

Title: CLUBROOT OF CANOLA

Policy No: 6308

Effective Date: July 27, 2021

Motion Number: 21.07.398

Supersedes Policy No: None

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Purpose: The purpose of this policy is to establish a management plan to prevent and/or minimize the spread and impact of Clubroot in Greenview. Greenview Council recognizes that Clubroot of Canola is declared a pest under the *Agricultural Pests Act* of Alberta and is a concern to agricultural producers within Greenview. Council further recognizes that it is beneficial to the agricultural industry to 'take active measures to prevent the establishment of, control or destroy pests in Greenview (Sec. 6, *Agricultural Pests Act*, R.S.A 2000, Chapter A-8).

1. DEFINITIONS

- 1.1. **Manager of Agricultural Services** means the individual appointed as the Agricultural Fieldman through motion by Greenview Council and by virtue of position (*Agricultural Service Board Act*) who acts as a Pest Inspector.
- 1.2. **Agricultural Pests Act** means the *Alberta Agricultural Pests Act* (R.S.A. 200, Chapter A-8) and the *Pest and Nuisance Control Regulation* (184/2001) including any amendments or successor legislation thereto.
- 1.3. **Agricultural Service Board** means the Board appointed by Greenview Council to address agricultural concerns.
- 1.4. **Alberta Clubroot Management Plan** means the plan to manage clubroot of canola as set forth by Alberta Agriculture and Forestry.
- 1.5. **Clubroot of Canola ("Clubroot")** means the serious soil-borne disease caused by *Plasmodiophora brassicae*.
- 1.6. **Control** means to destroy or manage the disease through measures deemed acceptable by the Pest Inspector and this Policy.
- 1.7. **Crop Residue** means the material left in an agricultural field after the crop has been harvested.
- 1.8. **Cruciferous Plants** means a plant family which includes; canola/rapeseed and mustard, as well as the cabbage family (broccoli, brussel sprouts, cabbage, cauliflower, kale, kohlrabi, radish, rutabaga and turnip).

- 1.9. **ID %** means a value derived from application of the accepted algorithm to determine clubroot disease severity: $(\#1 \text{ total} * 1) + (\#2 \text{ total} * 3) / 100 * 100$.
- 1.10. **Destroy** means to kill all growing parts or to render reproductive mechanisms non-viable.
- 1.11. **Geographic Area** means an area of land under the jurisdiction of Greenview.
- 1.12. **Greenview** means the Municipal District of Greenview No. 16.
- 1.13. **Infested** means a property containing Clubroot of Canola.
- 1.14. **Notice** means a notice in writing issued by a Pest Inspector under section 12 of the *Agricultural Pests Act*.
- 1.15. **Period of Restriction** means a period of time which a cruciferous crop may not be planted or grown.
- 1.16. **Pest** means an animal, bird, insect, plant or disease declared a pest under section two of the *Agricultural Pests Act*.
- 1.17. **Pest Inspector** means an inspector appointed by Greenview Council or by the Minister to carry out the *Agricultural Pests Act*.
- 1.18. **Producer** means a farm operator.
- 1.19. **Soil Disturbance** means anything that can or may move soil.

2. POLICY STATEMENT

- 2.1. Clubroot of Canola poses a serious threat to the Canola industry by reducing yields, it reduces the quantity and quality of the oil produced from the seeds and the spores can remain viable for twenty (20) years or more according to current research.
 - A. Clubroot was declared a pest to Alberta under the *Agricultural Pests Act* (APA) in 2007. Section 6 of the APA states that: a local authority shall take active measures to prevent the establishment of, or to control or destroy pests in Greenview.

3. PROCEDURE

- 3.1. In the event that a symptomatic sample sent to an accredited lab for analysis returns a DNA positive for Clubroot Greenview shall:
 - A. Ensure the landowner(s) and/or producer(s) receive a written Pest Notice as per the *Agricultural Pests Act* and associated Regulations following these parameters, as set by Council:
 - i. 1-3 rotation or a two-year break when ID% is less than 2%;
 - ii. 1-4 rotation or a three-year break when ID% is greater than 2%;
 - iii. Should pathotype testing reveal the field is infested with a resistance breaking pathotype the pest notice shall be until there is a canola cultivar

with resistance to that specific pathotype. All other brassica crops shall be prohibited.

