

MB Sunflower Crop Report

Wednesday August 1, 2012

Crop

Early planted fields are at the R-6 stage, at which point the yellow ray petals wilt and fall from the head. Moisture stress is evident in fields with light land and are in need of rain.

Staging for an insecticide or fungicide application is proving difficult due to variability in plant height and development. If the appropriate time to spray is stated as R-5.1, this is equivalent to 10% bloom, meaning that the individual flowers have flowered 10%; not when 10% of the field has started flowering. At R-5.1 the outer ring of disk florets on the face of the sunflower head have emerged for pollination.

Insects

Lygus bug numbers are decreasing due to insecticide applications having been made. As previously mentioned, it is important to continue monitoring sunflower fields as canola or hay is swathed in neighboring fields. Adults are able to fly and can easily migrate. Sunflowers are susceptible to damage until the seed shells are sufficiently hard to prevent penetration by the insect. Damage is more of a concern in confection sunflowers and oilseed sunflower seed marketed for the baking industry.

Banded Sunflower Moths are present across the province however populations do not appear to be extremely high. Larvae feeding has been detected in sunflower seeds. Damage is still possible in fields that have already been sprayed with an insecticide as the larvae may have been protected within the head. The larvae are in the first or second instar, out of 5 instar stages. These early instar larvae are small and off-white. Each larvae can feed on approximately 5 to 7 seeds through development. The economic threshold is 1 adult per 100 sunflower heads during the day.

Disease

Verticillium wilt is present at very low incidence in scattered fields, mostly in the north central area. The symptoms are necrosis (browning) of leaf tissue between the leaf veins with yellow margins. The veins remain green making the symptoms very characteristic. Typically confection type sunflowers are more susceptible to infection than oilseed sunflowers.

Without the much needed rain, the risk of sclerotinia head rot continues to be low for most of the province.

Limiting Factor Insects



Figure 1. R-5.1 is the crop stage at which 10% of the sunflower head has flowered, not 10% of the field.



Figure 2. Early instar Banded sunflower moth larvae are cream colored with a dark head capsule and feed on sunflower kernels.



Figure 3. Verticillium wilt creates a unique mottling of plant leaves with necrotic areas between the leaves that contrast with the green veins.