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Moving Forward with Dicamba

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Moving Forward with Dicamba

Abstract
On October 31, 2018, the EPA made the long-awaited announcement regarding dicamba registration for use on dicamba-resistant soybean. I suspect opinions regarding the EPA actions are as varied as people’s views of the technology.

Disciplines
Agricultural Science | Agriculture
On October 31, 2018, the EPA made the long-awaited announcement regarding dicamba registration for use on dicamba-resistant soybean. I suspect opinions regarding the EPA actions are as varied as people’s views of the technology. Following are pertinent changes on the dicamba labels:

1. People under the supervision of a certified applicator are no longer allowed to make applications.
2. Applications are allowed only from 1 hour after sunrise to 2 hours before sunset (previously the restriction was between sunrise and sunset).
3. Applications are restricted to 45 days after planting or prior to R1 stage of soybean, whichever comes first (previously the restriction was up to and including the R1 stage).
4. Applications cannot be made if rain within 24 hours may result in soil runoff (previously the label stated not to apply if rain is expected to occur within 24 hours).
5. The label clarifies what constitutes sensitive areas and where downwind buffers are required. The applicator must survey the area for sensitive crops and residential areas, and then not apply the product when wind is blowing towards these areas. It is up to the applicator to determine the appropriate distance between the target site and sensitive area. One of the more important changes is that the label states that managed or mowed areas adjacent to fields are now considered a non-sensitive area. Thus, the road right-of-way can be considered part of the 110 ft downwind buffer.
6. There is a new restriction regarding buffers around the entire field in counties with endangered species. Six Iowa counties (Hardin, Jackson, Dubuque, Delaware, Clayton, Allamakee) are affected by this restriction. Fields in these counties will require a 57 ft buffer on all sides of the field. Non-sensitive areas as defined on the label can be used as the buffer. An EPA website provides details regarding this restriction.
7. Dicamba specific training will again be required for all applicators using the registered products on dicamba-resistant soybean.

I still have reservations about the ability to use dicamba postemergence in soybean with an acceptable level of risk to sensitive vegetation (Table 1). Restrictions related to wind speed, rainfall, and hours during the day when applications are allowed, provide few hours that are appropriate (legal) for application. The label changes for 2019 do little to reduce the risk for volatility; experience indicates that volatilization has played a significant role in off-target movement and injury. Preemergence applications of dicamba greatly reduce the likelihood of injury compared to postemergence applications, and this is our recommendation for the technology. However, I recognize preemergence applications reduce the value of dicamba on weeds with prolonged emergence, such as waterhemp. The potential for off-target movement increases as postemergence applications are delayed. When using the new dicamba products postemergence, the goal should be to complete applications by the V2 – V3 stage of soybean. Avoiding applications when temperatures are forecast to exceed 85°F within 24 hours after application will reduce the potential for volatility losses. Combining dicamba with a Group 15 herbicide (Dual, Warrant, Zidua, etc.) when it is applied early postemergence will prolong activity on late-emerging waterhemp.

Table 1. Pesticide misuse cases handled by IDALS

<table>
<thead>
<tr>
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<th>2012</th>
<th>2013</th>
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<tr>
<td>Total complaints</td>
<td>120</td>
<td>122</td>
</tr>
<tr>
<td>Total Group 4</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Dicamba</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Year</td>
<td>Total complaints</td>
<td>Total Group 4</td>
</tr>
<tr>
<td>------</td>
<td>------------------</td>
<td>---------------</td>
</tr>
<tr>
<td>2014</td>
<td>89</td>
<td>-</td>
</tr>
<tr>
<td>2015</td>
<td>108</td>
<td>-</td>
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<tr>
<td>2016</td>
<td>102</td>
<td>23</td>
</tr>
<tr>
<td>2017</td>
<td>211</td>
<td>-</td>
</tr>
</tbody>
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The spread of multiple resistance weeds has greatly complicated weed management, creating the demand for new tools. Dicamba requires a much higher level of management than any other herbicide to be used safely. It is the applicator’s responsibility to follow all label requirements, and know what sensitive plants are in the vicinity of any Xtend field being sprayed with dicamba.

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Category: Weeds
Crop: Soybean
Tags: dicamba  Xtend soybean  EPA
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