

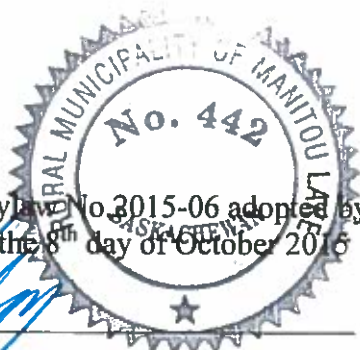
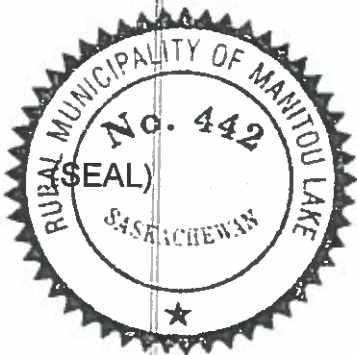
RURAL MUNICIPALITY OF MANITOU LAKE No. 442

BYLAW NO 6-2015

A BYLAW TO PREVENT AND CONTROL CLUBROOT

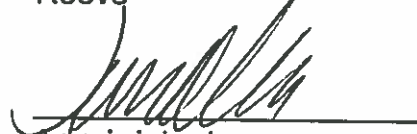
The Council of the Rural Municipality of Manitou Lake No. 442 in the Province of Saskatchewan enacts as follows:

1. This Bylaw may be referenced as the "Clubroot Bylaw"
2. In this Bylaw:
 - a) "officer" means an officer within the meaning of *The Pest Control Act*;
 - b) "Municipality" means the Rural Municipality of Manitou Lake No. 442;
3. Unless otherwise specified, the owner(s) and/or occupant(s) of land situated in the Municipality shall be responsible for carrying out the provisions of this Bylaw.
4. Every owner(s) and/or occupant(s) of any land in the Municipality shall notify the Municipality in which the land is located of the presence of clubroot, within 30 days of becoming aware of the same.
5. Notification of the presence of clubroot shall be in writing in Form "A", attached to and forming part of this Bylaw. Completed Form A should be returned to the office of the Rural Municipality of Manitou Lake No. 442.
6. Where the officer believes that a person has contravened any provision of this Bylaw, a Bylaw Violation Notice may be served either personally or by mailing or leaving same at the last known address.
7. The Bylaw Violation Notice shall be in Schedule "1", attached to and forming part of this Bylaw.
8. The Bylaw Violation Notice shall be deemed to have been served:
 - a) on the expiration of twenty- four hours after it is posted, if the notice is mailed;
 - b) on the day of actual delivery, if the notice is served personally; or
 - c) on the business day following the transmission, if given by facsimile.
9. In lieu of prosecution, the person who has contravened the provisions of this Bylaw shall pay a fine in the amount of \$ which shall be indicated on the Bylaw Violation Notice.





Reeve



Administrator

Certified a true copy of Bylaw No 2015-06 adopted by Resolution of Council on the 8th day of October 2015


 Administrator

Schedule # 1 to Bylaw No. 2015-06

M-11 (a)

BYLAW VIOLATION NOTICE

Rural Municipality of Manitou Lake No. 442

BYLAW VIOLATION NOTICE

Name:

Address:

This official notice is issued for alleged breach of the following bylaw:

Bylaw No. 2015-06

Section #:

Offence:

Voluntary Payment:

DETAILS OF ALLEGED BREACH OF VIOLATION

Date and time of violation:

Location of violation:

PENALTY

Take notice that you may remit a voluntary payment to the Municipality in the amount stipulated above to avoid prosecution for this offence.

Payment may be made in person at the municipal office or by mail

RM of Manitou Lake No. 442
Box 69
Marsden, SK
S0M 1P0

If the voluntary payment indicated above is not received by [specified date], a summons requiring your appearance in provincial court will be issued.

