Accepted Herbicide Options for Selected Noxious Weeds

Note: the order of appearance of these products in the following list does not constitute a preference of the use of one product over the other. Please select the most appropriate product for the weeds being treated.

The herbicide information in this Schedule A is intended to provide general guidance for the acceptable use of federally registered herbicides providing **control** of the target weed. It is the responsibility of the applicant to ensure herbicide treatment is made according to the label and appropriate for their specific situation. SARM and the Ministry are not responsible for the consequences of herbicide application. Herbicide applications made contrary to the product label will not be funded.

Arsenal (Reg #23713); Arsenal Powerline (Reg.#30203) - Active ingredient: imazapyr. May be used in bare ground treatments only. Will kill nearly all vegetation contacted. Legumes may be slightly tolerant. Continues to prevent the emergence of weed seedlings due to soil residues. Very short buffer to water on the label. Will require permit from Saskatchewan environment. May be applied at 1200 mL/acre (or backpack at 30 mL/1 L water). Several weeds have developed resistance to this class of herbicides (i.e. kochia) and will not be controlled. May be tank-mixed with glyphosate and/or Banvel VM for control of these weeds.

Eligible Noxious Weeds found on the product	Eligible Prohibited Weeds found on the product
label:	label:
Yellow toadflax	Giant foxtail
Field bindweed	
Bladder campion	
Leafy spurge	
Ox-eye daisy	
Common burdock	

Aspect (Reg#31641); Grazon XC (Reg#31642) — Active ingredient: picloram + 2,4-D choline salt. Aspect is for use in <u>industrial areas</u> and Grazon XC is for use in <u>range and pasture areas</u>. Both products selectively control broadleaf weeds and brush in perennial grass cover. Both products have residual characteristics that may negatively impact sensitive species for one to two years after application.

Eligible Noxious Weeds found on the product label:

- Common burdock (1890 mL/acre)
- Leafy spurge (1890 mL/acre*)
- Yellow toadflax (1890 mL/acre*)
 - * As part of a yearly treatment program for four years. Must include the use of a recommended surfactant such as *Intake* (*Grazon XC* only), *Gateway* (*Aspect* only), *Xiameter OFX-0309 Fluid* (*Aspect* only), or any non-ionic surfactant (adjuvant cost may be included in claim).

Clearview (Reg#29752); Sightline (Reg#30409); Reclaim II (Reg#30062) — Active ingredient: aminopyralid + metsulfuron (Reclaim II also contains 2,4-D = Reclaim II B; Sightline also contains fluroxypyr for control of Group 2 resistant kochia or cleavers) Clearview and Sightline are for use in non-crop areas (roadsides, ditches, commercial land, right-of-ways etc.) and may be used occasionally in Range and Pasture areas for control of invasive species. Reclaim II is for use in Range and Pasture only. Because these products are essentially a combination of Milestone and Escort, they have residual characteristics that may negatively impact sensitive species for one to two years after application. Plants in the legume and sunflower families are the most sensitive to these products. Add the recommended surfactant (such as AG-SURF, AGRAL 90 or CITOWETT PLUS) to the spray solution at 2.0 mL per 1 L of spray solution (adjuvant cost may be included in claim). Weed control claims below are for a single season only as a way to reduce seed production. Retreatment may be required in future seasons.

Eligible Noxious Weeds found on the product label:

- Absinthe (Clearview, Reclaim II A or Sightline A
 @ 55 g/acre plus 2,4-D Amine (or Reclaim II B)
 @ 455 gae/acre plus Sightline B product according to the label)
- Black henbane (Clearview, Reclaim II A or Sightline A @ 81 g/acre; – plus companion "B" product according to the label)
- Burdock (Reclaim II A @ 55 g/acre + Reclaim II B @ 455 gae/acre)
- Common tansy (Clearview, Reclaim II A or Sightline A @ 55 g/acre – plus companion "B" product according to the label)
- Hoary Alyssum (Clearview, Reclaim II A or Sightline A @ 69 g/acre – plus companion "B" product according to the label)
- Ox-eye daisy pre-bud (Clearview, Reclaim II
 A or Sightline A @ 55 g/acre plus companion
 "B" product according to the label)
- Wild parsnip (Clearview, Reclaim II A or Sightline A @ 81 g/acre; – plus companion "B" product according to the label)

