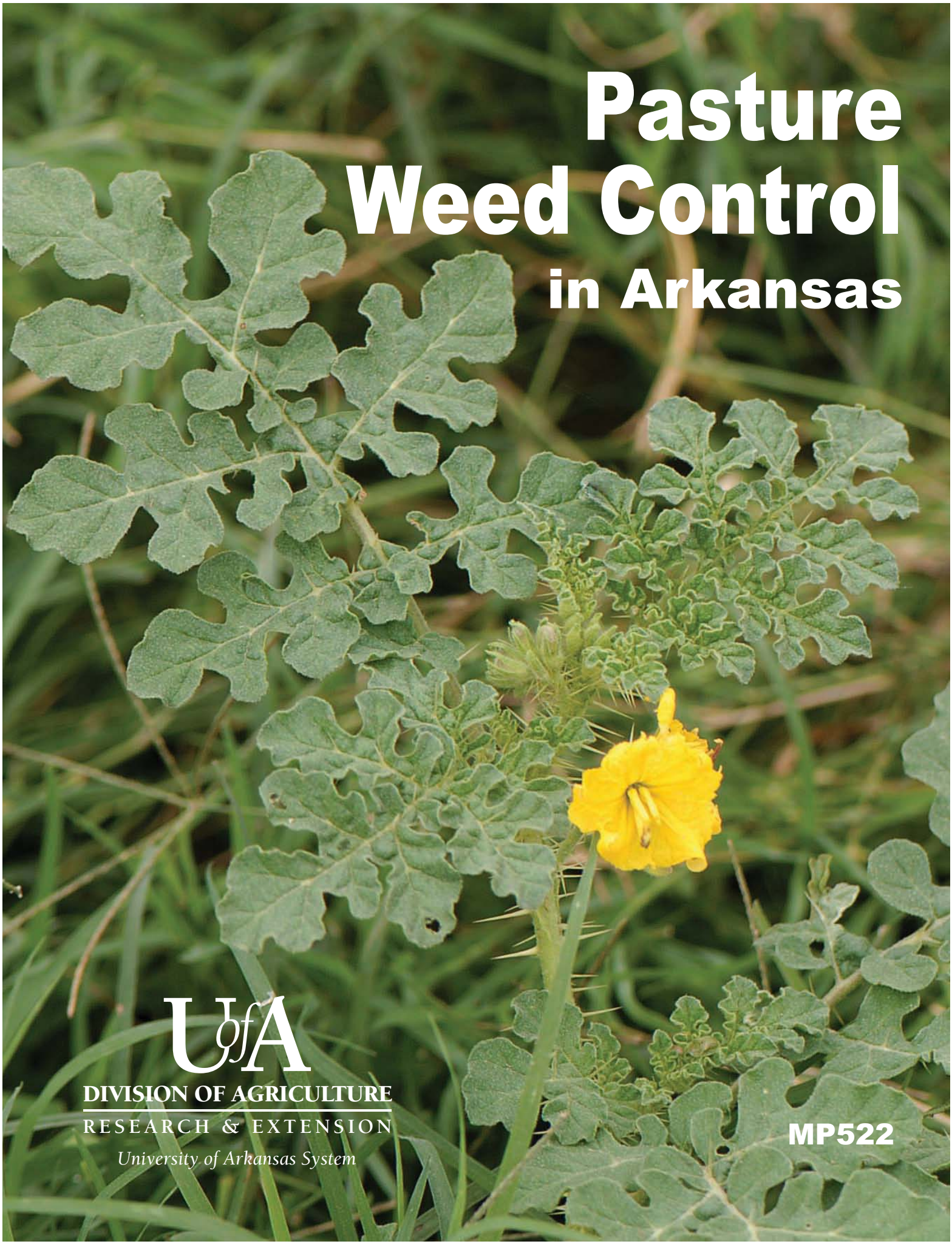
Pasture Weed Control in Arkansas



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Pasture Weed Control in Arkansas

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Introduction

Properly applied weed control is one of the most cost-effective management practices available to pasture farmers. Many weed control practices are cheap when compared to other pasture improvement methods.

Will weed and brush control always produce more grass? Not always. There must be a population of desirable plants present to take advantage of the reduced weed competition. If a pasture has 20 to 30 percent bermudagrass cover and a dense stand of broadleaf weeds, spraying with a broadleaf herbicide may help the bermudagrass spread. However, with bermudagrass, fertilization and follow-up weed control must be part of the program.