Issued this [date] by [name of Officer]

Signature of Officer

Rural Municipality of Manitou Lake No. 442 Clubroot Bylaw Form A

CLUBROOT SURVEY FORM

¼ Section _____ TWP _____ RGE _____ West of _____ Meridian

And/or GPS Coordinates N _____ and W _____

As shown on the diagram attached,

-or- Number, Street: _____ Town/City: _____

Pest Control Officer: _____

Surveyor Name (if different from above): _____

Address: _____

Phone: _____ **Email:** _____

Landowner Name: _____

Date Surveyed: _____

Is this survey part of an agreement with the landowner or an order? _____

TILLAGE INFORMATION (IF APPLICABLE/KNOWN)

Fall 20____: No tillage: _____ Cultivation (# of times): _____ Discing (# of times) _____

Other: {(Please specify) # of times} _____

Spring 20____: No tillage: _____ Cultivation (# of times): _____ Discing (# of times) _____

Other: {(Please specify) # of times} _____

SEEDING INFORMATION (IF APPLICABLE/KNOWN)

Crop: _____ Variety: _____ Source: Certified _____ Common _____

Seeding Date: (if available) _____ Seeding Rate: (lbs/ac or kg/ha) _____

Total rainfall (if available): June _____ July _____ Irrigated: Yes _____ No _____

ROTATION INFORMATION (IF APPLICABLE/KNOWN)

Please list Canola variety used in previous years if known: _____

20____: Wheat _____ Barley _____ Canola _____ Filed peas, Lentil, Dry Bean _____

Oats _____ Rye _____ Potato _____ Forage Grasses _____ Forage Legumes _____

Other (Please specify) _____

20____: Wheat _____ Barley _____ Canola _____ Filed peas, Lentil, Dry Bean _____

Oats _____ Rye _____ Potato _____ Forage Grasses _____ Forage Legumes _____

Other (Please specify) _____

History of cabbage or brassica crops other than Canola grown on the field: _____

(Could include indication of previous home garden)

All survey information is considered confidential and is to be kept on file in the office of the municipality and released only to authorized municipal or provincial government personnel and the person owning, occupying or controlling the land surveyed. Disclosure is subject to the agreement reached or orders issued in the event of a positive clubroot finding, as outlined in the clubroot policy of the municipality.

FIELD TRAFFIC: Is there occasional traffic onto the field, ie oil pumping rigs, power installations, recreational vehicles (ATVs), etc.? _____

