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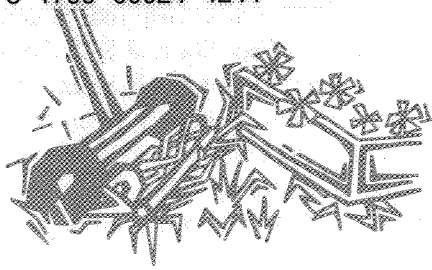
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YARD

Annual grassy weed control in lawns no. 3.101

by A.J. Koski¹

Quick Facts...

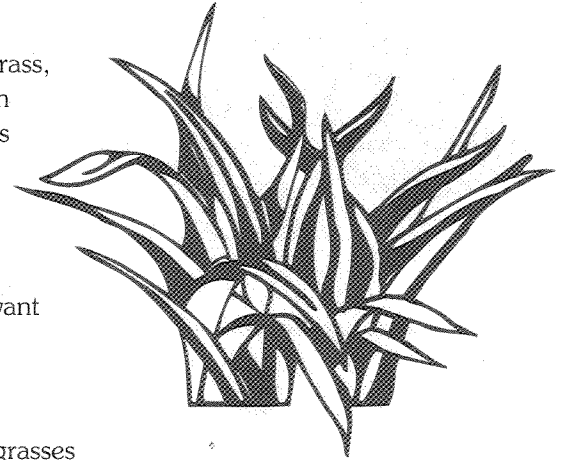
Crabgrass, foxtail, barnyardgrass, and goosegrass can be important lawn weed problems at the lower elevations (lower than 6,000 to 6,500 feet) in Colorado.

Mow summer grasses as high as practical during the summer months for the particular grass species present in your lawn.

Maintain bluegrass, tall fescue, fine fescue, and ryegrass at 2 1/2 to 3 inches during the summer.

Irrigate properly to help reduce annual weed infestation. Light, frequent irrigation will encourage weed seed germination – even if a preemergent herbicide has been applied.

Crabgrass, foxtail, barnyardgrass, and goosegrass can be important lawn weed problems at the lower elevations (lower than 6,000 to 6,500 feet) in Colorado. These weeds belong to a group called the summer annual grasses, and it's important to understand their growth cycle if you want to control them.

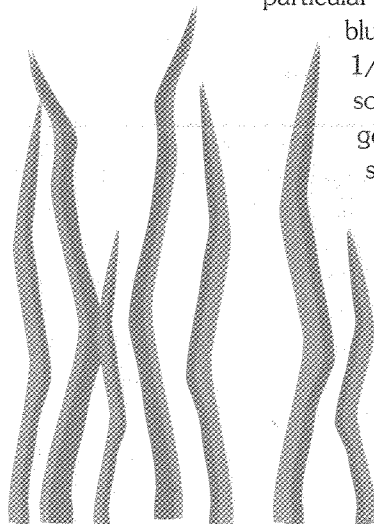


Growth

The seed of summer annual grasses deposits on the ground from the previous fall and germinates the following year, from midspring through midsummer. Germination is based on soil temperature (not air temperature), generally beginning when surface soil temperatures reach 55 to 60 degrees F. Once germinated, these grasses grow quickly during the summer months. Their growth is favored by warm temperatures and a good supply of water. Each annual grass plant produces thousands of seeds from midsummer through the early fall, when the plants are killed by the first frost. There are several approaches to consider in the management of annual grasses in the home lawn, involving both cultural (non-herbicidal) techniques and the possible use of herbicides.

Non-Herbicidal Control

- Mow as high as practical during the summer months for the particular grass species present in your lawn. Maintain bluegrass, tall fescue, fine fescue, and ryegrass at 2 1/2 to 3 inches during the summer. The seeds of some weeds require high light intensity to germinate, and the shaded environment near the soil surface in a high-mown lawn helps deter weed seed germination. In addition, the higher mowing height produces a healthier grass plant. Crabgrass and other annual grassy weeds are much more common and more aggressive in lawns that are mowed at heights less than 2 inches.

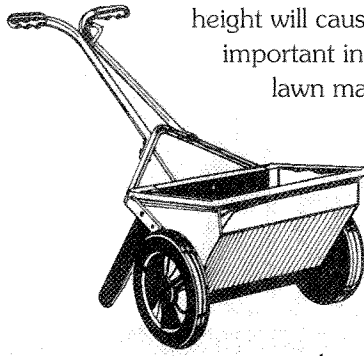


- Mow at intervals frequent enough so that no more than one-third of the grass blade is removed in a single mowing. Letting a turf grow tall and then cutting it back to a low

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There are herbicides available that will control crabgrass by preventing establishment of seedling crabgrass.



height will cause a reduction in turf density. This is especially important in the spring, when the grass is growing faster. A lawn may require mowing every three to five days during the spring and early summer.

- Irrigate properly to help reduce annual weed infestation (see *Fact Sheet 7.202, Lawn care*). Light, frequent irrigation will encourage weed seed germination – even if a preemergent herbicide has been applied.

- Fertilize according to the needs of your lawn species (refer to 7.202) for information on proper fertilization of the common lawn grasses.

- Core cultivate (aerate) the lawn at least once per year to reduce compaction and to control thatch.

Herbicidal Control

Preemergent Herbicides. Herbicides are available that control crabgrass by preventing establishment of seedling crabgrass. These preemergent herbicides must be applied before the crabgrass seed germinates to be effective. In southern and western Colorado, crabgrass seed can germinate from late March to early April. Along the northern Front Range, crabgrass can germinate from mid-April to mid-May. Apply preemergent herbicides two to four weeks before the above dates. Remember, the actual germination of crabgrass varies from year to year, depending on the weather. Warm, moist springs cause earlier germination, and cool, dry springs delay germination. It is essential to remember that a preemergent herbicide application will not control annual weedy grasses after the seed germinates and the weed begins to form leaves.