Eligible Prohibited Weeds found on the product label:

- Diffuse knapweed (Clearview, Reclaim II A or Sightline A @ 93 g/acre; – plus companion "B" product according to the label)
- Field scabious (Clearview, Reclaim II A or Sightline A @ 55 g/acre; – plus companion "B" product according to the label)
- Perennial pepperweed (Clearview, Reclaim II A or Sightline A @ 69 g/acre; – plus companion "B" product according to the label)
- Spotted knapweed (Clearview, Reclaim II A or Sightline A @ 55 g/acre; – plus companion "B" product according to the label)
- Yellow star-thistle (Clearview, Reclaim II A or Sightline A @ 55 g/acre; – plus companion "B" product according to the label)

Dicamba (350, 480, 600) g/L formulations (various)- Active ingredient: dicamba. For use in both range and pasture as well as non-crop areas. For selective control of broadleaf weeds in perennial grass covered areas. These products may leave a residue for at least a portion of the growing season that will impact sensitive plants seeded into the area. These products are soluble in water and caution should be used when applying to very sandy land with shallow ground water.

Eligible Noxious Weeds found on the product label:

• Field bindweed (408 grams acid equivalent/acre at the flowering stage)

Escort (Reg#23005) – Active ingredient: metsulfuron. May be used for selective control in perennial grass areas. Use the rate specified for specific species plus non-ionic surfactant (Agral 90, Surf 92, Prosurf, etc.) at 2.0 mL for each 1 L of spray solution (adjuvant cost may be included in claim). Escort has residual characteristics that may negatively impact sensitive species for four or more years after application. Eligible Noxious Weeds found on the product label:

Common tansy (8 g/acre)

Esplanade (Reg #23713); - Active ingredient: indazaflam. May be used in bare ground treatments only. Will kill nearly all vegetation emerging from seed after application. Perennial grasses may be tolerant and will require that glyphosate be added to control established grasses. Continues to prevent the emergence of weed seedlings due to soil residues. Very short buffer to water on the label. Will require permit from Saskatchewan environment. May be applied at 152 mL/acre.

Eligible Noxious Weeds found on the product label:

Field bindweed

Eligible Prohibited Weeds found on the product label:

- Giant foxtail
- Yellow star-thistle

Grazon XC (see Aspect above)

Milestone (*Reg#28517*) – <u>Active ingredient:</u> aminopyralid. *Milestone* is for use in non-crop areas and may be used occasionally in Range and Pasture areas for control of invasive species. *Milestone* will control of broadleaf species in permanent perennial grass areas. *Milestone* has residual characteristics that may negatively impact sensitive species for one to two years after application. The addition of 2,4-D 600 Amine at 1000 mL/acre will enhance control. For Range and Pasture use see *Restore II*.

Eligible Noxious Weeds found on the product label:

- Absinthe (Milestone at 200 mL/acre alone or Milestone at 150 mL/acre + 2,4-D 600 Amine at 770 mL/acre)
- Ox-eye daisy (117 mL/acre)
- Hoary cress (Milestone at 117 mL/acre + 2,4-D 600 Amine at 600 mL/acre)
- Common tansy (Milestone at 200 mL/acre + 2,4-D 600 Amine at 1000 mL/acre)

Eligible Prohibited Weeds found on the product label:

- Diffuse knapweed (202 mL/acre)
- Spotted knapweed (117 mL/acre)
- Yellow star-thistle (117 mL/acre)

Navius (Reg#30922) – <u>Active ingredient:</u> aminocyclopyrachlor + metsulfuron. May be used for selective broadleaf weed control in grassy areas as well as brush at higher rates. For use on range and pasture areas as well as industrial sites such as rights of way (road, pipeline, rail), non-irrigated ditchbanks, well sites yard sites, etc.

