

Noxious Weeds

Statement from the Nebraska Department of Agriculture

Noxious weeds compete with crops, rangeland, and pastures, reducing yields substantially. Some noxious weeds are directly poisonous or injurious to man, livestock, and wildlife. The losses resulting from noxious weed infestations can be staggering, costing residents millions of dollars due to lost production. The business of noxious weed control is everyone's concern, and their control is to everyone's benefit. The support of all individuals within the state is needed and vital for the control of noxious weeds within Nebraska.

It is the duty of each person who owns

or controls land in Nebraska to effectively control noxious weeds on such land. County boards or control authorities are responsible for administration of noxious weed control laws at the county level. This system provides the citizens of Nebraska with local control. Each county is required to implement a coordinated noxious weed program. When landowners fail to control noxious weeds on their property, the county has the ability to serve an individual notice upon the owner of such land. This notice shall give specific instructions and methods on when and how certain noxious weeds are to be controlled.

The University of Nebraska–Lincoln Extension in cooperation with the Nebraska Department of Agriculture has developed a series of publications on the biology, identification, distribution and control of the state's noxious weeds. See *Canada Thistle* (EC171); *Plumeless Thistle* (EC172); *Spotted and Diffuse Knapweed* (EC173); *Leafy Spurge* (EC174); *Purple Loosetrife* (EC176); *Musk Thistle* (EC177); *Saltcedar* (EC164) and *Common Reed* (*Phragmites*) (EC166).

For a description of individual plant treatment techniques, go to page 51.

Weed	Herbicide	Product Per Acre	Application Time	Remarks and Approximate Cost Per Acre Broadcast
CANADA THISTLE	Chaparral/ Opensight	2.0-3.3 oz		Cost: Chaparral \$11.25-\$18.25; Opensight \$13.75-\$22.75.
	Tordon 22K	1.0 qt	Fall when actively growing or spring early flower bud	For noncrop areas and spot treatment in pasture and range. Tordon may remain in the soil for three or more years. Cost: \$17.50.
	Tordon 22K + 2,4-D ester (4L)	1.0 pt 32.0 oz	Fall; spring during flower bud	Cost: \$13.25.
	Glyphosate [♦]	56.0-80.0 oz	Flower bud stage or in fall when growing actively	Idle ground or spot treatment in cropland before head or pod fill of crop. Avoid tillage for three days. Cost: \$4.75-\$7.00.
	Dicamba [•]	32.0-64.0 oz	Fall when actively growing or spring early flower bud	Idle ground or grassland. Avoid tillage for five days. Injury to forage grasses may occur. Broadleaf crops may be injured for two years after treatment. Cost: \$9.00-\$18.00.
	Curtail Stinger or Transline	2.0-4.0 pt 0.67-1.3 pt	Rosette to pre-bud or in fall when actively growing	Curtail needs lower rate in wheat and barley, higher rate in fallow, pasture or CRP. Stinger used in sugarbeet and corn. Transline is labeled for rangeland and permanent grass pastures. Cost: Curtail \$13.75-\$27.50; Stinger \$47.00-\$91.00; Transline \$20.00-\$39.00.
	Telar	1.0-3.0 oz	4-6" or rosette stage Prebloom to bloom or in the fall when actively growing	Escort or Telar for use in ag noncropland only. One application suppresses Canada thistle. For Telar, do not graze treated area if rate is more than 1.33 oz/A. Add NIS at 0.5% v/v. Cost: Escort \$14.00; Cimarron Plus \$14.00; Cimarron Xtra \$17.00; Telar \$24.00-\$72.00.
	Escort or Cimarron Plus or Cimarron Xtra	1.0 oz 1.0 oz 1.0 oz		
	Grazon P+D ²	4.0-6.0 pt		
	Milestone	5.0-7.0 oz	Fall; spring during flower bud	It is permissible to treat non-irrigation ditchbanks, seasonably dry wetlands (such as flood plains, deltas, marshes, swamps or bogs) and transitional areas between upland and lowland sites. Cost: \$14.75-\$20.75.
<p>Control Strategies</p> <p>Spring and summer — Keep Canada thistle from going to seed by mowing once in June and again in July or treating with an inexpensive herbicide (2,4-D ester at 2.0 qt/A).</p> <p>Fall after first frost — An investment in an efficacious herbicide (Milestone, Stinger, or Tordon) in the fall can provide excellent control.</p>				

[♦]Glyphosate rates are based on a 4.0 ai/gal or 3.0 lb ae/gal formulation. See pages 177-178 for information on common glyphosate formulations.

[•]Dicamba rates are based on a 4.0 ae/gal formulation, like those found in Clarity or Banvel. See page 176 or the *Herbicide Dictionary* for other products containing dicamba.

Noxious Weeds *(continued)*

Weed	Herbicide	Product Per Acre	Application Time	Remarks and Approximate Cost Per Acre Broadcast	
DIFFUSE AND SPOTTED KNAPWEED	2,4-D ester (4L)	32.0 oz	Rosette stage	Cost: \$4.50.	
	Chaparral/ Opensight	2.5-3.3 oz		Cost: Chaparral \$14.00-\$18.25; Opensight \$2.25-\$2.75.	
	Curtail	2.0-3.0 qt	Last bud to early rosette	Cost: \$27.50-\$41.25.	
	Grazon P+D [◆]	3.0-4.0 pt		Cost: \$12.50-\$16.50.	
	Telar	1.0-2.0 oz	Mid-bolt to last bud stage	Cost: \$24.00-\$48.00.	
	Redeem R&P Tordon 22K	1.5 qt 1.0-2.0 pt	Rosette to bud stage	Cost: Redeem \$48.00; Tordon 22K \$8.75-\$17.50.	
	Milestone	5.0-7.0 oz	Rosette to bolting stage	For broadcast and spot treatment on noncropland, rangeland, pastures and CRP. Cost: \$14.75-\$20.75.	
LEAFY SPURGE	2,4-D ester (4L)	64.0 oz	Bud stage in spring	Retreatment necessary. Annual applications gradually reduce infestation. Cost: 2,4-D \$9.00; Grazon P+D \$16.50.	
	Grazon P+D	2.0 qt			
	Plateau (Cadre, Imazapic 2E)	8.0-12.0 oz	In fall 2 weeks before first frost	Do not apply herbicide in spring over area treated the previous fall with 8.0-12.0 oz/A. Use with MSO 1.0 qt/A. Cost: \$12.50-\$18.75.	
	Sharpen + Plateau	1.0-2.0 oz 4.0-6.0 oz	Flowering stage in spring only	Currently for use only on rights of way (roadsides, ditches). Use with COC or MSO 1.0 qt/A. Cost: \$12.00-\$21.00.	
	Tordon 22K	2.0-4.0 pt	Fall or spring Sept. to early Oct.	Tordon for noncrop areas and spot treatment in pasture and range. Cost: Tordon \$17.50-\$35.00; Overdrive + Tordon \$22.75.	
	Overdrive + Tordon	4.0 oz 16.0 oz	Flowering stage		
MUSK AND PLUMELESS THISTLE	Chaparral/ Opensight	1.0-1.25 oz		Cost: Chaparral \$5.50-\$7.00; Opensight \$7.00-\$8.50.	
	Cimarron Max,	0.25 oz part A + 1.0 pt part B	Late fall or spring before bolting	Use in pastures, grasses for seed, fallow and CRP. Curtail may be used in wheat. Cost: Cimarron Max \$9.25; Cimarron Plus \$3.50; Cimarron X-tra \$8.50-\$17.00; Curtail \$13.75.	
	Cimarron Plus, or				0.25 oz
	Cimarron X-tra	0.5-1.0 oz			
	Curtail	2.0 pt			
	Telar	1.0 oz	Bolted plants in spring prior to flowering	Use in noncropland and roadsides. Add surfactant at 1.0 pt/100 gal. Cost: \$24.00.	
	Milestone	3.0-5.0 oz	Rosette through bolting or in the fall	For broadcast and spot treatment on noncropland, rangeland, pasture and CRP. Cost: \$9.00-\$14.75.	
	2,4-D ester (4L)	48.0-64.0 oz	Late fall treatment of rosettes or in spring before flowering stalks lengthen	Annual treatments necessary for control of new seedlings. Fall applications after trees drop leaves and before leafing out in the spring reduces damage. Do not apply after soil freeze-up in the fall. For use on ranges and permanent pastures only. Cost: 2,4-D \$6.75-\$9.00; 2,4-D + dicamba \$6.75; Tordon 22K \$4.50-\$6.50; Grazon P+D \$8.25-\$16.50; Transline \$10.00-\$30.00; Redeem R&P \$24.00-\$32.00; Overdrive \$14.00.	
	2,4-D ester (4L) + Dicamba [●]	32.0 oz 8.0 oz			
	Tordon 22K	8.0-12.0 oz	Oct. 1-Dec. 1		
	Grazon P+D	2.0-4.0 pt	Rosette to early bolt growth stage		
	Transline	0.33-1.0 pt			
	Redeem R&P	1.5-2.0 pt			
Overdrive	4.0 oz	Rosette in spring or fall			
PHRAGMITES (common reed)	Aquatic glyphosate ¹ or Habitat	96.0-128.0 oz 2.0-4.0 pt	Apply in spring before flower or fall		Do not use glyphosates not labeled for aquatic use. Cost: Aquatic glyphosate \$37.50-\$50.00; Habitat \$36.25-\$72.50.

