

MP521

Turfgrass Weed Control

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DIVISION OF AGRICULTURE
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Introduction to Turfgrass Weed Control

There are many different herbicides and combinations that will successfully control the weeds mentioned here. For the sake of brevity, I have not attempted to mention all of them. Purdue University Extension has a publication, *Turfgrass Weed Control for Professionals*, that is very comprehensive. I recommend it if you wish to dig deeper.

The toughest lawn weeds in Arkansas are dallisgrass, purple nutsedge, Virginia buttonweed and bermudagrass. Most of the other common lawn weeds can be eliminated with a moderate effort, but the four listed above are difficult to eradicate.

No amount of herbicide application will overcome management or environmental deficiencies. Grass needs to be healthy and vigorous to compete with weeds. Common problems include too much shade, improper mowing, watering and fertilization. The reverse is also true. It is usually impossible to achieve complete weed control through cultural practices alone.



American Burnweed (*Erechtites hieraciifolius*)

Simazine, Specticle and FreeHand provide preemergence control of burnweed. Celsius, Confront, Tribute Total and Blindside (metsulfuron + sulfentrazone) provide excellent postemergence control.



Annual Bluegrass (*Poa annua*)

It is difficult to achieve complete control of annual bluegrass with a single pre- or post-herbicide application. Preemergence and postemergence treatment may be needed. To achieve preemergence control with herbicides such as Specticle (indaziflam), Barricade (prodiamine), Pendulum (pendimethalin) and Dimension (dithiopyr), apply on August 15 and water in immediately. Specticle can be applied later because it has postemergence activity on small annual bluegrass. In bermudagrass, one of the cheapest and easiest ways to control *Poa annua* is to use glyphosate while bermudagrass is completely dormant. Revolver (foramsulfuron), TranXit (rimsulfuron) and Monument (trifloxysulfuron) will provide postemergence *Poa annua* control without damaging partially green bermudagrass or zoysiagrass. Simazine and atrazine are effective preemergence and postemergence on annual bluegrass that has not tillered.



Annual Sedge (*Cyperus compressus*)

Monument (trifloxysulfuron), Certainty (sulfosulfuron) and Dismiss South (sulfentrazone + imazethapyr) provide excellent annual sedge control. **See Sedge Control for Homeowners.**

Bahiagrass

(*Paspalum notatum*)

Metsulfuron (Manor, Blade or Mansion) is a good choice for bahiagrass control in bermudagrass. Make two applications of metsulfuron 60 DF at 1 ounce of product per acre three to four weeks apart. Do not use over the root zone of desirable trees and ornamentals. Add 0.25% nonionic surfactant. In centipedegrass, Segment (sethoxydim) may be used to control bahiagrass.



Bermudagrass (*Cynodon dactylon*) Preplant Control

Make three or four applications of 41% ai glyphosate or higher at 2 to 3 quarts per acre over the growing season (May, July and September). Wait for regrowth before making the next application. Using this method does not guarantee complete control. Tank mixing with 24 fluid ounces per acre of Fusilade II may improve control. Do not seed for 30 days after applying Fusilade II.



Bermudagrass (*Cynodon dactylon*) Selective Suppression

In zoysiagrass or tall fescue, use Fusilade II (fluazifop) at 6 fluid ounces per acre plus Turflon Ester at 32 fluid ounces per acre to suppress bermudagrass. Begin around June 1 and repeat every four weeks unless the zoysiagrass has not recovered from the first application.

(Photo: Bermudagrass in zoysiagrass.)

In centipedegrass, Segment (sethoxydim) may be used at 24 fluid ounces per acre to suppress bermudagrass, bahiagrass and other weedy grasses. Do not apply Segment sooner than three weeks after green-up and more than twice per season. Do not tank mix sethoxydim with other pesticides or fertilizers.





