



# Canola Diagnostics

Your Field. Your Results



## Sampling Instructions for Canola Disease Diagnostics

Testing Provided by Genebright  
BioSolutions and Manitoba Canola  
Growers Association





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## General Notes:

- Clearly label each sample (**e.g., field ID, first and last name, phone number**).
  - Field ID is the label assigned to a field by the farmer.
- Do not mix plant and soil materials in the same bag.
- Use separate bags and tools for each field to avoid cross-contamination.
- For multiple diseases, please provide separate samples for each diagnostic test.

## 1. Clubroot (*Plasmodiophora brassicae*) – Soil Sampling for Identification and Quantification

### Sampling Procedure (W-Shape Pattern):

1. Select a representative field or patch.
2. Walk the field in a **“W” pattern**, collecting **5–10 soil cores** (15–20 cm deep, from the root zone) at each turning point and center of the “W”.
3. Avoid field edges, roadways, or unusual spots unless symptoms are suspected there.
4. Mix all collected subsamples in a **clean bucket** to create a **composite sample (~2 cups or 500 g of soil)**.
5. Place the soil in a **sealed plastic bag**, label it with the **field ID, first and last name, and phone number**.

### Storage and Shipping:

- Keep cool in fridge and ship as soon as possible.
- If shipping is delayed, store in a cool environment (normal fridge/not frozen)



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## 2. Verticillium Stripe (*Verticillium longisporum*) - Plant/Stubble Sampling (for identification)

### When to Sample:

- When symptoms (e.g., striping on stems, premature ripening) are most evident.

### Sampling Procedure:

1. Select **10–20 plants or stubble pieces** showing typical symptoms (black striping, peeling epidermis, premature dry-down).
2. Uproot or cut plants at the base, ensuring you include lower stem portions.
3. Place samples in **paper bags** (not plastic), label with **field ID, first and last name, and phone number**.
4. Keep cool in fridge and ship as soon as possible.

## 3. Blackleg (*Leptosphaeria maculans*) – Plant Sampling for Race Identification

### When to Sample:

- Preferably when symptoms are best developed.

### Sampling Procedure:

1. Select **10–15 plants** showing symptoms such as stem cankers, lodging, or lesions near the base of the stem.
2. Cut or pull the plants to collect the lower stems (approx. 5–10 cm of crown area).
3. **Do not collect roots.**
4. Place in **paper bags** and clearly label with **field ID, first and last name, and phone number**.
5. Keep cool in fridge and ship as soon as possible.

### Important:

- Avoid heavily rotted tissue – moderate lesions provide better results for race ID.