



# AUTAUGA QUALITY COTTON

*Your Cotton, Your Choice*

## Maintaining Fiber Quality In Harvest Preparations

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Making every effort to deliver quality cotton fiber should be as much a part of a marketing plan as determining price fixations. In recent years, as a result of a strong sales basis, quality fiber has brought growers up to an additional five or six cents a pound. All indications are a similar basis can be expected this fall with such cotton still in short supply around the globe.

Granted, there are several factors beyond our control that can greatly affect fiber quality, such as plant genetics and weather conditions to name a couple. However, for the sake of this discussion I will limit my comments to those factors you do have some influence on. When to terminate the crop, selection of proper harvest aid materials and preventing lint contamination are all items that as a grower you have control over.



### Defoliation Timing

As I've said so often, cotton defoliation is more art than science that begins with proper timing. Applying defoliant either too early or too late can have an adverse effect on the crop. Defoliating too early lowers both yield and micronaire while poor leaf drop can be expected if applied too late as lower temperatures lessen the performance of harvest aid materials.

Basically, there are three ways to determine if the crop is mature enough to defoliate. I would strongly advise using one or a combination of these depending on the condition of the crop when deciding on when to apply defoliant.

1. Percent open bolls – This method has been around for some time now. If the crop is uniform from the bottom of the plant to the top, defoliant can be safely applied when 60 percent of the bolls are open. However, if there are gaps in the plant where fruit was not set for some reason, this percentage should be raised to near 75 percent to account for immature top bolls.
2. Slicing Bolls – Especially in instances where the crop is not set uniformly on the plant, this would be the preferred method because it focuses more on the unopened bolls. Bolls are generally mature enough for defoliation when they are difficult to slice and the lint strings out when sliced, and there is found a distinguishable brownish seed coat with little or no jelly inside them. This would be my recommended way to time defoliant applications.

3. Nodes Above Cracked Boll – The more scientific method would be NACB. It has been shown there is a direct relationship between percent open bolls and the number of nodes between the uppermost first position cracked boll and uppermost first position harvestable boll. Defoliant can be safely applied when the NACB is less than four.

### Harvest Aid Selection

The selection of harvest aid materials should be made on a field by field basis according to the needs of the plants and short term weather forecasts. There are a host of different products available which all have different modes of action. For this reason, it is impossible to cover all the different scenarios you could face this harvest season. Your county agent or consultant would be an excellent resource for this information.

However, I would like to make a few points here. All harvest aid products are designed to either remove leaves, prevent regrowth, or open bolls. For this reason, a tank mix of two or more of these products will be much more effective than one product used alone. Early in the fall, prevention of regrowth should be a major concern. Warm temperatures in September and October along with leftover N and soil moisture are sure to encourage regrowth. By adding a thidiazuron-containing product, such as Dropp or Freefall to the tank mix, you can greatly reduce the risk of lint stain from this juvenile growth. Also, if unopen mature bolls are present in the field, the addition of a Ethephon containing product such as Prep or others will help insure a once over harvest and enhance defoliation activity.

Although there are many tank mix combinations to choose from, one that has become quite popular and performed well is a mixture of Ethephon (Prep) + thidiazuron (Dropp) + tribufos (Folex). Early on under high temperatures the use rates of 1.33 + 2.5 ounces + 8 ounces, respectively should be sufficient. Be aware the effectiveness of these materials is temperature sensitive. As air temps decline later in the harvest season, rates should be increased but remain cautious for high rates applied under high temperatures will stick leaves resulting in greater leaf content and trash.

Finally, harvest aid materials do not translocate in the plant therefore coverage is critical. When making applications with ground equipment

use a minimum of 10 gallons of water per acre with 15 to 20 gallons preferred. Also, nozzle selection is important. The smaller the droplet sizes the better the coverage and defoliation, in most cases. To achieve the best coverage with minimum drift use regular flat fan tips and carefully watch your ground speed and pressure.

### Preventing Lint Contamination

U.S. grown cotton has a global reputation among mill buyers for quality, uniformity and reliability which gives us a distinct advantage over other cotton producing countries. One area that has received a good deal of attention lately is lint contamination for it reduces the efficiency of textile mills. We must always be conscious of this and take every precaution to prevent it, if we are to maintain our reputation. The following are a few practices the NCC has come up with for keeping cotton "contamination free".

1. Prior to harvest, create a watch list for foreign materials, including plastics, roadside debris, grease or oily residues, an even accumulated leaves and dirt.

2. Inspect fields and remove any materials a harvester could pick up.

3. Clean and power wash all harvesting equipment.

4. During harvest, use the watch list and have entire harvest crew on the watch for potential contaminants.

5. Inspect harvest equipment daily for hydraulic leaks or grease that could come in contact with seed cotton.

6. Do not build modules or round bales where potential contaminants could be picked up with them when they are moved.

7. Don't identify modules or round bales using permanent marker.

Good luck this fall,

#### ATTENTION:

AQCA and Choice Cotton Company have relocated their offices to  
169 East Main Street  
Prattville, Alabama 36067.

Please note our new mailing address and send all future documents to this location.