Will weed and brush control increase profit? Some weed and brush control treatments can be expensive. Consider the cost of the initial treatments, the life of the treatment and the cost of maintenance treatments to avoid losing what was gained by the initial application. Research the projected forage response and the financial outlay involved. Weed control is not always motivated by potential profit. Farmers may spray weeds simply because it makes their fields look better.

Research Methods

These recommendations are based on results obtained in Arkansas field trials. In our research plots, broadcast applications are applied at 15 gal/A using a boom sprayer equipped with Spraying Systems 8002 flat fan nozzles on 20-inch spacing. We add 0.25% nonionic surfactant to the spray mix.

Boom Sprayers

Use a boom sprayer when precise application is critical. A good target volume for spraying pasture weeds and brush with a boom is 15 gallons per acre.

Boomless Sprayers

Boomless nozzles (Boom Buster, Boominator, Boomjet, etc.) are not as accurate as a boom sprayer. The nozzle in the photo is a Boom Buster. Due to the characteristics of boomless sprayers, about 25 gallons per acre is the lowest spray volume that can be used.

Guidance Systems

A GPS guidance system is very helpful in achieving accurate applications when treating pastures with no rows to follow. It prevents overlaps and skips when spraying herbicides or applying fertilizer. Foam markers are also available for this purpose.

Guidance Systems (cont.)

A guidance system will help prevent this kind of streaking.

Basal Bark and Stump Treatment

An effective mix for basal bark and stump treatment is 25% Remedy Ultra + 75% light mineral oil. Use a spray tip that will produce a fine mist to avoid overuse of the herbicide mix. A Teejet 5500 X-1 or X-2 adjustable Conejet is a good choice. Basal bark treatment is most effective on brush with stems 4 inches or less in diameter. Stump treatment should be done as soon as possible after cutting. Delaying treatment beyond a few hours will reduce herbicide absorption into the stump.

Hack and Squirt

Using a hatchet and a squirt bottle is another useful method for controlling large brush. The idea is to inject the herbicide into the tree. A cordless electric drill is a good tool for creating holes in which to inject herbicide. A disposable syringe with the needle removed is a good tool for injecting herbicide into hatchet cuts or drill holes.

Individual Plant Treatment (IPT)

IPT is the most effective way to control brush with herbicides. The effectiveness is largely due to good coverage. Spray to wet the leaves but not to run off.

Soil Spot Treatment

Applying herbicide to the soil at the base of woody plants can be an effective method of control. Rainfall moves the herbicide into the soil where it is taken up by the roots. Applying Tordon 22K to the soil is the most effective means for controlling persimmon. Do not use this method where the roots of desirable trees extend. Velpar and Spike are also used as soil-applied brush killers in pastures. A livestock worming gun or disposable syringe may be used to accurately apply herbicides to the soil around individual plants.

Winter Weed Control in Bermudagrass

Glyphosate may be applied to completely dormant bermudagrass to control winter weeds. This leads to first cutting that is largely free of weeds. Tank mixing metsulfuron 60 DF at 0.25 oz/A with the glyphosate will improve control. Pastora at 1.5 oz/A is also very effective for winter weed control. Pastora may be applied if the bermudagrass is not completely dormant.

Clover Damage

Banvel, Cimarron Plus, Cimarron Max, Clarity, Grazon P+D, GrazonNext HL, metsulfuron 60 DF, PasturAll, PastureGard HL, Remedy Ultra, Surmount, Tordon 22K and Weedmaster will kill all clover. White clover has some tolerance for 2,4-D amine at rates up to 1 lb ai/A. Other clovers (red, crimson, arrowleaf, etc.) do not tolerate 2,4-D.

Surfactant

Adding a surfactant to the mix reduces the surface tension of the spray drops and may enhance herbicide uptake through the leaves. Surfactants seem to be more important when spraying brush with waxy leaves such as hollies and greenbrier. Consult the herbicide label for surfactant use instructions. Typical surfactant rates are from 0.25% to 0.5% of the total volume of the mix. For example, if the target concentration is 0.25%, add one quart surfactant to 100 gallons of spray mix.

Bermudagrass Sprigging Weed Control

Weedmaster at 2 quarts per acre will provide about three weeks of residual control. Weedmaster application may be delayed a few days after sprigging but must go out before weeds exceed 1 inch in height. Diuron will provide longer lasting control than Weedmaster. Apply diuron at 1 lb/ai/A after sprigging and before weeds are 1 inch tall. Rainfall is needed to activate the herbicide.

