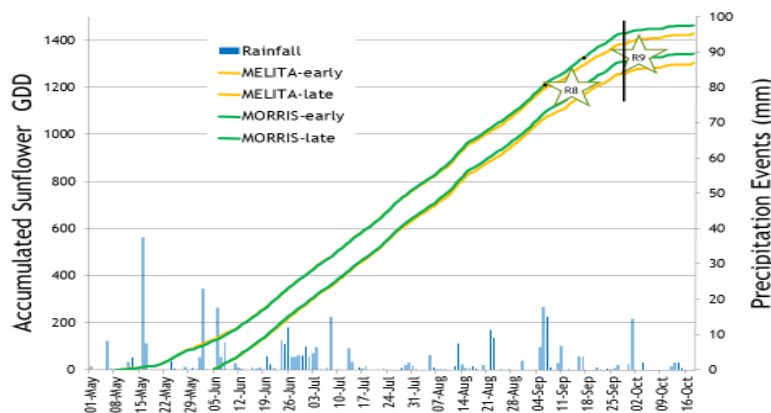




There are **5 management practices** that sunflower growers can apply to achieve the best grade:

- ⇒ **Ideal Planting Time**
- ⇒ **Plant Populations**
- ⇒ **Pest Management**
- ⇒ **Desiccation**
- ⇒ **Harvest Timing, Do Not Delay!**

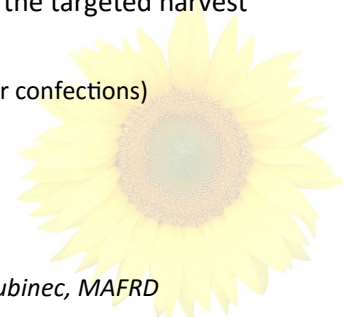
- i. **Ideal Planting Time:** Realizing the true potential of the crop comes down to proper timing to plant. By planting late there are a number of risks that could affect yield and grades. The major risk you will run is an early season frost, before plants reach an R-8 stage (physiological maturity). Other late season risks include bird predation, shatter loss, stalk lodging, and fall moisture events resulting in detrimental head rot outbreaks. Resulting in a loss of yield and quality.



- ii. **Planting Populations:** Achieving the correct planting population is a very important step. It is especially important for confectionary growers. By hitting a proper seed drop target, this will ensure you reach the desired harvest stand and ultimately the desired head size and highest percentage of large seed.

What seed drop do you need to achieve your desired harvest population? Fred Parnow, Canadian Marketing Manager with NuSeed suggests that the general rule of thumb is to plant 10% higher population than your desired harvest stand. That being said, a grower must first make sure that the seed germination percentage is in the mid 90's (if lower, you must adjust). Calibration is crucial to achieving an even plant stand, not only when changing from one variety to another, but also between different seed lots of the same seed size designation due to differences in seed size, shape and weight. Prior to planting, growers should ensure the seedbed is adequate, a pre-emerge herbicide has been applied and early chewing insects must be controlled. Below are the targeted harvest population stands that should be achieved:

- * In-shell (Confections) 14 -16,000 plants/ac. (NOTE: Recommendations are changing for confections)
- * Dehull (Oilseeds) 19 -20,000 plants/ac.
- * Birdfood/Crush (Oilseeds) 21-24,000 plants/ac.



iii. **Pest Management:** Like all other crops, managing pests is a top priority! Pests, specifically insect and disease, will reduce quality and potentially the marketability of your crop. Special attention to following will ensure a quality product:

⇒ **Weed control** has always been a priority in sunflower management. It is a well known fact that weeds rob yield by using up nutrients and competing for light. Intense weed pressure can also affect seed size as it acts like over seeding, this in turn can affect head size in sunflower. New herbicide tolerant varieties are definitely helping in this situation along with the use of pre-emerge weed control options.

⇒ **Insect management** is also a critical component of making the grade. As mentioned above it starts early in the season making sure wire worms and cutworms are controlled. “Cruiser Maxx® is the industry leading seed treatment, which provides excellent control of adult sunflower beetle and also repels wireworm” says Fred Parnow. Cutworm control has been more difficult and demands proper scouting and spray timing. Scouting for cutworm is extremely important and needs to be a priority. Top “quality robbing” insects include: banded sunflower moth, lygus bug and seed weevils (rare).

Scouting and properly timed insecticide applications are critical in order obtain a premium grade. This has proven to be a challenge over the years. Three newly registered insecticides look promising for managing the above insects. For more information on these products contact Troy Turner, NSAC Agronomist at (204) 750-2555.

⇒ **Disease management** continues to be the number #1 factor for downgrading sunflower seeds. Diseases incidence can be reduced by applying management tools.

◆ **Downy Mildew:** Select hybrids with resistance, use a seed treatment and control weed hosts.

◆ **Rust:** Scouting fields, and ensuring that this years production field is not in the same area as last years sunflower crop are two management practices that need to be performed. Scout for earliest visible stages of rust. Should a treatment be warranted, foliar applications are proven to be effective. If overlooked, rust can cause yield loss, loss of weight and oil content.

◆ **Sclerotinia:** Sclerotinia is the #1 downgrading factor in sunflowers. The battle against sclerotinia is a universal one, as it affects a large number of broadleaf crops and therefore rotation is very important when selecting a field location. There are fungicides that are registered to suppress sclerotinia in sunflowers. NSAC continues to conduct testing to determine the best application timing and effectiveness.

SPECIAL NOTE: *It is recommended that growers only grow sunflowers on a field 1 in every 4 years, if no other sclerotinia susceptible crop has been grown in the rotation. If crops such as canola, edible beans, soybeans are in the rotation, a grower should look at a longer rotation.*

iv. **Desiccation:** Once a sunflower crop hits physiological maturity it should be a priority to scout for proper timing to desiccate the crop. A properly timed application can speed up the time to harvest while reducing the chance of shatter loss, bird predation and disease losses. To learn about proper timing for the use of a desiccant [click here](#).

v. **Harvest:** Longer-maturing crops, such as corn and soybeans are becoming much more prevalent in growers’ crop rotations. This results in a busy harvest season and a decision on which crop to harvest first, a FAQ to our agronomist. The answer may be different on every farm, however growers’ must consider the opportunity cost of losing quality on their sunflower seeds vs. other crop types. Often times, the economics on a quality sunflower crop will finalize the decision on which crop to harvest first. Lastly, a friendly reminder to clean out harvest equipment between crop types.

Remember sunflowers are a special crop, you must treat them that way!