[◆]See manufacturer's label for application time.

[●]Dicamba rates are based on a 4.0 ae/gal formulation, like those found in Clarity or Banvel. See page 176 or the *Herbicide Dictionary* for other products containing dicamba.

¹Before using a glyphosate formulation, confirm that it is approved for aquatic use. Glyphosate formulations labeled for aquatic use in Nebraska (November 2011) include: Rodeo and Accord Concentrate (Dow AgroSciences), AquaMaster (Monsanto), Aquaneat (NuFarm), Cinco (Loveland), and Glyfos Aquatic (Chemnova).

Noxious Weeds *(continued)*

Weed	Herbicide	Product Per Acre	Application Time	Remarks and Approximate Cost Per Acre Broadcast	
PURPLE LOOSESTRIFE (Lythrum) Aquatic habitat (12 months under water)	2,4-D amine	80.0 oz/20.0 gal	Plants with active growth in bloom or later	Confirm that your brand of 2,4-D is labeled for aquatic uses. Do not use Roundup or other non-aquatic glyphosate products in aquatic habitat. Cost: 2,4-D amine \$8.75; 2,4-D LV 4 ester \$4.50-\$5.75; Aquatic glyphosate \$25.00-\$37.50.	
	2,4-D LV 4 ester	32.0-40.0 oz / 5.0-15.0 gal			
	Aquatic glyphosate ¹	64.0-96.0 oz			
	Habitat	1.0-3.0 pt			Cost: \$18.25-\$54.50.
PURPLE LOOSESTRIFE (Lythrum) Intermittently wet or ponded areas or terrestrial noncropland	Garlon 3A	3.0-5.0 pt	Plants with active growth in bloom or later	Watch for desirable species. Garlon, 2,4-D, and Escort have some safety on many grassy species and cattails at the listed rates; however, they will injure or kill many broadleaf species. Cost: Garlon 3A \$37.50-\$62.50; Garlon 3A+ 2,4-D amine \$42.00; Escort \$28.00-\$56.00; Escort + 2,4-D amine \$18.50.	
	Garlon 3A + 2,4-D amine	3.0 pt 40.0 oz			
	Escort	2.0-4.0 oz			
	Escort + 2,4-D amine	1.0 oz 40.0 oz			
	Habitat (spot treat)	1.0-2.0 qt / 100.0 gal			Add 1 qt NIS/100 gal. Spray foliage to wet, but not to runoff. Cost \$36.25-\$72.50/gal.
	Habitat (broadcast)	1.0-3.0 pts			Higher rates of Habitat are nonselective and will result in total vegetation control. Do not apply more than 6 pt/year. Cost: \$18.50-\$54.50.
	SALT CEDAR	Garlon 4 Ultra + Milestone			3.0 qt 7.0 oz
Habitat		4.0 pt (broadcast)			
Habitat		1% (spot spray)			
Habitat + glyphosate [♦]		2.0 pt 32.0 oz			
Garlon 4/Remedy		33% (spot spray)	Basal treatment. Apply directly to 18" length of lower trunk or fresh cut stump (page 51).		

♦Glyphosate rates are based on a 4.0 ai/gal or 3.0 lb ae/gal formulation. See pages 177-178 for information on common glyphosate formulations.

¹Before using a glyphosate formulation, confirm that it is approved for aquatic use. Glyphosate formulations labeled for aquatic use in Nebraska (November 2011) include: Rodeo and Accord Concentrate (Dow AgroSciences), AquaMaster (Monsanto), Aquaneat (NuFarm), Cinco (Loveland), and Glyfos Aquatic (Cheminova).

Troublesome Weeds and Woody Plants

(See pages 39-42 for spray additives)

Best control will be obtained if treatments are made when plants are actively growing. Treatment in following years may be required. An application just before flowering and a second application on fall regrowth will give best results on most perennials. Dust on leaves may interfere with herbicide activity. When the crop is not indicated, the treatment is for a weed growing in noncropland, pastures or rangeland. Always consult the label for the latest information and directions.

Weeds on the Watch List of the Nebraska Department of Agriculture are denoted by ✕. These weeds appear to be increasing and are being monitored by the NDA.

For a description of individual plant treatment techniques, go to page 51.

Weed	Herbicide	Product Per Acre	Application Time	Remarks and Approximate Cost per Acre Broadcast
ALFALFA (for control before planting wheat, soybean, dry edible bean, and potato)	2,4-D ester (4L)	48.0 oz	Alfalfa with 4-6" new growth; fall application best	Delay planting for 30 days after application. Ester formulations are less persistent than amine formulations. Cost: \$6.50.
ALFALFA (for control before planting corn, wheat, or sorghum)	2,4-D ester 4L + Dicamba [•]	32.0 oz + 8.0 oz	Alfalfa with 4-6" new growth in fall or spring; fall application best; in spring at least 2 weeks before corn planting	Delay planting corn for 10 days and delay sorghum 15 days. Best time to kill alfalfa is in the fall. Cost: 2,4-D ester 4L + dicamba \$8.25; Distinct \$9.75-\$13.00.
	Distinct	3.0-4.0 oz		
ALFALFA (in corn or sorghum)	2,4-D amine (4L) + Dicamba [•] (corn only)	4.0 oz 8.0 oz	Alfalfa with 4-6" growth	Use drop tips on crop taller than 8". See No-till Burndown section of corn, sorghum, or soybean for control prior to planting. Apply in sorghum at the 3-5 leaf stage. Cost: 2,4-D + dicamba \$4.25; dicamba \$3.50; Distinct \$13.00; Hornet WDG \$14.25.
	Dicamba [•]	8.0 oz		
	Distinct	4.0 oz	Use drop nozzles if corn is above 24"	
	Hornet WDG	3.0 oz		
ARTICHOKE, JERUSALEM	2,4-D amine (4L) + Dicamba [•]	8.0 oz 8.0 oz	12-18" tall	For use in corn. Use drop tips on corn taller than 8 inches. Cost: \$4.75.
	2,4-D ester (4L)	32.0 oz	18-24" tall	For use where no crop is present. Cost: \$4.50.
	Classic	0.75 oz	2-8" tall	For use in soybean. Cost: \$12.00.
	Curtail	2.0 pt	12-18" tall	Cost: \$13.00.
BEDSTRAW (annual) (in corn)	Aim or with Atrazine	0.5 oz 0.75-1.0 lb	POST on corn less than 12"	Apply at 10.0 gal/A or more. Cost: Aim \$1.00; Aim + atrazine \$6.50-\$7.50.
	Dicamba [•]	0.50-1.0 pt	POST on corn less than 9"	Use lower rate on coarse textured soils. Cost: \$3.75-\$7.25.
BLUE MUSTARD	2,4-D ester (4L) 2,4-D amine (4L)	8.0 oz 16.0 oz	Nov. 15-Mar. 15 before blue mustard stem elongation	Use only on fully tillered wheat. Cost: \$1.00-\$1.75.
	Amber or Cimarron Extra, or Cimarron Plus or Finesse or Peak + 2,4-D ester (4L)	0.28 oz 0.28 oz 0.2 oz 0.38-0.5 oz 4.0 oz	Mar. 1-15 before blue mustard stem elongation; in spring, broadleaf weeds 2-4"	Add surfactant. Use only on wheat with four or more tillers. Use only on continuous wheat or wheat-fallow. Do not use on soils with pH of 7.9 or higher. Cost: Amber + 2,4-D \$3.50; Cimarron + 2,4-D \$4.25; Finesse + 2,4-D \$4.25; Peak + 2,4-D \$6.00-\$7.75.
	Cimarron Max	0.25 oz part A + 1.0 pt part B	In spring before blue mustard stem elongation	Cost: \$6.25.

[•]Dicamba rates are based on a 4.0 ae/gal formulation, like those found in Clarity or Banvel. See page 176 or the *Herbicide Dictionary* for other products containing dicamba.