COMMENTS (Please attach additional sheets if required): _____

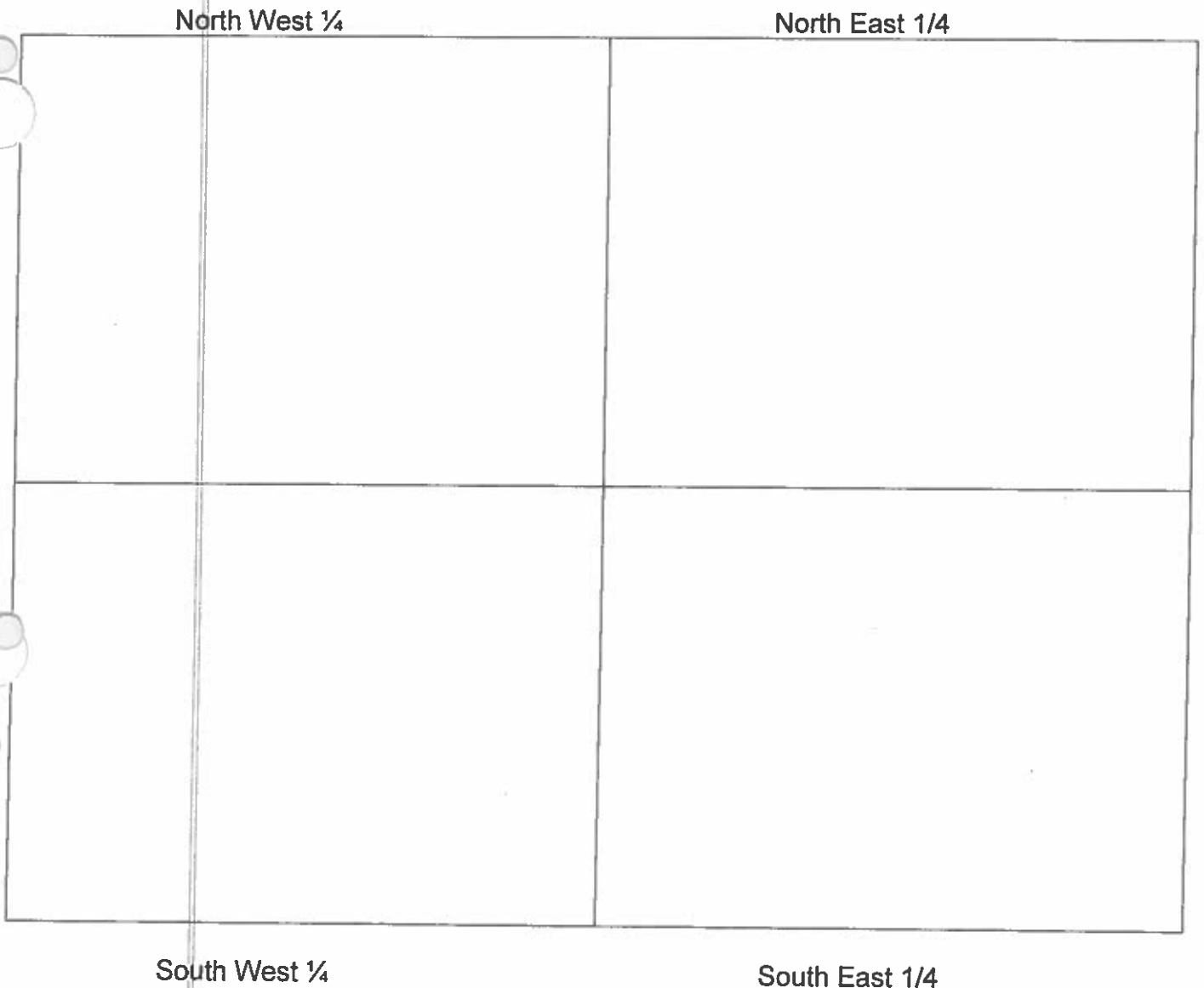
TYPE OF SAMPLE(S) COLLECTED

SOIL: Yes _____ No _____ **NUMBER OF SAMPLES:** _____

PLANTS: Yes _____ No _____ **NUMBER OF SAMPLES:** _____

DIAGRAM SHOWING LOCATION OF FIELD ENTRANCE AND/OR SAMPLES:

(May be supplemented with map printed from GIS software)



All survey information is considered confidential and is to be kept on file in the office of the municipality and released only to authorized municipal or provincial government personnel and the person owning, occupying or controlling the land surveyed. Disclosure is subject to the agreement reached or orders issued in the event of a positive clubroot finding, as outlined in the clubroot policy of the municipality.

**RURAL MUNICIPALITY POLICY REGARDING THE PREVENTION AND
CONTROL OF CLUBROOT**

1. Definitions

In this Policy:

- a) "Officer" means an officer within the meaning of *The Pest Control Act*;
- b) "Municipality" mean the Rural Municipality of Manitou Lake No. 442.
- c) "Council" means the Council of the Rural Municipality of Manitou Lake No. 442.

2. Policy Statement

The RM of Manitou Lake No. 442 recognizes that clubroot is a serious problem of cruciferous plants such as canola, mustard, camelina, oilseed radish, taramira and cruciferous vegetables such as arugula, broccoli, brussels sprouts, cabbage, cauliflower, Chinese cabbage, kale, kohlrabi, radish, rutabaga, turnip, and cruciferous weeds (e.g. stinkweed, shepherd's purse, wild mustard).

The RM of Manitou Lake No. 442 supports the principle to control the spread of clubroot, which has been declared a pest number under *The Pest Control Act*.

3. Procedures

- a) *The Saskatchewan Clubroot Management Plan* will be referred to and used as a guide for any control/prevention measures. An updated copy of this document can be obtained by calling the Saskatchewan Agriculture Knowledge Center at 1-866-457-2377.
- b) Clubroot filed inspections will be conducted by officer(s) appointed by the Municipality to monitor for clubroot and/or enforce *The Pest Control Act* within the Municipality.
- c) Clubroot surveys procedures and the reporting form will follow standard protocols as recommended by the Saskatchewan Clubroot Initiative and the Saskatchewan Canola Disease Survey (see Schedule A).
- d) Clubroot confirmation must be obtained through observation of disease symptoms in a susceptible crop (either in the field or through bioassay – plants grown in a soil sample and observed for clubroot symptoms after six weeks) and detection of the pathogen's DNA in a plant a soil sample, obtained by laboratory testing.



