FACTORS INFLUENCING CANOLA DIRECT COMBINING

POD DROP AND SHATTER IN CANOLA

As canola plants mature and face a wide array of environmental conditions, pods are subject to many factors that can lead to loss of yield. Pod drop and pod shatter both result in yield lost and seed on the ground that can lead to increased volunteer plants in subsequent years.

Pod drop in canola is heavily influenced by the environment and can increase as harvest is delayed.

Pod shatter occurs as a result of external forces at or after maturity as well as the plants natural drop of ripe seed.

PLANTING AND STAND ESTABLISHMENT

If you are considering direct harvest of canola, it is important to be prepared right from the time of seeding. Factors that will improve your success include:

- Seed as soon as conditions are right – goal would be to have the crop reach maturity as early as possible to reduce risk of frost prior to maturity.
- Fertilize for the yield target – a thick crop will be easier to direct cut and will reduce the amount of physical pod shatter.
- Target the correct population – 7-10 plants per square foot will help maintain a thick stand that will knit well, reduce branch-ing, even out maturity and reduce risk of physical pod shatter.
- Maintain a clean field – reducing the amount of weeds in the field will reduce the amount of green material at harvest. Choosing clean fields in the spring and maintaining weed control throughout the season will lead to higher yields and increase the success of direct combining canola.
- Watch for disease – fields that are free of disease will have greater success at direct harvest and will reduce loss from early pod shatter as a result of premature ripening of diseased plants.

CONSIDERATIONS AT HARVEST

The decision to direct combine canola is made for several reasons that may include:

- Reduced cost of labor or equipment
- Reduced risk of yield loss under some conditions
- Reduced window of swath timing
- Targeting higher seed yield and quality
- Choosing pre-harvest weed control options
- Faster crop and seed drying after rains

At the time of harvest there are factors that will help maximize the yield potential of canola harvested by direct combining.

These factors include:

- Select fields that have an even maturity and a thick stand.
- Target harvest at 10% moisture or less. Consider drying canola harvested in the 10-15% moisture range.
- Harvest when straw is slightly damp in the early morning or evening.
- If frost occurs, harvest after the first heavy frost.
- Ensure equipment is set properly. Type of header and settings have the potential to impact pod shatter. Reel adjustments may be required. Headers that can move the cutting bar forward should be considered.
- Limit the number of acres that you direct combine to the number that is manageable. Risk of yield loss as a result of pod shatter and pod drop will increase as harvest is delayed

- Consider using the SSCA (Saskatchewan Soil Conservation Association) Harvest Loss app to help set your combine.

- The Pioneer® Canola Seed Rate Calculator can easily estimate canola seeding rates and final stand.