- A rate of 67.6 g/acre is recommended (8.35 g per 10 L water treats 500 sq. metres). A measuring cylinder is included in each package of *Navius* and is for measuring *Navius* only.
- An adjuvant must be added to the spray mixture for proper activity. Non-ionic surfactants (*Agral 90, Surf 92, ProSurf*, etc.) must be added at 2.5 mL per 1 L of spray solution or either *Merge* or a Crop Oil Concentrate (i.e. *Assist, Score, Superior Oil Concentrate*, etc.) must be added at 10 mL per L of spray solution (adjuvant cost may be included in claim).
- Applications must be made in a minimum of 81 L/acre of water for adequate coverage.
- Upwind spraying must stay back 5 m from aquatic habitats and shallow water bodies less than 1 m deep or 2 m from water deeper than 1 m. Applications must stay back from sensitive land-dwelling plants by 45 m. The buffer to land-dwelling plants is not required on rights-of-way, but precautions should still be taken to avoid damage from drift. Avoid applying over the roots of trees (typically equal to the height of the tree from the trunk).

Eligible Noxious Weeds found on the product label:

- Leafy spurge
- Common tansy
- Ox-eye daisy

Eligible Prohibited Weeds found on the product label:

- Common crupina
- Giant hogweed
- Knapweed (diffuse and spotted)
- Yellow star-thistle

Restore II (Reg#28517) – Active ingredient: aminopyralid and 2,4-D. Restore II is for use in Range and Pasture areas for control of invasive species. Restore II will control of broadleaf species in permanent perennial grass areas. Restore II has residual characteristics that may negatively impact sensitive species for one to two years after application. For Industrial uses see Milestone.

Eligible Noxious Weeds found on the product label:

- Absinthe (970 mL/acre)
- Burdock (970 mL/acre)
- Field bindweed (970 mL/acre)
- Hoary cress (970 mL/acre)
- Ox-eye daisy (570 mL/acre)

Sightline (see Clearview above)

Eligible Prohibited Weeds found on the product label:

- Spotted knapweed (570 mL/acre)
- Yellow star-thistle (570 mL/acre)

Tordon 22K (Reg#9005) – Active ingredient: picloram. May be used for selective control in permanent grass areas. The maximum rate of 3600 mL/acre (90 mL/18 L of water over 100 sqm) may be applied by hand application equipment only and may only be applied to 50% of any two-acre portion of land. Rates of 1900 mL/acre may be used for applications over larger areas. This product is mobile in water and may leach into groundwater if applied to sandy soils overlying shallow ground water. **Tordon 22K** may also leave a residue in the soil that will impede the growth of sensitive crops for several years.

Eligible Noxious Weeds found on the product label:

- Leafy spurge (3600 mL/acre rate only*)
- Russian knapweed (1900 mL/acre rate)
- Yellow toadflax (3600 mL/acre rate only*)
- Field bindweed (3600 mL/acre rate only*)
 * Note: the 3600 mL/acre rate is only to be
 - * Note: the 3600 mL/acre rate is only to be applied to one half of each two acre area)

Eligible Prohibited Weeds found on the product label:

Diffuse or spotted knapweed (910 mL/acre rate)

Truvist (Reg#30920) – Active ingredient: aminocyclopyrachlor + chlorsufuron. May be used for selective broadleaf weed control in grassy areas or mixed with non-selective soil persistent herbicides for bare ground sites. Only for use on industrial sites such as rights of way (road, pipeline, rail), non-irrigated ditchbanks, well sites yard sites, etc. – may not be used in range or pasture. **Do not allow treated areas to be cut for hay or grazed by livestock this product is not registered for this use.** (Note: Truvist is no longer being manufactured so supplies may be limited)

