

Special Bulletin—Desiccation

Are you thinking about desiccating your sunflowers?

Natural desiccation can be slow and uneven. Poor weather can cause reduced quality and yield through stem breakage, shattering and predation by blackbirds. To speed up the natural desiccation process, it may be worthwhile to consider the use of a chemical desiccation. Chemical desiccants are generally typical herbicides that have achieved special registration to be used as a harvest aid.

What is the right stage to desiccate at?

Timing of desiccation is critical as application prior to physiological maturity can result in decreased quality, seed size and test weight. Sunflowers are physiologically mature at the stage R-9. At this stage, the seeds have reached maximum size and bushel weight. Visually, this is when the back of the head is yellow and the bracts are brown and seed moisture is between 30-35%.

The bract tip turns brown at 40-50%. At this stage, seed moisture is too high and the plant has not reached physiological maturity. The broadest part of the bract should be turning brown. It is at this stage that the seeds are between 30-35% moisture and desiccation can be performed.



What products are registered as a Harvest Aid?

There are currently two products, Reglone and HEAT, registered as a Harvest Aid for sunflowers. Both of these products can be applied by air. The application rates for the products is as follows;

Reglone - Ground application—0.5 L/ac to 0.7 L/ac (use high rate for dense crop, heavy weed population)

- Aerial application 0.7 L/ac to 0.9 L/ac (use high rate for dense crop, heavy weed population)

HEAT— 71 g/ha (30ac/jug or 240 ac/case) HEAT used with Merge alone at 1L/ha (400mL/ac).

How to increase efficacy?

Coverage is critical when desiccating sunflower. This is because the back of the head of sunflower is so pulpy that improved coverage will increase rate of dry-down. Applying at the water volumes as suggested by the chemical companies will achieve the required coverage for desiccation. However, water volumes may be lower than desirable during application. If the application is timed when there is "free-water" or dew on the plants, the products will 'spread' on the dew, resulting in a better desiccation. If activity in the plant (so after application) occurs when temperatures are above 20-25°C, this will also aid in faster and more efficient desiccation and dry-down.