Troublesome Weeds and Woody Plants *(continued)*

Weed	Herbicide	Product Per Acre	Application Time	Remarks and Approximate Cost per Acre Broadcast
BUCKBRUSH (snowberry)	2,4-D ester (4L)	64.0-96.0 oz	Full foliage (May 10-25)	Use sufficient water to ensure good coverage. May have to retreat. Cost: \$8.75-\$13.25.
	Chaparral	1.25 oz	Full foliage in spring	Cost: \$7.00.
	Cimarron Plus	0.5 oz	6-12" of new foliage	Cost: \$6.50.
	Cimarron Plus + Rangestar	0.25 oz 1.0 pt	6-12" of new foliage	Cost: \$6.75.
	Grazon P+D [◆]	4.0 pt		Cost: \$17.00.
✕BUCKTHORN (European)	Garlon 3A	3.0-5.0 pt	In fall 2-4 weeks before first frost	Cost: \$33.75-\$56.25.
BUFFALO BUR	2,4-D ester (4L) + Dicamba [●]	8.0 oz 8.0 oz	POST on corn	Plants must be small. Cost: \$4.75.
	Atrazine 4L [■]	2.0 qt	Preplant or PRE on corn	Reduced rates less effective. Cost: \$8.00.
	Buctril	1.5 pt	In corn or sorghum weeds 3-5 leaf stage	Plants taller than 4 inches not controlled. Cost: \$14.75.
	Callisto	3.0 oz	Weeds 3-4 leaf in corn	Add 0.25 ai atrazine plus COC. Cost: \$15.75.
	Cobra	12.5 oz	POST on soybean	Weeds need to have 4 true leaves. Cost: \$18.00.
	Grazon P+D [◆]	2.0-4.0 pt	Actively growing in spring pre-bloom	Cost: \$8.50-\$17.00.
	Ultra Blazer	1.5 pt	Weeds 3-4 leaf stage in soybean	Weeds must be small. Follow-up treatments necessary. Cost: \$14.00.
✕BULL THISTLE	Cimarron Plus or Cimarron Xtra	1.25 oz 1.0 oz		Cost: Cimarron Plus \$16.25; Cimarron Xtra \$16.00.
	Clarity	1.0-2.0 qt	Spring application	Cost: \$29.50-\$59.00.
	Escort	0.2-0.4 oz	Spring application	Cost: \$2.50-\$5.00.
	Garlon 3A	3.0 pt	Spring application	Cost \$33.75.
	Grazon P+D	2.0-3.0 pt	Rosette stage	Cost: \$8.50-\$12.75.
	Milestone	3.0-5.0 oz	Rosette through bolting or in fall	Cost: \$9.25-\$15.25.
	Overdrive	4.0 oz	Rosette stage	Cost: \$10.75.
	Telar XP	1.0 oz	Spring application	Cost: \$23.00.
	Tordon 22K	8.0-12.0 oz	Fall	Cost: \$5.75-\$8.50.
Transline	0.5-1.0 pt	Spring application	Cost \$25.00-\$50.00.	
BURCUCUMBER and WILD CUCUMBER	Atrazine 4L [■]	2.0 qt	PRE in corn Weeds 3-5 leaf stage in corn or sorghum	Atrazine can also be used POST. Cost: atrazine \$8.00. Thorough coverage required. Cost: Buctril 2EC \$14.75.
	Buctril 2 EC	1.5 pt		
	Classic	0.3-0.75 oz	Apply POST in soybean when crop is up to 4" Weeds 1-8" tall	Cost: \$5.00-\$12.00.
	Princep 4L	3.0 qt	PRE in trees	Cost: Princep \$21.75.

✕Nebraska Department of Agriculture "Watch List" weed.

●Dicamba rates are based on a 4.0 ae/gal formulation, like those found in Clarity or Banvel. See page 176 or the *Herbicide Dictionary* for other products containing dicamba.

■The total amount of atrazine applied cannot exceed 2.5 lb ai/A per calendar year. Use no more than 1.6 lb ai/A on highly erodible land with less than 30% crop residue. Using atrazine on soils with less than 1% organic matter increases carryover injury risk to susceptible crops, especially high pH soils. Do not use on sandy soils if water table is shallower than 30 ft.

◆See manufacturer's label for application time.

Troublesome Weeds and Woody Plants *(continued)*

Weed	Herbicide	Product Per Acre	Application Time	Remarks and Approximate Cost per Acre Broadcast
BURSAGE (skeletonleaf and woollyleaf)	2,4-D ester (4L) + Dicamba [•]	32.0 oz 32.0 oz	June or when growing actively	See remarks for field bindweed. If soil moisture conditions are poor, use oil-water emulsions as a carrier. Cost: \$19.00.
	Grazon P+D	3.0-4.0 pt	When growing actively to flower bud stage	Noncrop areas. Grazon P+D and Tordon may remain in soil for three or more years. Cost: Grazon P+D \$12.75-\$17.00; Tordon 22K \$22.50; 2,4-D ester + dicamba \$11.75.
	Tordon 22K	2.0 pt		
CACTUS — See <i>Pricklypear</i> for <i>Plains Pricklypear</i> , and <i>Brittle</i> or <i>Fragile Cactus</i>				
CANADA THISTLE — See <i>Noxious Weed Section</i>				
CATTAILS	2,4-D ester (4L)	1.5 gal + 5% diesel oil + 0.5% emulsifier	Boot to early flowering	Use the equivalent of 150 gal of water per acre. Retreat regrowth as necessary. Cost: 2,4-D \$26.25/gal.
	Aquatic Glyphosate ¹	3.0 qt	At flowering	Use aquatic glyphosate product in or near water. Cost: \$40.50.
	Habitat	1.0-3.0 pts	Boot to flowering	Cost: \$15.75-\$47.00.
	Lineage Clearstand	25.0 oz	Boot to flowering	Cost: \$93.75.
CEDAR — See <i>Red Cedar</i>				
CHEAT GRASS — See <i>Downy Brome</i>				
COTTONWOOD, WILLOWS, SIBERIAN ELM, CHINESE ELM	2,4-D ester (4L)	64.0-96.0 oz	Full foliage (June-July); basal treatment anytime	2,4-D with aerial equipment at least 5 gal carrier. Annual treatment for 2 to 3 years may be necessary. Basal or stump treatment: 2.0 qt of herbicide/10.0 gal of diesel; apply to point of runoff. Cost: 2,4-D \$8.75-\$13.25; Escort \$24.00; Grazon P+D \$34.00/gal; Remedy \$108.00/gal.
	Escort	2.0 oz		
	Grazon P+D	4.0 qt		
	Grazon P+D or Remedy ²	3.0 qt	For trees greater than 10 feet tall, rate per 100 gal water	
	Grazon P+D or Remedy ²	2.0 qt		
	Grazon P+D or Remedy ²	1.5 pt	For trees less than 10 feet tall, rate per 100 gal water	
	Grazon P+D or Remedy ²	1.0 pt		
	Krenite S	2.0-3.0 gal in 100.0 gal water + surfactant	Late July, Aug., and Sept.	
Spike 20P	0.25 oz/1" dia	Spring or fall	Apply under drip line. Cost: \$0.15/inch diameter.	
Velpar L	4.0 ml/1" dia	Spring with spot gun to tree base	Cost: \$0.08/inch diameter.	
CUPGRASS, PRAIRIE (in corn)	Balance Flexx ³ + Harness Xtra [■] 5.6	3.0-6.0 oz 1.8-2.7 qt	0-8 DBP	POST treatments may be needed. Cost: Balance Flexx + Harness Xtra \$37.25-\$62.50.
✕DALMATION TOADFLAX	Cimarron Plus	0.5-1.0 oz	Before flowering in spring or fall	Cost: Cimarron Plus \$6.50-\$13.00; Plateau \$22.00-\$32.75; Telar \$46.00-\$69.00; Tordon 22K \$22.50-\$45.00.
	Plateau	8.0-12.0 oz		
	Telar	2.0-3.0 oz	Fall	
	Tordon 22K	2.0-4.0 pts		
DANDELION — See <i>No-till Burndown Tables for Corn and Soybean</i>				

✕Nebraska Department of Agriculture "Watch List" weed.

¹Before using a glyphosate formulation, confirm that it is approved for aquatic use. Glyphosate formulations labeled for aquatic use in Nebraska (November 2011) include: Rodeo and Accord Concentrate (Dow AgroSciences), AquaMaster (Monsanto), Aquaneat (NuFarm), Cinco (Loveland), and Glyphos Aquatic (Cheminova).

²See manufacturer's label for application time.

³Do not use Balance Flexx on coarse textured soils of less than 2% organic matter if the water table is less than 25 feet. Do not use on fields prone to runoff or flooding. Crop response to Balance is most likely to occur where soils are coarse, organic matter content is less than 1.5%, and the pH is greater than 7.4. Corn seed must be covered with 1.5 to 2.0 inches of soil. Avoid planting when the surface soil is wet.