- B. All landowner(s) and/or producer(s) within a one (1) mile or 1.6 kilometer radius of the field where Clubroot was confirmed, will be sent written confirmation that Clubroot was confirmed within a one (1) mile or 1.6 kilometer radius of their property with an information package.

3.2. The landowner(s) and/or producer(s) of lands confirmed with Clubroot shall be required to adopt the following immediate control measures;

- A. The crop shall be harvested, and the canola seed shall be sold for crushing, but **not** sold for feed or seed, and shall **not** be retained for reseeding.
- B. Crop residue shall be chopped and evenly spread back onto the infected land, not baled or removed.
- C. Any seed load transported from the infested land shall be securely covered (tarped).
- D. Soil disturbance on infected land should be minimized to prevent movement to uninfected land.
- E. Any crop residue and soil should be cleaned from all equipment and implements and left on the land before taking equipment off the infected land.
- F. Implements, or parts thereof, which come directly into contact with the soil should be sterilized, as per the Alberta Clubroot Management Plant (Appendix 1 and 2).
- G. Should the landowner(s) and/or producer(s) of infected land plant canola fail to abide by the notice the Manager of Agricultural Services shall:
 - i. If the landowner(s) and/or producer(s) fails to abide by the Notice, the Manager of Agricultural Services shall.
 - ii. Take appropriate measures to destroy the planted crop.
 - iii. Should Greenview destroy the crop, an invoice shall be issued to the landowner(s) and/or producer(s) for the labour, chemical and equipment costs of the crops destruction as per Provincial Legislation, including the ability of Greenview to add the arrears amount to the property taxes.
 - iv. Should enforcement be required, where the landowner(s) or producer(s) does not elect to perform the control themselves additional administrative fees will be charged at 15% of the cost of enforcement.
- H. After the period of restriction listed in the Notice has expired, canola may be seeded.
- I. Inform any contractors or custom operators who may enter onto the land that Clubroot has been found on the property, and advise them to properly clean and disinfect any equipment which comes into contact with the soil.

4. COUNCIL RESPONSIBILITIES

4.1. Council shall appoint Pest Inspectors (as per section 10 of the *Agricultural Pests Act*).

4.2. Council shall review the Clubroot of Canola policy annually, to ensure the policy is informed by the most recent advancements in knowledge of the clubroot pathogen.

5. ADMINISTRATION RESPONSIBILITIES

- 5.1. The Manager of Agricultural Services shall establish protocols and an inspection schedule to be followed outlining the following:
 - A. Ensure fields to be inspected are distributed across the geographic area of Greenview.
 - B. Sampling techniques, recordkeeping and protocols for entering land.
 - C. Mitigation and control of clubroot spore transferral between fields by Pest Inspectors and;
 - D. Timed to ensure impacted producers are informed of positive clubroot DNA results prior to harvest.
- 5.2. For Research purposes, canola and other cruciferous crops may be permitted to be grown on lands where a Notice has been issued with respect to Clubroot of Canola on the lands provided that pre-approval has been granted by the Manager of Agricultural Services at their sole discretion.
- 5.3. Administration shall develop a geographical heat map based on Townships of infestations for use in mitigation plan development by industry and construction companies.
- 5.4. In order to better understand how the disease was introduced and spread, administration shall gather as much information about the Clubroot infected field as possible, including type and variety of the crop, seed retailer, equipment movement, custom operators used, soil type, pH and drainage patterns.
- 5.5. Greenview Agricultural Services will provide information and education to landowner(s) and/or producer(s) regarding the spread of Clubroot of Canola.
- 5.6. Greenview will advocate that all seed (of a host crop) should be a Clubroot resistant variety.