Bahiagrass *(Paspalum notatum)*

This recommendation is for use in established bermudagrass to control 'Pensacola' bahiagrass. In late May, apply 60 DF metsulfuron or Cimarron Plus at 0.5 to 1 oz/A plus 0.25% surfactant. Make a second application three to four weeks later. It is important to follow up the herbicide application with a fertility program to encourage the bermudagrass growth. Metsulfuron is safe on bermudagrass and has no grazing or haying restrictions. Metsulfuron also controls many broadleaf weeds and some brush species. Other metsulfuron combination products such as Pastora and Chaparral will also control bahiagrass.

Bitterweed

(Helenium amarum)

This weed is an indicator of poor soil fertility and weak, thin pastures. Spray bitterweed before it flowers. Bitterweed is readily controlled with 2,4-D amine at 1 to 2 pt/A applied in May or early June. Cimarron Plus, metsulfuron 60 DF, Grazon P+D, GrazonNext HL and dicamba + 2,4-D also control bitterweed.

Blackberry

(Rubus spp.)

Use metsulfuron 60 DF or Cimarron Plus at 1 oz/A plus 0.25% nonionic surfactant. Apply in May or June while blackberry and dewberry are actively growing. Remedy Ultra at 3 pt/A applied during or after bloom has been effective for blackberry and dewberry. Surmount at 2 qt/A is another option. Apply Surmount after fruit drop. Do not mow during the year of application. Regardless of treatment choice, plan on making a follow-up treatment the next year to control escapes.

Brush, Mixed

Apply a mixture of 0.25% Remedy Ultra plus 1% Grazon P+D as a leaf spray to individual plants. Add 0.25% v/v nonionic surfactant. Spray between May and October while brush is actively growing. Picloram-free combinations include GrazonNext HL + Remedy Ultra or Chaparral + PastureGard HL.

Buckbrush

(Symphoricarpos orbiculatus)

Readily controlled by metsulfuron at 1 oz/A, or 2,4-D amine at 1.5 lb/A is also effective. Chaparral at 3.3 oz/A controls buckbrush.

Buffalo Bur

(Solanum rostratum)

Buffalo bur has yellow flowers about 1 inch in diameter and many sharp spines. It is most common in northwest Arkansas. Spray early with GrazonNext HL at 1.5 pt/A or Grazon P+D at 2 pt/A.

Buttercup

(Ranunculus spp.*)*

Spray buttercup in late February or early March before it flowers. This weed is easily controlled with 2,4-D amine at 1 to 2 pt/A. Metsulfuron 60 DF, Cimarron Plus, Grazon P+D, Grazon-Next HL and dicamba + 2,4-D also control buttercup. In dormant bermudagrass, either glyphosate or paraquat will control buttercup at normal use rates.

Carpetweed

(Mollugo verticillata)

This species is typically found in disturbed soil. It can be difficult to control with growth regulator herbicides. Grazon P+D, 2,4-D and dicamba + 2,4-D are generally ineffective. However, Grazon-Next HL at 1 qt/A has done a good job. Remedy Ultra at 1 pt/A provides about 60% control.

Chickweed, Common

(Stellaria media)

2,4-D alone does a poor job of controlling common chickweed. Cimarron Plus at 0.25 oz/A, Cimarron Max at Rate I, Grazon P+D and GrazonNext HL at 1 qt/A and metsulfuron 60 DF at 0.25 oz/A all provide good control of common chickweed.

Chickweed, Sticky

(Cerastium glomeratum)

2,4-D alone does a poor job of controlling sticky chickweed. Cimarron Plus at 0.25 oz/A, Cimarron Max at Rate I, Grazon P+D and GrazonNext HL at 1 qt/A and metsulfuron 60 DF at 0.25 oz/A all provide good control of sticky chickweed.

Crabgrass *(Digitaria sanguinalis)*

Glyphosate may be applied between cuttings to control crabgrass in established bermudagrass hayfields. Apply 4 to 8 fl oz/A of 4 lb/gal glyphosate as soon as the hay is removed after cutting. Be warned that glyphosate should not be used in this manner unless bermudagrass stunting, yield reduction and possible stand reduction can be tolerated. Applications made after regrowth is well under way will result in increased damage to the bermudagrass. We have tested this practice many times and the amount of bermudagrass injury is unpredictable. Injury ranged from almost none up to 50% stunting.