[■]The total amount of atrazine applied cannot exceed 2.5 lb ai/A per calendar year. Use no more than 1.6 lb ai/A on highly erodible land with less than 30% crop residue. Using atrazine on soils with less than 1% organic matter increases carryover injury risk to susceptible crops, especially high pH soils. Do not use on sandy soils if water table is shallower than 30 ft.

[•]Dicamba rates are based on a 4.0 ae/gal formulation, like those found in Clarity or Banvel. See page 176 or the *Herbicide Dictionary* for other products containing dicamba.

Troublesome Weeds and Woody Plants *(continued)*

Weed	Herbicide	Product Per Acre	Application Time	Remarks and Approximate Cost per Acre Broadcast	
DEVILSCLAW (in corn and sorghum) (also controls cocklebur and common sunflower)	Aim EC + Atrazine DF [■]	0.5 oz 0.25-0.5 lb	2-4" 2-4"	Use COC with atrazine and Laddok. Cost: Aim + atrazine \$2.00-\$2.75; atrazine \$5.25; Basagran \$13.75-\$27.50; Laddok \$15.00-\$22.50; Bucril + atrazine \$12.00-\$19.25.	
	Atrazine DF [■]	1.4 lb	2-4"		
	Basagran + 28% N	1-2 pt 1.0 gal	Devilsclaw less than 4"		
	Bucril 2EC + Atrazine DF [■]	1.0-1.5 pt 0.6-1.2 lb			
	2,4-D ester (4L)	8.0-16.0 oz	Devilsclaw less than 6"	Cost: 2,4-D \$1.00-\$2.25.	
	Callisto	3.0 oz	POST in corn less than 5"	Use 1% COC + AMS. Cost: \$15.75.	
	Hornet (Corn only)	2.4 oz	Devilsclaw less than or equal to 6"	Apply to corn up to V6 stage. Include 1.0 gal COC + 2.5 gal of UAN/100.0 gal of water. Cost: \$11.50.	
	Corn Dicamba [●] + atrazine [■]	9.0-16.0 oz 0.57-1.0 lb	Emergence to 5-leaf 2-5 leaf stage	Cost: \$4.75-\$11.25.	
	Sorghum Dicamba [●] + atrazine [■]	6.5-9.0 oz 0.4-0.57 lb			
	Peak (Sorghum only)	0.75-1.0 oz	Devilsclaw 1-6"	Cost: \$11.00-\$14.50.	
	Permit	0.66-1.33 oz	Devilsclaw 1-6"	Cost: \$13.75-\$28.00.	
	Resource (Corn only)	4.0-8.0 oz	Devilsclaw 4-12"	Use 1.0 qt/A COC. Cost: \$7.00-\$13.75.	
	Treatments (in soybean)	Classic + Harmony SG	0.25 oz 0.125 oz	POST	Add 28% UAN 1.0 gal/A + 0.125% v/v NIS. Cost: \$6.00.
		Command 3ME	1.5-2.0 pt	PPI/PRE to soybean planting	Command drift may damage green vegetation. Command residue may damage wheat planted the same fall. Cost: \$27.50-\$36.50.
Pursuit DG		1.44 oz	Devilsclaw less than 3"	Use with 1.0-2.0 qt of 28% UAN + NIS at 2.0 pt/100.0 gal. Cost: \$7.75.	
Resource		12.0 oz	Devilsclaw 30"	Use 1.0 qt/A COC. Cost: Resource \$20.75.	
(Requires RR soybean)		Glyphosate [◆]	32.0 oz	Devilsclaw 4-12"	Cost: \$3.00.
DOCK (curled and pale)	2,4-D ester (4L) + Dicamba [●]	32.0 oz 8.0 oz	Before flowering in spring or fall	For use on idle ground or grassland. For corn in VE stage use 1.3 pt of 2,4-D + 0.5 pt of dicamba. Cost: \$8.00.	
	Grazon P+D [◆]	2.0-3.0 pt		Cost: \$12.75-\$19.25.	
	Glyphosate [◆]	16.0 oz	Preplant	Apply 1 week before planting soybean or corn. Plant Roundup Ready soybean or Roundup Ready corn and use labeled glyphosate POST. Cost: glyphosate \$1.50; glyphosate + 2,4-D \$2.25; Overdrive \$16.25; Telar \$23.00-\$69.00.	
	Glyphosate [◆] + 2,4-D ester (4L)	32.0 oz 8.0 oz			
	Overdrive	6.0 oz			
	Telar	1.0-3.0 oz			

■The total amount of atrazine applied cannot exceed 2.5 lb ai/A per calendar year. Use no more than 1.6 lb ai/A on highly erodible land with less than 30% crop residue. Using atrazine on soils with less than 1% organic matter increases carryover injury risk to susceptible crops, especially high pH soils. Do not use on sandy soils if water table is shallower than 30 ft.

◆Glyphosate rates are based on a 4.0 ai/gal or 3.0 lb ae/gal formulation. See pages 177-178 for information on common glyphosate formulations.

◆See manufacturer's label for application time.

●Dicamba rates are based on a 4.0 ae/gal formulation, like those found in Clarity or Banvel. See page 176 or the *Herbicide Dictionary* for other products containing dicamba.

Troublesome Weeds and Woody Plants *(continued)*

Weed	Herbicide	Product Per Acre	Application Time	Remarks and Approximate Cost per Acre Broadcast
DODDER (in alfalfa)	Pursuit	1.0-2.0 oz	Apply after dodder has emerged but prior or soon after attachment	Cost: Pursuit \$5.50-\$10.75; Raptor \$21.50-\$32.25.
	Raptor	4.0-6.0 oz		
	Glyphosate♦ in Roundup Ready alfalfa	32.0-64.0 oz		Cost: \$3.00-\$6.00.
DOGWOOD (<i>Cornus</i> spp.)	Cimarron Plus	1.0 oz	Spring or fall Full foliage during June	Ground application only. Observe all drift precautions when using within 1/2 mile of sensitive crops. Cost: Cimarron Plus \$13.00; dicamba \$14.50-\$29.00; Crossbow \$70.00-\$105.00.
	Crossbow	1.0-1.5 gal		
	Dicamba•	1.0-2.0 qt		
	Grazon P+D	3.0 pt	Spring or fall	Cost: \$12.75.
	Grazon P+D	1% v/v High volume foliar	Spring or fall	See page 51 for <i>Individual Plant Treatment Techniques</i> . Cost: \$34.00/gal.
	Spike 20P	0.25 oz/1" dia	Spring or fall	Apply under drip line. Cost: \$9.75.
DOWNY BROME	Glyphosate♦	12.0-16.0 oz	Fall or early spring when desirable grasses are dormant Early spring	Use glyphosate before planting corn, sorghum, soybean and in fallow. Cost: glyphosate \$1.25-\$1.50; Oust \$6.25-\$12.50.
	Oust (noncropland)	1.0-2.0 oz		
	Plateau /Cadre/ Imazapic 2E (noncropland, range, pasture CRP)	4.0-12.0 oz	Full PRE or early POST	Add MSO 1.0 qt/A. Cost: \$11.00-\$33.00.
	Alternate system			Crop rotation — include a late spring-seeded crop in the rotation. See NebGuide G422, <i>Downy Brome Control</i> .
ELM — See <i>Cottonwood</i>				
FIELD BINDWEED Retreatment is necessary. (When treating crops, adjust rates.) Glyphosate used only in Roundup Ready crops.	2,4-D ester (4L)	32.0 oz	Vigorous fall growth or flower bud stage in spring	Avoid tillage 5 weeks before and 1 week after application. Do not plant small grains for 15 days after 2,4-D and 45 days after dicamba. Plan to treat for several consecutive years. Cost: 2,4-D \$4.50; 2,4-D + dicamba \$8.00-\$11.75.
	2,4-D ester (4L) + Dicamba•	8.0-16.0 oz		
	Dicamba•	16.0-32.0 oz	Late summer or late fall actively growing	Apply glyphosate in 10 gal or less water/A. Avoid tillage for 5 days. Do not plant small grains for 15 days with 2,4-D and 45 days per pint of dicamba. Broadleaf crops may be injured 2 years after high rates of dicamba in western Nebraska. Cost: dicamba \$3.75-\$7.25; Landmaster BW \$6.25; glyphosate + 2,4-D \$4.00; glyphosate + dicamba \$6.75.
	Glyphosate♦ + 2,4-D amine (4L) or Dicamba•	8.0 oz		
	Landmaster BW	54.0 oz		
	Extreme	48.0 oz	2-6" runners	Control of larger plants reduced by 30%. Cost: \$19.25.
	Glyphosate♦ + Classic	32.0 oz 0.3 oz	2-6" runners	Control of larger plants reduced by 30%. Cost: \$7.75.
	Glyphosate♦ + Phoenix	32.0 oz 5.0 oz	2-6" runners	Control of larger plants reduced by 20%. Cost: \$10.25.
	Glyphosate♦ + Raptor	32.0 oz 3.0 oz	2-6" runners	Control of larger plants reduced by 20%. Cost: \$19.25.
	Paramount	5.3 oz	Fall	Preplant to wheat. Cost: \$20.75.
	Tordon 22K + 2,4-D ester (4L)	0.5-1.0 pt 16.0-32.0 oz	Fall after wheat harvest	Use in a wheat-fallow rotation. Retreat with 2,4-D or Landmaster BW in spring. Cost: \$7.75-\$15.75.

