



University of Alaska Fairbanks
 Cooperative Extension Service
 Pesticide Chart by Crop
 November 2008

Crop	Active ingredient	Trade names	Rate/acre	Timing	Weeds controlled	Notes	Leaching	Runoff
Hay, grass	glyphosate	Round up, Cornerstone	2% spot spray (2 2/3 oz/gallon)	During growing season	Non-selective herbicide used	Generic products including Cornerstone should be mixed with a non-ionic surfactant at 0.5% v:v (2 qt/100 gal).	VL	M-s
	2,4-D LV6 ester		0.7-2.0 lb/ae per A	Annual weeds are easier to control when small.	Broadleaf weeds	Do not cut hay within 30 days of application.	M*	M-w
	2,4-D amine		Depends on weed species and size.	Spray biennial weeds in the seedling to rosette stage before flower stalks are apparent. Treat perennial weeds while still seedlings or wait until bud stage of growth.	Ester formulation controls woody and vining species more effectively than amine.	Do not graze lactating dairy cattle for 7 days after treatment. Do not graze meat animals within 3 days before slaughter.		
	clopyralid + 2,4-D amine	Curtail	2-4 quart/A	Apply to established pasture when weeds are actively growing.	Broadleaf weeds	Do not cut for hay within 30 days of application.		
	Dicamba	Banvel	0.25-2lb ae/A Rate depends on weed species and size.	Apply after weeds emerge. Treat annuals when small and actively growing. Treat established perennials at bud stage unless label indicates otherwise.	Many annual, biennial, and perennial species including woody and vining species.	Can also be applied as a cut-surface treatment to control trees or prevent sprouting of cut trees. There are no haying or grazing restrictions except lactating animals. Check the label for specific hay restrictions.	H	L-w
	Dicamba + 2,4-D	Weedmaster	0.5-4 pints/A Rate depends on weed species and	Apply to grass when annual and biennial broadleaf weeds are small and actively growing and perennials are at bud stage.	Broadleaf weeds.	Do not apply to newly seeded areas until grass is established. Do not graze lactating dairy cattle for 7 days after application. Do not cut for hay for lactating dairy animals within 37 days of		



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		size.	Check label for timing of specific weeds.	application.
				Do not graze meat animals on treated fields within 30 days of slaughter. Note label for restrictions on reseeding or overseeding.
triclopyr	Garlon 3A	1 qt-0.66 gal./A	Apply when broadleaf weeds and woody plants are actively growing. To control biennial thistles and other biennials, apply before flower stalks appear.	Variety of broadleaf and woody species. Rate varies depending on weeds to be controlled; check label Add a non-ionic surfactant to the tank mix. Do not harvest for hay within 14 days of application. Do not graze meat animals on treated pasture for 3 days prior to slaughter during the season of application. Do not allow grazing or harvest of green forage for lactating animals during the same season as treatment.
triclopyr ester	Remedy	0.25-2.0 lb ae/A (1-4 pts/A Remedy)	When plants are actively growing	Broadleaf weeds Haying and grazing restrictions vary with application rate and livestock type. Check the label.
triclopyr + 2,4-D	Crossbow	1%-1.5% spot spray or up to 1 gal/A	Annual weeds are easier to control when small. Spray biennial weeds in the seedling to rosette stage before flower stalks are apparent.	Variety of broadleaf and woody species. May not be applied to forage that is to be cut and sold for commercial purposes. Do not apply to newly seeded areas until grass is established.