Carolina Geranium (*Geranium carolinianum*)

Effective control requires a tank mix of a postemergence herbicide with simazine or atrazine. Typical mixes are a three-way plus simazine or atrazine or Manor or Blade plus simazine or atrazine. Apply early (between December and March 1) before the weeds get big.



Carpetweed (*Mollugo verticillata*)

Monument (trifloxysulfuron) will control carpetweed. Atrazine or simazine applied preemergence or early postemergence are also effective. Turflon Ester (triclopyr) will provide fair to good control of this weed. Three-ways, unless they contain triclopyr, are generally ineffective.



Cat's Ear Dandelion (*Hypochaeris radicata*)

Cat's ear dandelion may be effectively controlled in the fall or spring with two-, three- and four-way broadleaf herbicides, as well as with metsulfuron.

Chickweed, Common

(Stellaria media)

Effective chickweed control requires a tank mix of a postemergence herbicide with simazine or atrazine. Typical mixes are a three-way plus simazine or atrazine or Manor or Blade plus simazine or atrazine. Apply early (between December and March 1) before the weeds get big.



Chickweed, Sticky

(Cerastium glomeratum)

Effective chickweed control requires a tank mix of a postemergence herbicide with simazine or atrazine. Typical mixes are a three-way plus simazine or atrazine or Manor, Mansion or Blade plus simazine or atrazine. Apply early (between December and March 1) before the weeds get big.



Corn Speedwell

(Veronica arvensis)

Three-ways alone do not control corn speedwell. Effective control requires a tank mix of a post-emergence herbicide with simazine or atrazine. Typical mixes are a three-way plus simazine or atrazine or Manor, Mansion or Blade plus simazine or atrazine. Apply early (between December and March 1) before the weeds get big.





Crabgrass (*Digitaria* spp.)

For preemergence control, apply Specticle (indaziflam), Barricade (proflam), Pendulum (pendimethalin) and Dimension (dithiopyr) around March 1 or before crabgrass begins to germinate.

Scotts Halts (pendimethalin) is a good preemergence choice for homeowners. For postemergence control, apply quinclorac (Quinclorac 75 DF, Drive, Drive XLR8) to tolerant turfgrasses when crabgrass is less than two tillers or mature. Repeat application in seven days. Use methylated seed oil for a surfactant. Other postemergence possibilities include Tenacity (mesotrione) or Segment (sethoxydim) in centipedegrass. MSMA can be used for crabgrass control but is not labeled for use on residential turf. **Postemergence homeowner products that contain quinclorac include Ortho® Weed-B-Gon Weed Killer for Lawns Plus Crabgrass Control Concentrate, Bayer Advanced All-In-One Lawn Weed & Crabgrass Killer and Fertilome Weed Out with Q.**



Cudweed

(*Gnaphalium* spp.)

Cudweed species are biennial plants but are relatively easy to control. Two-, three- and four-way broadleaf herbicides control postemergence as do repeat applications of metsulfuron (Manor, Mansion, Blade, etc.). Apply in the spring while in rosette stage and before seed stalk formation.



Dallisgrass

(*Paspalum dilatatum*)

One option is to dig out the clumps with a shovel. Spot treatment with MSMA is legal on sod farms and golf courses. Repeat applications of Tribute Total (foramsulfuron + halosulfuron + thienencarbazone) in late summer and early fall will suppress dallisgrass in residential lawns. **Use Tribute Total only in bermudagrass.** Another approach is spot treatment with glyphosate. Obviously, this is going to kill some of the desirable grass and leave brown spots in the turf. Two applications of glyphosate are needed. Apply the first after active growth begins in May, and spray again when regrowth appears. This will take most of the summer. Keep the glyphosate spray off nontarget plants.

Dandelion

(*Taraxacum officinale*)

The common three-way herbicides (2,4-D + dicamba + MCPP) control dandelion. Metsulfuron and quinclorac also control dandelion.



Dichondra

(*Dichondra* spp.)