♦Glyphosate rates are based on a 4.0 ai/gal or 3.0 lb ae/gal formulation. See pages 177-178 for information on common glyphosate formulations.

•Dicamba rates are based on a 4.0 ae/gal formulation, like those found in Clarity or Banvel. See page 176 or the *Herbicide Dictionary* for other products containing dicamba.

Troublesome Weeds and Woody Plants *(continued)*

Weed	Herbicide	Product Per Acre	Application Time	Remarks and Approximate Cost per Acre Broadcast
✘GARLIC MUSTARD	2,4-D + Dicamba [•]	16.0 oz 8.0 oz	Vegetation is dormant; young small plants	Do not use 2,4-D ester or dicamba when air temperature exceeds 85°F. Cost: \$5.75.
	Escort	1.0 oz	Spring application of 2-3" tall plants	Cost: \$12.00.
	Glyphosate [♦]	32.0 oz or 2% spot spray	Full or early spray when desirable	Use glyphosate broadcast in spring and fall when other vegetation is dormant. Spot spray during growing season. Cost: \$2.25-\$3.00.
GUMWEED (curlycup)	2,4-D ester (4L)	48.0 oz	Pre-bud	Cost: 2,4-D \$6.50; Grazon P+D \$8.50.
	Grazon P+D	1.0 qt		
	Lineage Clearstand	6.0-13.0 oz	Pre-bud	Cost: \$48.75.
HEMP (marijuana)	2,4-D ester (4L)	32.0 oz	2-12" tall	Cost: 2,4-D ester (4L) \$4.50; Grazon P+D \$8.50.
	Grazon P+D	2.0 pt		
HEMP DOGBANE	2,4-D ester (4L)	16.0-32.0 oz	Flower bud stage, spring	Use lower rates in crops. Cost: \$2.25-\$4.50.
	2,4-D ester (4L)	32.0 oz	Apply after corn is in the dough stage, but before the dogbane leaves start to turn yellow	Dogbane roots should have pink swollen buds. Cost: 2,4-D \$4.50.
	Glyphosate [♦]	128.0 oz	Late summer or fall	Idle ground or spot treatment in cropland before head or pod fill of crop. Avoid tillage for at least 7 days after treatment. Cost: \$12.00.
	Surmount	2.0 pt	Summer	Rangeland, pasture and CRP. Cost: \$16.00.
HOARY CRESS	2,4-D ester (4L)	64.0 oz	Rosette stage in the fall or early bud in spring	Suppression only. Growth starts in early spring. Treat twice a year for 2 to 3 years. Cost: \$9.00.
	Chaparral	3.3 oz	Early spring before bud stage	Cost: \$18.25.
	Cimarron Plus or Cimarron Xtra or Escort	1.0 oz 2.0 oz 1.0 oz	Rosette stage in spring	Cost: Cimarron Plus \$13.00; Cimarron Xtra \$32.00; Escort \$12.00.
	Plateau/Cadre (pasture, range, noncropland, CRP)	6.0-12.0 oz	Late spring/summer at flowering	Cost: \$16.50-\$32.75.
HOARY VERVAIN	Curtail	2.0-3.0 pt	Apply in early summer (up to 6" tall weed)	Cost: Grazon P+D \$8.50-\$12.75; Curtail \$13.00-\$19.50; Tordon 22K \$11.25; Salvo \$2.75-\$3.50; Weedmaster \$6.00.
	Grazon P+D	2.0-3.0 pt		
	Salvo	12.0-15.0 oz		
	Tordon 22K	1.0 pt		
	Weedmaster	32.0 oz		
✘HOUNDSTONGUE	Cimarron Plus	1.0 oz	Apply in spring (rosette stage)	Cost: Cimarron Plus \$13.00; Escort \$12.00-\$24.00; Plateau \$22.00-\$32.75; Telar DF \$23.00; Tordon \$17.00.
	Escort	1.0-2.0 oz		
	Plateau	8.0-12.0 oz		
	Telar XP	1.0 oz		
	Tordon	1.5 pt		

✘Nebraska Department of Agriculture "Watch List" weed.

♦Glyphosate rates are based on a 4.0 ai/gal or 3.0 lb ae/gal formulation. See pages 177-178 for information on common glyphosate formulations.

•Dicamba rates are based on a 4.0 ae/gal formulation, like those found in Clarity or Banvel. See page 176 or the *Herbicide Dictionary* for other products containing dicamba.

Troublesome Weeds and Woody Plants *(continued)*

Weed	Herbicide	Product Per Acre	Application Time	Remarks and Approximate Cost per Acre Broadcast
HORSETAIL	Garlon 3A	5.0 pt	Spring treatment in pasture	Cost \$56.25.
IRONWEED	2,4-D ester (4L)	48.0 oz	Flower to bud stage	Cost: \$6.50.
	Grazon P+D [◆]	2.0-3.0 pt	Prior to bud stage	Rangeland. Cost: \$8.50-\$12.75.
✕JOHNSONGRASS — (See <i>Shattercane</i> in <i>Crops Table</i> for seedling Johnsongrass control.)				
KNAPWEED — See <i>Noxious Weed Section</i>				
KOCHIA — (See <i>Crop Tables</i>)				
KUDZU	Chaparral	3.3 oz	Apply at or after flowering	Cost: \$18.25.
	Cimarron Plus	1.0-2.0 oz	Apply to spring foliage or in fall	Cost: Cimarron Plus \$13.00-\$26.00; Escort \$12.00-\$24.00; Garlon 3A \$33.75-\$56.25; Lineage Clearstand \$71.25; Milestone \$21.25.
	Escort	1.0-2.0 oz		
	Garlon 3A	3.0-5.0 pt		
	Lineage Clearstand	19.0 oz		
	Milestone	7.0 fl oz		
LARKSPUR PRAIRIE	Grazon P+D	3.0-5.0 pt	Apply in spring	Cost: Grazon P+D \$12.75-\$21.25; Cimarron Plus \$6.50-\$13.00.
✕LESPEDAZA SERICEA	Cimarron Plus	0.625 oz	Spray at flower bud to full bloom	Cost: \$8.25.
	Escort	1.0-2.0 oz		Cost: \$12.00-\$24.00.
	PastureGard	1.5-2.0 pt		Cost: \$11.25-\$15.00.
	Remedy	1.0-1.5 pt	Before bloom	Cost: Remedy \$13.50-\$20.25; Surmount \$16.00-\$20.00.
	Surmount	2.0-2.5 pt		
LOCUST (honey and black)	Chaparral	3.3 oz	Full foliage	Cost: \$18.25.
	Curtail	2.0-3.0 pt	Full foliage during June; cut stump or basal treatment anytime	Ground application only. Observe all drift precautions. See <i>Cottonwood</i> for basal and cut stump treatment. Cost: Curtail \$13.00-\$19.00; dicamba \$29.00; Escort \$12.00-\$24.00; Grazon P+D \$17.00-\$34.00; Remedy \$27.00-\$54.00.
	Dicamba [•]	64.0 oz		
	Escort	1.0-2.0 oz		
	Grazon P+D	2.0-4.0 qt		
	Remedy*	2.0-4.0 pt		
	Spike 20P	0.25 oz/1" dia	Spring or fall	Apply under drip line. Cost: \$0.15/in diameter.
	Surmount	2.0-3.0 pt	Full foliage during June	Cost: Surmount \$16.00-\$24.00; Transline \$25.00-\$50.00.
	Transline	0.5-1.0 pt		
In no-till corn:	Hornet	3.0-5.0 oz		Cost: \$14.25-\$23.75.
MARESTAIL (horseweed) (for control in crops see individual <i>Crop Tables</i>)	2,4-D ester (4L) or Redeem R&P	32.0 oz 1.0-2.0 pt	Prior to bolt	Cost 2,4-D \$4.50; Redeem R&P \$15.75-\$31.25.
	Cimarron Plus	0.125 oz	2-6" weeds	Use in pastures. Cost: \$1.75.
	Grazon P+D	2.0-3.0 pt	Prior to bolt	Cost: \$8.50-\$12.75.
	Overdrive	4.0-8.0 oz	2-6" tall in pasture	Cost: \$10.75-\$21.50.
	Telar	1.0 oz	2-6" in pasture	Cost: \$23.00.