- e) By way of the Municipalities Clubroot Bylaw (Bylaw Number) every owner and/or occupant of land shall notify the Municipality or appointed officer of the Municipality in which the land is located of the presence of clubroot, within 30 days of confirmation (as described above) of the presence of clubroot, and provide the exact location of the disease.
- f) Personal survey information and details of self-reporting clubroot findings is to be considered confidential and kept on file in the office of the Municipality and released only to authorized municipal or provincial government personnel and the person(s) owning, occupying or controlling the land. Disclosure is subject to agreement reached with the landowner(s) and/or occupant(s), in the best interests of the community in accordance with the Saskatchewan Clubroot Management Plan.
- g) When the land is verified positive for clubroot, the landowner(s) and/or occupant(s) will be consulted by the appointed municipal officer regarding the methods of control to be applied with a view to the most satisfactory treatment from the standpoint of him/her/them, as well as the community, in accordance with the Saskatchewan Clubroot Management Plan, entering into a written agreement with the Municipality using form B.
- h) The landowner(s) and/or occupant(s) may be required to take actions as deemed appropriate by the appointed municipal officer by way of an order to destroy, control and prevent the spread of clubroot on any land owned, occupied or controlled by him/her/them, following the best practices for the prevention and management and proper sanitation measures outlined in the Saskatchewan Clubroot Management Plan, using form C.
- i) Adjacent landowners and any individuals or the parties who may be accessing the land must be prohibited from accessing the or notified by the landowner(s) and/or occupant that clubroot is present on the land so they may limit traffic and/or ensure proper sanitation.

4. Adoption



Reeve



Administrator

Adopted this 8th day of October, 2015



Administrator



Important Information:

For More Information on Clubroot

For more information on clubroot please visit www.clubroot.ca or www.agr.gov.sk.ca or contact the Saskatchewan Agriculture Knowledge Centre at 1-866-457-2377.

Bylaws

If the Municipality would like to implement a bylaw regarding clubroot please see the attached Sample Bylaw. If you require assistance with clubroot bylaws please contact SARM at 306-757-3577.

Management and Control Methods

If the municipality or municipal appointed officer requires assistance devising an effective management plan or requires guidance on sampling techniques or control methods please contact the Saskatchewan Agriculture Knowledge Center at 1-866-457-2377.

Notifying Ratepayers

SARM has drafted a sample letter that could be sent to ratepayers informing them of clubroot and the importance of prevention and management of the disease. Please see the attached Sample Letter to Ratepayers.

A handwritten signature in black ink, appearing to be the initials 'J.L.' with a small flourish at the end.

Clubroot Survey Protocol

Introduction: Clubroot is a soil-borne disease caused by a microbe, *Plasmodiophora Brassicae*. Clubroot affects the roots of cruciferous field crops such as canola, mustard, camelina, oilseed, radish and taramira. It also affects cruciferous vegetables such as arugula, broccoli, brussels sprouts, cabbage, cauliflower, Chinese cabbage, kale, kohlrabi, radish, rutabaga and turnup, as well as cruciferous weeds (e.g. stinkweed, shepherd’s purse, wild mustard).

Symptoms: Invasion of host roots leads to the formation of clubroot galls. These deformed roots have a reduced ability to absorb water and nutrients leading to stunting, wilting, yellowing, premature ripening and shriveling of seeds. The cause of these above-ground symptoms can be confirmed by digging up suspect plants to check roots for gall formation. Clubroot affects canola yield and quality to a similar degree as other diseases affecting water and nutrient uptake, and its impact depends on soil conditions and the growth stage of the crop when infection occurs. Early infection of seedlings can result in significant yield losses. Spore germination of *Plasmodiophora*, infection and disease development are favoured by warm soils, high soil moisture and low soil ph.