The common three-way herbicides (2,4-D + dicamba + MCPP) control dichondra. Two applications about 30 days apart will be needed. Tank mixing metsulfuron with a three-way herbicide often improves control.



Doveweed

(*Murdannia nudiflora*)

Products containing atrazine or simazine, Revolver or metsulfuron applied twice 30 days apart provide partial control. Tank mixes of MSMA with Sencor or multiple applications of two- or three-way broadleaf herbicide mixtures also provide good control but also can cause injury to some turfgrass species. Tank mixing Quicksilver or Dismiss with these products increases and hastens their activity. Repeat applications of all herbicides or combinations will be needed for complete control.





Facelis

(*Facelis retusa*)

Effective control requires a tank mix of a postemergence broadleaf herbicide with simazine or atrazine. Typical mixes are a three-way plus simazine or atrazine or Manor, Mansion or Blade plus simazine or atrazine. Apply early (between December and March 1) before the weeds get big.



Field Madder

(*Sherardia arvensis*)

Glyphosate alone does not control field madder. Effective field madder control requires a tank mix of a postemergence herbicide with simazine or atrazine. Typical mixes are a three-way plus simazine or atrazine or Manor or Blade plus simazine or atrazine. Apply early (between December and March 1) before the weeds get big.



Goosegrass

(*Eleusine indica*)

Use either Specticle or Ronstar for preemergence control of goosegrass. Barricade and Pendulum will provide slightly less effective preemergence control. Postemergence herbicides for goosegrass include Revolver, Illoxan, Dismiss and Sencor. Repeat applications are needed when controlling goosegrass postemergence. Pylex (topramezone) is effective on goosegrass in centipedegrass and certain cool-season grasses.

Ground Ivy

(*Glechoma hederacea*)

In cool-season grasses, use a product containing triclopyr or fluroxypyr. Momentum FX2 (2,4-D + triclopyr + fluroxypyr) or T-Zone (triclopyr + 2,4-D + dicamba + sulfentrazone) are good options for ground ivy. In warm-season grasses, metsulfuron (Mansion, Manor or Blade) or Celsius WG are good choices. **Ortho Chickweed and Oxalis Killer (8% triclopyr) is a good choice for homeowners. Do not use on centipedegrass, St. Augustinegrass or bermudagrass.**



Hairy Bittercress

(*Cardamine hirsuta*)

The dinitroaniline (proflumiclor, pendimethalin, others) herbicides do not provide effective preemergence control of hairy bittercress. Effective hairy bittercress control requires a tank mix of a postemergence herbicide with simazine or atrazine. Typical mixes are a three-way plus simazine or atrazine or Manor or Blade plus simazine or atrazine. Apply early (between December and March 1) before the weeds get big.



Henbit

(*Lamium amplexicaule*)

Three-ways (2,4-D + MCPP + dicamba) alone do not control henbit. Effective control requires a tank mix of a postemergence herbicide with simazine or atrazine. Typical mixes are a three-way plus simazine or atrazine or metsulfuron plus simazine or atrazine. Apply early (between December and March 1) before the weeds get big.





Kyllinga (*Kyllinga* spp.)

Monument (trifloxysulfuron), Certainty (sulfosulfuron) and Dismiss South (sulfentrazone + imazethapyr) provide excellent kyllinga control. SedgeHammer+ (halosulfuron), while slightly less effective on kyllinga, is safe to use on all turfgrasses. **See Sedge Control for Homeowners.**



Large Hop Clover (*Trifolium campestre*)

Effective large hop clover control requires a tank mix of a postemergence herbicide with simazine or atrazine. Typical mixes are a three-way plus simazine or atrazine or metsulfuron plus simazine or atrazine. Apply early (between December and March 1) before the weeds get big.