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					Do not harvest for hay within 14 days of application. Check the label for haying and grazing restrictions for lactating dairy animals.		
triclopyr + clopyralid	Redeem R&P	1.5-4 pts/A Rate depends on weed species, size and stage of growth.	Apply to established grass when broadleaf weeds are actively growing. Annual weeds are easier to control when small. Spray biennial weeds in the seedling to rosette stage before flower stalks are apparent.	Herbaceous broadleaf weeds.	Add a non-ionic surfactant at rate recommended on label. Do not apply to newly seeded areas until grass is established. There is a 7 day restriction for harvesting dry hay. For lactating dairy animals: Do not graze or harvest green forage from treated area for 14 days or harvest for dry hay until next growing season. Withdraw meat animals from treated area 3 days before slaughter.		
aminopyralid	Milestone	3-7 fl oz/A	Apply to actively growing weeds.	Controls variety of broadleaf weeds including weeds in sunflower and legume families.	Add a non-ionic surfactant at 1-2 qts/100 gal. spray solution to enhance control. Desireable broadleaf forages can be killed by Milestone. Consult the label for details. No restrictions on grazing or hay harvest.		
Metsulfuron methyl	Valuron DF 60 Cimarron	0.1-0.4 oz/A 0.1-1 oz/A	Apply to actively growing weeds.	Wide range of broadleaf weeds	Add a non-ionic surfactant at 0.25% V:V (1 qt/100 gallons) No grazing restrictions for any livestock including lactating.	H*	M-w



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Note label for restrictions for use on timothy, fescue, and ryegrass pastures.

Pasture and Rangeland	2,4-D LV6 ester		0.7-2.0 lb/ae per A	Annual weeds are easier to control when small.	Broadleaf weeds	Do not cut hay within 30 days of application.	M*	M-w
	2,4-D amine		Depends on weed species and size.	Spray biennial weeds in the seedling to rosette stage before flower stalks are apparent. Treat perennial weeds while still seedlings or wait until bud stage of growth.	Ester formulation controls woody and vining species more effectively than amine.	Do not graze lactating dairy cattle for 7 days after treatment. Do not graze meat animals within 3 days before slaughter.		
	clopyralid	Curtail	2-4 quart/A	Apply to established pasture when weeds are actively growing.	Broadleaf weeds	Do not cut for hay within 30 days of application. Do not graze lactating dairy for 14 days after application. Do not meat animals to graze treated fields within 7 days of slaughter (for first 14 days after treatment).		
	+ 2,4-D amine							
	Metsulfuron methyl	Valuron DF 60	0.1-0.4 oz/A	Apply to actively growing weeds.	Broadleaf weeds including Canada thistle.	For best results, use a non-ionic surfactant. Consult the individual label for instructions and approved sites. No grazing restrictions for up to 1 oz/A. Check label for restrictions and precautions for use on timothy, fescue, and ryegrass pastures.	H*	M-w
		Escort	0.5-3.3 oz/A					
		Cimarron	0.1-1.0 oz/A					
	Metsulfuron methyl	Cimarron Max	Part 1 0.25-1 oz/A	Apply pre- or postemergence. Best if applied to		Check the label for use and rate, which depends on weed		



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			young, actively growing weeds.	spectrum and size of weeds.			
+ dicamba		Part 2	2-4 pts/A	There is a 37 day harvest restriction for cut hay.			
+ 2,4-D							
Dicamba	Banvel	0.25-2lb ae/A	Apply after weeds emerge.	Many annual, biennial, and perennial species including woody and vining species.	Can also be applied as a cut-surface treatment to control trees or prevent sprouting of cut trees.	H	L-w
		Rate depends on weed species and size.	Treat annuals when small and actively growing. Treat established perennials at bud stage unless label indicates otherwise.		No grazing restrictions for non-lactating animals. Meat animals must be removed from treated areas 30 days prior to slaughter.		
Dicamba	Weedmaster	0.5-4 pints/A	Apply to grass pastures when annual and biennial broadleaf weeds are small and actively growing and perennials are at bud stage.	Broadleaf weeds.	Do not apply to newly seeded areas until grass is established. Do not graze lactating dairy cattle for 7 days after application. Do not cut for hay for lactating dairy animals within 37 days of application.		
		Rate depends on weed species and size.	Check label for timing of specific weeds.		Do not graze meat animals on treated fields within 30 days of slaughter. Note label for restrictions on reseeding or overseeding.		
glyphosate	Round up, Cornerstone	2% spot spray (2 2/3 oz/gallon)	During growing season	Non-selective herbicide used for spot-spray field renovation. Up to 10% of any acre can be sprayed.	Generic products including Cornerstone should be mixed w/ a non-ionic surfactant at 0.5% v:v (2 qt/100 gal). Repeat applications can be made in the same area at 30 day intervals.	VL	M