Equipment and Materials Needed:

Clubroot survey sheets (Form A)	Hand trowel	Disposable booties and gloves
Clipboard and pen	Pocket knife	Garbage bags
GPS unit or maps	Pail of five per cent bleach for soaking/cleaning tools	Five per cent bleach in misting bottle
Paper bags or boxes		

Plant Sample Survey Procedure:

1. As growing may six to eight weeks to develop, symptoms are most detectable later in the growing season (late July or August).
2. Records must be kept for all fields visited using *Form A* clubroot survey sheets.
3. Do not drive into fields or access, but park on the road whenever possible. Surveyors can walk into infested fields but must follow human sanitation procedures.
4. If survey personnel enter a field in any potentially infested regions, whether it is known to have clubroot or not, they are to follow these procedures:
 - Wear disposable footwear that can be removed immediately after leaving the field. Another option is to used rubber boots or other footwear that can be sterilized (misted) with a disinfectant solution (five per cent bleach) upon leaving the field.
 - Dispose of the deposable footwear in a sterile fashion. Sealing in a garbage bag and burning is preferred. Do not reuse disposable footwear.
 - Clean and disinfect any tools that may have been in contact with soil in the field.
5. Observe 20 plants at each at each five sites in field, for a total of 100 plants. Keep each of these five sites at least 20 metres from each other and at least 20 metres from the field edge.
6. if patches of premature ripening are observed, particularly in field entrance or corners of field, dig or pull up plants, shake off excess soil and inspect roots for the presence of galls. If clubroot is suspected, cut off stems and collect root samples.
7. Air-dry root samples in paper envelopes/boxes/bags and send them to the Ministry of Agriculture’s Crop Protection Laboratory at 346 McDonald Street, Regina SK, S4N 6P6, telephone (306) 787-8130. You may mail, courier or drop off samples in person. There is a \$20 fee for visual inspection.
8. If the visual diagnosis is positive, root samples will be forwarded to a laboratory on behalf of the municipality for DNA testing. Cost of the DNA testing will depend on the current fee set by the credited laboratory (approximately \$100).

J. L.

Soil Sample Survey Procedure:

1. Soil samples can be collected at any time but soil should be dried after collection.
2. Records must be kept for all fields visited using *Form A* clubroot survey sheets.
3. Do not drive into field or access, but park on the road whenever possible. Surveyors can walk into infested fields but must follow human sanitation procedures.
4. If survey personnel enter a field in any potentially infested regions, whether it is known to have clubroot or not, they are to follow these procedures:
 - Wear disposable footwear that can be removed immediately after leaving the field. Another option is to use rubber boots or other footwear that can be sterilized (misted) with a disinfectant solution (five per cent bleach) upon leaving the field.
 - Dispose of the disposable footwear in a sterile fashion. Sealing in a garbage bag and burning is preferred. Do not reuse disposable footwear.
 - Clean and disinfect any tools that may have been in contact with spoil in the field.
5. Soil samples should be comprised of a mixture of small scoops (approximately one cup each) of soil taken at each of 5 sites visited in one field. Because clubroot is most likely to arrive on soil attached to vehicles and field equipment, IF the entrance to the field is evident, these 5 sites should be located in the velocity of this approach. Clear away residue from the soil surface, and scoop approximately 1 cup of the top 5-10cm of soil at each site (total 1 litre from all 5 sites combined). Keep each of these five sites at least 20 metres from each other and at least 20 metres from the field edge.
6. Air-dry soil samples in paper boxes and send them to a laboratory for DNA testing. Cost of the DNA testing will depend on the current fee set by the credited laboratory (approximately \$100).
 - For a list of laboratories providing clubroot testing, please visit: www.clubroot.ca (click on Identify Clubroot) or contact the Crop Protection Laboratory in Regina.

J.L.

CLUBROOT AGREEMENT

Agreement No. _____

Date of Agreement _____, 20__

Agreement between

Owner, Occupant or Operator

-and-

Pest Control Officer

(name)

(name)

(address)

(address)

_____ No.

(Municipality)

I, the above owner or occupant, having this day conferred with the above-mentioned pest control officer, hereby acknowledge the presence of clubroot, on the land located at (if different from above):

_____ 1/4S _____ T _____ R _____ West of the _____ Meridian

and/or GPS Coordinates N _____ and W _____

as shown on the diagram attached,

-or- Number, Street: _____ Town/City: _____

AND hereby agree to do the following work (specify work to be done):

(signed) _____

(Owner and occupant)

