

BT REFUGIA FOR 2001
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Thank you Bob. While my topic this morning may not be the most exciting one on the agenda, I think you will agree with me the message is of critical importance. Since the introduction of Bt cotton varieties in 1996, growers have learned to adapt this new technology to their production systems. Not only have farmers had to learn an entirely new regiment of insect monitoring and control, they have actually had to accept the fact that they must now raise the very pests they were trying to control.

The concept of insect resistance management is nothing new to cotton farmers. We have led agriculture in fighting resistance and adapting our production practices to the development of resistance in many insect pests. Planting and maintaining refugia however was a different story. While it's one that has taken some time to get used to, all records show a high level of compliance among the Bt cotton variety producers. Fortunately since the introduction of Bt cotton varieties, refuge requirements have remain unchanged. That is not the case for the 2001 crop.

This presentation and a special session this afternoon are efforts to help producers more fully understand these changes and the importance of complying with measures to delay or prevent development of resistance to Bt cotton. This morning, I will give an overview of the registration status, review the refuge changes for 2001, and finally, talk about issues facing Bt registration in the next few months.

Before I review the significant changes, perhaps some background information is necessary. Bollgard cotton varieties received a time limited registration when first introduced in 1996. That registration was set to expire on January 1st of this year. EPA along with the registrant, Monsanto and the cotton industry realized that a full re-registration review could not be concluded in time to ensure a timely decision for that deadline. Therefore the agency requested Monsanto file for a voluntary extension of the registration through the 2001 crop year. Well the final action was something more than an "extension." It actually turned out to be a modified temporary re-registration, which included significant changes in the insect resistance management requirements. That's where the refuge changes come in for the 2001 crop.

Time does not permit me take you through the process of how we ended up where we are for this crop year. Take it from me that it was an intense dialogue between EPA, Monsanto and the cotton industry. Now let me review the changes you will be faced with if you grow Bt cotton varieties this year. For the past crop years, growers had two options for establishing refuge -- a 4% unsprayed and a 20% sprayed.

The most obvious changes for 2001 are distance and width requirements for refuges, a new embedded 95:5 option, and the community approach to refuge placement. Specifically, the 20% sprayed option has basically remained intact. For every 100 acres of Bollgard cotton a producer plants, he must have at least 25 acres of non-Bollgard cotton. This option, as the name implies, allows the grower to treat the refuge with any insecticide except foliar applications of Bt. The only change in this option is that the non-Bollgard acreage must be within one mile of the sprayed refuge on a field border to field border basis.

The unsprayed option as been modified in 3 major ways. First the amount of unsprayed refuge has increased from 4% to 5% or in other words, a grower must have 5 acres of non-Bollgard cotton for every 95 acres of Bollgard planted. Another change is that the unsprayed refuge must be at least 150 feet wide and all Bollgard fields must be within ½ of a mile of the unsprayed refuge on a field border to field border basis. This external unsprayed refuge cannot be treated with any insecticides for tobacco budworm or cotton bollworm control.

An additional untreated option is available for this crop year - the 5% embedded option. This option requires the same amount of the refuge, but allows it to be within the Bollgard field with the same size requirements as the external unsprayed. One major difference is that a grower can treat the embedded refuge as long as he treats the entire field - Bollgard included.

For areas in California, Arizona and New Mexico, where pink bollworm is the pest of concern, growers are allowed to mix individual rows of Bollgard with non-Bollgard rows to embed their refuge as long as the non-Bollgard production totals at least 5%.

In order to aid growers with fields that may be small in size, non-contiguous and spread over large distances, a community refuge system was developed for this crop year. While the community plan still requires the full implementation of one of the three options I just went over, it does allow growers to cooperate together and share non-Bollgard production assuming it still meets the aggregate size and distance requirements. Community refuges take considerable planning among growers. Time does not permit me to review all of the preliminary requirements, but you can learn more about this form of implementation and more about each of these options in this afternoon's workshop on resistance management for Bt cotton.

I have now very quickly reviewed the changes in refuge requirements for the 2001 crop. Why is this information important to each of you? The most significant reason is that's its in the growers' best interest to practice good insect resistance management guidelines. Cotton producers stand to lose the most if this technology becomes ineffective. These refuge requirements were collectively agreed upon as an effective plan to prevent resistance. Secondly, refuge compliance is a contractual requirement to be a licensed grower. Failure to comply could result in your inability to have access to Bt cotton varieties. And finally, in order to maintain reasonable refuge requirements for future crops, growers must continue to prove that they are voluntarily complying with refuge requirements. Many of the critics of this technology accuse cotton producers of being careless in their stewardship of this valuable production tool. We have made a strong case that compliance is key to success of any refuge strategy and producers are the key to compliance.

I stated earlier that Bollgard cotton had received a temporary re-registration. As we speak, the full registration process is underway for the 2002 cotton crops and beyond. All of the current refuge options are under review. The National Cotton Council has stated that for a resistance management plan to be effective, it must be feasible and consistent. We believe the requirements for the 2001 crop are feasible. For them to remain consistent, we must continue to show good faith in our compliance.

Therefore the burden is upon us the users of this technology. We must demonstrate to EPA and our critics that we will continue a high level of compliance and improve where we can. How well we achieve these goals may determine the continued availability of this technology. If we wish to see it expand into the best varieties and if we wish to maintain some consistency in feasible refuge requirements, we must be good stewards.

Avail yourself of every opportunity to understand what is required of you. Many of you will be receiving a letter from NCC President Bob McLendon on this matter. Please read it carefully and study the informational brochure that was enclosed. This excellent brochure was prepared by Monsanto to explain the modifications and to provide interpretative guidance on how to design effective refuges on the farm. Attend grower information meetings and make sure your consultant does as well. And again, come by the workshop this afternoon for more details.

Mr. Chairman that concludes my remarks.