



*Pollinator Stewardship Council  
1617 White Water Ct.  
Berthoud, CO 80513  
www.pollinatorstewardship.org*

October 17, 2022

Office of Pesticide Programs  
Environmental Protection Agency  
1200 Pennsylvania Ave. NW  
Washington, DC 20460-0001.

Federal Register Number 2022-17754 EPA-HQ-OPP-2016-022

Re: EPA-HQ-OPP-2016-0223-0026 Dicamba Revised Human Health and Draft Ecological Risk Assessments

To Whom It May Concern:

The Environmental Protection Agency (EPA) is charged with protecting the health and welfare of both humans and the environment, including pollinators. These comments are submitted relative to EPA's Revised Human Health and Draft Ecological Risk Assessments for the registration review of dicamba. We are highly concerned about the continued use of products containing the herbicide known as dicamba.

Despite the extensive research and reports showing significant risks and damage from this pesticide including 3,500 dicamba-related incident reports from the 2021 growing season alone, the sale and use of this pesticide continues. The EPA's Revised Human Health and Draft Ecological Risk Assessments for the registration review of dicamba indicate risks specific to honeybees, which play a critical role in our food system.

Extensive research, as well as years of field experience and data collection with the use of dicamba herbicides in the United States, has shown that dicamba is volatile when temperatures exceed 85 degrees and that it persists for a significant period of time in the environment. It is well established that dicamba is prone to volatilize during application causing damage to non-target species ([Behrens and Lueschen, 1979](#); [Mueller et al., 2013](#); [Riter et al., 2020](#)). In vapor form, the pesticide is transported over long distances and then redeposited on the soil, water, or plant surfaces by the wind and wet deposition mostly through dew and rainfall ([Gavrilescu, 2005](#)). With the introduction of Xtend crops, the number of applications and the quantity of dicamba products applied while temperatures are above 85 degrees has increased exponentially.

Common spray additives can also decrease the pH and significantly increase volatility. ([2019, Mueller & Steckel](#)). Dicamba can be measured in the air, surface water, and rainwater many days after application and can harm pollinators. Applications of dicamba have migrated to and damaged or destroyed non-target vegetation that is vital to pollinators. With pollinator habitat destruction occurring at an alarming rate, and the critical importance of pollinators to the nation's food supply, the continued use of an uncontrollable herbicide such as dicamba, is irresponsible and unsafe and fails to protect the health and welfare of humans and the environment, including pollinators.

Additionally, as a result of the characteristic of dicamba to drift and volatilize, combined with its toxicity to all broadleaf plants, the beekeepers and honey producers in the agricultural areas of the United States where dicamba herbicides are applied have experienced extensive losses to their bees due to the damage or eradication of the plants – natural and crops – from which they receive their food. As a direct consequence, those producers and their customers have also experienced a dramatic decline in honey production and income. This negative impact is overlooked as there is no current incident reporting process related to reduction of pollinator foraging due to dicamba use.

Along with honeybees, all pollinators are affected when dicamba becomes volatile. Since dicamba is a broadleaf herbicide, and because pollinators depend on broadleaf plants for their nutritional needs, the continued use of dicamba is placing all pollinators at risk. Researchers from Penn State University found that when pollinator habitat is exposed to dicamba through off-target movement, the affected vegetation produces 50% fewer blooms resulting in fewer pollinator visits; less nutritional output, less healthy bees and less honey production.

According to the Draft Ecological Risk Assessment for Registration Review of Dicamba dated August 9, 2022, honeybees are at risk due to the use of dicamba. The following can be found on page 41:

The combined results of the two studies support the finding of reduced food consumption by [bee] adults despite the uncertainty about the results from the study conducted at multiple concentrations. Both larval chronic studies with TGAI dicamba acid showed a reduction in larval/pupal survival and adult emergence. In one study, (MRID 50784602), there was a 28% ↓ pupal survival and 28% ↓ adult emergence at the LOAEL (33 µg ae/bee). In the other study (MRID 50931303), there was a 19% ↓ larval survival, 28% ↓ pupal survival, and 28% ↓ adult emergence.

With regard to exposure levels causing reduced survival in larvae and reduced food consumption by adults, there does not appear to be adequate research or data identifying how much contaminated food adult foragers bring back to the hive, and how this translates into what larvae consume. This information is critical for determining the true risks of chronic exposure to dicamba.

Also included in the Draft Ecological Risk Assessment for Registration Review of Dicamba:

There is not a risk concern for acute exposure to bees from any uses of dicamba. However, there is a potential chronic risk concern for bees (adult and larval stages) limited to nectar attractive plants on or near the treatment field (*non-DT plants uses*: within 16 ft for ground applications and 36 ft for aerial applications depending on the droplet size spectrum and spray height) for all uses with maximum single application rates  $\geq 0.44$  lb ae/A. Potential risk from use on DT-plants is expected to be limited to the treatment field due to label restrictions that reduce off-field movement of dicamba below toxicity thresholds. Exposure levels may be high enough for some uses to elicit reduced survival in larvae and reduced food consumption by adults, which could have impacts on growth. The uses with the greatest potential risk on the treatment field are asparagus (post-emergent applications)<sup>5</sup>, soybean (DT-plant post-emergent applications and non-DT plant pre-harvest applications), DT-cotton (post-emergent applications), and any registered uses on unmaintained non-agricultural areas.

The introduction of Xtend crops has resulted in the destruction and damage of pollinator habitat. Also, the continued use of dicamba will furthermore deplete food sources for all pollinators and contribute to further declines in honeybee populations.

Given rising concern about the effects of poor nutrition on honeybees and the synergistic effects of such poor nutrition in combination with common pesticides at sublethal doses, these results are alarming and unacceptable.

The Pollinator Stewardship Council strongly disagrees with the continued use of products containing dicamba and requests that it be removed from the market. PSC believes that the draft ecological assessment is accurate. PSC further believes that the proposed label language to mitigate these known risks is insufficient and that dicamba agricultural, personal, and landscape registration should be revoked.

Sincerely,

Pollinator Stewardship Council  
1617 White Water Ct.  
Berthoud, CO 80513  
[www.pollinatorstewardship.org](http://www.pollinatorstewardship.org)  
970-213-3099



E. Hardy Kern, III, MPA  
Director of Government Relations  
American Bird Conservancy  
412-337-4673 • EHardyKern@abcbirds.org