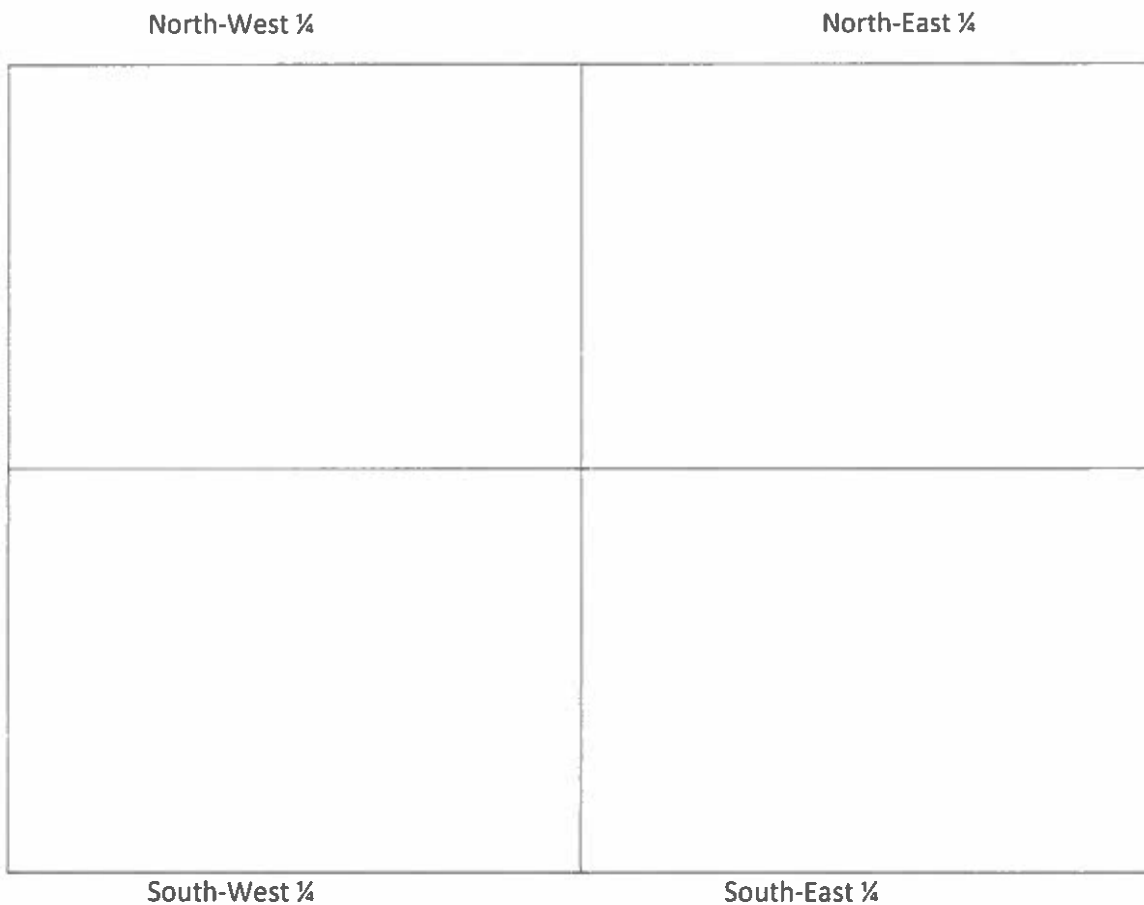
(signed) _____

(pest Control Officer)

J. L.

DIAGRAM SHOWING LOCATION OF CLUBROOT

(may be supplemented with map printed from GIS software)



Section _____ Township _____ Range _____ West of _____ Meridian _____

GPS coordinates: N _____ W _____

(these locations are approximations only and do not necessarily indicate all clubroot present.)

Note: this agreement to be made in triplicate. The original copy is for the owner/occupant, and copies 2 and 3 are to be submitted to the municipality.