Croton, Tropic

(Croton glandulosus)

This summer annual is readily controlled with herbicides. At the rate of 1 qt/A the following herbicides provide excellent control: Cimarron Max, Grazon P+D, GrazonNext HL, Weedmaster and 2,4-D. Spray in May or early June when weeds are less than 12 inches tall.

Croton, Woolly

(Croton capitatus)

This summer annual is readily controlled with herbicides. At the rate of 1 qt/A the following herbicides provide excellent control: Cimarron Max, Grazon P+D, GrazonNext HL, Weedmaster and 2,4-D. Spray in May or early June when weeds are less than 12 inches tall.

Dallisgrass

(Paspalum dilatatum)

There is a period in late fall to early winter when bermudagrass is dormant and dallisgrass remains green. During this time 16 fl oz/A of 4 lb/gal glyphosate provides fair to good dallisgrass control. Bermudagrass injury varies. Timing and calibration are important. Once frost occurs, the bermudagrass should be checked frequently so that the application can be made as soon as it is completely dormant. If glyphosate products with higher concentrations are used, the rate should be adjusted.

Dewberry

(Rubus spp.*)*

Use metsulfuron 60 DF or Cimarron Plus at 1 oz/A plus 0.25% nonionic surfactant. Apply in May or June while blackberry and dewberry are actively growing. Remedy Ultra at 3 pt/A applied during or after bloom has been effective for dewberry. Surmount at 2 qt/A is another option. Apply Surmount after fruit drop. Do not mow during the year of application. Regardless of treatment choice, plan on making a follow-up treatment the next year to control escapes.

Dogfennel

(Eupatorium capillifolium)

Spray dogfennel when it is 6 to 12 inches tall. At this height, Grazon P+D or Weedmaster at 1 qt/A will give 90% to 100% control. Research has shown that Remedy Ultra (triclopyr) and Pasture-Gard HL (triclopyr + fluroxypyr) are also highly effective for controlling dogfennel. PastureGard HL at 3 pt/A is the preferred treatment for dogfennel that is more than 3 feet tall.

Downy Brome *(Bromus tectorum)* and Cheat *(Bromus secalinus)*

In dormant bermudagrass, Roundup at 1 qt/A controls these winter grasses. Spray before seed heads form. Pastora at 1.5 oz/A controls these grasses and may be used on partially green bermudagrass. Spray between early January and early March when the weeds are small.

Fescue, Tall

(Festuca arundinancea)

In bermudagrass, tall fescue can be eradicated by applying Panoramic (imazapic) at 10 fl oz/A + 32 fl oz/A glyphosate. Apply in late December or January when the bermudagrass is completely dormant. Glyphosate alone is not very effective when applied at this time of year.

Foxtail, Knotroot

(Setaria geniculata)

Foxtail is a late-germinating summer grass that becomes obvious in July. One option is to apply 8 to 10 fl oz/A of 4 lb/gal glyphosate as soon as the hay is off the field. Panoramic at 4 to 6 fl oz/A does a fair job of foxtail control if it is in the seedling stage. Add 0.25% nonionic surfactant. Control of large plants will be poor. Application timing will typically be from late May to early June. Panoramic (imazapic) will stunt bermudagrass. Damage varies, but the loss of one hay cutting is typical. Expect 30 to 45 days of bermudagrass suppression after application. Do not apply to drought-stressed bermudagrass. Do not apply during spring transition. Do not apply to newly sprigged or seeded bermudagrass.

Greenbrier *(Smilax* spp.*)*

Greenbrier control is difficult regardless of the methods or herbicides used. Broadcast herbicide applications are not effective. For individual plant treatment, mix 1 quart Remedy Ultra with 3 quarts diesel fuel, vegetable oil or light mineral oil. Apply this mix to the lower 12 inches of the greenbrier stems with a Conejet 5500 X-1 or X-3 nozzle. Agitate the mixture before spraying. Best results are achieved in the winter when more basal stems are exposed. Expect about 75% control one year after treatment. Follow-up applications are essential.

Groundsel

(Senecio spp.*)*

Metsulfuron 60 DF or Cimarron Plus at 0.5 to 1 oz/A has proven to be the most effective herbicide for groundsel control. Apply in May. Add 0.25% nonionic surfactant. Grazon P+D at 2 to 3 qt/A provides partial control.