Apply preemergent herbicide uniformly across the lawn to establish a chemical barrier on the soil surface. Avoid skips and streaks, which may allow weeds to appear in the lawn later in the year.

The preemergent herbicide must be applied uniformly across the lawn to establish a chemical barrier on the soil surface. It is essential to avoid skips and streaks, which may allow weeds to appear in the lawn later in the year. These preemergent herbicides break down during the summer months, most quickly when summers are warm and precipitation/irrigation is plentiful. Therefore, weather patterns and irrigation programming that favors a faster than normal breakdown of a preemergent herbicide can lead to a lawn infested with a late germinating annual grass. These annual grasses can still become a problem in lawns that are not mowed, fertilized, or irrigated properly – even when a preemergent herbicide is used.

With normal weather patterns, most preemergent herbicides give good to excellent control of crabgrass, foxtail and barnyardgrass. Control of goosegrass and field sandbur will often be less satisfactory, depending upon herbicide used. To maximize weed control, consider the following guidelines. In all cases, read the specific pesticide label for more detailed information before using the product.

- Do not use preemergent herbicides at the time of seeding except for a product containing siduron. Wait until the new grass is mowed three times before applying a preemergent herbicide.

- After a preemergent is used, wait two to four months before seeding, depending on the



Apply sufficient water (one-half inch) to wash the herbicide off the grass onto the soil surface within one to two days of application.

product used. Refer to the label for the specific time that must elapse before it is safe to seed.

- If sod is laid, do not apply preemergent herbicides to the soil or to new sod. Rooting may be restricted by some of the preemergent herbicides.

- Apply sufficient water (one-half inch) to wash the herbicide off the grass onto the soil surface within one to two days of application.

- Do not thatch the lawn after the preemergent herbicide application, as the herbicide barrier can be disturbed.

- Conventional core cultivation (aeration) does not reduce the effectiveness of preemergent herbicides that have already been applied.

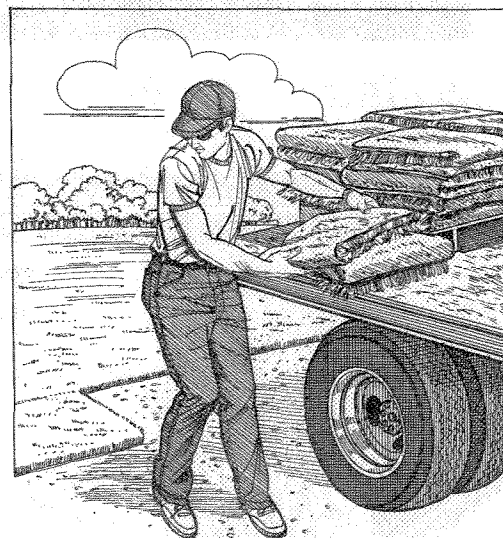


Table 1: Herbicides for annual grass control on cool-season turfgrass lawns and expected level of control.

Herbicide Name	Trade Name	Crabgrass Foxtail	Goosegrass	Barnyardgrass	Field Sandbur
benefin	Balan	G-E	F	G	NA
benefin/trifluralin	Team	E	G	G-E	NA
bensulide	Betasan	G-E	P-F	G-E	NA
corn gluten meal	Many	G	NA	NA	NA
DCPA	Dacthal	G-E	F	F	P-F
dithiopyr	Dimension	E	G-E	G-E	NA
oxadiazon	Ronstar	G	E	NA	F
pendimethalin	Pre-M, Pendulum	E	G-E	G-E	NA
prodiamine	Barricade	G-E	G-E	NA	NA
siduron	Tupersan	F-G	P-F	F-G	NA

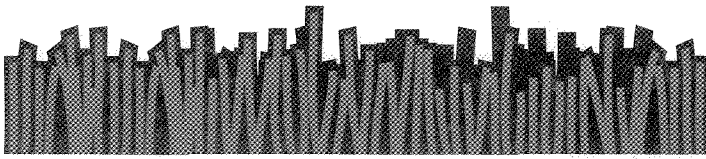
E=excellent, G=good, F=fair, P=poor, NA=information not available

Postemergent Herbicides

Another type of herbicide can be used on annual grasses after they germinate and begin to mature. These postemergent crabgrass herbicides are called organic arsenicals. The most commonly sold type, called MSMA (monosodium methanearsonate), is often sold under trades names like "Crabgrass Killer." These herbicides are most effective against young, seedling annual weeds and can only be applied as a spray. Once the weeds become larger and more mature, MSMA is largely ineffective. The organic arsenicals do not act as preemergent herbicides. Some points to consider when using MSMA and related organic arsenicals include:

- They may cause a temporary discoloration of the turf. If the soil is dry, water the turf area so that the moisture penetrates to a 3-inch depth the day before the treatment. During hot, dry weather, apply another one-half inch of water two days after the lawn has been sprayed.

- With a late-summer or early-fall treatment it is best to wait two weeks before overseeding the treated area.



- Do not apply postemergent crabgrass herbicides to a new seeding until it is mowed at least three times.

- A second application of organic arsenicals may be needed four to seven days after the initial application. This is generally needed for more mature weeds. Irrigate with 1 inch of water two days after the last treatment to minimize damage to the turf.

- Apply organic arsenicals when air temperatures range from 70 to 85 F. Shade or cloudy weather, accompanied by cooler temperatures, decreases the effectiveness of organic arsenicals.

Exclusion of chemicals or product trade names does not imply criticism, nor does inclusion imply any endorsement, by Colorado State University or the author.

Read all label directions before using any pesticide.