

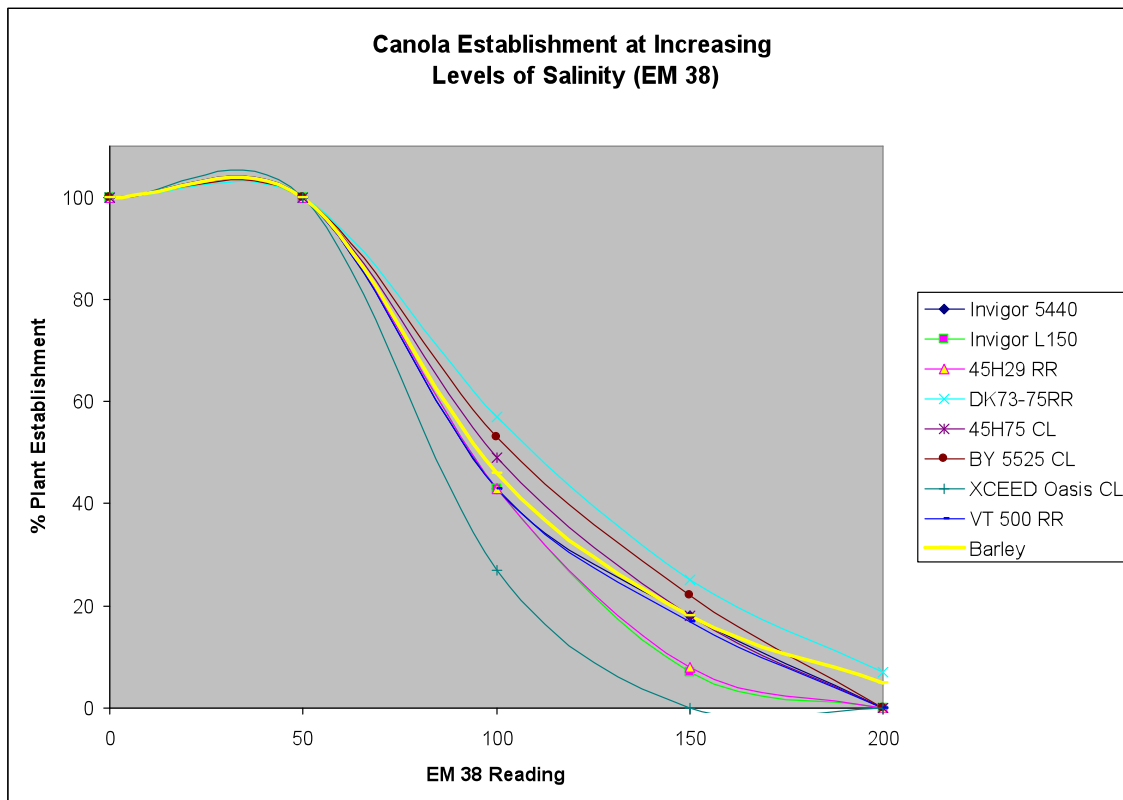
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Salt Tolerance of Hybrid Canola Demonstration

The excessive rainfall and snow melt we have experienced over the past few years has resulted in saturated rooting zones and leaching, factors that contribute to soil salinity. With these conditions prevalent, there is potential for areas of moderate salinity to expand, limiting seeding options for producers to lower value cereals. Producers are seeking a salt-resistant, non-cereal grain crop as an agronomic alternative with economic advantages to barley. This demonstration of newer canola varieties attempts to emulate in the field what has been shown in the AAFC's Salt Testing Facility by Dr. Harold Steppuhn, where canola has demonstrated tolerance similar to barley. This tolerance has been shown in the Salt Lab, where conditions are controlled and variability is minimalized. Since plant establishment is quite variable on saline soils (i.e. often determined by temporary leaching from a rainfall event after seeding).

An area near Hodgeville, Sk. was identified as a site with salinity. EM38 readings were taken in spring and fall to map the area. The canola varieties and Harrington barley were seeded in strips down a saline gradient from the non-saline area into and through the saline area. Our 2012 field data shows the hybrid canola varieties tested have equivalent tolerances to salinity as barley. Similar results from replicated trials in the AAFC's Salt Lab were found by Dr. Harold Steppuhn.



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