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					Reseeding is advised.		
MCPA ester	Sword, Solve	1-2 lb ae/A (1-3 pts/A Solve) (3/4-2 pts/A Sword)	Spray perennials in early bud to bloom stage and during regrowth in fall. Spray other weeds in spring or fall when weeds are actively growing.	Hempnettle, lambsquarter, mustards, shepherd's purse. Less susceptible sp: Canada and perennial sowthistle, vetch.	Use higher rate for less susceptible species. Do not graze dairy animals for 7 days after treatment. Do not harvest for hay within 21 days of treatment. Do not graze meat animals for 7 days prior to slaughter. Do not use in pasture with legume forages.	M*	H
aminopyralid	Milestone	3-7 fl oz/A	Apply to actively growing weeds.	Controls variety of broadleaf weeds including weeds in sunflower and legume families.	Add a non-ionic surfactant at 1-2 qts/100 gal. spray solution to enhance control. Desireable broadleaf forages can be killed by Milestone. Consult the label for details. No restrictions on grazing or hay harvest.		
triclopyr	Garlon 3A	1 qt-0.66 gal./A	Apply to pasture when broadleaf weeds and woody plants are actively growing To control biennial thistles and other biennials, apply before flower stalks appear.	Variety of broadleaf and woody species.	Rate varies depending on weeds to be controlled; check label Add a non-ionic surfactant to the tank mix. Do not harvest for hay within 14 days of application. Do not graze meat animals on treated pasture for 3 days prior to slaughter during the season of application.G18		



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					Do not allow grazing or harvest of green forage for lactating animals during the same season as treatment.
triclopyr ester	Remedy	0.25-2.0 lb ae/A (1-4 pts/A Remedy)	When plants are actively growing	Broadleaf weeds	Haying and grazing restrictions vary with application rate and livestock type. Check the label.
triclopyr + 2,4-D	Crossbow	1%-1.5% spot spray or up to 1 gal/A	Annual weeds are easier to control when small. Spray biennial weeds in the seedling to rosette stage before flower stalks are apparent.	Variety of broadleaf and woody species.	May not be applied to forage that is to be cut and sold for commercial purposes. Do not apply to newly seeded areas until grass is established. Check label for restrictions on grazing dairy cattle and reseeding or overseeding.
triclopyr + clopyrialid	Redeem R&P	1.5-4 pts/A Rate depends on weed species, size and stage of growth.	Apply to permanent grass pasture when broadleaf weeds are actively growing. Annual weeds are easier to control when small. Spray biennial weeds in the seedling to rosette stage before flower stalks are apparent.	Herbaceous broadleaf weeds.	Add a non-ionic surfactant at rate recommended on label. Do not apply to newly seeded areas until grass is established. Do not graze or harvest green forage for lactating dairy animals from treated area for 14 days or harvest for dry hay until next growing season. Withdraw meat animals from treated area 3 days before slaughter. There is a 7 day restriction for harvesting dry hay.



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hexazinone	Velpar L	0.66 lb ai/A Maximum allowed per season. See notes for details.	Just before or during period of active growth of brush species to be controlled.	For control of brush species in pastures and rangeland.	Not intended for broadcast application but for application to soil at base of plants to be controlled. Do not apply to brush standing in water or where desirable trees or shrubs are growing immediately adjacent to weeds. Do not use on marshy or poorly drained sites or on soils classified as clays. Do not apply to snow-covered or frozen ground. Do not cut hay from treated areas.	H	H
chlorsulfuron	Telar	0.25-1.33 oz/A	For perennial weeds, apply at budding or flowering stage or in fall at rosette stage. Apply early in the life cycle of annual weeds.		Apply only to established, non-stressed grasses. Certain grasses are less tolerant of higher rates. Check label for rates appropriate for grasses present in area to be treated. Telar applied before flowering can reduce seed head development of cool-season grasses. Bluegrass, bromes, orchardgrass, and wheatgrass tolerate rates of 0.25-1 oz/A Fescue, bluestems, lovegrasses, and wildrye tolerate 0.25-0.5 oz/A	H*	M-w
Small grains, oats							
thifensulfuron + tribuneron	Harmony Extra	0.3-0.4 oz/A	Apply after the crop is in the three-leaf stage but before jointing.		Add a non-ionic surfactant at 0.25% v:v (1 pt/100 gal) For best results, apply to young, actively growing weeds, at	H*	M-w



