

THE BARKY COTTON RESEARCH TASK FORCE is a group of farmers, scientists and administrators organized in February 1986 on the initiative of the Plains Cotton Growers, Inc. and Cotton Incorporated.

The purpose of the Task Force is to work toward assisting spinning mills to produce satisfactory end products from the crop in areas where bark is sometimes a problem and to investigate methods to reduce the bark content of lint.

Cooperating on the Task Force, in addition to Cotton Incorporated and Plains Cotton Growers, Inc. are:

- The Cotton Board;
- Texas Tech University;
- USDA Cotton Quality Research Station, Clemson, SC;
- USDA Agricultural Marketing Service;
- USDA Agricultural Research Service;
- Texas Agricultural Experiment Station;
- Cooperative Extension Service;
- Certified Producer Organizations From Affected States; and
- Manufacturers of Machinery and Equipment.

Bark costs us millions of dollars — for example, \$3.00/bale, averaged over every bale we produce in West Texas. In a year of severe bark problems, the total cost to West Texas can be over \$20 million. Together we are going to reduce annual costs of bark grades.

Please contact the individuals listed on the inside of this pamphlet for assistance or for further information.

Don Bell, Wolfforth, Texas
 Chairman
 Barky Cotton Research Task Force



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WAR ON BARK

PLANNING THE FALL CAMPAIGN

Bark and Your Harvesting Strategy

Bark costs millions every year!

Your harvesting strategy can raise or lower the number of barky grades that you get. If you often lose money because of bark, you need to be aware of the pointers given here.

Stripper harvesting is the obvious common feature of production practices where bark is a serious problem. Strippers, however, do not cause bark, but the way they are operated and the way the entire system is managed can affect the stick content of bur cotton — a factor that is closely related to barky bales.

By conditioning your crop in the best way possible and by combining your experience with new research findings, you can reduce stick and bark content. Here are some tips for your guidance.

1. By using **harvest-aid chemicals** to prepare a mature crop in a timely manner, you can take advantage of good harvesting weather. This lets you avoid prolonged exposure late in the year when stalks and limbs become brittle, causing high stick content and more bark regardless of how well harvesters are operated.
2. If you normally depend on **frost** to do the work of harvest-aid chemicals, waiting too long for that frost after the crop is mature, will cost you profits. Using the chemicals may be your best choice.
3. **Warm weather** is needed for harvest-aid chemicals to work — apply them only when there is a good chance for several warm days (in the 70s).
4. When chemicals (or frost) have taken effect and the crop is ready, **harvest as soon as possible**, before plants become bone-dry and brittle.

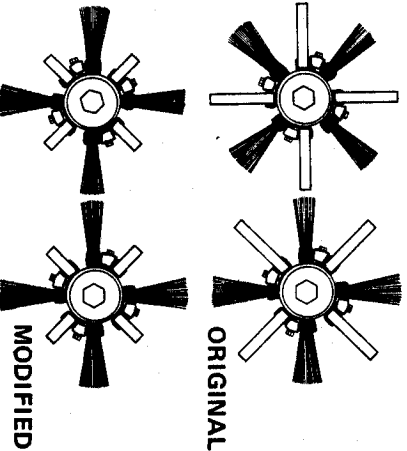
5. If your stripper puts every lock of cotton into the basket, the **rolls are probably set too close**, causing excessive sticks, resulting in barky grades. Open the space between the rolls until you leave a little cotton. Then adjust them closer if the loss seems unacceptable. This way, you can use the least aggressive setting that gets the job done. Use the owner's manual for guidance with adjustments.

6. If the **retainer plates (brush-roll comb guides)** are set too close, they will increase stick content and chances of bark. Set them just close enough to prevent dropping cotton on the ground.

7. **Conditions vary** from one field or variety to the next. You should re-check roll settings as the crop changes.

8. USDA researchers at Lubbock showed that **shortening rubber paddles** by 1 inch reduces stick content by 40%. This change, shown in the diagram below, is one that you can make in your own shop — one that will put money in your pocket because it can reduce barky grades by as much as 65%. But it will also cause more field loss. Keep this loss under control and accept it as a **good compromise in exchange for reduced bark penalties**.

Remember, however, that when you use the shortened paddles, the rolls should be timed **brush-to-brush**, with the roll spacing measured between bristle tips, **not timed brush-to-paddle** as recommended for original equipment.



9. Here's **how to estimate field losses**. Collect seed cotton left on ten feet of the **four rows** just harvested (on the plants and on the ground). Count the number of seeds in the collected seed cotton. Ten seeds per foot of row length behind a four-row, 40-inch machine is about 1% loss in bale-to-the-acre cotton (5 per foot for a two-row machine). On four, 30-inch rows, 7.5 seeds per foot is about a 1% loss.

If you use a bur extractor, it will contribute to the loss. Be sure that the channel saws are in excellent condition and that the grid bars are all in place, not bent, and adjusted right. This should cut cleaning loss to one percent while removing up to 20 percent of the sticks and 50 percent of the burs.

Keeping the sticks out is job number one.

Contacts where you can get more information are listed below.



Preparation of this pamphlet was fostered by the Barky Cotton Research Task Force, with financial assistance from Cotton Incorporated. The following scientists prepared the text of this pamphlet. Contact them or your extension agent if you have unanswered questions.

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