

## Control of Common Weeds in Pastures [cont.]

### Honeysuckle (*Lonicera* spp)

Metsulfuron 60 DF 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 3 lb/ae/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 at 0.5 oz/A will also provide 90 to 100% control.

### 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 per acre 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 or to Jiggs or World Feeder varieties.

### Groundsel (*Senecio* spp)

Metsulfuron 60 DF 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.

### 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. Bermudagrass may be harvested after the two-week period without any effect on Outrider performance. Weed response to Outrider is very slow. It may require up to one 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 johnsongrass. 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. Panoramic at 4 fl oz/A plus 0.25% nonionic surfactant will provide about 80% johnsongrass control. Panoramic will stunt bermudagrass. Damage varies, but the loss of one hay cutting is typical. Pastora is effective for johnsongrass control. See the label for instructions.

### Maypop, Passion Flower (*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.

### 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 commercial basal oil and apply to the lower 18 inches of the stems with a Conejet 5500 X-2 nozzle.

### 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 commercial basal oil and apply to the lower 18 inches of the stems with a Conejet 5500 X-2 nozzle. Agitate the mixture before spraying.

### Palmetto, Dwarf (*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 frutescens*)

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 (ccs) 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 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. Metsulfuron 60 DF, Grazon P+D, GrazonNext HL and dicamba + 2,4-D, and 2,4-D amine all provide good control of seedling pigweed.

### Plantain, Buckhorn (*Plantago lanceolata*)

A proven treatment for buckhorn plantain is Grazon P+D at 1.5 qt/A. This product provided 90 to 100% control of buckhorn plantain. Add 0.25% nonionic surfactant to the spray mix. Apply in late May or early June when weeds are actively growing. Metsulfuron 60 DF at 0.5 oz/A is also an effective herbicide for this weed.

(Continued, page 109)

## Control of Common Weeds in Pastures [cont.]

### 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.

### 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 one to three years for complete control.

### Ragweed, Common and Lanceleaf (*Ambrosia* spp)

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. Metsulfuron is not effective on ragweed.

### Red Sorrel (*Rumex acetosella*)

Grazon P+D at 1 qt/A provides excellent control of red sorrel. Metsulfuron 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.

### Rose, Wild (*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.

### 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 1.0 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*)

Three options for early postemergence sandbur control include Pastora at 1.5 oz/A, Roundup Weathermax at 11 fl oz/A or Panoramic (imazapic) at 6 fl oz/A. Apply after the first hay cutting as soon as the hay is removed from the field. 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. Fertilization of bermudagrass is a key part of sandbur control.

### Sawbrier or Greenbrier (*Smilax* spp)

Greenbrier control is difficult regardless of the methods or herbicides used. The waxy leaves are a barrier to herbicide uptake. Ester formulations of herbicides are more likely to penetrate the leaves. Apply a 4 lb/gallon triclopyr ester (Remedy Ultra, etc.) at 1.5 quarts per acre. Add 0.5% surfactant. Broadcast in at least 15 gallons of spray mix per acre. Apply in late April or early May before the leaves mature and the wax thickens. Expect 70 to 80% control from one application. Make follow up applications when regrowth appears.

### Sedges (*Cyperus* spp)

Use 1.33 oz/A of Outrider or Permit with 0.25% nonionic surfactant in 10 to 40 gallons of water per acre as a broadcast application. Permit may be used on all grasses. Use Outrider on bermudagrass only. 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. Hay may be harvested after the two-week period without any effect on efficacy. Weed response to Outrider and Permit is slow. Tank mixing Outrider with herbicides formulated as amines (including 2,4-D) may decrease the effectiveness of Outrider on sedges. Permit may be tank mixed with Grazon P+D or Weedmaster.

### 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 1.0 oz/A plus 0.25% nonionic surfactant is an excellent treatment for sericea control.

### 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 Chaparral, Grazon P+D, Remedy Ultra, PastureGard HL and Surmount.

### Thistles (*Carduus*, *Cirsium* spp)

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.

### 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.

### 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 at 0.5 oz/A is the preferred treatment. Add 0.25% nonionic surfactant to the spray mix.

### Woolly Croton (*Croton capitatus*)

Along with bitterweed and buttercup, woolly croton is one of the easiest pasture weeds to control with herbicides. Apply 2,4-D amine at 1 to 2 pt/A in May or early June when woolly croton is less than 12 inches tall. Metsulfuron 60DF, Grazon P+D, GrazonNext HL and dicamba + 2,4-D also control woolly croton.