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Dicamba	Banvel, Sterling, Clarity	2-4 fl oz/A	Apply when weeds are at the two- to five-leaf stage. Do not apply after oats begin to joint.	Annual broadleaf weeds	temperatures above 60 F, and adequate soil moisture. Do not feed to dairy stock before crop matures. Do not tank mix with 2,4-D.	H	L-w
Bromoxynil	Buctril Buctril 4 Cereal	0.25-0.5 lb ai/A	Apply to weeds up to the four leaf stage, or 2" tall, or 1" diameter. Do not use after oats begin to joint.	Broadleaf weeds	Do not graze for 45 days. Control is more consistent when used in a tank mix. Bromoxynil is very compatible tank mixed with other broadleaf herbicides.	L	H
MCPA ester	Sword, Solve	0.25-0.5 lb ae/A	Apply to actively growing weeds when oats are in the three- to five-leaf stage or up to early boot stage.		Individual labels vary in timing, rates, and grazing restrictions. Check label to ensure proper use. Do not permit dairy animals or meat animals being finished for slaughter to graze or forage on treated fields within 2 weeks after applying.	M*	H
MCPA amine	MCP Amine 4 or Chaser Ultra 2	0.25-0.375 lb ae/A +	Before passing the five-leaf stage.		Do not use after oats begin to joint. Do not feed to dairy stock before crop matures. Do not tank mix with 2,4-D.	M*	H
+ dicamba	Banvel or Clarity	2-4 fl oz/A				H	L-w
Clopyrialid + Fluroxypyr	Colt AS	1-1.33 pt/A	Postemergent when oats are at 3 leaf stage up to when leaf flag is visible.	Variety of broadleaf annual and perennial weeds; volunteer	Do not graze livestock or harvest for forage within 7 days. There is a 14 day harvest interval for hay and a 40 day harvest		



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			Apply when weeds are actively growing but before 4" or vining. Use higher rate when weeds are 4-8".	potatoes.	interval for grain and straw.		
2,4-D		0.25-0.5 lb ae/A	Apply after plants are fully tillered but before stems begin to joint.	Annual broadleaf weeds	Not all 2,4-D is labeled for oats. Check the label. Do not forage or graze treated grain fields within two weeks after treatment. Do not feed treated straw to livestock.	M*	M-w
copyrialid	Stinger	0.25-0.33 pt/A	Apply from three-leaf up to early boot stage. Apply to actively growing weeds.	Annual broadleaf weeds		H*	H
Glyphosate	Roundup, Cornerstone		Pre-emergence; may be applied before, during or after planting but before crop emergence.	Annual grass and broadleaf weeds.	This application works best if there is a delay between tillage and planting to allow weeds to emerge before the oats. Lowest rate can usually be used because weeds are small. May also be used for spot treatment	VL	M
Small grains, barley							
thifensulfuron + tribuneron	Harmony Extra	0.3-0.6 oz/A	Apply after the crop is in the two-leaf stage but before the flag leaf is visible.		Add a non-ionic surfactant at 0.25% v:v (1 pt/100 gal spray solution) Best results on young, actively growing weeds, at temps above 60 F, and adequate soil moisture.	H*	M-w
thifensulfuron	Ally Extra	0.2-0.4 oz/A	Best applied when weeds are small and actively		Add a non-ionic surfactant at 0.25% v:v (1 qt/100 gal)	H*	M-w



