Office of
INDIANA STATE CHEMIST AND SEED COMMISSIONER
Protecting Indiana's Agriculture and Environment - Feed, Fertilizer, Pesticide and Seed

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What You Should Know About Purchasing & Using

Dicamba-Based Herbicides

Background:

The Indiana Pesticide Review Board (IPRB) was created by the Indiana legislature to direct pesticide rulemaking and policy for Indiana. Board members are appointed by the Governor. The IPRB is comprised of government and university scientists; industry, conservation organization and public representatives; and commercial and private pesticide applicators. The Board has authority to adopt rules to establish a list of Restricted Use Pesticides (RUPs) and to develop restrictions for the distribution and use of pesticides in Indiana.

The IPRB has been studying and discussing the use of 2,4-D and dicamba containing herbicides on soybeans almost continuously since 2007. At that time, it was brought to the Board's attention that 2,4-D and dicamba tolerant soybeans were being developed to create additional options for growers/farmers to control certain noxious weeds that have become resistant to currently used soybean herbicides. In addition to the potential benefits of such weed control developments, serious concerns about off-target movement (drift and volatilization) and damage from these highly active herbicides to sensitive crops and sites (i.e. tomatoes, grapes, melons, fruits, vegetables, non-tolerant soybeans, ornamentals, etc.) have been debated.

Dicamba tolerant (DT) soybean and cotton crop seeds were approved by USDA for planting in 2016. As a result, some U.S. growers in parts of the Midwest and South planted these crops, even though U.S. EPA had not yet made a decision to approve any dicamba-based herbicides for use on these crops. In spite of having no dicamba product to apply legally on these crops, a significant number of growers proceeded to use unlabeled dicamba herbicides. Many incidents of misuse resulted in numerous non-target damage claims. Preliminary estimates suggest that Missouri alone investigated over 220 complaints, involving at least 62 private applicators, and over 41,000 acres of damaged soybeans, peaches, tomatoes, melons, and other crops and residential plantings.

Late in 2016 and early 2017, U.S. EPA made a determination to accept the registration for several dicamba-based herbicide products labeled for both pre-emergence and post-emergence use on DT soybeans. The currently accepted soybean products are Monsanto Company's **XtendiMax with VaporGrip Technology** (EPA Reg. No. 524-617), BASF's **Engenia Herbicide** (EPA Reg. No. 7969-345), and DuPont's **FeXapan Herbicide Plus VaporGrip Technology** (EPA Reg. No. 352-913). These new products bear labels with many new and detailed drift restrictions and requirements not found on most older herbicide labels.

Regulatory Action in Indiana:

In response to requests for regulatory safeguards to protect non-target sites and crops, the IPRB voted unanimously on November 30, 2016 to start the rulemaking process to classify dicamba herbicides as state Restricted Use Pesticides (RUPs) for Indiana.

During the deliberations to consider making dicamba-based herbicides state RUP's, the Board considered the following issues:

- the potential for widespread misuse of dicamba-based herbicides, as demonstrated in Missouri and other states
- the presence of a variety of sensitive crops and sites in Indiana;
- the complexity and detail of the new label use directions
- the need to create an effective regulatory mechanism to prevent and respond to misuse incidents (i.e. records of purchase, distribution, and use, as well as effective penalties for violation);
- the desire to make this weed control technology available to Indiana growers; and
- the desire to maintain technology through safe, legal, and effective use.

Although the IPRB also considered other regulatory safeguards such as mandatory buffers, application timing restrictions, and state-specific wind speed restrictions, they concluded that state RUP classification would be the least disruptive to Indiana applicators and product distributors who might be handling and using dicamba herbicides. In addition, the Board determined that this would be the most effective mechanism to address potential misuse of all dicamba herbicides used for agricultural production, not just the new formulations such as **Xtendimax, Engenia,** and **FeXapan.**

Proposed Rule to Classify Dicamba Herbicides as State RUPs:

The rulemaking process by the IPRB was initiated in December, 2016. The first step in that process is to be granted an exception from the current Indiana rulemaking moratorium established by Executive Order. The IPRB is currently awaiting to hear back from the Indiana Office of Management and Budget as to whether the exception will be granted or not.

