National Cotton Council OF AMERICA

P.O. Box 2995 • Cordova, TN 38088-2995
(901) 274-9030 • FAX (901) 725-0510
www.cotton.org

PRODUCERS • GINNERS • WAREHOUSEMEN • MERCHANTS • COTTONSEED • COOPERATIVES • MANUFACTURERS

September 10, 2020

The Honorable Andrew Wheeler
Administrator
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW
Washington, DC 20004

Dear Administrator Wheeler:

As you are aware, the June 3, 2020 decision of the U.S. Ninth Circuit Court of Appeals concerning the newest dicamba formulations (Xtendimax, Engenia, and FeXapan) had the potential to be devastating to our nation's farmers. The cotton industry greatly appreciates your agency's efforts in allowing utilization of the existing stocks that were in the possession of farmers and their commercial applicators.

Nevertheless, U.S. cotton farmers still need a new, longer term registration for the new formulation dicamba products (including Tavium), and we understand that EPA is working diligently on that. For our growers to plan for the 2021 season and beyond, it is imperative that they have the assurance of a durable registration. Greater legal certainty for dicamba registrations will minimize the considerable financial risks that farmers face each spring. Unfortunately, this sense of consistency has been missing in recent years, as the June 3 ruling underscores, and which was also partly due to the "temporary" term of the previous registrations. Today's farmer cannot depend on spur of the moment decisions in planting. Certainly, for the 2021 growing season, our farmers will begin considering variety selections in the fall and early winter following the harvest of this year's crop. As you are well aware, once the federal label is finalized, the States will start making their own decisions on specific rules for the use of the products. Therefore, we ask that your agency move as quickly as possible to provide a new label so that our growers know whether or not to order dicamba-tolerant varieties and their choice of dicamba pesticides to apply to those fields next spring.

Of the 12.2 million acres planted to cotton this year, it is estimated that approximately 70% of those acres (8.5 million acres) are planted to dicamba-tolerant varieties. The 70% adoption rate reflects the recent trends from USDA's Cotton Varieties Planted report and industry variety sales data. Current industry forecasts anticipate a similar adoption rate for the 2021 crop. For the 2021 crop year, total U.S. cotton acreage is projected to be 13.0 million acres with 9.1 million acres (or 70%) estimated to be planted to dicamba-tolerant varieties.

Already, producers and university extension specialists have begun expressing an urgent need for reliable information on whether or not dicamba products will be labeled for use in 2021. Our staff are reporting that about 70% of cotton growers across twelve states have asked recently about the status of dicamba's registration for next year. Dicamba training under the present

COVID 19 pandemic will require additional planning and time to accommodate the numerous individuals to be trained. Trainers have expressed urgency of a registration decision.

With the current crop harvest now underway in some parts of the country, producers are beginning to develop planting operation plans for 2021. The uncertainty over dicamba's availability for 2021 will quickly become an obstacle to the development of their 2021 operation plans. For example, farmers need to determine which fields will be allocated to specific crops so that they can develop respective crop budgets for submission to lenders. Lenders will review the budgets and may require the producer to identify budget reductions for loan approvals. Producers must determine choice of crop varieties, confirm the availability of supply, and order seed for delivery. The mass of time sensitive logistical tasks - for securing loans, purchasing seed, staging seed for distribution, and delivery of seed in a timely manner - requires most of the late fall, winter, and early spring months. Field operations in the fall of 2020 are determined based on the next intended crop. Verification of a dicamba label for 2021 is urgent for all of these reasons.

Economic and Agronomic Impacts

As the National Cotton Council (NCC) described in our June 7, 2020 letter to Assistant Administrator Dunn, the economic importance of dicamba for approved over-the-top (OTT) use is significant. Without access to dicamba, our baseline assumption is that 20% of those acres could be susceptible to significant yield losses due to increased weed pressures. Research conducted prior to availability of dicamba-tolerant varieties reported a minimum 50% yield-loss in fields with resistant palmer amaranth (pigweed). Using a U.S. average yield of 730 pounds per planted acre, the yield decline on the impacted acres would be 365 pounds, which translates into $215 of lost revenue based on USDA's projected cotton price of $0.59 per pound. Overall, this would mean lost revenue for U.S. cotton producers of $392 million.

Given the prevalence of RoundUp (glyphosate)-resistant pigweed, it is important to understand the risks to U.S. cotton production. If as many of 40% of the dicamba tolerant acres suffer a 50% yield loss, the lost revenue reaches $723 million.