[◆]See manufacturer's label for application time.

✕Nebraska Department of Agriculture "Watch List" weed.

[•]Dicamba rates are based on a 4.0 ae/gal formulation, like those found in Clarity or Banvel. See page 176 or the *Herbicide Dictionary* for other products containing dicamba.

Troublesome Weeds and Woody Plants *(continued)*

Weed	Herbicide	Product Per Acre	Application Time	Remarks and Approximate Cost per Acre Broadcast
MILKWEED, COMMON	2,4-D ester (4L) + Dicamba [•]	32.0 oz 8.0 oz	Flower bud to bloom stage	Do not plant small grains for 15 days after 2,4-D + dicamba treatment. 2,4-D + dicamba suppresses growth for 1 year. Cost: \$8.25.
	Glyphosate [◆]	96.0 oz	Flowering through maturity; ropewick application in soybean	Idle ground or spot treatment on cropland before head or pod fill of crop. Avoid tillage for 7 days. Cost: \$9.00.
	Lineage Clearstand	25.0 oz	At flowering time	Cost: \$93.75.
	Overdrive	4.0-8.0 oz	2-6" tall in pasture	Cost: \$10.75-\$21.50.
MILKWEED, HONEYVINE (climbing)	2,4-D amine (4L)	1.0-2.0 pt	Before vines reach 3 ft in length	For use in corn or sorghum. Use lower rates in sorghum. Gives suppression only. Cost: \$1.00-\$3.50.
	2,4-D ester (4L)	0.5-1.0 pt		
MULLEIN, COMMON	Cimarron Plus or Escort	0.5 oz 0.5 oz	Rosette stage in fall or spring	Add crop oil (COC) 2 qt/A. Cost: Cimarron Plus \$6.50; Escort \$6.00.
	Grazon P+D	4.0 pt	Late fall on rosettes or spring before flowering stalks lengthen	Essential to apply in rosette stage. Add surfactant 2.0 pt/100.0 gal solution. Cost: \$17.00.
	Overdrive	6.0 oz	Fall or spring prior to bolting	Cost: \$16.25.
✕MULTIFLORA ROSE	Chaparral	3.3 oz	Full foliage to bloom	Cost: \$18.25.
	Cimarron Max	0.5 oz Part A + 2.0 pt Part B	Full foliage bud to bloom	Cost: \$12.50.
	Cimarron Plus	0.375 oz or 1.0 oz/100.0 gal water	Full foliage bud to bloom	Add 0.25% (v/v) nonionic surfactant (NIS). Cost: \$13.00/oz.
	Cimarron Xtra	2.0 oz	Full foliage	
	Dicamba [•]	32.0-64.0 oz or 32.0 oz/25.0 gal water	Full foliage	Cost: \$14.50/qt.
	Spike 20P	0.25 oz/bush or 0.25 oz/22.0 sq ft	Anytime soil is not frozen	Cost: \$9.70/lb.
	Tordon 22K + 2,4-D (4L)	1.0 qt 64.0 oz	When plants are actively growing	Cost: \$31.25.
	Tordon RTU	Apply undiluted to cut stumps		Cost: \$12.00/qt.
MUSK THISTLE — See <i>Noxious Weed Section</i>				
NUTSEDGE — See <i>Yellow Nutsedge</i>				

◆See manufacturer's label for application time.

✕Nebraska Department of Agriculture "Watch List" weed.

◆Glyphosate rates are based on a 4.0 ai/gal or 3.0 lb ae/gal formulation. See pages 177-178 for information on common glyphosate formulations.

•Dicamba rates are based on a 4.0 ae/gal formulation, like those found in Clarity or Banvel. See page 176 or the *Herbicide Dictionary* for other products containing dicamba.

Troublesome Weeds and Woody Plants *(continued)*

Weed	Herbicide	Product Per Acre	Application Time	Remarks and Approximate Cost per Acre Broadcast	
OAK	Crossbow	1.5 gal	Full foliage June to July; cut stump or basal treatment anytime	Noncropland only for Spike and Crossbow. Be careful of desirable tree roots. Cost: dicamba \$29.00; Crossbow \$105.00; Remedy +2,4-D ester \$31.50-\$35.75; glyphosate \$12.00/gal; Spike 20P \$0.15/inch diameter; Pasturegard \$22.50-\$30.00.	
	Dicamba [•]	64.0 oz			
	Remedy + 2,4-D ester (4L)	1.0 qt 32.0-64.0 oz			
	Glyphosate [♦]	50% to 100% solution	June cut stump		
	Spike 20P	0.25 oz/1" dia	Spring or fall to soil around tree base		
	Pasturegard	3.0-4.0 pt	In summer when leaves are fully emerged		
	Spike 20P	5.0-20.0 lbs	Anytime except when soil is frozen		Cost: \$48.50-\$194.00.
	Spike 80 DF	3.75-5.0 lb	Anytime except when soil is frozen		Cost: \$123.75-\$165.00.
	Surmount	3.0-4.0 pt	In summer when leaves are fully emerged		Cost: \$24.00-\$32.00.
	Velpar L	4.0 ml/1" dia	Spot gun in spring to tree base		Cost: \$0.08/inch diameter.
OSAGE ORANGE	Crossbow	1.0-1.5 gal	Full foliage June to July; basal treatment anytime	Noncrop areas only. See remarks for cottonwood. Cost: Crossbow \$70.00-\$105.00; Remedy + 2,4-D ester \$18.00-\$31.50.	
	Remedy + 2,4-D ester (4L)	1.0-2.0 pt 32.0 oz			
	Spike 20P	0.5 oz/1" dia	Spring or fall to soil around tree base		Cost: Spike 20P \$0.30/inch diameter.
	Velpar L	4.0 ml/1" dia	Spot gun in spring to tree base		Cost: Velpar L \$0.08/inch diameter.
PLUMELESS THISTLE — See <i>Noxious Weed Section</i>					
POISON HEMLOCK	2,4-D ester (4L) + Dicamba [•]	32.0 oz 8.0 oz	Rosettes — fall or early spring	Do not allow livestock access to dry matter. Cost: \$8.25.	
	Grazon P+D [◇]	2.0-4.0 pt		Cost: \$8.50-\$17.00.	
POISON IVY	Crossbow	1.0-1.5 gal	Full foliage in spring	Thoroughly wet all vegetation. Do not apply to cropland. Cost: Crossbow \$70.00-\$105.00 sq ft; glyphosate \$9.00-\$15.00; Remedy + 2,4-D \$18.00-\$31.50.	
	Glyphosate [♦]	96.0-160.0 oz			
	Remedy + 2,4-D ester	1.0-2.0 pt 32.0 oz			
PRICKLY PEAR	Tordon 22K	1% v/v	As spot treatments to new growth	Cost: \$90.00/gal.	
	Tordon 22K	1.0-2.0 pt	New growth to flowering	May take 1-2 years before death. Spot treat in pasture and grazing land. Include NIS in spray mixture. Cost: Tordon 22K \$11.25-\$22.50; Remedy + Tordon 22K \$18.25-\$25.00; Grazon P+D \$17.00.	
	Remedy + Tordon 22K	0.5-1.0 pt 1.0 pt			
	Grazon P+D [◇]	4.0 qt			

✘Nebraska Department of Agriculture "Watch List" weed.

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•Dicamba rates are based on a 4.0 ae/gal formulation, like those found in Clarity or Banvel. See page 176 or the *Herbicide Dictionary* for other products containing dicamba.

◇See manufacturer's label for application time.

