

# Harvesting & Storage

## HARVESTING

The following hints from experienced sunflower growers should prove most helpful.

• The following header attachments are strongly recommended:-

**Sunflower trays** – to retain heads and seeds in the header front. These are essential

**Sullivan reel** – working at the machines ground speed to help prevent blockages and reduce seed shattering.

**Head snatcher** (push bar under the cutter bar) – to speed harvesting and reduce trash levels in the sample. Not as important when using a rotary header.

- The use of a neighbour or contractor is preferable to harvesting without these attachments, particularly sunflower trays.
- Care at planting - a uniform crop is easier to harvest so a uniform, even plant stand is the best start. See “Seed Treatments in Farming Systems and Agronomy”
- Don't wait until all heads are black. Commence harvest when some 10% of heads are still soft (cream colour on the back). This will reduce trash levels and enable a faster harvest speed. Moisture at this stage should be 9% or less.
- For an over-ripe crop - harvest at night, early morning
- Use a slow drum speed,  $\pm$  450 rpm for conventional headers and  $\pm$  350 rpm for rotaries.
- Each crop and variety is different and fine tuning is normally necessary with every change.
- Do not try to retain small seeds in the sample as trash is a companion of these small seeds. Aim to have the head largely intact out the back of the header with any small centre seeds still present.
- Fan speed as fast as practical without lifting seed over the sieve. A common fault in sunflower harvesting is to use insufficient air for fear of losing the small seeds which are of little value.
- If the header width is the same as the planter, make the guess rows about 20% wider to allow for any header movement without crop damage.



## SUNFLOWER DESICCATION

For an uneven crop or where harvest needs to be brought forward desiccation is recommended.

**Product** Diquat 200 g/L, Reglone®

**Rate** 2-3 L/Ha

**Timing** When seeds are mature and less than 35% moisture

## DRYING

At grain moistures of 12-15% sunflower can be more quickly harvested with less losses and a cleaner sample compared to dry crops. Therefore there are considerable benefits in harvesting early.

Sunflower is easily dried due to the large air spaces and low grain density permitting an easy air flow. Care needs to be taken with samples containing a lot of fines as these will readily ignite when exposed to direct heat. Always be prepared with fire equipment and act quickly in the event of a fire.

As high temperatures are not normally necessary prefer a temperature of 45°C to 50°C to reduce any fire risk. If the moisture is close to 9%, aeration only will be required.

## STORAGE

For safe storage, the seed needs to be less than 9% moisture (40% oil), kept cool and with low (less than 4%) trash levels. Samples with high oil contents need a lower moisture content, e.g. 50% oil – 7.5% moisture. The sample also needs to have a low level of damaged seed.

Ensure that silos and storage areas are clean and free of other grain residues that could harbour storage insects.

Storage chemicals are not registered for sunflower, so good hygiene with adequate aeration are essential. Avoid contaminating areas to be used for sunflower storage with chemical residues.

Seed which has been dried initially needs to be checked daily to ensure the moisture levels are right as samples immediately out of a drier can give a misleading reading.

Storage contracts are available providing an opportunity for growers to capitalise on any available on-farm storage. Grain for safe storage needs to meet the above specifications, have a low percentage of damaged seed and be monitored weekly for grain moisture and temperature.

Moist or hot grain needs to be immediately moved.

(Note: use only registered products for storage insect control).