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+ tribenuron			growing, temps are above 60F and soil moisture is adequate before, during, and after treatment.		Tank mix with another broadleaf herbicide with a different mode of action.		
+ metsulfuron methyl							
Metsulfuron methyl	Ally XP Valuron DF 60	0.1 oz/A	Apply post-emergence after barley has two leaves but before boot stage. Apply to difficult to control weeds when they are actively growing and no more than two inches tall or across.	Controls wide range of broad-leaf weeds. Inhibits Canada thistle.	For best results, add a non-ionic surfactant at 1-2 qts/100 gallons spray solution. Metsulfuron can persist in the soil, check label for crop rotation instructions.	H*	M-w
Dicamba	Banvel, Clarity	2-3 fl oz/A	Apply after weeds have emerged (less than 2") but before barley exceeds the four leaf stage.	Annual broadleaf weeds		H	L-w
Bromoxynil	Buctril Buctril 4 Cereal	0.25-0.5 lb ai/A	Apply to weeds up to the four leaf stage, or 2" tall, or 1" diameter.	Broadleaf weeds	Do not graze for 45 days. Control is more consistent when used in a tank mix. Bromoxynil is very compatible tank mixed with other broadleaf herbicides.	L	H
Bromoxynil + MCPA	Bromac Bronate Advanced Wolfpack	0.5-1.0 lb ai/A	Apply in spring when barley is in the 3-leaf stage but before it reaches boot stage.	Broadleaf weeds	Do not graze for 45 days. Most effective when applied to weeds up to 2" tall or across. Use higher rate for more resistant weeds.		
MCPA ester	Sword, Solve	0.5-1.0pt/A	Lower rate can be applied after the grain has four	Annual broadleaf weeds	Grazing intervals range from 7-14 days depending on product.	M*	H



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			leaves, higher rates after the grain is fully tillered but before jointing.		Check the label for specific rates and grazing restrictions. May be tank mixed with clopyrialid (Stinger)		
clopyrialid	Stinger	0.25-0.33 pts/A	Apply to actively growing weeds when crop is in the 3-leaf to early boot stage.	Only weeds emerged at time of application will be affected.	Use higher rate to control canada thistle. Do not exceed 0.66 pts/A per year. May be tank mixed with MCPA (Sword, Solve)	H*	H
Clopyrialid + Fluroxypyr	Colt AS	1-1.33 pt/A	Postemergent when oats are at 3 leaf stage up to when leaf flag is visible. Apply when weeds are actively growing but before 4" or vining. Use higher rate when weeds are 4-8".	Variety of broadleaf annual and perennial weeds; volunteer potatoes.	Do not graze livestock or harvest for 7 days after application. There is a 14 day harvest interval for hay and a 40 day harvest interval for grain and straw.		
clopyrialid + 2,4-D amine	Curtail	2-2.66 pts/A	Apply to young, actively growing weeds after grain has begun tillering up to the jointing stage.	Annual broadleaves, weeds in sunflower family including Canada thistle.	Barley only, not labeled for oats.		
Glyphosate	Roundup, Cornerstone	0.375-0.75 lb ae/A	Pre-emergence of grain crop.	Annual grasses and broadleaf weeds.	Timing is important to avoid crop damage; carefully check entire field to ensure no barley has begun to emerge.	VL	M
2,4-D		0.25-1.0 lb ae/A	When barley is fully tillered but before jointing.	Broadleaf weeds	Do not forage or graze treated grain fields within 2 weeks after treatment. Do not feed treated straw to livestock.	M*	M-w



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Individual labels may vary slightly on rate and timing, check the label for proper use.

Grass seed								
Dicamba	Banvel, Clarity	0.5-2.0 pts/A	Do not apply after the seed crop begins to joint. For best result, apply when weeds are in the 2-4 leaf stage and rosettes are less than 2" diameter.	Broadleaf weeds	Add a non-ionic surfactant at 1 pt/100 gallons spray solution. Rainfall within 4 hours of application will reduce effectiveness.	H	L-w	
MCPA	Sword, Solve	1-2 pts/A	Apply before boot stage	Broadleaf weeds in newly established or established grass stands.	There is a 14 day waiting period before grazing. Grass seedling root development may be inhibited when applied to early growth stages. May be tank mixed with clopyrialid (Stinger)	M*	H	
clopyrialid	Stinger	4 oz/A	Apply in spring before boot stage. For control of late-emerging Canada thistle, a pre-harvest treatment may be made after grass is fully developed; apply when basal leaves are fully emerged but before bud stage.	Broadleaf weeds including Canada thistle	For established grasses only; potential for crop injury increases with increased rate and later applications. May be tank mixed with MCPA (Sword, Solve)	H*	H	
clopyrialid + 2,4-D amine	Curtail	2-4 pts/A	Apply in spring before boot stage. For control of late-emerging Canada thistle, a pre-harvest treatment may be made after grass is fully	Broadleaf weeds including Canada thistle	For established grasses only; potential for crop injury increases with increased rate and later applications. Curtail contains 2,4-D amine, which may injure some grasses			