Copy 1: Owner/Occupant

Copy 2: Municipality

Copy 3: Government of Saskatchewan

J. L.

CLUBROOT ORDER

Order No. _____

Date of Issue _____, 20__

To: _____ Address: _____

Telephone: _____

It has come to my attention that clubroot, a declared pest under *The Pest Control Act*:

(please check box)

Has been confirmed on your land described as (if different from above):

_____ 1/4S _____ T _____ R _____ West of the _____ Meridian.

-or-

Number, Street: _____ Town/City: _____

And/or GPS coordinates N _____ And W _____

-or-

Are present in soil adhering to your machine described as:

(description of machine, including serial number and, if applicable, license plate)

In accordance with the Clubroot Bylaw for the municipality, you are hereby notified:

(Detail instructions including methods to be used to destroy clubroot or clean machine and setting out any prohibitions or other measures the Pest Control Officer considers necessary or appropriate).

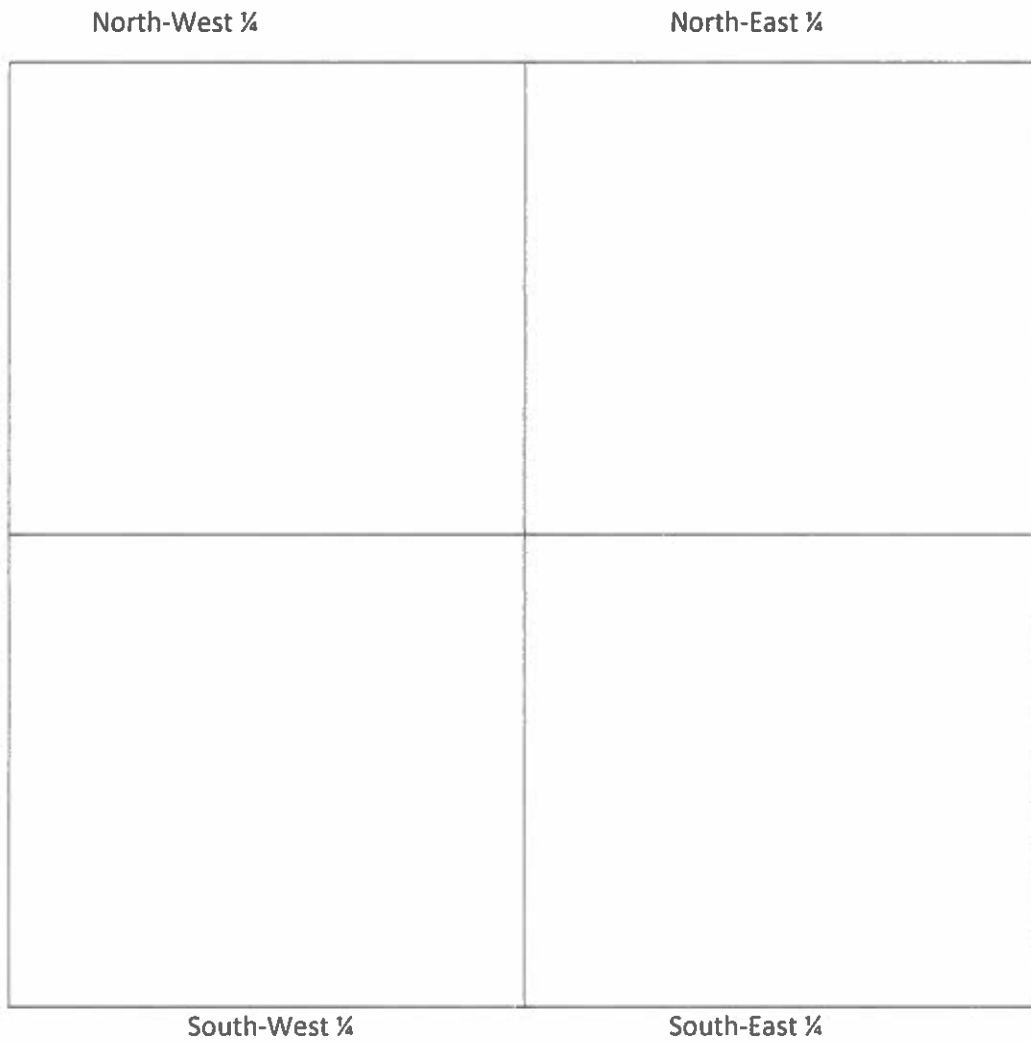
(Pest Control Officer)

RM of Manitou Lake No. 442

J.F.

