



# Controlling CLS: Cultural Practices

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## Plant Tolerant Varieties

Planting varieties that are tolerant to cercospora leaf spot can positively impact our ability to adequately control this disease. This single technique alone does not provide control, but makes a difference when used in conjunction with other integrated pest management practices.



Variety	CLS Rating (1-9)
Crystal M509	3.7
Beta 9505	3.8
Beta 9475	4.0
Hilleshog 9737	4.1
Beta 92RR30	4.1
Beta 90RR54	4.2
Maribo MA109RR	4.3
Crystal RR018	4.3
Hilleshog 9093RR	4.3
SV RR958	4.4
Crystal M380	4.5
Crystal M579	4.6
Beta 9545	4.8
Beta 92RR60	4.8
Crystal M375	4.8
Crystal RR270	5.5

**Fig. 1:** The pictures above were taken in 2016 from an OVT site on Sept. 15<sup>th</sup>. This site received 6 fungicide applications. A) A tolerant sugar beet variety showing minimal CLS damage. B) A susceptible variety producing regrowth after the original leaves burned down from CLS. Both varieties received the same treatments! C) OVT CLS ratings showing the differing levels of CLS resistance among tested varieties. The higher numbers (in red) indicate those varieties with less resistance. These varieties should be kept away from common lines to 2016 sugar beet fields and will require aggressive fungicide spray programs. The lower numbers (in green) indicate those varieties with more resistance to CLS. These varieties could be used near common lines to 2016 sugar beet fields and other areas with a high anticipated disease potential to help slow and reduce the spread of CLS.



## Management of Common Lines

Proper management of common lines between old and new sugar beet fields can help reduce disease incidence and delay the spread of disease into the new field. This type of management has the potential to work well because CLS inoculum is commonly spread via wind and water from the previous sugar beet crop debris. To help reduce the spread of CLS:

- If possible, plant an alternative crop for the 100 to 200 feet along the common line to the 2016 sugar beet field.
- Plant a variety with strong tolerance to CLS in the first 100 to 200 feet along the common line to the 2016 sugar beet field.
- Apply an early fungicide application (EBDC) along any common line to the 2016 sugar beet field 7-10 days prior to the start of the CLS fungicide program.
- Bury sugar beet residue in the fall to decrease the survival rate of CLS spores.
- Do not drag residue from the previous sugar beet field into the new sugar beet field with spring tillage passes.



**Fig. 2:** This field was prepared for spring planting using a field cultivator. The tillage passes moved plant material containing inoculum from the 2015 field into the 2016 field.

Information Credit:

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