

June 23, 2016

Office of Pesticide Programs  
Regulatory Public Docket (7502P)  
U.S. Environmental Protection Agency  
1200 Pennsylvania Ave., NW  
Washington, DC 20460

**Regarding the Draft Human Health and Ecological Risk Assessment for Aldicarb**

DOCKET ID: **EPA-HQ-OPP-2012-0161**

The Georgia Cotton Commission (GCC) is a producer funded organization representing the cotton producers of Georgia. Georgia is the second largest cotton growing state with a \$960 million farm gate value and a total economic contribution of \$2.6 billion to the economy of Georgia. The Georgia cotton industry also accounts for over 20,000 jobs in our state. Agriculture is the largest industry in Georgia accounting for over 411,000 jobs and has a total economic impact of over \$74 billion to Georgia's economy.

Aldicarb has been an important pest management tool for Georgia cotton growers. The previously labeled Temik 15G by Bayer CropScience, and now the AgLogic 15G Aldicarb Pesticide has been shown to control nematodes and thrips in Georgia cotton. Aldicarb has been the standard to which all other at-plant pest control products to control nematodes and thrips are compared. While other nematode and thrips management products are available, aldicarb provides an easy to use product at a relatively low cost per acre to the Georgia cotton farmer. Aldicarb fits very well into our Georgia cotton farmers' integrated pest management programs.

As members of the National Cotton Council (NCC), GCC supports the following comments compiled by the NCC.

The National Cotton Council (NCC) appreciates the opportunity to provide comments regarding EPA's draft human health and ecological risk assessment of aldicarb. Cotton

producers have not had access to aldicarb for several years. Historically, aldicarb has been used to control thrips and nematodes during early seed germination and seedling establishment. The product was typically applied in furrow (i.e. dropped in the soil with the seed and covered with soil at planting) which eliminated exposure risk to above soil organisms. Similarly, the efficacy of the pesticide diminished in a few weeks, long before any cotton blooms were present. The lack of access to this product in recent years has forced producers to rely on other products that do not have comparable yield protection. In particular, multiple states have sought additional means to control nematode pests of cotton due to the lack of access to aldicarb. EPA should be reminded that in recent years, the agency has denied Section 18 requests for the use of terbufos to control nematodes in cotton. The cotton industry is in dire need of effective rotational products such as aldicarb for control of thrips and nematodes in early season cotton production.

The NCC is the central organization of the United States cotton industry. Its members include producers, ginner, cottonseed processors and merchandizers, merchants, cooperatives, warehouse and textile manufacturers. A majority of the industry is concentrated in 17 cotton-producing states stretching from Virginia to California. The NCC represents producers who cultivate between 10 and 14 million acres of cotton. Annual cotton production, averaging approximately 16 to 20 million 480-lb bales, is valued at more than \$5 billion at the farm gate. The downstream manufacturers of cotton apparel and home furnishings are located in virtually every state. Farms and businesses directly involved in the production, distribution and processing of cotton employ more than 230,000 workers and produce direct business revenue of more than \$27 billion. Accounting for the ripple effect of cotton through the broader economy, direct and indirect employment surpasses 420,000 workers with economic activity well in excess of \$120 billion. In addition to the cotton fiber, cottonseed products are used for livestock feed, and cottonseed oil is used as an ingredient in food products as well as being a premium cooking oil.

Aldicarb has been an important crop protectant product for cotton production in the U.S. and has been used safely for 40 years. Although the use of aldicarb declined with the introduction of neonicotinoid insecticides, it was still a foundational crop protectant for efficient cotton production in many areas of the U.S. cotton belt. Aldicarb controls more early-season cotton pests than any other available product and fits well into integrated pest management (IPM) programs since it has a minimal impact on beneficial cotton insects. Aldicarb is used as an at-planting treatment that is applied beneath the soil to protect seedling cotton plants against early season insects and, at higher rates, nematodes. Early season pests include thrips, nematodes, aphids, plant bugs, flea hoppers, and mites. Use of this product reduces a grower's need for additional foliar pesticide sprays during the season since a single-application at planting provides control of nematodes and insects for up to 6 weeks.

Nematodes are a serious cotton pest and have increased in numbers and geographic distribution over the last 10 years. The Reniform nematode, for example, has become a serious pest in the Mid-South and parts of the southeast costing U.S. cotton growers \$1 billion over the past 5 years. Options for chemical control of nematodes in cotton are very limited. Aldicarb is by far the most effective chemical nematicide available. Effective protection against early season insects is of prime importance to getting the crop off to a good start with healthy, vigorous seedling plants. In this manner, aldicarb improves yield, quality and earliness of maturity.

Research presented at the 2011 Beltwide Cotton Conferences demonstrated the importance of aldicarb by evaluating the effects on cotton yields in the absence of the product. Over a 5-year period, cotton yields from untreated control plots were compared to plots treated with aldicarb. The research indicated that plots treated with aldicarb produced an additional 198 pounds of cotton fiber per acre and an additional 297 pounds of cottonseed.

Based on this research and the assumption that 25% of U.S. cotton acres are treated with aldicarb each year, an estimate of the importance of aldicarb to the cotton industry

can be calculated. USDA has estimated that 9 million acres were planted to cotton in 2015 and a raw cotton fiber price of \$0.58 per pound. Based on these estimates, 2015 production losses due to the absence of aldicarb are valued at \$258 million. It is clear why aldicarb has long been recognized as the standard for managing nematode populations in cotton.

The Environmental Fate and Effects Division (EFED) report suggests modeling concerns for potential risks to birds and mammals. The NCC respectfully notes that the EFED report acknowledges no reports of incidents when aldicarb was used in compliance with label instructions. EFED acknowledged uncertainty due to their understanding of the depth of soil cover after application (Page 2, Table under Label Clarification). The NCC urges EFED to understand it is not easy to label the depth of soil cover due to multiple agronomic variables that dictate seed placement in the soil. Seed placement in the soil will vary by plant species as well as by soil type, soil moisture, rain forecast, and irrigation capabilities within a plant species. However, the placement of the aldicarb with the seed in the seed furrow covered with soil enhances compliance because of desired protection of the seed. The NCC encourages EFED to recognize the historical use that has demonstrated the lack of real risk to birds and mammals when aldicarb is used as label instruction prescribe.

The NCC urges EPA to recognize the use of aldicarb at planting offers little opportunity for impact on honey bee colonies. It is difficult to understand, from a biological and scientific perspective, why EPA would predict a risk to honey bees from an in-furrow application at planting. Although cotton flower development depends greatly on temperature and time (degree days), it typically takes more than 40 days from planting to flower development. The biological efficacy of aldicarb applied in the soil at planting does not persist for this duration of time. Additionally, studies previously provided to EPA have demonstrated that honey bees are not attracted to cotton pollen. Similarly, studies have shown little nectar production in pre-flowering cotton. EPA is urged to refine this risk assessment to reflect these biological data.

NCC appreciates the opportunity to comment on this important crop protectant product and urges the agency to favorably consider its registration.

Sincerely,

A handwritten signature in black ink that reads "Mike Lucas". The signature is written in a cursive, flowing style.

Mike Lucas

Chairman

Georgia Cotton Commission