

2021 Dicamba

FREQUENTLY ASKED QUESTIONS

Updated: January 21, 2021

On October 27, 2020, the U.S. Environmental Protection Agency (EPA) announced that registrations for **Engenia**, **Xtendimax**, **FeXapan**, and **Tavium** herbicides were extended through 2025.

The following frequently asked questions (FAQs) have been developed by the Office of Indiana State Chemist (OISC) to address many of the issues that have been raised regarding legal use of agricultural dicamba-containing products in Indiana. Updates to these FAQs are posted at <https://www.oisc.purdue.edu/pesticide/dicamba.html>.

1. Are there any Indiana restrictions on the purchase and use of "older formulation" dicamba products (NOT Engenia, Fexapan, Xtendimax, or Tavium)?

Yes, all agricultural herbicides containing at least 6.5% dicamba were classified as **State Restricted Use Pesticides (RUPs)** in Indiana, effective 2018. These older dicamba products must be sold, distributed, tracked, applied, and recorded the same as every other RUP in Indiana. These older formulations are **NOT** labeled for over-the-top post emergence use on soybeans.

2. Are there any Indiana state-specific restrictions on the use of dicamba herbicides in 2021?

Yes, just like in 2020, Indiana is pursuing a **June 20th** application cut-off date for the 2021 use season. But unlike 2020, the application cut-off date would now apply to all RUP dicamba herbicide products formulated with at least 6.5% dicamba. The purpose of the cut-off date is to address the unacceptably high number of off-target movement incidents and resulting adverse effects associated with later season dicamba applications. OISC has collected data since 2017 that suggests off-target incidents can be reduced by over half by observing the June 20th application cutoff-date. This same data reflects that late season use of any agricultural dicamba herbicide can be overly problematic.

3. Will there be any changes to how OISC responds to complaints of off-target movement of dicamba herbicides in 2021?

Starting in 2019 OISC initiated a dicamba response procedure that allowed complainants to request a full compliance investigation or an investigation to document dicamba exposure only. The procedural change was intended to preserve OISC resources that had been overwhelmed by dicamba complaints and to provide a response option that had been requested by some of the complainants in 2017 and 2018. Based on the documented success of these changes in 2019 and 2020, OISC will continue to provide these options in 2021. In addition, OISC will extend these investigation response options to off-target movement complaints for all herbicides, not just dicamba.

4. Do mixers, loaders, handlers, and spray equipment cleaners of the soybean dicamba herbicides (Engenia, Fexapan, Xtendimax, Tavium) need to be certified applicators?

Yes, anyone who is responsible for any part of the use and application process, which includes mixing, loading, application, or cleaning dicamba application equipment, must become a certified and licensed private applicator or a commercial applicator (Category 1). Workers are not required to be certified and licensed if they are involved in nothing more than transportation of unopened dicamba containers, transportation of “hot loads” that were mixed by a certified and licensed applicator, or unloading of a pre-mixed “hot load” directly from the transportation vehicle into a spray rig.

5. Do I need to be "dicamba trained" again in 2021 to use the soybean dicamba herbicides?

Yes, the 2020 label requirements for the soybean herbicides accepted by EPA again include the annual training requirement for all applicators, handlers, loaders, mixers, and spray equipment handlers. This mandatory annual dicamba training is in addition to the requirement to be a licensed commercial applicator or private applicator.

6. Who will provide the mandatory annual dicamba training?

Annual dicamba training in Indiana is now provided almost exclusively by the soybean dicamba product registrants (*BASF, Bayer, Corteva, Syngenta*). This registrant training may be in person or virtual group training or may be self-directed online training. OISC recommends that you contact your dicamba supplier or visit registrant websites for details. OISC will also accept dicamba training that has been accepted by any other state pesticide regulatory agency.

7. Have the soybean dicamba herbicide record keeping requirements changed for 2021?

Yes, in 2021, the applicator records must also include the identity of and a receipt for the label-required **pH buffering adjuvant/volatility reduction adjuvant** and **drift reduction adjuvant** mixed in every tank mix of the soybean dicamba herbicides. If you use the record keeping form developed by Purdue Pesticide Programs in PPP-119, you will satisfy the 2021 dicamba record keeping requirements for Indiana.

8. The labels for the soybean products require that I keep a record of when I checked DriftWatch for the presence of nearby sensitive crops or sites. Can I also use that site to check for the presence nearby non-DT soybeans?

Yes, effective January 1, 2019, a new FieldWatch feature called CropCheck has allow growers to map row crops like soybeans, cotton, and corn that may be sensitive to some nearby pesticide applications. Access CropCheck through www.driftwatch.org. Note that checking CropCheck for nearby non-DT row crops does not eliminate the requirement for the applicator to ensure those neighboring crops are dicamba-tolerant before application.

9. The dicamba soybean labels require, “If wind direction shifts such that the wind is blowing toward neighboring sensitive crops or residential areas, STOP the application.” What documentation will OISC require as evidence that the applicator has met this requirement?

The label requires record keeping of wind direction at the start and finish of the application. However, the applicator must also constantly monitor wind speed and direction throughout the entire application and include a notation in the application records documenting the time-period that the application was stopped due to a change in wind speed or direction. Otherwise, the assumption will be that the application was continuous, without stopping, as required.

10. Application records must include start and stop times. If the wind direction shifts toward neighboring sensitive crops or residential areas, and the applicator stops the application, but doesn’t pick up the application until the following day, is that a separate application or the same one?

