MB Sunflower Crop Report

" Sclerotinia basal rot has developed in isolated fields across the province. Continue to scout for the development and spread of rust uredinia."

Friday June 29, 2012

Crop

Crop staging is from V-4 to V-14. Crop development has accelerated in the heat.

Disease

Sclerotinia Basal Rot is developing in fields across the province. The disease causes sudden wilting of the plants due to the development of a lesion at the soil line. The lesions at the soil line are tan to light-brown and eventually girdle the stem. Under moist conditions the lesion may become covered in white mycelia and black sclerotia bodies. It can take as little as 4 to 7 days from the first sign of wilt until plant death.

Basal rot is caused when sunflower roots grow near sclerotia bodies in the soil. The sclerotia bodies are stimulated to germinate and infect the roots. Adjacent plants often become infected with basal rot due to the ability of the fungi to infect plants via the roots. Infection level is based on the density of sclerotia bodies in the soil. No rescue treatments are available.

Continue to monitor for rust. It is likely that the brown rust pustules will develop soon. Uredinia can be found on both the upper-side and underside of leaves and can be rubbed off easily. This stage can be spread long distances by wind.

Insects

It has been reported that the first Banded Sunflower Moth was caught in a trap in North Dakota this week, two weeks earlier than last year. Banded sunflower moths are small and tan colored with a wingspan of about 0.5 inch. The adult has a dark band across the forewings. The adults tend to stay in field margins on weeds or in adjacent crops during the day. At twilight females move into the crop to lay eggs on the outside of the bracts of the sunflower head. Emergence of the Banded Sunflower Moth will be monitored across Manitoba.

Continue to scout for Thistle caterpillars. Levels of damage remain low and damage rarely approaches

Limiting Factor

Figure 1. Thistle caterpillar larvae are black, spiny and have a yellow stripe along each side. The larvae damage plants by feeding on leaves.

Figure 2. Sclerotinia basal rot causes a brown lesion to develop at the soil level. Infection causes the plant to wilt.

Figure 3. Rust uredinia are brown pustules on both the upper– and lower– leaf surfaces. The spores can be rubbed off easily.