Lawn Burweed or Spurweed (*Soliva pterosperma*)

Simazine or atrazine will provide pre- and postemergence control of spurweed if applied early. For best results, apply between Thanksgiving and Christmas. If that timing is missed, make the application before March 1. Metsulfuron (Manor, Mansion or Blade) or three-ways (MCP + dicamba + 2,4-D) provide post-emergence control of spurweed. Metsulfuron or a three-way may be tank mixed with either simazine or atrazine.

Lespedeza, Common

(*Lespedeza striata* or
Kummerowia striata)

Lespedeza is often an indicator of insufficient nitrogen fertilization. 2,4-D alone will not control lespedeza or white clover. Products containing metsulfuron, fluroxypyr or triclopyr are very effective on most legumes. Escalade II, Confront and metsulfuron (Manor, Mansion or Blade) are good lespedeza control products. When using three-ways (2,4-D + MCPP + dicamba), repeat applications are usually needed. Celsius (thiencarbazone + iodosulfuron + dicamba) should be effective on lespedeza. **Ortho Chickweed and Oxalis Killer (8% triclopyr) is a good choice for homeowners. Do not use this product on centipede grass, St. Augustine grass or bermudagrass.**



Lyreleaf Sage

(*Salvia lyrata*)

Lyreleaf sage is a hardy perennial with a basal rosette. The flowers can be white or light blue. Metsulfuron (Mansion, Blade or Manor) at 0.5 ounce per acre will provide good to excellent control. Products containing 2,4-D, dicamba, MCPP, triclopyr and fluroxypyr are generally ineffective.



Moss

(*Bryum argentum*)

Quicksilver T&O (carfentrazone) at 6.7 ounces per acre in 100 GPA when temperatures are less than 85° F provides excellent moss control. Bentgrass has excellent tolerance for Quicksilver. Do not apply to desirable hybrid bermudagrass. Quicksilver does not control algae.





Nutsedge, Purple

(*Cyperus rotundus*)

This is the most difficult sedge to control. Repeat applications will be needed. Monument (trifloxy-sulfuron), Certainty (sulfosulfuron) and Dismiss South (sulfentrazone + imazethapyr) provide temporary suppression of purple nutsedge. SedgeHammer+ (halosulfuron), while slightly less effective, is safe to use on all turfgrasses. Image 70 DG (imazaquin) is an effective herbicide for suppressing sedges in warm-season turfgrasses. Image may cause stunting of turfgrasses. **See Sedge Control for Homeowners.**



Nutsedge, Yellow

(*Cyperus esculentus*)

Not usually a problem in lawns. It is more common in ornamental beds and vegetable gardens. SedgeHammer+, Image, Certainty, Monument, Dismiss and Dismiss South are all effective for yellow nutsedge. **See Sedge Control for Homeowners.**



Plantain, Broadleaf

(*Plantago major*)

The common three-way herbicides (2,4-D + dicamba + MCPP) control broadleaf plantain. Tank mixing metsulfuron with a three-way herbicide often improves control.

Plantain, Buckhorn (*Plantago lanceolata*)

The common three-way herbicides (2,4-D + dicamba + MCPP) control buckhorn plantain. Tank mixing metsulfuron with a three-way herbicide often improves control. Fall applications are more effective.



Prostrate Knotweed (*Polygonum aviculare*)

Metsulfuron at 0.5 ounce per acre or dicamba (Banvel, Vanquish) at 0.5 pound per acre will control prostrate knotweed. Celsius WG (thiencarbazone + iodosulfuron + dicamba) should be effective on prostrate knotweed. There are many combination products that contain 2,4-D and dicamba including Trimec 992 and Speedzone.



Purple Deadnettle (*Lamium purpureum*)

Three-ways (2,4-D + MCPP + dicamba) alone will not control purple deadnettle. Effective deadnettle control requires a tank mix of a postemergence herbicide with simazine or atrazine. Typical mixes are a three-way plus simazine or atrazine or metsulfuron plus simazine or atrazine. Apply early (between December and March 1) before the weeds get big.





