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FOR IMMEDIATE RELEASE

David Dugan

OSU Extension Educator, Agriculture and Natural Resources

Adams/Brown/Highland Counties

Ohio Valley Extension Education Research Area

Dicamba Use on Soybeans

In the past few weeks I have had several calls concerning soybeans that are puckered up with the appearance of herbicide damage. In most of these cases it was thought to be the result of the new technology of dicamba resistant soybeans. There is no silver bullet or magic that can happen when the soybeans are damaged. How bad will it hurt the yield? Will they recover? These are questions that it will take time to find the answer. It may depend on the weather, too. The following was in a recent CORN newsletter and is from Dr. Mark Loux, OSU Extension Weed Specialist.

We have had the opportunity to walk additional Ohio fields where soybeans were damaged by off-target movement of dicamba since our last C.O.R.N. newsletter article on this subject (see link below), and we continue to hear about even more affected fields. This situation continues to develop across the Midwest and South, and everyone involved is trying to assess causes and what these mean for future use. A couple of action items here for anyone associated with an off-target dicamba movement and injury situation:

- Take the time to report the problem to Monsanto (XtendiMax), BASF (Engenia), or DuPont FeXapan) so that they create a record of it. The compilation of these records has to be reported by companies back to regulatory agencies, which provides the agencies with information on how extensive the issues are. Reporting to the companies does not result in specific information being provided to ODA, or any further regulatory action or investigation by ODA. This also allows the three companies to investigate and get an assessment of causes of off-target movement. While affected growers may not receive the desired resolution or satisfaction from company investigations, there is still value in reporting with regard to broader resolution of the issue.
- Where possible, we would encourage reporting off-target dicamba situations to ODA also. This provides ODA with needed information on how extensive any problems are and what possible causes are. This is the basis for an official record specific to Ohio, that allows ODA to follow up with companies and/or EPA to determine whether revisions to labels, registrations, etc are needed here. Our experience is that affected parties do not necessarily want to subject their neighbors to investigation, especially given that problems may have occurred even where labels were followed. But this would be helpful in the end. Legally, applicators are required to notify ODA if anyone informs them that their application caused damage in excess of \$500.00.

What follows is a rough assessment of dicamba issues here in Ohio, based on a limited number of farm visits and reports from people around the state, and a few things to think about as seed orders are placed and weed control programs for next year are planned.

1. No one wants a repeat of this year's problems next year, and we have to assume that there will be some modifications of dicamba product labels and restrictions prior to the 2018 growing season. Purchasing Xtend seed with an assumption that the approved dicamba products can be applied in 2018 per the 2017 labels may be an erroneous conclusion. We have no idea what will happen here –



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just be aware of this. In our recent field investigations of dicamba problems, one message we received from the affected parties was along these lines – “while we realize that there can be hiccups with new technology, please pass on to the appropriate regulatory agencies that this is not an acceptable situation (and also implied I think was – “we expect it to be resolved before next year”)”. Message received and sent on. Monsanto, BASF, and DuPont – consider yourselves notified also.

2. As far as we know, off-target issues in Ohio have occurred only for postemergence applications of dicamba, in spite of a fair amount of preplant/preemergence use. We have to assume also that the lower number of official complaints in Ohio compared with states to the west and south of us is due at least in part to less frequent postemergence use here. Among other reasons for less risk when used preplant vs postemergence, including possibly lower temperatures and less frequent inversions, there is simply not as much emerged sensitive vegetation early in the season to damage should dicamba move off-target. While off-target movement this year seems to be causing injury only to non Xtend soybeans so far, there is certainly potential for damage to any other sensitive vegetation that is close enough – gardens, vineyards, orchards, etc. The apparent unpredictability of off-target movement this year for postemergence applications indicates to us the probability of damage in the future to something with way more value per acre than soybeans. We state this really just to reiterate that there is less risk to using dicamba early in the season, where it does have substantial value still for burndown of glyphosate-resistant marestail and ragweeds.

3. The “elephant in the room” for this entire situation has to do with the causes of off-target movement and injury, and the role of volatility. Causes of injury can include contaminated spray equipment from a previous application, addition of the wrong product during mixing, spray particle drift from an adjacent field due to wind during application, movement from a nearby treated field due to application during an inversion, or volatilization of dicamba from a nearby treated field sometime following application. Differences in patterns between particle drift and volatility were covered in the previous C.O.R.N. article linked below. It’s likely that there are examples of every one of these somewhere across the region. Based on the distances of dicamba movement and patterns of injury, weed scientists are concluding that post-application volatilization of approved dicamba products is likely one of the major causes, and our experience here in Ohio would support this conclusion (and some of this volatility could be due to use of unapproved dicamba of course). Applicators should be aware that current label guidelines address only controllable application parameters, and weather conditions the day of application, but do not address conditions that could affect the risk of volatility following application. Volatility is much less predictable and less controllable than the other causes listed here anyway. We should also mention that so far there is apparently no recognition of the probable role of volatility by the companies selling approved dicamba products – something good to know in the event you report a problem and have a conversation with them.

4. During farm visits in northwest Ohio last week, it appeared that dicamba seems to be moving from treated fields with runoff water also, and causing injury to sensitive soybeans at the destination of that runoff. We observed this on a small scale – water moving/ponding between two adjacent fields (one Xtend soybeans and one not). We also observed it on a larger scale, where a field next to a drainage ditch that drained several miles of cropland was flooded from that ditch and then developed dicamba injury. In the latter case one could probably conclude that there were multiple dicamba-treated fields upstream, which contributed runoff water to the ditch. It may be a wetter than average year in northwest Ohio, but the nature of the soils and drainage there would lead one to predict future occurrences.

Dates to Remember

Aug. 10 – 13

Ohio Valley Antique Machinery Show in Georgetown.

- Aug. 14 Pesticide Testing at Old Y Restaurant at noon.
- Aug. 15 Southwest Corn Growers Field Day in Washington Court House.
- Aug. 15 Adams County Farm Bureau and Soil and Water Annual Meeting.
- Aug. 24 Beef and Forage Field Night at OARDC Research Farm in Jackson.
- Aug. 24 Blueberry, Bramble and Wine Grape Field Night at OSU South Centers.
- Sept. 14 Fertilizer Certification opportunity at North Adams High School starting at 5:30 p.m. in the Round Room. Call to pre-register at least one week prior at the Adams Co. OSU Extension office, 937-544-2339 and ask for Barbie.