

Auxin Herbicide Applicator Training

The Situation

Non-target dicamba herbicide injury to susceptible plants, especially soybeans, was widespread in 2017. Dicamba herbicides have been on the market for many years and have a reputation for causing non-target injury to susceptible plants, but injury increased dramatically in 2017 following the introduction of Xtend (dicamba resistant) soybean varieties and registration of new dicamba products for use on Xtend soybeans. The new dicamba products were lower in volatility than other formulations and had very specific label guidelines to minimize off-target movement, but widespread injury still occurred. The new dicamba product labels were modified for 2018 with more restrictive use requirements, including mandatory auxin herbicide training for all applicators who planned to apply the new products for 2018.

What We Did

An auxin herbicide training program was developed by K-State Research and Extension and approved by the Kansas Department of Agriculture. The training addressed label application requirements, along with specific examples of the impacts of various application factors, weather conditions, and site conditions that affect the potential for non-target dicamba injury based on previous research and demonstration experiences. Several KSU Extension Specialists provided the training at 56 meetings across the state of Kansas. Most of the auxin herbicide training meetings were scheduled and hosted by county and district extension programs. Training programs were posted on the KSU Pesticide Safety and IPM webpage and publicized in popular and social media venues.

Outcomes

Over 2,200 private and commercial pesticide applicators received credit for auxin herbicide training through the KSRE program. Training certification cards were produced by K-State Research and Extension and provided to each participant that completed the training. The list of trained applicators was provided to the Kansas Department of Agriculture for their records.

Success Story

K-State Research and Extension provided mandatory auxin herbicide applicator training to over 2,200 private and commercial pesticide applicators to allow them to safely apply labelled dicamba products on Xtend soybeans. The scope and severity of dicamba injury to non-target plants appeared to be significantly reduced in 2018 compared to the 2017 growing season based on observations and fewer inquiries to the Kansas Department of Agriculture (KDA) and KSRE. Duane Simon from KDA said, "I think the training did make a difference, more applicators were following the label. All in all, the training helped the applicators to make good decisions about the application and to be aware of what was around them, as far as sensitive crops."

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