Yes, stopping an application and resuming it on a following day will be considered a separate application. Accurate records must be maintained. Each time the certified applicator starts or stops an application it needs to be recorded, regardless of which applicator is performing the application or which day.

11. Are there any application timing restrictions on the use of soybean dicamba products?

Yes, these products may not be applied at night or during the period two hours before sunset through one hour after sunrise. In addition, the 2021 labels prohibit application after the R1 growth stage of the soybeans and after June 30th. However, additional state restrictions in both Indiana and Illinois will set the application cut-off date in 2021 at **June 20th**. So the more restrictive June 20th cut-off date will apply in Indiana.

12. Are there still prohibitions against spraying when wind is blowing toward sensitive crops, plants, and residential areas?

Yes, the 2021 labels still prohibit application when the wind is blowing toward adjacent sensitive crops, plants, and residential areas.

13. What does the term “adjacent” mean on these labels?

While the various dicamba soybean product labels for 2021 have eliminated the use of the term “neighboring” and have settled on the term “adjacent” for describing sensitive sites to be protected, neither the EPA nor the product registrants have defined the limits of what they mean by the term “adjacent”. Therefore, in Indiana the term “adjacent” shall mean any protected crop or site that exists, partially or in whole, within 240’ of the edge of the target soybean field. EPA’s improved risk assessments in 2020 and increased levels of drift protection applied to the 2021 labels suggest that significant downwind drift past 240’ should not be a concern. However, applicators should be advised that this improved risk assessment and safety margin does not eliminate applicator regulatory liability under the Indiana state drift rule for off-target adverse effects resulting from drift past 240’. Both label restrictions and the state drift rule will be considered by OISC when investigating off-target movement complaints.

14. Do sensitive crops include adjacent organic crops?

Yes, although certified organic crops are not specifically listed on the labels as an example of a sensitive crop, the fact remains that any pesticide residues in these crops, whether causing a visible adverse effect or not, might make these crops unfit for sale, use, or consumption as organic. Therefore, certified organics are sensitive crops.

15. Are the 2021 buffer requirements for dicamba soybean products the same as on previous labels?

No. There are several significant changes. First, the standard 110' downwind buffer from last year has been increased to 240'. The applicator must always maintain a 240' downwind buffer between the last treated row and the nearest downwind field/area edge (in the direction the wind is blowing). In addition, for dicamba soybean applications in counties with protected endangered species (**Greene, Harrison, Lagrange, Lake, Porter, Posey**), a 57' buffer is required on every side of the target soybean field plus a 310' downwind buffer. Applicators must check the EPA website <https://www.epa.gov/endangered-species/bulletins-live-two-view-bulletins> for restrictions prior to application.

16. Is a buffer required on just one side of a dicamba-treated soybean field when the application does not occur in one of the Endangered Species Act counties?

Sometimes yes, but oftentimes buffers are required on several sides of the target field. Applicators should remember that buffers will often be required on two or more downwind sides of a target field. If wind direction is not constant and non-target fields and sites are not positioned completely perpendicular to one another, two or more sides of the target soybean field may require a buffer. A 45-degree wind direction would require a buffer on at least two downwind sides.

17. Are downwind buffers required next to in-field grass/vegetative waterways?

No, downwind dicamba buffers would not be required next to these in-field areas. U.S. EPA and OISC have concluded that grass waterways should be treated the same as Conservation Reserve Program (CRP) areas. Both CRP and grass waterways include voluntary conservation agricultural areas that could be used for cropland production. Therefore, buffers are not required to protect these voluntary conservation practice areas.

18. The dicamba labels prohibit application during a temperature inversion. How can I determine if a temperature inversion exists in or near my target field prior to application?

Just like other weather measurements, there is no one official method to determine if temperature inversion conditions exist in a field. However, temperature inversion indicators can include nights with limited cloud cover and light-to-no wind, ground fog, smoke not rising, dust hanging over a road, or the presence of dew or frost. Just like other weather data documentation, a time, date, and GPS-stamped photograph taken in the field from your smartphone can serve to supplement and support your determination that an inversion did not exist. In addition, tools to help you identify the likelihood of a temperature inversion can include smoke generators in the

target field, phone apps, and the Inversion Tester by Spoton ®. (*Reference to any specific equipment or brand does not suggest product endorsement by OISC*).

19. Weather apps are now available to help an applicator predict and measure weather. Are these apps certified or official-enough for my weather measurements?

It is important that you understand that these apps rely on weather data collected at weather stations that may or may not be close to your target application field. Most of these apps use computer software to estimate the weather conditions at your location. Therefore, there will be some margin of error or inaccuracy. While not perfect, these weather-predicting apps are usually better than an applicator's guess or estimate made without measuring equipment used at boom height in the target field at the times of application. Research on the in-field reliability of weather apps is available at <https://vimeo.com/309554246/b04fd38bf2> or on the OISC Dicamba Update website page under [Ground Truthing Weather Apps for Wind Speed and Temperature Inversions](#).

20. I have a spray injection system that allows me to keep my dicamba and my other on-sprayer herbicides and adjuvants in separate tanks. The point of injection for each tank is at the spray boom. Can I use the same spray system for dicamba and other herbicides or adjuvants if those other products are not on the list of label-approved tank mixes?

No, you cannot use the injection spray system to circumvent the tank mix restrictions. The labels of these products require that the entire spray system, including tanks, pumps, booms, lines, screens, and nozzles be cleaned according to label directions, both before and after application. Therefore, since it is impossible to clean the spray booms before or after injection of these dicamba products, this type of application is prohibited. Even very small amounts of dicamba left in spraying systems have caused significant cross contamination and non-target impact issues.