

MB Sunflower Crop Report



"Headline® by BASF has recently become the first ever registered fungicide for use on Sunflowers in Canada. This will be a valuable management tool for Sunflower Rust."

Report 6 Monday, July 5, 2010

Staging Fields planted in late April, V-16 to R-1. Fields planted in mid May to early June, V-8 to V-20. Sunflower growth and development is making up for lost time with the hot temperatures.

Weeds Possible Group 2 carryover injury? Symptoms consistent with Group 2 herbicide injury have been observed at trace to low levels in multiple fields across the province (Fig. 1). Symptoms include ceased growth at the cotyledon stage (inhibition of growing point) and slight reddening of the stem tissue. Subsequent death of the stunted cotyledons is slow. *If you are observing these symptoms in your field, you are encouraged to contact our office and report if the field has a history of Group 2 herbicide use in 2009. Ph. (204) 750-2555.*

Insects Adult Lygus bugs are starting to appear in advanced sunflower crops (nearing or at R-1). Sunflower is susceptible to damage by Lygus between growth stages R-4 and R-5. Scouting should take place beginning at R-4 to determine if an insecticide treatment is warranted at early flower.

Disease Seeing patches of bright yellow? Apical Chlorosis (Fig. 2) has been observed in a couple fields in the Central region. The obvious symptom of this disease is the extreme bleaching of the leaves, including the veins. While affected leaves will remain chlorotic (yellow), damage from this disease is minor and new, green leaves will grow. Cool temperatures and water-logged soils a couple weeks ago are conducive conditions for the disease.

Brown rust pustules (Fig. 3) were found last week on the undersides of the lower leaves. This is the economical and repeating stage of rust that can cause significant yield reduction if infection is present on the upper leaves at flowering. In this particular field the time between early infection and the economical stage was approx. 20 days. Research indicates that a fungicide application prior to disease development may not warranted, as there is no guarantee that rust will progress to economical levels. Protecting the upper leaves at flowering is the most important and therefore monitoring your fields prior to flowering is essential. 0-1% infection on upper leaves is a common threshold for Headline®. The coming weeks will be critical in determining how the economical stage progresses.

Current Crop Limiting Factors None



Fig. 1 Suspected Group 2 carryover injury on sunflower seedlings.



Fig. 2 Apical Chlorosis (L).



Fig. 3 Cinnamon brown rust pustules on underside of leaf.