Reduced Access to Dicamba Will Mean Higher Costs and Lower Productivity

If the new registrations impose additional restrictions on the use of dicamba, then costs to U.S. cotton farmers could be considerable.

In order for dicamba to be useful in limiting costs and improving yields, it is absolutely crucial that the new dicamba label permit use beyond the post-emergence period of cotton cultivation. For example, limiting federally-labeled use to the pre-emergent phase could severely undermine the value of a producer's investment in dicamba-tolerant seed and related inputs. Similarly, many farmers may be reluctant to rely on state-based rules that permit continued use in their areas, since the legal uncertainty of using a product past its federally-labeled date could weigh negatively on a farmer's investment decision.

In the event dicamba use were restricted to the point that it is not cost-productively available, producers would need to revise budgets for alternatives such as different crops or increased inputs and reduced variety options. These alternative strategies would probably be less profitable than cotton production in which post-emergent use of dicamba is permitted. Most farmers would likely choose one of the following alternatives.

First, producers could purchase varieties with the dicamba-tolerant (DT) trait and manage the crop without the incorporation of the dicamba chemistry. However, producers would have far less capacity to control pigweed emergence. They would also have to use more herbicides, with more frequent applications with rotations and mixtures of herbicides. Even with all of the additional herbicide use, producers would still likely have an expectation of yield reduction, particularly for fields with previous history of failure to control pigweed. Additional management steps would be expected, including the use of manual labor for removal of weeds and possibly the planting of a cover crop in some areas. All of these management options would mean increased costs with an expectation of reduced yield.

Second, producers could expand their use of glufosinate and glufosinate-tolerant crops. The glufosinate-tolerant trait has been bred into numerous varieties across seed provider companies due to the availability of non-exclusive licensing. Unfortunately, glufosinate is already known to be less effective in controlling pigweed. Thus, this option would also likely mean lower yields, inconsistent control of pigweed, and would force over-reliance on glufosinate resulting in accelerated selection for weeds resistant to glufosinate.[1] University scientists across the cotton belt have been working with producers to manage the long-term durability of glufosinate, in order to avoid overuse and thus optimize its effectiveness. If farmers lose access to dicamba, use of glufosinate might rise in the short-term but with high selection pressure for resistant weeds, meaning we would probably see decreasing effectiveness in the field.

Third, producers could consider greater adoption of the Enlist cotton system. The variety selection would be reduced to those varieties produced by the registrant who retained exclusivity to the trait allowing the use of 2,4-D choline over the top. At this time, NCC does not have information regarding the volume of seed available for this option, but we believe it would be fair to say the volume is not sufficient to replace all dicamba acres. The premier or most desired varieties would be in high demand. It would be reasonable to expect the premier varieties would be exhausted quickly once producers began placing orders. However, the Enlist system would be the most similar alternative to the dicamba system even though it would exclude large seed stocks held by other companies.

The remaining alternative would be to plant a different crop. It should be noted that farmers in many cotton production locations in Texas, the largest cotton producing state, have only one alternative crop, grain sorghum. Producers will need to know very soon what their access to dicamba might be in order to evaluate the feasibility of an alternate crop.

Most importantly, all of these alternative strategies would force the cotton industry back toward a weed control system with known weed resistance to most of the herbicide Modes of Action (MOA) and would force over reliance on the available MOAs. EPA has more insight into the

[1] Cotton Foundation, 2018 Educational Outreach Program, summary letter to EPA, August 23, 2018, unpaginated

discovery pipeline of new herbicide MOAs and understands the coming void that we could see in the near future. With that in mind, an assessment of the dicamba system's availability must include the real risk of a crisis for weed control in cotton.

Cotton producers are well aware of this looming weed control dilemma. This is why the NCC has actively engaged with EPA and the industry's producer leadership in efforts to comply and advance proper stewardship of the auxin (dicamba system and the Enlist system) herbicide systems.

In fact, the Cotton Foundation has engaged for several years with EPA, producers from multiple locations, and university extension/research scientists with a mission of auxin stewardship and education. Producers have reported their own experiences that collectively demonstrate they are able to comply with label requirements without any evidence of drift issues.[2] In fact, reports of drift incidents appear to have decreased significantly in the major cotton producing areas. Cotton farmers are simply not seeing the scale of problems from drift they experienced in earlier years.