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developed; apply when basal leaves are fully emerged but before bud stage.

that are grown for seed.

glyphosate	Roundup, Cornerstone	33% solution (1 gallon product + 2 gallons water)	Weeds should be at least 6 inches taller than crop. Weeds should be in early bud, late boot, full bloom, or early seed stage of maturity.	Perennial or annual weeds	For use in wick or wiper applications. In heavy infestations, reduce speed to ensure adequate wiper coverage. Do not graze or feed within 14 days of treatment.	VL	M
Potatoes							
paraquat	Gramoxone Inteon: Paraquat concentrate:	1-2 pints/A 0.7-1.3 pts/A (0.25-0.5 lb ae/A)	Apply after weeds emerge before potatoes emerge. Delay application to maximize weed emergence but apply no later than ground cracking before potatoes emerge.	Annual grass and broadleaf weeds	Restricted use pesticide Add a non-ionic surfactant at 0.125% V:V (1 pt/100 gal spray solution) Paraquat will not control weeds that emerge after application.	VL	L-s
Glyphosate	Roundup, Cornerstone	0.38-1.1 lb ae/A	For pre-plant or in planted crops prior to emergence of potatoes. Apply when grass is less than 18" tall.	Volunteer oats or barley, other grasses and broadleaf weeds.	Generic products including Cornerstone should be mixed with a non-ionic surfactant at 0.5% v:v (2 qt/100 gal).	VL	M
EPTC	Eptam 7E	3.5-7 pts/A For quackgrass pre-plant: 4.5 pts/A	Preplant, preemergence, or early postemergence. Preplant application impregnated on dry bulk fertilizer.	Annual grass and certain annual broadleaf weeds	Soil surface must be dry and incorporated into soil to prevent herbicide loss. Preharvest interval is 45 days.	L	H
pendimethalin	Prowl H2O	In medium texture soil	Preemergence/preemergence incorporated after	Annual grass and certain	Can be applied to ground or through chemigation.	L	M-s



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		with <3% OM: 2 pts/A; with >3% OM: 3 pts/A 3 pts/A fine textured soil	planting but before potatoes and weeds emerge. Early postemergence up to 6" stage of potato.	annual broadleaf weeds	Do not exceed maximum rate allowed for any soil type. Do not apply post-emergence if potatoes are stressed. Do not apply to peat or muck soils.		
metribuzin	Sencor DF 75%	0.33-1.3 lb/A	Preemergence or postemergence before weeds are 1" tall. Rain may reduce control if applying postemergence.	Annual grass and broadleaf weeds	Mechanical cultivation after treatment reduces weed control. Check label for rotation of row crops other than potato. Do not apply post-emergence to early-maturing, smooth skin, white skinned, or red-skinned varieties of potato. Do not apply post-emergence within 3 days after cloudy, cool, or wet weather.	M*	H
trifluralin	Trifluralin 10G	6.25-7.5 lbs/A medium texture soil; 7.5-10 lbs/A fine texture	Apply and incorporate after planting, immediately following dragoff, or after crop emergence	Annual grass and certain annual broadleaf weeds	In areas receiving less than 20 inches of rainfall per year use lower rate range.	L	M-s
rimsulfuron	Matrix 25%	1-1.5 oz/A	Preemergence after hilling or dragoff but before potatoes and weeds emerge. Postemergence when weeds are less than 1"	Annual grass and broadleaf weeds.	May temporarily yellow potato foliage applied postemergence. Check label for specific application methods and precautions. May be used on potatoes grown for seed. See label.	M*	M-w
sethoxydim	Poast	Annual grass: 1.5 pt/A Volunteer grain: 2.25 pt/A Quackgrass: 2.5 pt/A	Apply to actively growing annual grasses at stage of grass growth indicated on label. Volunteer cereals: apply before tillering up to 4" tall.	Grasses and volunteer cereals Suppresses quackgrass	There is a 30 day harvest interval from application to harvest. Add a crop oil concentrate at 2 pts/A. It is also recommended to add ammonium sulfate (AMS) at 2.5 lbs/A.	L*	H