Hedge Mustard

(Sisyimbrium officinale)

Grazon P+D or Weedmaster at 1 qt/A controls hedge mustard if applied early. GrazonNext HL at 1.5 pt/A and Chaparral at 2.5 oz/A are also effective.

Hemp Dogbane

(Apocynum cannabium)

Surmount at 3 to 6 pt/A is the best treatment we have found for hemp dogbane. Apply when the weeds are 18 to 24 inches tall. Add 0.25% non-ionic surfactant. In areas where picloram cannot be used, apply 2 qt/A Weedmaster + 1 oz/A metsulfuron 60 DF plus 0.25% nonionic surfactant. Or, apply metsulfuron 60 DF at 1 ounce of product per acre plus 0.25% nonionic surfactant. Follow up next spring to control escapes.

Henbit

(Laminum amplexicaule)

Use a product that contains metsulfuron such as Cimarron Plus, Patriot, Cimarron Max, Chaparral and several others. Apply between mid-December and March 1.

Honeylocust

(Gleditsia triacanthos)

Spray the leaves with a 1% solution of Grazon P+D. Add 0.25% nonionic surfactant. Apply after full leaf-out when conditions are favorable for plant growth. Make a follow-up application the next spring.

Honeysuckle

(Lonicera spp.*)*

Metsulfuron 60 DF or Cimarron Plus at 1 oz/A provides excellent honeysuckle control. For individual plant treatment, add 1 ounce of product per 100 gallons of water and spray to wet. A 2% solution of 4 lb/gal glyphosate or 4 lb/gal triclopyr, applied in the fall, also controls honeysuckle. Follow-up treatments will be needed.

Horsenettle

(Solanum carolinense)

Grazon P+D (3 to 4 pt/A) or GrazonNext HL (2 pt/A) are good choices for horsenettle control. Time herbicide applications to occur between bloom and fruit set. Complete horsenettle control will not be achieved with a single herbicide application. Spray for three consecutive years to reach the 90% to 100% control range.

Horseweed

(Conyza canadensis)

Spray horseweed when it is less than 12 inches tall. A properly timed application of Grazon P+D or Weedmaster at 1 qt/A will give 90% to 100% control. Metsulfuron 60 DF or Cimarron Plus at 0.5 oz/A will also provide 90% to 100% control.

Indigo, White Wild

(Baptisis leucantha)

A perennial with trifoliate leaves that may reach 5 feet. Cimarron Max (Rate II), Surmount 1.5 qt/A and Chaparral at 3.3 oz/A applied in late June all averaged 90% control at 60 days after spraying.

Johnsongrass *(Sorghum halepense)*

Use 1.33 oz/A of Outrider with 0.25% nonionic surfactant in 10 to 40 gallons of water per acre as a broadcast application. Apply to actively growing johnsongrass that is at least 18 to 24 inches tall and up to the heading stage. Weeds to be treated should not be mowed or grazed for two weeks before or after application. Tank mixing Outrider with herbicides formulated as amines (including 2,4-D) may decrease the effectiveness of Outrider on johnsongrass. Pastora at 1.5 oz/A is effective for johnsongrass control.

Lyreleaf Sage

(Salvia lyrata)

A hardy perennial that arises from a rosette. Metsulfuron at 0.5 to 1.0 oz/A has been the most effective treatment. Grazon P+D at high rates provides partial control.

Maypop

(Passiflora incarnata)

Control data is scarce for maypop. One greenhouse study indicates that Remedy Ultra or 2,4-D amine at 2 qt/A will provide good initial control. Clarity at 1 pt/A also performed well in this trial. Expect regrowth the next year.

Mayweed

(Anthemis cotula)

This summer annual is readily controlled with herbicides. At the rate of 1 qt/A the following herbicides provide excellent control: Cimarron Max, Grazon P+D, GrazonNext HL and Weed-master. Chaparral at 2.5 oz /A also controls mayweed. Spray in May or early June when weeds are less than 12 inches tall.

Oaks *(Quercus* spp.*)*

It is possible to achieve partial control of some oak species using 2,4-D alone at 2 qt/A. Improved control can be achieved by using a mixture of 1% Grazon P+D plus 0.25% Remedy Ultra as an individual plant leaf spray. Add 0.25% nonionic surfactant. Basal bark treatments are very effective on oaks with stem diameters of 4 inches or less. Mix 1 quart Remedy Ultra with 3 quarts diesel fuel, vegetable oil or light mineral oil and apply to the lower 18 inches of the stems with a Conejet 5500 X-1 or X-3 nozzle. Agitate the mixture before spraying. JLB Oil Plus is a ready-to-use basal oil carrier that may be used in place of diesel fuel.