Troublesome Weeds and Woody Plants *(continued)*

Weed	Herbicide	Product Per Acre	Application Time	Remarks and Approximate Cost per Acre Broadcast
PUNCTURE VINE	2,4-D ester (4L)	16.0 oz	Pre-bloom stage most effective	Mature burs not affected by 2,4-D. Retreatment necessary on new plants. Cost: \$2.25.
	Callisto + atrazine (corn)	3.0 oz 1/4 lb	POST in corn	Cost: \$16.75.
	Dicamba [•]	16.0 oz	EPOST on corn or sorghum	Cost: \$7.25.
	Hornet WDG (corn)	3.0 oz	POST before V6 corn	Add 1% v/v COC or 0.25% v/v NIS. Cost: \$14.25.
	Journey	32.0 oz	POST in noncropland	Cost: \$32.50.
	Overdrive (Pasture and Range)	4.0-8.0 oz	4-8" in pasture	Cost: \$10.75-\$21.50.
	Peak	0.75-1.0 oz	POST on sorghum or proso millet	Cost: \$11.00-\$14.50.
	Plateau* (range, pasture CRP)	8.0-12.0 oz	Early POST	Add MSO 1.0 qt/A for use in warm-season grasses. Cost: \$22.00-\$33.00.
PURPLE LOOSESTRIFE (lythrum) — See <i>Noxious Weed Section</i>				
PURSLANE, COMMON (in fallow to be planted to winter wheat)	2,4-D ester (4L)	32.0 oz	When growing actively	Till 5-7 days after treatment. Do not plant small grains for 15 days. Cost: 2,4-D \$4.50.
	Amber or Finesse + 2,4-D ester (4L)	0.2-0.3 oz 0.4 oz 4.0 oz	Early POST	Add surfactant when used POST. Surfactant 1.0-2.0 qt/100.0 gal solution. Do not use on soils with pH of 7.9 or higher. Allow 12 days before planting wheat. Cost: Amber + 2,4-D \$2.75-\$3.75; Finesse + 2,4-D \$8.25.
	Rave	4.0 oz	Less than 6"	Cost: \$7.50.
	2,4-D ester (4L)	32.0 oz	Early summer	Follow-up treatments may be necessary. Cost: \$4.50.
RAGWEED, WESTERN (perennial)	Curtail	2.0-3.0 pts	Early summer	Cost: \$13.00-\$19.50.
	Grazon P+D	2.0-3.0 pt	Early summer	Lower rate when weeds are small. Cost: \$8.50-\$12.75.
	Overdrive	4.0-6.0 oz	Early summer	Cost: \$10.75-\$16.25.
	Salvo	12.0-15.0 oz	Early summer	Cost: \$2.75-\$3.50.
	Surmount	1.5-2.0 pt	Early summer	Cost: \$12.00-\$16.00.
	Transline	0.5-1.0 pt		Cost: \$25.00-\$50.00.
	Weedmaster	32.0 oz		Cost: \$6.00.
	2,4-D ester (4L)	32.0 oz	Early summer	Follow-up treatments may be necessary. Cost: \$4.50.
RED CEDAR, EASTERN	Spike 20P	0.5 oz/1" dia	Spring or fall	Spike for use in noncrop areas only. Tordon and Velpar LP can be used on grazing land. Cost: Spike 20P \$0.30/inch; Tordon \$0.14/inch; Velpar \$0.08/inch.
	Tordon 22K	4.0 ml/3 ft of tree height	Spring or fall	
	Velpar L	4.0 ml/1" dia	Spot gun in spring to tree base	
	Grazon P+D	6.0-8.0 pt	Apply broadcast up to 2 ft tall trees	Cost: Grazon P+D \$25.50-\$34.00; Tordon 22K \$17.00-\$22.50; Surmount \$40.00.
	Tordon 22K	1.5-2.0 pt		
	Surmount	5.0 pt/A		
	Grazon P+D	2% v/v		
	Tordon 22K	1% v/v	Individual tree treatments (up to 10 ft tall trees)	
	Surmount	1.5% v/v		
	Alternative treatment — prescribed burn.			

[•]Dicamba rates are based on a 4.0 ae/gal formulation, like those found in Clarity or Banvel. See page 176 or the *Herbicide Dictionary* for other products containing dicamba.

*The active ingredient in Plateau is imazapic. See *Herbicide Dictionary* for other formulations of imazapic.

Troublesome Weeds and Woody Plants *(continued)*

Weed	Herbicide	Product Per Acre	Application Time	Remarks and Approximate Cost per Acre Broadcast
REED CANARYGRASS	Habitat	1.0-2.0 pt	Apply in spring, 2-3 ft of growth	Cost: Habitat 1.0-2.0 pt \$15.75-\$31.25; Rodeo \$13.50-\$20.25; Habitat + Rodeo \$22.50.
	Rodeo ²	64.0-96.0 oz		
	Habitat + Rodeo ²	1.0 pt 32.0 oz		
	Lineage Clearstand	19.0 oz	2-3 ft growth	Cost: \$71.25.
RUSSIAN KNAWEED	Curtail	3.0-4.0 qt	Apply at bud stage early flower	Idle ground or grassland. Avoid tillage for 7 days. Injury to forage grasses may occur. Broadleaf crops may be injured for 2 years after treatment. Cost: Curtail \$39.00-\$52.00; dicamba \$14.50-\$29.00; Grazon P+D \$10.75-\$17.00; Milestone \$15.25-\$21.25; Redeem R&P \$39.00-\$62.50; Tordon 22K \$22.50-\$45.00.
	Dicamba [•]	32.0-64.0 oz		
	Grazon P+D [◆]	2.5-4.0 pt		
	Lineage Clearstand	8.0-13.0 oz		
	Milestone	5.0-7.0 oz		
	Redeem R&P	2.5-4.0 pt		
	Tordon 22K	1.0-2.0 qt	Apply late in fall after killing frost	Pasture, range or noncropland. Add MSO 1 qt/A. Cost: \$32.75.
	Plateau ¹	12.0 oz		
	Transline	1.0-1.3 pt	Apply from bud to mid-flower growth stage or treat in fall	Cost: Transline \$50.00-\$65.00.
RUSSIAN OLIVE	2,4-D ester (4L) + Dicamba [•]	64.0 oz 32.0 oz	Full foliage (early June)	See remarks for cottonwood. Cost: \$23.25.
	Remedy	1.0 qt/3.0 qt diesel or crop oil as basal treatment		Cost: \$27.00/qt.
	Spike 20P	0.5 oz/1" dia	Spring or fall	Use on noncropland only. Cost: \$0.34/in diameter.
	Arsenal or Habitat	1.0-2.0 qt (broadcast)		Noncrop sites only. Add NIS at 0.25% v/v (broadcast or 1.0% v/v (spot spraying). Cost \$31.25-\$62.50.
	Pathfinder II	Apply undiluted as low volume basal treatment		
RUSSIAN THISTLE — See <i>Kochia</i> for controls				
SAGEBRUSH (sand, fringed and green sagewort)	2,4-D ester (4L)	48.0-64.0 oz	4"-8" new growth (June)	1.5 qt/A 2,4-D adequate on sand sagebrush. Cost: 2,4-D \$6.50-\$8.75; Grazon P+D \$12.75-\$17.00.
	Grazon P+D	3.0-4.0 pt		
	Garlon 3A	50% (spot spray)	Apply directly to fresh cut stump (See page 41)	50% spot spray is 1.0 qt Garlon 3A plus 1.0 qt water. Cost: \$90.00/gal.
SALT CEDAR — See <i>Noxious Weed Section</i>				
SANDBUR (pasture, range and noncropland)	Plateau	4.0-10.0 oz	Spring PRE to early POST Sandbur less than 4"	Add 1.0 qt MSO/A. For use in warm-season grasses. Cost: \$11.00-\$27.50.
✕SCOTCH THISTLE	2,4-D (4L) + Dicamba [•]	32.0 oz 16.0 oz	Spring or fall rosette	Cost: \$11.75.
	Chaparral	1.5-2.5 oz	Spring rosette stage	Cost: \$8.25-\$14.00.
	Cimarron Plus	0.25 oz	Spot treatment to rosette	Cost: \$3.25.
	Milestone	4.0-6.0 oz	Spring and fall rosette	Cost: \$12.25-\$18.50.
	Overdrive	4.0-6.0 oz	Spring or fall	Cost: \$10.75-\$16.25.
	Tordon 22K	1.0-2.0 pt	Fall rosette	Cost: \$11.25-\$22.50.

✕Nebraska Department of Agriculture "Watch List" weed.

◆See manufacturer's label for application time.

•Dicamba rates are based on a 4.0 ae/gal formulation, like those found in Clarity or Banvel. See page 176 or the *Herbicide Dictionary* for other products containing dicamba.

¹The active ingredient in Plateau is imazapic. See *Herbicide Dictionary* for other formulations of imazapic.

²Before using a glyphosate formulation, confirm that it is approved for aquatic use. Glyphosate formulations labeled for aquatic use in Nebraska (November 2011) include: Rodeo and Accord Concentrate (Dow AgroSciences), AquaMaster (Monsanto), Aquaneat (NuFarm), Cinco (Loveland), and Glyfos Aquatic (Cheminova).

