Benefits of a Timely Cotton Harvest

- Timely harvest and harvest aid applications are important to help maximize potential for cotton yield, fiber, seed quality, and overall net return.
- Once cotton is properly harvested, implementing preventative practices to help protect cotton from moisture will help maintain fiber quality and seed germination.

It can be difficult to make good cotton harvest timing decisions. Weathering losses can easily reduce the value of the cotton crop unless measures are taken to protect quality and yield potential. Timely harvest aid applications can result in an earlier harvest and help to preserve fiber quality. However, even with timely harvest aid applications, a delayed harvest can have an adverse effect on both the yield and quality of lint.

**Timing Harvest—Harvest Aids**
Start monitoring cotton for defoliation early. The chemical termination of a cotton crop with harvest aids is generally a compromise between further gains in yield and the risk of weather-related losses from extended periods of exposure of more mature bolls.¹

The timing of harvest aid chemical applications is critical, and there are different methods and considerations for determining the correct time for making applications. Traditional methods to help determine proper defoliation timing are the firmness of the boll, percent open bolls in a field, color of the seed coat, and accumulated growing degree units. A more accurate way to plan defoliation application is to map plant growth. A plant will not effectively load anymore bolls after reaching 4 to 5 nodes above white flower (NAWF). A defoliation application is recommended after an accumulation of 850 heat units (DD60s).² Even when following the plant mapping technique, fields should still be visually inspected. As a rule, 60 percent of the bolls should be open and the seed coat should be hard and dark in color prior to harvest aid application.

If harvest aids are applied too early, cotton yield potential and quality may be reduced. If harvest aids are applied too late, weather may limit efficacy of the chemicals and there may be increased potential for quality losses due to poor late-season weather.

**Weather for Harvest**
Harvest aids work best when the average temperature remains above 60°F. Lower temperatures will slow leaf drop and boll opening. Late fall harvest aid applications increase the chance of cooler temperatures reducing efficacy. Rainfall potential increases in September and October which can reduce fiber quality and push back harvest dates.

Harvest delays beyond the date the cotton crop would be ready for harvest can result in significant yield and quality reductions. Fiber length, strength, and color can be affected, resulting in lower lint loan values and net returns per acre.
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Post Harvest Storage
To help protect cotton during storage, rectangular modules should be covered with a high-quality tarp. Tarps should be checked for any tears or pin holes before use. Round modules are wrapped with plastic that covers the entire round part and a few inches on the ends. A later harvest may mean excess moisture and any additional moisture in the cotton can cause condensation, so modules should be monitored.

When elevated moisture levels occur, temperatures increase within the module compromising lint grade and seed germination. Extreme cases can result in spontaneous combustion. Ideally, cotton harvested at correct moisture levels should only increase 10 to 15°F in the first 5 to 7 days of module storage, then level off or decrease in temperature. A 15 to 20°F temperature increase during the first 5 to 7 days will indicate a high moisture problem and the module should be ginned as soon as possible. After the initial daily temperature check, modules should continue to be checked every 3 to 4 days. At any time during storage if a module reaches a temperature of 120°F the cotton should be ginned immediately.

Summary
Waiting for the last few cotton bolls at the top of the plant to mature before harvest may not be worth it. Applying harvest aids and harvesting a cotton crop in a timely fashion, can optimize overall net return. Proper cotton storage after harvest can further protect cotton until it is taken to the gin.

Picker Fire Safety Tips
Cotton pickers are very large, complex, and expensive pieces of equipment. Heat from the unit combined with dry debris and lint can easily cause fire within the unit and in the field. These simple tips can help in the event of a fire:

- Do not park an idling picker with the exhaust facing a module or bale.
- Be sure the area behind the cab, near the transmission is kept debris free. High temperatures can easily cause a fire to ignite.
- If a fire is suspected try to move the picker to a nearby area free of combustible material that would allow the fire to spread and unload all seed cotton immediately.
- Keep two working ABC fire extinguishers available, one in the cotton picker cab and one within reach while on the ground.
- Never enter a basket or chamber if a fire is suspected.
- Always keep a cell phone or farm radio nearby to alert others if a fire occurs.

Source:

For additional agronomic information, please contact your local seed representative.

Individual results may vary, and performance may vary from location to location and from year to year. This result may not be an indicator of results you may obtain as local growing, soil and weather conditions may vary. Growers should evaluate data from multiple locations and years whenever possible.

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