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			followed with a second application of 1.5 pt/A	For quackgrass: apply when shoots are 6-8" tall		Control may be erratic on weeds stressed by drought, temp extremes, and other factors. Do not apply if rain is expected within 1 hour of application. Do not cultivate within 5 days before or 7 days after applying.		
clethodim	Intensity	6-16 oz/A	Apply postemergence to grasses growing under ideal growing conditions.	Grasses	Do not harvest potatoes for 30 days following application.	M	M-w	
	Intensity One	9-32 oz/A	Do not cultivate within 7 days of application as this will reduce effectiveness of control.		Add 1 qt/A crop oil concentrate Apply ammonium sulfate at a rate of 2.5-4 lb/A to increase control of quackgrass and volunteer cereals Cover crop cereals are extremely susceptible to this herbicide.			
carfentrazeon-ethyl	Aim	3.2-5.8oz/A	Apply during later stages of vine senescence. Aim will also dessicate susceptible broadleaf weeds to aid intuber harvest.	Vine dessicant, harvest aid	Adequate dessication is usually achieved within 14 days of application.	H*	L-w	
					Use a sufficient volume of water to ensure adequate coverage of foliage.			
diquat	Reglone desiccant	1-2 pts/A in a single application	Time final application at least 7 days before harvest	Vine dessicant, harvest aid	Apply with a non-ionic surfactant at 0.5-4 pts/100 gal spray. Reglone is rainfast 30 minutes after application. Do not feed forage from treated potatoes to livestock.			
sulfuric acid		93% 17-28 gal/A	Apply at least 5 days before harvest. Repeat application after 5 days if necessary.	Vine dessicant, harvest aid	Restricted Use Pesticide: certified applicators only. This product is not as dependant on temperature or other			



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hexazinone + sulfometuron	Westar	2-4 lb/A	Apply before rain to fully activate. Apply before or shortly after weed emerge.	Grass and broadleaf weeds	to point of runoff. See label for susceptible weeds, use restrictions, and precautions.	H	H
imazapic + glyphosate + diquat	Roundup extended weed control plus weed preventer	6 oz/gallon spot spray	Apply when weeds are actively growing.	Grass and broadleaf weeds	Spray existing weeds and surrounding weed prone area soil to prevent weeds up to 4 months; thoroughly wet the area.		
imazapyr	Arsenal	0.25-1.5 lb ai/A	Apply before or soon after weed emerge. In most situations, best applied postemergence to vigorously growing weeds.	Grass and broadleaf weeds	Provides postemergence control with residual control of many annual and perennial weed species.	H*	H

Sources:
 Pacific Northwest Weed Management Handbook 2008
 Meister Pro Crop Protection Handbook 2008
 Guide for Weed Management in Nebraska 2004
www.kellysolutions.com/ak

Important note: The information presented in this chart was current as of November 2008. Individuals applying pesticides are responsible for making sure the pesticides they apply are registered for use in the State of Alaska. Visit the Alaska Department of Environmental Conservation website at <http://www.kellysolutions.com/ak/> for the most current listing of registered pesticides.

<p>Key to leaching and runoff potential: H=High M=Medium L= Low VL= Very low * indicates risk of leaching increases with increasing soil pH.</p>	<p>Runoff potential when leaching also occurs: L-w = Low, primarily lost with runoff water. L-s = Low, primarily lost with sediment. M-w = Medium, primarily lost with runoff water. M-s = Medium, can be lost with displaced sediment as well as water runoff. H = High, lost in both runoff water and displaced sediment.</p>
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