Osage Orange

(Maclura pomifera)

Apply 1% Remedy Ultra plus 0.25% surfactant as a leaf spray to individual plants. For Osage orange with stems less than 4 inches in diameter, mix 1 quart Remedy Ultra with 3 quarts diesel fuel, vegetable oil or light mineral oil and apply to the lower 18 inches of the stems with a Conejet 5500 X-1 or X-3 nozzle. Agitate the mixture before spraying. JLB Oil Plus is a ready-to-use basal oil carrier plus surfactant.

Palmetto

(Sabal minor)

Apply a 4% solution of Remedy Ultra as an individual plant treatment. Add 0.25% v/v nonionic surfactant. Be patient.

Perilla Mint

(Perilla fruticosa)

Grazon P+D at 1 qt/A or Weedmaster at 1 qt/A will control perilla mint. Apply in late May or early June when weeds are actively growing. Spray before the weeds are 12 inches tall. Add 0.25% nonionic surfactant to the spray mix. Bush hog large plants that have already formed flowers.

Persimmon *(Diospyros virginiana)*

Persimmon is one of the more difficult brush species to control. The most effective treatment is undiluted Tordon 22K applied to the soil as a spot concentrate prior to periods of expected rainfall. Apply directly to the soil within the drip line and on the upslope side of the tree. Application to trees taller than 12 feet is not recommended. Apply 2 to 4 mls (cc's) per inch of stem diameter in spring (April-May). Use a Spraying Systems Meterjet applicator or a livestock worming gun to apply a precise amount of the herbicide. A leaf spray using a 1% Surmount solution is slightly less effective.

Pigweed

(Amaranthus spp.*)*

Pigweeds are prolific seed producers. Single plants are capable of producing thousands of seeds. Given adequate rainfall, pigweed seeds germinate throughout the summer. All emerged pigweed may be killed by a herbicide treatment only to be replaced by another flush of seedlings. Repeat applications will be needed for full-season control. Spray when the pigweeds are less than 12 inches tall. Cimarron Plus, metsulfuron 60 DF, Grazon P+D, GrazonNext HL, dicamba + 2,4-D, and 2,4-D provide good control of seedling pigweed.

Plantain, Buckhorn

(Plantago lanceolata)

Two proven treatments for buckhorn plantain are Grazon P+D at 1.5 qt/A or Cimarron Max at 1 qt/A + 0.25 oz/A. These products provided 90% to 100% control of buckhorn plantain. Add 0.25% nonionic surfactant to the spray mix. Apply in fall when there is adequate moisture and the weeds are actively growing. Metsulfuron 60 DF or Cimarron Plus at 0.5 oz/A are also effective herbicides for this weed.

Poison Hemlock

(Conium maculatum)

Spray poison hemlock when it is less than 18 inches tall and before it flowers. Grazon P+D and GrazonNext HL at 1 qt/A are very effective for poison hemlock control when applied in May or early June.

Poorjoe

(Diodia teres)

The presence of a poorjoe is an indicator of low soil fertility. It is readily controlled with Grazon P+D or GrazonNext HL at 1 qt/A and Cimarron Max at Rate II. Spray in May or early June when weeds are less than 12 inches tall.

Prairie Tea

(Croton monanthogynus)

This summer annual is readily controlled with herbicides. At the rate of 1 qt/A the following herbicides provide excellent control: Cimarron Max, Grazon P+D, GrazonNext HL, Weedmaster and 2,4-D. Spray in May or early June when weeds are less than 12 inches tall.

Pricklypear

(Opuntia spp.*)*

Employing individual plant treatment, spray pricklypear with a 1% Surmount solution plus 0.5% nonionic surfactant. Use of Hi-Lite Blue Dye will help avoid spraying the same plant twice and show the extent of the coverage on treated plants. Apply during active growth. Do not spray under desirable trees. Do not spray wet pads. Be patient; Surmount works very slowly. It may take 1 to 3 years for complete control.

Prickly Sida, Teaweed

(Sida spinosa)

The key to prickly sida control is treating early before the weeds become too well established to control. GrazonNext HL or Grazon P+D are effective on this weed in the seedling stage. As the weeds get older, the percent of control declines.