The rulemaking process, if successful, is expected to take from six to twelve months to complete. Anyone interested in the process and schedule, including the opportunity to provide input at the public hearing (once scheduled), can track the rule at http://www.oisc.purdue.edu/oisc_rules_regs_laws.html.

The draft proposed rule will identify for classification as an RUP any herbicide that contains at least 6.5% dicamba active ingredient and is labeled for use in agricultural production. The rule is not intended to affect low level dicamba herbicides that are labeled solely for use in turf or right-of-way weed control.

Current Status of NEW Dicamba Herbicides:

All dicamba herbicides in the channels of trade that have not been classified as RUPs by U.S. EPA are still considered non-restricted pesticides in Indiana. As such, these products can be purchased and used by non-certified applicators. Based on the time required to complete the state rulemaking process, it is reasonable to expect that these products, including **XtendiMax, Engenia,** and **FeXapan** will remain non-RUPs through the 2017 growing season in Indiana.

While the IPRB has requested that dicamba activity in Indiana be closely monitored and inspected during 2017, additional regulatory requirements such as purchase and use only by certified applicators, sale and distribution only by registered RUP dealers, and record keeping for both application and distribution cannot be implemented until the rule becomes final.

New Labels, New Requirements, & New Uses of Dicamba on Soybeans:

It is very important to understand that new labels addressing new uses on soybeans are currently unsettled and are subject to change. However, as of the date of this notification, there are a number of important items that can be communicated. Applicators and growers are encouraged to check the following Office of Indiana State Chemist (OISC) web site http://www.oisc.purdue.edu/pesticide/news_alerts.html for Indiana-specific updates.

Summary of What We Know Currently:

1. Dicamba tolerant (DT) soybean seeds are in channels of trade, and it is anticipated that they will be planted in at least parts of Indiana in 2017. *(NOTE: Seeds do not require approval by OISC for distribution and planting in Indiana.)*
2. The IPRB has proposed a rule to classify all agricultural herbicides containing at least 6.5 % dicamba as state Restricted Use Pesticides (RUPs).
3. This rule, if passed, could take 6 to 12 months, or longer, to finalize.
4. State RUP classification would:
    a. restrict purchase and use to certified applicators only;
    b. restrict sale and distribution by registered RUP dealers only;
    c. require users to keep application records for two years; and
    d. require dealers to keep sales records for two years.
5. To date, U.S. EPA and Indiana have accepted for registration three dicamba products for use on DT soybeans, **XtendiMax with VaporGrip Technology** (EPA Reg. No. 524-617), **Engenia Herbicide** (EPA Reg. No. 7969-345), and **FeXapan Herbicide Plus VaporGrip Technology** (EPA Reg. No. 352-913).
6. The use directions and restrictions on these new labels are extensive, and applicators should seek special focused training before purchase and use of these products.
7. There are currently only a very limited number of nozzle types, tank-mixes, or drift reduction agents approved for use with these products. Depending on which product will be used, applicators must check www.xtendimaxapplicationrequirements.com ; www.engeniatankmix.com ; or www.fexapanapplicationrequirements.dupont.com within seven days prior to application to determine if the desired nozzles or tank mixes have been approved by U.S. EPA.
8. No dicamba-containing products will be classified as state RUPs until the proposed rule becomes final.
9. OISC will ensure adequate lead time for outreach and education before implementation and enforcement of any new rule revisions or before state restrictions become final.

Compliance and Enforcement in Indiana:

As with all products, "The Label is the Law". OISC will be monitoring and enforcing the label requirements and use restrictions on these new labels, as well as the labels of older dicamba containing herbicides. It is important to remember that older labeled dicamba herbicides are **NOT** approved for the newer use patterns on DT soybeans. Pre-plant timing restrictions and post-emergence application prohibitions still apply for those older products.

In addition, OISC will be monitoring herbicide dealers and distributors to ensure that older labeled dicamba products are not being diverted to DT soybean growers for illegal use, as occurred in other states during 2016. The Indiana Pesticide Review Board has urged OISC to apply the most stringent penalties available for violators whose actions might jeopardize the successful introduction of this new much-needed weed management option.

Reporting Problems Regarding Distribution or Application:

Questions, complaints, and reports of dicamba misuse, mishandling, or off-target exposure may be directed to OISC at (800) 893-6637 or saxtong@purdue.edu.

For updates to this document refer to http://www.oisc.purdue.edu/pesticide/news_alerts.html