- A rate of 68 g/acre is recommended (8.4 g per 10 L water treats 500 sq. metres). A measuring cylinder is included in each package of *Truvist* and is for measuring *Truvist* only.
- An adjuvant must be added to the spray mixture for proper activity non-ionic surfactants (*Agral 90, Surf 92, ProSurf,* etc.) must be added at 2.5 mL per 1 L of spray solution or either *Merge* or a Crop Oil Concentrate (i.e. *Assist, Score, Superior Oil Concentrate*, etc.) must be added at 10 mL per 1 L of spray solution (adjuvant cost may be included in claim).
- Applications must be made in a minimum of 81 L/acre of water for adequate coverage. Spraying
 must stay back 2 m from aquatic habitats and shallow water bodies less than 1 m deep or 1 m from
 water deeper than 1 m. Applications must stay back from sensitive land-dwelling plants by 25 m.
 The buffer to land-dwelling plants is not required on rights-of-way, but precautions should still be
 taken to avoid damage from drift. Avoid applying over the roots of trees (typically equal to the
 height of the tree from the trunk).

Eligible Noxious Weeds found on the product label:

- Leafy spurge
- Common tansy
- Field bindweed
- Ox-eye daisy
- Bladder campion
- Wild parsnip

Eligible Prohibited Weeds found on the product label:

- Common crupina
- Giant hogweed
- Halogeton
- Knapweed (diffuse and spotted)
- Perennial pepperweed
- Wild chervil
- Yellow star-thistle

Prohibited Weeds

Because prohibited weeds are rare or not currently found in Saskatchewan, registered control options may not have been developed in Canada yet. In accordance with *The Weed Control Act*, municipalities are required to notify Crops and Irrigation Branch upon the discovery of a prohibited weed and at that time an appropriate control option will be investigated and approved.

For control options for Prohibited weeds or assistance in confirming identification please contact the Provincial Weed Specialist at: (306) 787-4673 or Clark.Brenzil@gov.sk.ca

Note on Prohibited Weeds

Prohibited Weeds are either not currently in Saskatchewan, or are only recently introduced and very rare. If producers look through the list of *Prohibited Weeds*, there will be very few that they will recognize since for the most part, these species are not found in Saskatchewan yet. It is essential that these weeds are discovered as soon as possible after they enter the province, quarantined when they are found, and eradicated using the most effective means possible, to prevent them from gaining a foothold.

(1) The following plants are designated as Prohibited Weeds in Saskatchewan:

Common Name	<u>Botanical Name</u>
barberry, common	Berberis vulgaris L.,
bartsia, red	Odontites serotina Dum.
chervil, wild	Anthriscus sylvestris (L.) Hoffm.

crupina, common *Crupina vulgaris* Cass.

cupgrass, woolly Eriochloa villosa (Thunb.) Kunth

darnel Lolium temulentum L. foxtail, giant Setaria faberi Herrm. goatgrass, jointed Aegilops cylindrical Host

halogeton Halogeton glomeratus (M. Bieb.) C.A. Mey.

hemlock, poison Conium maculatum L.

hogweed, giant Heracleum mantegazzianum Sommier & Levier

hound's-tongue *Cynoglossum officinale* L. knapweed, diffuse *Centaurea diffusa* Lam.

knapweed, spotted Centaurea stobe L.(=Centaurea biebersteinii DC)

knapweed, squarrose *Centaurea virgata* Lam.

mustard, garlic Allaria petiolata (M. Bieb.) Cavara & Grande

pepperweed, perennial Lepidium latifolium L.
pondweed, curly-leaved Potamogeton crispus L.
puncturevine Tribulus terrestris L.
rue, African Peganum harmala L.
rush, flowering Butomus umbellatus L.

saltcedar Tamarix sp

scabious, field Knautia arvensis (L.) Coult. star-thistle, yellow Centaurea solstitialis L. toadflax, Dalmatian Linaria dalmatica

water-milfoil, Eurasian Myriophyllum spicatum L.

