
Name of Policy:
Control of Clubroot
Disease in Canola

Policy No.: 6056
Department: ASB
Authority: Agricultural Service Board
Current Approved Date:

Policy Statement:

The Agricultural Service Board will take active measures to control the spread of Clubroot within the boundaries of Lamont County.

Purpose: To prevent the establishment and spread of Clubroot which is a pest under the Agricultural Pest Act and follow the best management practice (BMP) set out by the Alberta Clubroot Management Committee.

Policy Resolution: ASB 16-015, ASB 17-120, ASB18-098, ASB19-049

Definitions:

The following three definitions cited from the Alberta Clubroot Management Plan, AGDEX 140/638-2, 2014

Clubroot of canola –is a serious soil-borne disease of canola, mustard and other crops in the cabbage family.

Clubroot is a long-lived disease where resting spores are long-lived in the soil for up to 20 years with a half-life of 4 years. Resting spores are spread from field to field via contaminated soil on equipment and machinery. All land users must be diligent to remove soil tag to prevent movement and introduction of the disease to new fields.

Symptoms of clubroot - The disease causes the roots of infected plants to exhibit a club-like appearance. Symptoms also include wilting, stunting, yellowing of the plant and early ripening or death. Clubroot is caused by a soil-borne pathogen called *Plasmodiophora brassicae*.

Cole crop – Field crops including mustard and canola, and additionally, cole crop vegetables, for example, broccoli, Brussels sprouts, cabbage, cauliflower, Chinese cabbage, kale, kohlrabi, radish, rutabaga and turnip, are

susceptible to clubroot, as are many cruciferous weeds, for example, wild mustard, stinkweeds and shepherd's purse."

Municipal ROW (Right of Way) – Municipal ROW distance is defined as per road type in the General Municipal Servicing Standard Section C (as per Lamont County Planning and Development Department)

Authority:

The Agricultural Service Board (ASB)

Procedure:

1. Random (swathed or standing) Field inspections will be conducted by the Agricultural Fieldman or designate.
2. Inspection will consist of a minimum of 20 fields surveyed in each electoral district throughout Lamont County where canola, mustard and cole crops are currently being grown. Additional fields, at the discretion of the Agricultural Fieldman may be surveyed if there is a suspicion of Clubroot within a field.
3. Clubroot survey method, reporting form, and calculation of disease incidence will exactly follow standard protocols provided by the Alberta Clubroot Management Committee.
4. The first positive survey results for an individual field with no prior history of Clubroot will be confirmed by a laboratory test (PCR). If a positive lab test (PCR) is found, a second PCR will be requested from the lab for a guarantee. "When land is verified positive for clubroot," the landowner, dependent on infestation percentage shall be either delivered a "Lamont County Pest Notification" or a legal notice in accordance with the Provincial Agricultural Pest Act. This document shall include either:
 - a. The legal land description of the entire quarter section or;
 - b. An area of the quarter section where a physical boundary is present dividing the section into two or more parts and is found to be sufficient by discretion of the Lamont County Agricultural Fieldman.
5. With a positive test and a total infestation below 10% of pulled plants, a "Lamont County Pest Notification" will be delivered to the producer with the following restrictions.
 - a. A Clubroot Management Plan will be developed with the producer and Lamont County. The Clubroot Management Plan will have the following requirements

- i. Landowner/producer shall not plant canola, mustard, or cole crops for two years following the year of issuance (1 in 3-year rotation)
 - ii. Non-resistant varieties shall not be planted for the following three years
 - iii. Clubroot inspection map with positive and negative survey results will be made available via hard copy, website, or upon request once the map is developed.
 - iv. As a proactive measure, only a clubroot resistant variety of canola shall be grown on the adjacent lands of the sanctioned portion of field within the quarter section;
 - v. Sanitation procedures should be created as per the Alberta Clubroot Management Plan when leaving a land infected with Clubroot
 - 1. Step 1 – Remove as much soil as possible from the machine by scraping or knocking off the larger clumps of soil and using compressed air to remove dust and plant debris
 - 2. Step 2 – remove any residual contaminated soil with a pressure washer or steaming unit using a 5% bleach solution
 - b. If the Clubroot Management Plan is deviated from in subsequent years as determined by field inspections and clubroot is verified again, a legal notice in accordance with the Provincial Agricultural Pest Act shall be issued.
- 6. With a positive test and a total infestation above 10% of pulled plants, a notice will be issued prohibiting the growth of canola, mustard, or cole crops for three years following the year of issuance.
 - a) Areas that have been prohibited from growing canola can be seeded in the 4th year following the notice given with a Clubroot resistant variety subject to the approval of the producers Clubroot Management Plan (eg. Notice issued 2017, must remain out of canola production for 2018, 2019 and 2020);
 - b) Producers Clubroot Management Plan shall be developed with consideration to the Alberta Clubroot Management Plan which is attached to and forms a part of this policy;
 - c) Any land sown back to Cole crops contrary to the above guidelines shall be destroyed as per the Agricultural Pests Act;
 - i. **“Compliance with notice**
13(1) A person to whom a notice is directed under section 12(1) or a person on whom a copy of the notice is served under

section 12(2) shall, subject to a right of appeal given by the Act, carry out the directions contained in the notice.

(2) If

(a) a person fails to comply with a notice issued under section 12 and the appeal period has expired,

(b) an inspector finds a pest on land, property or livestock in respect of which the inspector is not reasonably able to discover the owner, occupant or person in control, as the case may be, and determines that it is not practical to issue a notice under section 12, or

(c) an inspector finds a pest on land, property or livestock that requires immediate measures to be taken in order to prevent its establishment or to control or destroy it,

the inspector may carry out the measures described in the notice or do any things necessary in the inspector's opinion and consistent with good agricultural practice to prevent the establishment of or to control or destroy the pest. "

d) Adjacent landowners to New Clubroot locations will be notified of new infestations by letter within a 1-mile radius.

e) Clubroot inspection map with positive and negative survey results will be made available via hard copy, website, or upon request once the map is developed.

f) As a proactive measure, only a clubroot resistant variety of canola shall be grown on the adjacent lands of the sanctioned portion of field within the quarter section;

g) Sanitation procedures should be created as per the Alberta Clubroot Management Plan when leaving a land infected with Clubroot

i. Step 1 – Remove as much soil as possible from the machine by scraping or knocking off the larger clumps of soil and using compressed air to remove dust and plant debris

ii. Step 2 – remove any residual contaminated soil with a pressure washer or steaming unit using a 5% bleach solution

7. Fields that are determined to be a clubroot resistant variety and show high breakdown of resistance will be tested for pathotype of *Plasmodiophora brassicae*
8. The owner or occupants of the land who are disturbing the soil will have the responsibility to follow the guidelines set out under the Alberta Clubroot Management Committee to reduce the spread of the disease with the movement of soil and equipment.
9. Awareness and education will be provided by the Agricultural Services administration to landowners and County departments regarding the spread of the disease.

10. This policy shall be reviewed on an annual basis or as necessary by the Agricultural Service Board.

Duties & Responsibilities:

Forms Associated with This Policy:

Agricultural Pests Act, Alberta Queen's Printer (2014), Province of Alberta

Amendment History:

Scheduled Review Date:

October 2019