DIAGRAM SHOWING LOCATION OF CLUBROOT

(may be supplemented with map printed from GPS software)



Section _____ Township _____ Range _____ West of _____ Meridian

GPS coordinates: N _____ W _____

(these locations are approximations only and do not necessarily indicate all clubroot present.)

Note: This order is to be made in triplicate. The original copy is for the person to whom it is served, and copies 2 and 3 are to be submitted to the municipality.

Copy 1: Owner/Occupant/Person In charge of a machine Copy 2: Municipality Copy 3: Government of Saskatchewan

Draft Information Letter to be sent to all ratepayers from RM Council.

Re: The Prevention and Management of Clubroot in the RM of _____

Attention Ratepayers in the RM of _____:

Clubroot is a serious disease of cruciferous plants such as canola that can cause devastating yield losses. It is a soil borne disease that is easily transferred via contaminated soil residing on equipment, seed, etc. and there are limited options for controlling this disease.

The Rural Municipality of _____ supports the principle to control the spread of clubroot, which has been declared a pest under *The Pest Control Act* in Saskatchewan. By way of this letter we want to inform all of our ratepayers about the disease and suggest best practices that can be adopted to decrease the risks of contracting or spreading clubroot.

Section 4 of *The Pest Control Act* states that every person shall take measures to destroy clubroot or any crop, vegetation, vegetable, or other matter that may contain clubroot in order to control and prevent the spread of clubroot on any land or premises owned, occupied or controlled by that person.

The following is a list of best practices recommended in the provincially recognized Saskatchewan Clubroot Management Plan that landowners/occupants should adopt to prevent and manage clubroot.

1. Crop rotations: Plant susceptible crops, including clubroot resistant canola varieties, no more than once every four years.
2. Scout crops regularly and carefully.
 - Identify suspicious above-ground symptoms including wilting, stunting, yellowing and premature ripening of canola or other susceptible crops.
 - Field entrances and approaches are likely to be contaminated with clubroot spores first. Therefore, symptoms will often appear there first.
 - Confirm cause of above ground symptoms by checking the roots for galls.
3. If the clubroot is suspected, inform the Saskatchewan Ministry of Agriculture by contacting the Agriculture Knowledge Centre (1-866-457-2377) or your local Saskatchewan Ministry of Agriculture regional office.
4. If clubroot is confirmed to be present then please contact the Agriculture Knowledge Centre and the RM Office so they can assist you in devolving/implementing an effective clubroot management plan.
5. Practice good sanitation by restricting movement of potentially contaminated soil to non-contaminated regions.
 - a. For Saskatchewan producers, this means restricting entry into their fields of vehicles, field machinery or oil rig equipment with earth tag from infested regions unless it has been properly sanitized.
 - b. Ask questions about where the equipment is from and what sanitation measures have been used before the equipment left the infested area, dealer or auction site.
6. Clubroot spores may survive livestock digestion. Avoid use of straw, hay, greenfeed, silage and manure from infested or suspected areas.



Draft Information Letter to be sent to all ratepayers from RM Council

We also wanted to inform ratepayers that also as outlined in the Act under Section 17 the municipality may have appointed officer(s) conducting random clubroot field inspections throughout the RM to monitor for clubroot.

In order for the municipality to achieve their mandate under *The Pest Control Act, Section 12*, it has enacted a municipal bylaw requiring that: every owner and occupant of land shall notify the municipality in which the land is located of the presence of clubroot, within 30 days of confirmation or the presence of clubroot, and provide the exact location of the disease (see RM Bylaw Title, Number).

Once the RM is notified a municipal appointed officer(s) will work with the impacted landowner(s)/occupant(s) to devise an effective clubroot prevention/management plan by way of an agreement or municipal order which outlines the methods to be used, timelines and other requirements. This is in accordance with *The Pest Control Act, Section 19*.

We ask for your cooperation in helping the municipality prevent and manage this serious disease by adhering to these practices to both prevent and manage clubroot.

For more information on clubroot please visit www.clubroot.ca or www.agr.gov.sk.ca or contact the Saskatchewan Agriculture Knowledge Centre at 1-866-457-2377.

If you have any questions or concerns regarding the RMs clubroot polices or bylaws please contact_____.

Signed by an authorized RM Official