floating heart, yellow Nymphoides peltata (S.G. Gmel.) Kuntze

Invasive Plant Control Program (IPCP) Reference Table*

IPCP Eligible Noxious Weeds	IPCP Accepted Herbicide
Absinthe	Clearview; Sightline
	Reclaim II (range and pasture areas only)
	Milestone
	Restore II (range and pasture areas only)
Field bindweed	 Arsenal; Arsenal Powerline (bare ground treatments only)
	Dicamba
	Esplanade (bare ground treatments only)
	Restore II (range and pasture areas only)
	Tordon 22K
	Truvist (industrial areas only)
Common burdock	 Arsenal; Arsenal Powerline (bare ground treatments only)
	Aspect (industrial areas only)
	Grazon XC (range and pasture areas only)
	Reclaim II (range and pasture areas only)
	Restore II (range and pasture areas only)
Bladder campion	Arsenal; Arsenal Powerline
	Truvist (industrial areas only)
Ox-eye daisy	 Arsenal; Arsenal Powerline (bare ground treatments only)
	Clearview; Sightline
	Reclaim II (range and pasture areas only)
	Milestone
	Navius
	Restore II (range and pasture areas only)
	Truvist (industrial areas only)
Black henbane	Clearview; Sightline
	Reclaim II (range and pasture areas only)
Hoary cress	Milestone
,	Restore II (range and pasture areas only)
Hoary alyssum	Clearview; Sightline
, ,	Reclaim II (range and pasture areas only)
Leafy spurge	Arsenal; Arsenal Powerline (bare ground treatments only)
Leary Sparke	Aspect (industrial areas only)
	Grazon XC (range and pasture areas only)
	Navius
	Tordon 22K
	Truvist (industrial areas only)
Russian knapweed	Tordon 22K
Yellow toadflax	Arsenal; Arsenal Powerline (bare ground treatments only)
	Aspect (industrial areas only)
	Grazon XC (range and pasture areas only)
	Tordon 22K
Common tansy	
Common tansy	Clearview; Sightline Postaim II (range and nacture great only)
	Reclaim II (range and pasture areas only) Escort (parangal areas areas only)
	Escort (perennial grass areas only) Milestone
	Milestone

Common tansy (continued)	Navius
Common tansy (continued)	Truvist (industrial areas only)
Wild parsnip	Clearview; Sightline
wiiu parsiiip	Reclaim II (range and pasture areas only)
	Truvist (industrial areas only)
Prohibited Weeds	IPCP Accepted Herbicide
Wild chervil	Truvist (industrial areas only)
Common crupina	Navius
	Truvist (industrial areas only)
Giant foxtail	Arsenal; Arsenal Powerline (bare ground treatments only)
	Esplanade (bare ground treatments only)
Halogeton	Truvist (industrial areas only)
Giant hogweed	Navius
	Truvist (industrial areas only)
Diffuse knapweed	Clearview; Sightline
·	Reclaim II (range and pasture areas only)
	Milestone
	Navius
	Tordon 22K
	Truvist (industrial areas only)
Spotted knapweed	Clearview; Sightline
	Reclaim II (range and pasture areas only)
	Milestone
	Navius
	 Restore II (range and pasture areas only)
	Tordon 22K
	Truvist (industrial areas only)
Perennial pepperweed	Clearview; Sightline
	 Reclaim II (range and pasture areas only)
	Truvist (industrial areas only)
Field Scabious	Clearview; Sightline
	Reclaim II (range and pasture areas only)
Yellow star-thistle	Clearview; Sightline
	Reclaim II (range and pasture areas only)
	Esplanade (bare ground treatments only)
	Milestone
	• Navius
	Restore II (range and pasture areas only)
	Truvist (industrial areas only)

^{*}Table is for reference purposes only. Please refer to the full list of acceptable herbicides in Schedule A for more information, including allowable application rates. Always read and follow herbicide label directions.