Troublesome Weeds and Woody Plants *(continued)*

Weed	Herbicide	Product Per Acre	Application Time	Remarks and Approximate Cost per Acre Broadcast
SCOURINGRUSH	Arsenal	2.0 pt	Late summer or early fall	Suppresses scouringrush. Apply in a minimum of 20.0 gal/A. Use 1.0% v/v MSO. Cost: \$52.50.
	Casoron	105.0 lb	Late summer or early fall	Requires tillage to incorporate. For best results, tillage should destroy all scouringrush shoots. Cost: \$273.00.
	Escort	1.0-2.0 oz	Late summer or early fall	Suppresses scouringrush. Apply in a minimum of 20.0 gal/A. Use 0.5% v/v NIS and 2% v/v AMS. Cost: \$12.00-\$24.00.
	Garlon 3A	5.0 pt	Late summer or early fall	Suppresses scouringrush. Apply in a minimum of 20.0 gal/A. Use 0.5% v/v NIS. Cost: \$56.25.
	MCPA amine	96.0 oz	Late summer or early fall	Suppresses scouringrush. Apply in a minimum of 20.0 gal/A. Use 0.5% v/v NIS and 2% v/v AMS. Cost: \$15.00.
	Oust XP	4.0 oz	Late summer or early fall	Suppresses scouringrush. Apply in a minimum of 20.0 gal/A. Use 1.0% v/v COC. Cost: \$25.00.
	Telar XP	1.0-3.0 oz	Late summer or early fall	Will control scouringrush. May require second treatment in following year at 1.5 oz/A. Apply in a minimum of 20.0 gal/A. Use 0.5% v/v NIS and 2% v/v AMS. Cost: \$23.00-\$69.00.
✘SERICEA, LESPEDEZA — See <i>Lespedeza Sericea</i>				
SOAPWEED — See <i>Yucca</i>				
SOW THISTLE (perennial)	2,4-D ester (4L)	48.0 oz	Fall rosette or spring bud stage	See remarks for field bindweed. Cost: \$6.50.
	Overdrive	4.0-6.0 oz	Spring bud stage	Cost: \$10.75-\$16.25
SUMAC	2,4-D ester (4L)	32.0-64.0 oz	Full foliage	Use sufficient water for good coverage. Cost: \$4.50-\$8.75.
	Cimarron Plus + Weedmaster	0.5 oz 4.0 pt	Full foliage in June	Cost: Cimarron Plus + Weedmaster \$18.50.
	Grazon P+D [◆]	2.0-4.0 pt		Cost: \$8.50-\$17.00.
SWAMP SMARTWEED (tanweed, shoestring)	2,4-D ester (4L) + Dicamba [●]	32.0 oz 16.0 oz	When growing vigorously	On crops use lower rates and amine formulations. Cost: \$11.75.
	Glyphosate [◆]	3.0-4.0 qt in 10.0 gal or less water/A	Full foliage mid to late summer	Idle ground or spot treatment in cropland before head or pod fill of crop. Avoid tillage for 7 days. Cost: \$9.00-\$12.00.
	Tordon 22K [◆]	1.0-2.0 pt		Cost: \$11.25-\$22.50.
SWEET CLOVER	2,4-D ester	32.0 oz	12-20" tall	In pasture. Cost: \$4.50.
	Chaparral	2.5-3.0 oz	4-6"	Cost: \$14.00-\$16.75.
	Cimarron Plus	0.375-0.625 oz	4" in pasture	Cost: \$5.00-\$8.25.
	Glyphosate [◆] + Classic	32.0 oz 0.3 oz	4-6"	In Roundup Ready soybean (POST). Control of taller plants reduced by 60%. Cost: \$7.75.
	Glyphosate [◆] + Flexstar	32.0 oz 8.0 oz	4-6"	In Roundup Ready soybean (POST). Control of taller plants reduced by 50%. Cost: \$11.75.
	Plateau	4.0-6.0 oz	Apply in spring (4-6" tall plants)	Cost: \$11.00-\$16.50.
VENICE MALLOW (in Roundup Ready soybean POST)	Extreme	48.0 oz	4-6"	Cost: \$19.25.
	Glyphosate [◆] + Classic	32.0 oz 0.3 oz	4-6"	Cost: \$7.75.
	Glyphosate [◆] + Phoenix	32.0 oz 8.0 oz	4-6"	Cost: \$14.50.

✘Nebraska Department of Agriculture "Watch List" weed.

¹Before using a glyphosate formulation, confirm that it is approved for aquatic use. Glyphosate formulations labeled for aquatic use in Nebraska (November 2011) include: Rodeo and Accord Concentrate (Dow AgroSciences), AquaMaster (Monsanto), Aquaneat (NuFarm), Cinco (Loveland), and Glyfos Aquatic (Cheminova).

[◆]Glyphosate rates are based on a 4.0 ai/gal or 3.0 lb ae/gal formulation. See pages 177-178 for information on common glyphosate formulations.

[●]Dicamba rates are based on a 4.0 ae/gal formulation, like those found in Clarity or Banvel. See page 176 or the *Herbicide Dictionary* for other products containing dicamba.

[◆]See manufacturer's label for application time.

Troublesome Weeds and Woody Plants *(continued)*

Weed	Herbicide	Product Per Acre	Application Time	Remarks and Approximate Cost per Acre Broadcast	
VERVAIN (HOARY) — See <i>Hoary Vervain</i>					
WESTERN RAGWEED — See <i>Ragweed, Western</i>					
WILD BUCKWHEAT (in Roundup Ready soybean POST)	Extreme	48.0 oz	1-4"	Cost: \$19.25.	
	Glyphosate [◆] + Flexstar	32.0 oz 8.0 oz	1-4"	Cost: \$11.75.	
	Glyphosate [◆] + Phoenix	32.0 oz 5.0 oz	1-4"	Cost: \$10.25.	
	Glyphosate [◆] + Scepter	32.0 oz 1.44 oz	1-4"	Cost: \$9.00.	
	Glyphosate [◆] + Ultra Blazer	32.0 oz 12.0 oz	1-4"	Cost: \$10.00.	
	(in corn)	Distinct	4.0-6.0 oz	1-4"	Cost: Distinct \$13.00-\$19.50.
		Hornet	3.0 oz	1-4"	Cost: Hornet \$14.25.
	(in wheat)	Affinity BroadSpec	0.8 oz	1-3 leaves	Add NIS. Cost: \$9.50.
		Curtail	2.0 pt	1-4"	Cost: \$13.00.
	(in sugarbeet)	Stinger	4.0-6.0 oz	1-4"	Cost: \$17.50-\$26.25.
WILD CUCUMBER — See <i>Burcucumber</i>					
WILD LICORICE	Tordon 22K	2.0 pt	Bloom stage	Cost: \$22.50	
WILD OAT — In Nebraska, most likely weedy annual brome. See <i>Downy Brome</i>					
YARROW	2,4-D LV ester (4L) + Dicamba [●]	32.0 oz 8.0 oz		Cost: 2,4-D + dicamba \$8.25.	
	Grazon P+D	2.0 pt	Fall or spring pre-bloom	Cost: Grazon P+D \$8.50.	
	Overdrive	4.0-6.0 oz	Spring pre-bloom	Cost: \$10.75-\$16.25.	
YELLOW NUTSEDGE (in corn)	Beacon	0.76 oz	1-4"	For best results apply before June 21. Cost: Beacon \$22.75; Permit \$28.00.	
	Permit	1.33 oz			
✘YELLOW STAR THISTLE	Curtail	1.5-2.5 pt	Apply in rosette stage	Cost: Curtail \$9.75-\$16.25; dicamba \$14.00-\$29.00; Overdrive \$10.75; Tordon \$5.75-\$27.00; Transline \$25.00-\$50.00.	
	Dicamba [●]	1.0-2.0 qt			
	Overdrive	4.0 oz			
	Transline	0.5-1.0 pt			
	Tordon 22K	0.5-1.5 pt			
✘YELLOW TOADFLAX	Telar	1.0-2.0 oz	Fall application at rosette stage	Cost: \$23.00-\$46.00	
	Tordon 22K	2.0 pt	Early bloom	Cost: Tordon \$22.50; Clarity \$7.50.	
	Clarity (in corn)	8.0 oz			
YUCCA (soapweed)	Cimarron Plus	0.65-1.25 oz		Cost: \$8.50-\$16.25.	
	Tordon 22K	1.0 ml/plant		Apply with spot gun in whorl or base of plant. Cost: Tordon \$0.02/plant; Velpar \$0.08/plant.	
	Velpar L	4.0 ml/plant			
	Remedy	13.0 oz/5.0 gal of diesel or fuel oil		Spot application. Thoroughly wet the center of the plant to the soil surface. Cost: Remedy \$108.00/gal.	

✘Nebraska Department of Agriculture "Watch List" weed.

◆Glyphosate rates are based on a 4.0 ai/gal or 3.0 lb ae/gal formulation. See pages 177-178 for information on common glyphosate formulations.

●Dicamba rates are based on a 4.0 ae/gal formulation, like those found in Clarity or Banvel. See page 176 or the *Herbicide Dictionary* for other products containing dicamba.