

Agronomic Crops Network

The XtendiMax Label for Xtend Soybeans

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As everyone has probably heard by now, there is finally a federal label for the use of a dicamba product, XtendiMax, on dicamba-resistant (Xtend) soybeans, such as it may be. We cover some of the highlights from the label here and in part II, some additional thoughts on what it all means.

- The XtendiMax is based on dicamba DGA (Clarity), and the formulation contains “Vapor Grip” (imagine a deep voice with reverb), which reduces the volatility of the dicamba spray mix. It’s a 2.9 lb/gallon liquid, so 22 oz provides 0.5 lb of dicamba, which is equivalent to 16 oz of Clarity and other 4 lb/gallon dicamba products.

- Minimum application rate for any use is 22 oz/A. The maximum rate per application prior to soybean emergence is 44 oz/A, which is also the total maximum allowed for all applications prior to soybean emergence. The maximum rate per application after soybean emergence is 22 oz/A, and the total of all POST applications cannot exceed 44 oz/A. The total applied per year for all applications cannot exceed 88 oz.

- POST applications can be made from emergence up to and including the R1 stage of soybean growth. Weeds should be less than 4 inches tall at time of POST application. The label states that Monsanto will not warrant product performance when applied to weeds greater than 4 inches tall (how this will work for giant ragweed we have no idea, since it comes out of the ground more than 4 inches tall).

- XtendiMax cannot be tank-mixed with any adjuvants, drift reducing agents, or other herbicides except as eventually approved by Monsanto testing and listed at this website –

www.xtendimaxapplicationrequirements.com. Note – the website isn’t live yet so don’t bother going there.

- Use of ammonium sulfate, UAN, etc. is not allowed due to their potential to increase the volatility of dicamba. We assume that there will be approved AMS replacement products listed on the website eventually, to mitigate hard water issues.

- Application parameters: the only nozzle allowed at this time is the TeeJet TTI11004, used at a maximum pressure of 63 psi; minimum spray volume of 10 gpa; maximum ground speed of 15 mph; spray boom should be no more than 24 inches above target; and no aerial application.

- Do not apply if rain is forecast within the next 24 hours following application. Do not apply during temperature inversions.

- Wind speed and application: <3 mph – do not apply; 3 to 10 mph – optimum application conditions provided all other application requirements on label are met; >10 to 15 mph – do not apply when wind is blowing toward non-target sensitive crops; >15 mph – do not apply.

- When “sensitive areas” are downwind from the site of application, a buffer between the last treated soybean row and the sensitive area must be maintained as follows: 22 oz – 110 feet; 44 oz – 220 feet. The following areas can be considered part of the buffer: road, paved, or gravel surfaces; agricultural fields that have been planted to corn, Xtend soybeans, sorghum, proso millet, small grains or sugarcane (if you figure out how to successfully grow that last one here in the Midwest let us know); fields that have

been prepared for planting but not yet planted; areas covered by footprint of building or other man made structure with walls and/or a roof.

- With regard to “non-target susceptible crops: do not apply where off-target movement can occur to food, forage, etc. plantings and cause damage or render the crops unfit for sale, use or consumption; applicators are required to ensure that they are aware of proximity to non-target susceptible crops, including consulting registries that list commercial specialty or certified organic crops that may be near the application site.

- Do not apply when wind is blowing toward “adjacent commercially grown dicamba sensitive crops”, including but not limited to, commercially grown tomatoes and other fruiting vegetables, cucurbits, and grapes.

- There is a whole section on herbicide resistance, which emphasizes the need for “diversified weed control strategies to minimize selection for weed populations resistant toherbicides....”. Some desirable resistance management practices are listed along with the need to scout for non-performance after application and report any such instances to Monsanto.

Realizing that it all had to start somewhere, if your reaction to this first label is something along the lines of – “How the heck do we even use the product based on this?”, you are not alone. Some university weed scientists are having the same thoughts. As we head into the 2017 growing season not knowing what XtendiMax can be mixed with, it obviously becomes difficult to develop a weed management plan that includes it. It’s almost impossible to come up with a cost-effective system that includes a lone application of dicamba somewhere within the multiple applications of multiple herbicide sites of action that required for control of the five major resistant weeds in the Midwest – Palmer amaranth, waterhemp, marehail, and common and giant ragweed. And we would almost never recommend an application of dicamba alone due to the selection for dicamba resistance that can occur. We assume some of this should be clarified by the growing season, so if we can all just adapt on the fly.

It is going to be imperative that everyone involved completely understands without confusion the application guidelines with regard to not injuring nearby sensitive crops, ornamentals, etc. The label places responsibility for this directly onto the person making the application, so applicators will need to figure out what type of system and alternative plans to have in place to keep up with their typically hectic application schedule and still meet label guidelines based on current weather and proximity to sensitive crops. As may have been evident from the bullets above, there is confusing wording on the label with regard to the whole issue of non-target crops. On one page alone, there appears to be interchangeable use of “non-target sensitive” and “non-target susceptible” and “desirable sensitive crops”, and then also there is use of the term “sensitive areas” as a heading for the buffer information. And then also on the following page some information relative to the crops that are designated as overall more sensitive to dicamba than the “average susceptible crop” – tomatoes, cucurbits, and grapes. Our questions to Monsanto about this have been met with “well we are still working with EPA to figure this out”. Sometime soon would be good. Just a suggestion – consider adding some definitions of these different terms somewhere in there in addition to being consistent in their use. We will continue to provide updates and some strategies for dicamba use in Xtend soybeans as this situation evolves.

Topics:

[Soybean](#)

[Weed Control](#)

About the C.O.R.N. Newsletter

C.O.R.N. is a summary of crop observations, related information, and appropriate recommendations for Ohio Crop Producers and Industry. C.O.R.N. is produced by the Ohio State University Extension Agronomy Team, State Specialists at The Ohio State University and Ohio Agricultural Research and Development Center. C.O.R.N. Questions are directed to State Specialists, Extension Associates, and Agents associated with Ohio State University Extension and the Ohio Agricultural Research and Development Center at The Ohio State University.