# Purchase Agreement Form

# Two Per Cent Liquid Strychnine Concentrate for the Control of Richardson's Ground Squirrels

## **Condition of Purchase:**

As the purchaser of Two Per Cent Liquid Strychnine Concentrate (2% LSC), I declare:

- I have an economically significant infestation of Richardson's Ground Squirrels. This is defined by at least one of the following methods:
  - 1 Walk transect(s) counting burrow openings/holes in a **one metre wide** area along the transect. (One hole per four metres along the transect is considered an economically damaging level of RGS. In a 100-metre transect this equals approximately (25 X 25) 625 RGS burrows per hectare.).
  - 2 Twenty per cent loss in the crop in a 100-metre strip/area adjacent to a field margin, pasture or road allowance.
  - 3 Crop insurance claims from previous year.
- I have read the label for 2% LSC.

#### I understand that:

- 2% LSC is registered only for control of Richardson's Ground Squirrels;
- 2% LSC is to be applied according to the product label;
- 2% LSC is not to be used in aboveground bait stations;
- I must collect and dispose of the poisoned carcasses as directed by the label;
- 2% LSC cannot be sold or given to other producers; and
- 2% LSC cannot be used in areas where there are species at risk populations, such as burrowing
  owls and swift fox (The Saskatchewan Conservation Data Centre manages data on the locations
  of sensitive species. For more information visit their website at <a href="http://www.biodiversity.sk.ca">http://www.biodiversity.sk.ca</a>.);

## In purchasing 2% LSC, I hereby agree:

- To all the terms and conditions stated in the registration;
- To provide information on the performance of the product as is requested on the "Product Evaluation Form" received at the time of purchase;
- To return the completed "Product Evaluation Form" to my local Rural Municipality office within 21 days from the date the bait was placed;
- To report incidences of non-target poisoning on the Product Evaluation Form. Incidences can also be reported on the Health Canada website at <a href="http://www.hc-sc.gc.ca/cps-spc/pest/part/protect-proteger/incident/index-eng.php">http://www.hc-sc.gc.ca/cps-spc/pest/part/protect-proteger/incident/index-eng.php</a>; and
- That violation of the above terms and conditions can result in forfeiting the right to purchase
   2% LSC in the future.

	(Please print)
urchaser/Landowner Signature:	

Saskatchewan 😓

PURCHASE INFORMATION (*Required Fields)	
*Rural Municipality of	No
*Date of Purchase:	
*Name: *  (please print)	Telephone #: ()
*Mailing Address or P.O. Box #:	
*City, Town or Village:	*Postal Code:
E-mail address:	
*Amount purchased:(# of bottles)	
TREATMENT PLAN (*Required Fields) *Location of the land to be treated (for multiple sites, Quarter Section Township Range	only list the site with the highest infestation):  Meridian
or GPS Coordinates:	Farm Size:(acres)
Estimated acres to be treated:	
Crop (crop type)	Acres Treated
Forage	Acres Treated
Pasture	Acres Treated
CERTIFICATION  As the RM Administrator (or designate), I certify that to find the company of the	he information provided on the form, to the b
M Administrator Namo:	
M Administrator (or designate) Signature:	

# **Product Evaluation Form**

# **Two Per Cent Liquid Strychnine Concentrate**

Farmers, ranchers or pest control officers must complete and submit this form in a timely fashion.

Please return t	the completed	form to your Rui	ral Municipality	office within 21	days of bait ap	oplication.	
Rural Municipa	lity of		N	0	<u></u>		
Name: (please print)			Tel	Telephone # :			
	(please pri	nt)					
Mailing Addres	s or P.O. Box #:						
City, Town or Village:				Postal Code:			
1) As part of ar Richardson	n Integrated Pe 's Ground Squir	st Management ( rels have been ir	(IPM) program, nplemented:	the following alt	ernative metho	ods to control	
Hunting 🗆	7	Frapping $^-$	Maintainin	ig vegetative hei	ght (> 15 cm) =	-	
Raptor platforn	ns <sup>–</sup>	Maintaining Pred	ator habitat 🗆	Other roder	nticides ¬		
Other control n					(r	please list)	
		ple) pelow for each ar	ease identify)				
Date Purchased	Date Bait applied	Legal Land Description or GPS coordinates where bait was applied	Land use: Crop (crop type); or Forage; or Pasture	Population Density at time of Application (estimate # of burrows/acre)	Approximate Area Treated (acres)	Bait Performance 0-4 Poor 5-6 Fair 7-8 Good 9-10 Excellent	