WEED RESPONSE RATINGS FOR FORAGE HERBICIDES

HERBICIDES	WEEDS																																			
	Cancerweed	Crabgrass	Foxtail	Cheat	Little Barley	Horseweed	Smooth Pigweed	Smartweed	Bullthistle	Curly Dock	Buttercup	Goldenrod	Horsenettle	Wild Garlic	Dogfennel	Bitterweed	Red Sorrel	Common Ragweed	Lanceleaf Ragweed	Chickweed	Henbit	Tall Fescue	Bahiagrass	Mullein	Groundsel	Crotons	Coreopsis	Prickly Pear Cactus	Johnsongrass	Nutsedge	Sandbur	Virginia Buttonweed				
<b>Preemergence</b>																																				
Kerb	N	R	R	R	R	N	N	N	N	N	R	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	
Prowl H <sub>2</sub> O	N	R	R	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	R	N	
Sinbar	N	H	H	H	H	N	N	N	N	N	N	N	N	N	N	N	N	N	N	H	H	N	N	N	N	N	N	N	N	N	N	N	N	N	N	
<b>Postemergence</b>																																				
2,4-D	N	N	N	N	N	R	R	R	H	R	H	R	R	R	R	H	N	H	R	R	N	N	N	N	N	N	H	R	N	N	N	N	N	R		
2,4-DB	N	N	N	N	N	N	R	N	R	R	R	N	N	N	N	R	N	R	N	H	N	N	N	N	N	N	R	N	N	N	N	N	N	N	N	
Banvel	N	N	N	N	N	H	H	H	H	H	H	H	R	R	H	H	H	H	R	H	H	N	N	N	N	H	R	N	N	N	N	N	N	N	N	
Chaparral	R	N	N	N	N	R	R	R	R	R	R	N	R	N	R	R	R	R	R	R	R	N	R	R	R	R	R	R	R	N	N	N	N	N	R	
Crossbow	N	N	N	N	N	H	H	H	H	H	H	H	R	R	R	H	R	H	R	R	R	N	N	N	N	H	R	N	N	N	N	N	N	N	N	
Glyphosate	R	R	R	R	R	R	R	R	N	R	R	N	N	H	R	R	R	R	N	R	N	H	H	N	N	H	R	N	R	R	R	R	R	N	N	
GrazonNext HL		N	N	N	N	R	R	H	R	R	H	H	H			H		H	H	R	R	N	N			H		N	N	N	N	N	N	R		
Grazon P + D	R	N	N	N	N	H	H	H	H	H	H	H	H	R	H	H	H	R	R	R	R	N	N	R	R	H	R	H	N	N	N	N	N	R		
Karmex	N	R	R	R	R	N	N	N	N	N	N	N	N	N	N	N	N	N	R	N	N	N	N	N	N	N	R	N	N	N	N	N	R	N	N	
Metribuzin	N	N	N	R	R	R	R	N	N	N	R	N	N	N	N	N	N	N	N	R	R	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Metsulfuron	H	N	N	N	N	H	H	H	N	R	H	N	N	H	N	H	H	N	N	H	H	N	H	R	H	R	R	N	N	N	N	N	N	N	R	
Milestone		N	N	N	N	R	R	H	R	R	R		H			H					R	R	N	N					N	N	N	N	N	R		
Outrider	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	H	H	N	N	N	
Panoramic	N	R	R	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	R	N	N	N	N	N	N	N	R	R	R	R	N	N	
Paraquat	N	N	H	H	H	N	N	N	N	N	H	N	N	H	N	N	N	R	N	H	H	H	N	N	N	R	N	N	N	N	N	N	N	N	N	
Pastora	N	R	R	R	R	R	R	R	N	R	R	N	N	R	N	R	R	N	N	R	R	N	R	R	N	R	N	N	N	R	N	R	N	R	N	N
Permit	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	H	N	N	N
Poast/Poast Plus	N	R	R	R	R	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	R	N	N	N	N	R	N	N	N	N	N	N	N	N
Pursuit	N	R	H	R	N	N	R	N	N	R	N	N	N	N	N	N	N	R	N	R	R	R	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Raptor	N	R	R	R	N	N	R	N	N	R	N	N	N	N	N	N	N	N	R	R	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Select	N	H	H	R	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	R	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Tordon 22K	R	N	N	N	N	R	R	R	H	R	N	R	H	N	R	N	R	R	R	N	N	N	N	N	R	N	N	N	H	N	N	N	N	N	R	
Velpar	N	N	N	N	N	N	N	N	N	N	R	N	N	N	N	N	N	N	N	R	R	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Weedmaster	N	N	N	N	N	H	H	H	H	H	H	H	R	R	H	H	R	H	H	H	H	N	N	R	N	H	R	N	N	N	N	N	N	N	R	

H = Highly recommended  
R = Recommended  
N = Not recommended