown like flower
- Erect stem can reach 5 ft.
- Milky latex sap



Control

- **Mech:** Hand pulling, digging, to remove all parts of plant when found in grazing pasture land, combine with chemical treatment option.
- **Chemical:**
 - Dicamba (Banvel, Oracle, Clarity) with any 2,4-D Amine product.
 - Rate: 1 oz/gal

Backyard Weed Control Tips

Weeds (or undesirable vegetation) are a concern anytime they compete with the desired vegetation of your landscape or garden area. Weeds are opportunistic and will occupy any space that they can readily invade. Know that tolerating a few weeds can allow a healthy, functioning, attractive sustainable system.

Proper management, whether it be healthy turfgrass, adequate native plantings, or adequate mulch depth, can help to severely limit the impact that invasive and weed plants have.

The best weed control is prevention!

An integrated management approach to weed prevention will allow for the best results to reduce any weed concerns on your property. This takes time and attention over the long term to achieve successful results.

Additional Resources:

Melissa Werkmeister
Mesa County Weed and Pest Coordinator
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Tri River Area Extension Website <http://www.extension.colostate.edu/TRA/>

CMG Garden Notes #351, Weed Management
www.cmg.colostate.edu/gardennotes/351.pdf

Preparation of small spray quantities of pesticides
www.ext.colostate.edu/pubs/garden/07615.pdf

CSU Ext, Weed Management for small rural acreages
www.ext.colostate.edu/pubs/natres/03106.pdf

CSU Ext. Yard and Garden Publications
www.ext.colostate.edu/pubs/pubs.html#garden

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