3)	Report incidences of non-target species poisoning: For further information on incident reporting refer to
	the Pest Management Regulatory Agency website address:
	www.hc-sc.gc.ca/cps-spc/pest/part/protect-proteger/incident/index-eng.php
4)	Report on the presence (and location) of any species at risk, such as burrowing owls or swift fox, near the treatment site.
	Species:
	Location:
	Quarter Section Township Range Meridian
	or GPS Coordinates:
5)	Other comments:
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Dur	chaser/Landowner Signature
rui	chaser/Landowner Signature:
<u>Esti</u>	mating a significant economic infestation of Richardson's ground squirrels:
1-	Walk transect(s) counting burrow openings/holes in a one-metre wide area along the transect. (One hole
per	four metres is considered an economically damaging level of RGS. In a 100-metre transect this equals roximately (25 X 25) 625 RGS burrows per hectare.)
<b>2</b> – allo	Twenty per cent loss in the crop in a 100-metre strip/area adjacent to a field margin, pasture or road wance.
3 - (	Crop insurance claims from previous year.



# Integrated Pest Management for Richardson **Ground Squirrels**

Integrated pest management is a strategy used to attain sustainable, long-term pest control. It uses all viable options (chemical and non-chemical) to keep pest damage below economic levels while reducing negative impacts on the environment. Integrated pest management includes chemical, biological, historical/cultural and physical mechanical control activities. Naturally, some factors that affect Richardson's ground squirrel populations, such as climatic conditions, are not under producer control. Not all options will work in all areas or are necessarily compatible with all farming operations. However, it is important to consider other options aside from strychnine and other rodenticides as part of long-term pest management to prevent outbreak situations.

# Non-chemical options

# Trapping (e.g. guillotine-type traps)

Trapping can be an effective tool, but may be best-suited for smaller areas with high populations of Richardson's ground squirrel due to the labour requirements and capital expense.

# Vegetation/pasture height

Whenever possible, keep vegetation on pastures or forage higher than 15 cm. Richardson's ground squirrels tend to inhabit areas with shorter vegetation, as there is better visibility for predator avoidance. Research studies noted that taller vegetation negatively impacts their colonization. In addition, leave headlands and fenceline vegetation around cropland and hay land tall and not fall grazed.

These areas can also act as habitat for Richardson's ground squirrel predators.

# Raptor platforms or nesting boxes for predatory birds

Set up raptor platforms to entice raptors. This tool has only initial set-up costs and may be more beneficial in areas with fewer trees. There have, however, been reports of successful use of raptor platforms in the parkland region.

## RoCon

RoCon is a foam product injected in Richardson's ground squirrel burrows to suffocate the rodents. You must carry a supply of soft water for this product. Application timing is also important.

## Shooting

Hunting can be an effective tool for some areas. It is important to abide by safety precautions and regulations whenever you use a firearm.

# Chemical options

Chemical options for Richardson's ground squirrel control include the following:

- Strychnine;
- Anticoagulants, with the active ingredient chlorophacinone (e.g. Rozol, Ground Force); and
- Phostoxin (aluminum phosphide).

## Use of rodenticides

Although targeted at Richardson's ground squirrel, rodenticides will cause mortality in other animals. It is important to preserve natural predator populations to aid in Richardson's ground squirrel management. This includes fox, badger, weasels and coyotes. They can be negatively affected by the use of rodenticides.

The best timing for Richardson's ground squirrel control should be implemented based on the following:

 You will achieve optimum results from baiting before green up of vegetation in the spring. Variable climatic conditions will affect the emergence of Richardson's ground squirrel and the performance of rodenticides.

- When using a rodenticide, your first baiting should be completed prior to the emergence of the young.
- Bait or control in the headlands and fence lines prior to crop emergence.
- Do not use strychnine baiting twice in sequence in the same baiting location. Use an alternate control product or method for the second application of control. After the young Richardson's ground squirrel have emerged, do not apply strychnine or chlorophacinone more than once in the same location. This will help reduce the negative impact on predators.

Phostoxin (aluminum phosphide) is a fumigant that can be very effective in Richardson's ground squirrel control, but can also be very hazardous. This is a restricted product and requires a Pesticide Applicator's Licence to purchase and apply the product. New restrictions include submitting a treatment plan to the Pest Management Regulatory Agency (PMRA) prior to use.

Research has shown that anticoagulants (chlorophacinone, e.g. Rozol, Ground Force) are not effective if the surrounding crop stand is more than 40 per cent alfalfa, except when there is little green growth visible. Alfalfa contains Vitamin K, which is an antidote to chlorophacinone.

Oats are not a good bait carrier for chlorophacinone. There is an enzyme in oats that will reduce the effectiveness of chlorophacinone over time. Wheat is a better bait carrier.

#### For more information

For more information, contact the Agriculture Knowledge Centre general inquiry line at 1-866-457-2377.

#### **Contact Us**

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More

View all contacts in the directory