Ragweed, Common

(Ambrosia artemisifolia)

The key to effective ragweed control is spraying when the weeds are small (2 to 4 inches tall). Small ragweeds are readily controlled with 2,4-D amine at 1 qt/A. Grazon P+D, GrazonNext HL and dicamba + 2,4-D also control ragweeds at 1 qt/A. Cimarron Plus and metsulfuron are not effective on ragweed.

Ragweed, Lanceleaf

(Ambrosia lanceolata)

The key to effective ragweed control is spraying when the weeds are small (2 to 4 inches tall). Small ragweeds are readily controlled with 2,4-D amine at 1 qt/A. Grazon P+D, GrazonNext HL and dicamba + 2,4-D also control ragweeds at 1 qt/A. Cimarron Plus and metsulfuron are not effective on ragweed.

Red Cedar *(Juniperus virginiana)*

Apply undiluted Tordon 22K to the soil prior to periods of expected rainfall. Apply directly to the soil within the drip line and on the upslope side of the tree. Application to trees taller than 12 feet is not recommended. Apply 3 to 4 mls (cc's) per 3 feet of plant height in either spring (April-May) or fall (September-October). Soil spot treatments with Velpar are also effective on cedar less than 6 feet tall. Use a Spraying Systems Meterjet applicator or a livestock worming gun to apply a precise amount of the herbicide. DuPont offers a spot gun that will attach directly to the Velpar jug. Leaf sprays of Surmount or Tordon 22K will control cedar.

Red Sorrel

(Rumex acetosella)

Grazon P+D at 1 qt/A provides excellent control of red sorrel. Metsulfuron or Cimarron Plus at 0.5 oz/A is also very good. Treat anytime the red sorrel is actively growing. Remedy Ultra is not effective on red sorrel.

Ryegrass *(Lolium* spp.*)*

Glyphosate must be applied in January or February while the ryegrass is small to achieve effective control in dormant bermudagrass. A good rule of thumb is waiting for the high to reach 50 degrees three days in a row. Glyphosate works very slowly in cold weather. Delaying application into March and April results in big ryegrass that is very difficult to control regardless of the rate applied. In two years of testing at six locations, we have gotten excellent ryegrass control with glyphosate at 1 lb/ai/A applied in January or February. Another important factor in ryegrass control is adequate spray coverage. Our research herbicides are applied with a boom sprayer at 15 gal/A using 8002 flat fan nozzles on 20-inch spacing.

Sandbur *(Cenchrus longispinus)*

While not perfect, the best treatment we have found is an early postemergence application of Panoramic (imazapic) at 6 fl oz/A. Add 0.25% nonionic surfactant. Panoramic will stunt bermudagrass. Damage varies, but the loss of one hay cutting is typical. Expect 30 to 45 days of bermudagrass suppression after application. Do not apply to drought-stressed bermudagrass. Do not apply during spring transition. Do not apply to newly sprigged or seeded bermudagrass. See the Pastora label for sandbur control instructions. Fertilization of bermudagrass is a key part of sandbur control.

Sedges *(Cyperus* spp.*)*

(Yellow nutsedge pictured)

Use 1.33 oz/A of Outrider with 0.25% nonionic surfactant in 10 to 40 gallons of water per acre as a broadcast application. Apply to actively growing sedges with enough leaf area to intercept the spray. Weeds to be treated should not be mowed or grazed for two weeks before or after application. Bermudagrass may be harvested after the two-week period without any effect on Outrider efficacy. Weed response to Outrider is very slow. It may require up to 1 month for weeds to become brown. Tank mixing Outrider with herbicides formulated as amines (including 2,4-D) may decrease the effectiveness of Outrider on sedges. For spot treatment, mix 1.33 oz/A of Outrider in 100 gallons of water with 0.25% nonionic surfactant. Apply this as a spray to wet application.

Sericea Lespedeza

(Lespedeza cuneata)

Apply 1.5 pt/A PastureGard HL in the late spring to early summer before bloom. The plants should be 12 to 15 inches tall with fully developed leaves. Increase the rate to 2 pints per acre for dense stands or later stages of growth. Use a minimum spray volume of 10 gallons per acre. Higher application volumes are preferred. For spot application, mix 6 pints PastureGard HL per 100 gallons of water or 1 fluid ounce PastureGard HL per gallon of water. Apply the spray uniformly and thoroughly wet the sericea lespedeza foliage. Metsulfuron 60 DF at 1 oz/A plus 0.25% nonionic surfactant is an excellent treatment for sericea control.

