

MB Sunflower Crop Report

Friday July 27, 2012

Crop

The sunflower crop continues to accelerate through growth stages under the warm conditions. The MAFRI weather report indicates that most areas of the province are accumulating more heat units than average. Despite developing quickly, plants have been showing signs of moisture stress, especially in fields with light textured soil. Early planted fields are nearing the end of flowering (R-6), where as later planted fields are at the R-3 stage.

Insects

Lygus bug numbers exceeding the economic threshold (1 adult per 9 heads) have been reported from many areas of the province. As swathing of canola commences, it is important to continue monitoring sunflower fields. Adult lygus bugs can migrate from swathed canola fields to neighboring sunflower fields creating the possibility for populations to increase. Sunflowers are susceptible to damage until the seed shells have hardened sufficiently for the insect to no longer penetrate the shell. Applications are best made in the evening (after 8 p.m.) to reduce damage to pollinating bees.

Banded Sunflower Moths are present across the province. No damage caused by larvae feeding on sunflower seeds has yet been found, however it has been noted that banded sunflower moth was found in 28.6% of fields sampled in North Dakota, with 3.4% of those seed samples were infected. The economic threshold is 1 adult per 100 sunflower heads during the day.

Damage caused by sunflower seed maggot is present in scattered fields across the province. The larvae of this insect feed on the developing florets, causing seed sterility. The small, brown egg shaped pupae from the first generation is often in the face of the sunflower surrounded by damaged florets.

Disease

Although very low levels have been reported in North Dakota, rust continues to remain dormant in Manitoba. In saying this, if the weather continues to be warm and humid, creating the perfect conditions for infection, the disease may emerge again.

Holly Derksen (Provincial Field Crop Pathologist) predicts that the risk of sclerotinia head rot is relatively low. This rating does depend on field history for sclerotinia host crops and up coming weather conditions. Places that got rain this week and get another this weekend may be at a risk.

Limiting Factor Insects



Figure 1. The economic threshold for lygus bug in sunflower is 1 adult lygus bug (above) per 9 sunflower heads.



Figure 2. Sunflower seed maggot larvae feed on florets causing seed sterility. The pupae is circled in red. Directly above the pupae are aborted seeds.



Figure 3. Early planted fields are completing flowering, and will soon approach the R-6 stage where the ray petals wilt.