It is possible that farmers have simply become more adept at using and applying dicamba. Producers across the cotton belt have reported additional actions they have taken to enhance product stewardship, including the use of hooded sprayers and purchase of additional equipment).[3] These additional actions enable timely herbicide applications in compliance with the label restrictions. Compliance with dicamba label requirements involving windspeed and temperature inversions results in careful monitoring during field application, and stopping application as necessary. The amount of time equipment sits idle due to change of windspeed, direction, etc. has reduced the expected acres covered per day for application equipment. However, the need for the dicamba technology for numerous farmers supported purchase of additional equipment to compensate and still maintain timely applications. The lack of notable incidents may also be due to a dramatic increase in direct communication between cotton farmers and their neighbors in their production area, with more frequent information sharing concerning their application plans and post application follow-up. U.S. cotton farmers have also reported their efforts to ensure that everyone involved in herbicide application on their farm have completed auxin training. The producers have provided to EPA their experiences with resistant pigweed prior to dicamba tolerant crops and emphasized their determination to preserve the use of the auxin herbicide systems[4]

In light of the greatly improved stewardship of dicamba, and the absence of notable drift incidents, NCC urges EPA to avoid unnecessary dicamba label restrictions in the cotton belt. If EPA deems that some label restrictions are necessary, NCC would urge EPA to consider limiting those restrictions to the regions of the country where drift remains a problem. A regionalized approach could optimize the perceived benefits of any label restrictions while minimizing the harmful economic and agronomic impacts of such restrictions in areas of the cotton belt where they, frankly, are not needed.

---

[2]Foundation, August 23, 2018, unpaginated
[3] Foundation, August 23, 2018, unpaginated
[4] Foundation, August 23, 2018, unpaginated

The NCC believes the cotton belt is fortunate to have retained a highly effective and reliable extension system with dedicated scientists respected by producers. The extension scientists provide producers the best resource for factual production science information. These scientists continue to conduct production field studies (in cooperation with producers) to evaluate efficiencies and preservation of technology which are utilized to demonstrate revised best management practices for crop production.

Crop production faces continual biological and environmental challenges to which producers must adapt or fail. Producers face the constant change, adapt as necessary, and remain committed to maintain reliable production while minimizing issues of concern. The introduction of the auxin technologies (dicamba and Enlist) presented a new challenge for compliance and stewardship, but cotton producers have shown their dedication to master the safe application and stewardship of the dicamba system. Producers desire fewer label restrictions and urge continued research to achieve support for fewer label restrictions. In the meantime, producers support the label requirements due to the tremendous need for the herbicide system.

It is the understanding of the NCC that the registrant Bayer has submitted additional university and registrant studies. Additionally, the NCC understands that Bayer has developed a new additive that will further reduce volatility. The NCC is encouraged to hear of the new development and believes its use to further minimize volatility would be easily and widely adopted across the cotton belt. In any case, dicamba can be safely applied with compliance to the label. The NCC will continue to urge producers to maintain maximum attention and compliance for the needed weed control technology.

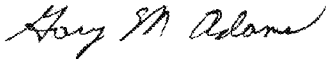
The NCC urges EPA to recognize the critical need for the dicamba herbicide system and emphasizes the importance of the most recent OTT applications periods. Further, the NCC would encourage EPA to consider rewarding those excelling in stewardship by considering less restrictive language for those who utilize technologies, such as hooded sprayers, that are documented to reduce risk of drift.

The NCC believes the cotton belt producers have shown their resolve to meet the compliance needs and take additional measures to minimize potential concerns. The critical need for effective weed control in the face of glyphosate resistant palmer amaranth will continue to incentivize farmers to take additional precautions rather than lose access to the product use.

The NCC appreciates the thorough, methodical science-based risk assessment process employed by EPA for every pesticide registration and registration review. We are aware of the vast scientific data informing the registration decisions as well as the standards required for the scientific studies (Good Laboratory Practice Standards).[5] The NCC is discouraged by the increased frequency of legal challenges that introduce popular press unsubstantiated claims as evidence in the court in attempts to dismiss valid science.

Thank you for this opportunity to provide comments supporting this important issue.

Respectfully submitted,



Gary M. Adams
President and CEO
National Cotton Council

[5] https://www.epa.gov/compliance/good-laboratory-practices-standards-compliance-monitoring-program