Spurge

(Chamaesyce spp.*)*

Use a product that contains metsulfuron such as Cimarron Plus, Patriot, Cimarron Max, Chaparral and several others.

Sumac

(Rhus spp.*)*

Sumac is one of the few brush species that is readily controlled with 2,4-D amine. Apply at the rate of 1.5 to 2 qt/A. Other herbicides effective for sumac include Grazon P+D, Remedy Ultra, PastureGard HL and Surmount.

Thistle, Bull

(Cirsium vulgare)

The key to effective thistle control is spraying while the thistles are in the rosette stage of growth (before the flower stalk appears). Biennial thistles in Arkansas are readily controlled with a properly timed application of 2,4-D amine at 1.5 qt/A. Spring applications should be made from late February to early March. Fall applications from late October through November will enhance a thistle control program. Grazon P+D, GrazonNext HL and dicamba + 2,4-D also provide excellent control of thistles at 1 qt/A.

Thistle, Milk

(Silybum marianum)

The key to effective thistle control is spraying while the thistles are in the rosette stage of growth (before the flower stalk appears). Biennial thistles in Arkansas are readily controlled with a properly timed application of 2,4-D amine at 1.5 qt/A. Spring applications should be made from late February to early March. Fall applications from late October through November will enhance a thistle control program. Grazon P+D, GrazonNext HL and dicamba + 2,4-D also provide excellent control of thistles at 1 qt/A.

Thistle, Musk

(Carduus nutans)

The key to effective thistle control is spraying while the thistles are in the rosette stage of growth (before the flower stalk appears). Biennial thistles in Arkansas are readily controlled with a properly timed application of 2,4-D amine at 1.5 qt/A. Spring applications should be made from late February to early March. Fall applications from late October through November will enhance a thistle control program. Grazon P+D, GrazonNext HL and dicamba + 2,4-D also provide excellent control of thistles at 1 qt/A.

Thistle, Yellow

(Cirsium horridulum)

The key to effective thistle control is spraying while the thistles are in the rosette stage of growth (before the flower stalk appears). Biennial thistles in Arkansas are readily controlled with a properly timed application of 2,4-D amine at 1.5 qt/A. Spring applications should be made from late February to early March. Fall applications from late October through November will enhance a thistle control program. Grazon P+D, GrazonNext HL and dicamba + 2,4-D also provide excellent control of thistles at 1 qt/A.

Texas Bullnettle

(Cnidosculus texanus)

A perennial with a taproot that may extend 6 feet deep. Stems and leaves have stinging spines. The flower is white and about 1 inch wide. Pasture herbicides are not very effective for controlling this weed. Chaparral at 3.3 oz/A provides suppression.

Trumpetcreeper

(Campsis radicans)

As with many perennial vines, it is virtually impossible to control trumpetcreeper with a single herbicide application. Banvel or Clarity at 2 qt/A, or the combination of 2,4-D with a lower rate of Banvel or Clarity, will provide from 60% to 100% control of this weed. Spot treatments of a 2% glyphosate solution are also an effective means of controlling small infestations of trumpetcreeper.

Vervain, Brazilian

(Verbena brasiliensis)

An erect perennial that grows up to 7 feet. This plant is more common in southern Arkansas and appears to be spreading. Grazon P+D and GrazonNext HL applied in May at 1 qt/A gave 90% to 100% control at 90 days after application.

Virginia Buttonweed

(Diodia virginiana)

This tough perennial is difficult to control with herbicides. Suppression is a more obtainable goal. In limited testing, Chaparral at 2.5 oz/A has been one of the better treatments. GrazonNext HL at 1 qt/A and Cimarron Max at Rate II will provide about six weeks of suppression.

Wild Garlic

(Allium vineale)

In tall fescue, 2,4-D ester at 2 qt/A will provide fair wild garlic control. Apply from December to March. Repeat the application the following year. In bermudagrass, metsulfuron 60 DF or Cimarron Plus at 0.5 oz/A is the preferred treatment. Add 0.25% nonionic surfactant to the spray mix.

Wild Rose

(Rosa spp.*)*

Spray the leaves with a 1% solution of Grazon P+D. Add 0.25% nonionic surfactant. Apply after full leaf-out when conditions are favorable for plant growth.

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