Sedge Control for Homeowners

SedgeHammer+ (halosulfuron + surfactant) is a good sedge control choice for homeowners because it is effective on the common sedges, comes in a small package with surfactant added and is safe on all turfgrasses. Hi-Yield Nutsedge Control also contains halosulfuron. Ortho Nutsedge Killer for Lawns (0.05% sulfentrazone) is a quick-acting herbicide that is fairly effective on most sedges and safe on most lawn grasses. Sulfentrazone is fast-acting and will cause leaf burn on sedges within two to three days. It is weaker on purple nutsedge compared to halosulfuron. *(Photo: Purple nutsedge control with halosulfuron.)*



Shepherd's Purse

(Capsella bursa-pastoris)

Effective control requires a tank mix of a postemergence herbicide with simazine or atrazine. Typical mixes are a three-way plus simazine or atrazine or Manor, Mansion or Blade plus simazine or atrazine. Apply early (between December and March 1) before the weeds get big.



Spotted Burclover

(Medicago arabica)

Effective control requires a tank mix of a postemergence herbicide with simazine or atrazine. Typical mixes are a three-way plus simazine or atrazine or Manor, Mansion or Blade plus simazine or atrazine. Apply early (between December and March 1) before the weeds get big.

Spring Beauty (*Claytonia virginica*)

Manor, Mansion or Blade (metsulfuron) will provide acceptable control of spring beauty. Apply in February or March. Add 0.5% nonionic surfactant.



Spurge (*Chamaesyce* spp.)

Manor, Mansion or Blade (metsulfuron) is the best spurge control treatment. Use only in bermudagrass, centipedegrass, St. Augustinegrass and zoysiagrass.



Violet (*Viola* spp.)

Manor, Mansion or Blade (metsulfuron) is an effective violet control herbicide in bermudagrass, centipedegrass, St. Augustinegrass and zoysiagrass. Products containing triclopyr and clopyralid (Confront, Turflon), 2,4-D + fluroxypyr + dicamba (Escalade 2) or triclopyr + phenoxy herbicides (Cool Power, HorsePower or Chaser) are fairly effective for violet control, and these products can be used on cool-season grasses such as tall fescue. Repeat applications are usually required. Mid- to late fall applications are best followed by mid-spring to early summer applications. **Ortho Chickweed and Oxalis Killer (8% triclopyr) is a good choice for homeowners. Do not use this product on centipedegrass, St. Augustinegrass or bermudagrass.**





Virginia Buttonweed

(*Diodia virginiana*)

Herbicides provide only temporary suppression of Virginia buttonweed. Products containing fluroxypyr or triclopyr such as Escalade II or Momentum FX2 seem to be more consistent than the standard three-ways. However, multiple applications of three-way (2,4-D + MCPP + dicamba) herbicides at intervals of three to six weeks do a fair job of suppressing Virginia buttonweed. **Consult label to determine the maximum number of applications allowed per year.**



White Clover

(*Trifolium repens*)

Three-way growth regulator herbicides, quinclorac and metsulfuron will provide postemergence control of white clover.



Wild Garlic, Wild Onion

(*Allium vineale*)

Metsulfuron (Manor, Mansion or Blade) is very effective for wild garlic control and many other winter broadleaf weeds. Apply in late February or early March on a warm (at least 50° F), sunny day when there is good soil moisture. Add 0.25% nonionic surfactant. Another option is use of either 2,4-D LV ester or one of the three-ways (Trimec, Triplet). These products are the least effective and require three applications to eliminate garlic. Make the first treatment in November, repeat in March and then again the following November. Do not treat 2,4-D-sensitive grasses such as centipedegrass and St. Augustine-grass unless they are dormant. The ester formulations of 2,4-D are more effective against garlic.

The information given herein is for educational purposes only. Reference to products and turfgrass cultivars is made with the understanding that no discrimination is intended nor endorsement by the Arkansas Cooperative Extension Service.

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