Chemical Factsheet

Dicamba

General Information

- Fact Sheet: Dicamba.pdf
- Product Names:
  Scotts LawnPro Step 2 Weed Control Plus Fertilizer 29-3-3 (Scotts Company), formulated with 2,4-D
  Virgoro Ultra Turf Weed & Feed (Spectrum Brands), formulated with 2,4-D, Mecoprop-p
  Spectracide Pro Broadleaf Weed (Spectrum Brands), formulated with 2,4-D, Mecoprop-p
  Scotts Weed and Feed 22-3-3 (Scotts Company), formulated with 2,4-D, Mecoprop-p
  Bonide Brushkil Poison Oak & Ivy Killer (Bonide Products), formulated with 2,4-D
- Chemical Class: Benzoic acid herbicide
- Uses: Agricultural, industrial, and residential settings. Different forms of dicamba (acid and salts) have registered uses on rights-of-way areas, asparagus, barley, corn , grasses grown in pasture and rangeland, oats, proso millet, rye, sorghum, soybeans, sugarcane, and wheat, golf courses
  and lawns.
- Alternatives: Organic agriculture, Organic lawns care
- Beyond Pesticides rating: Toxic

Health and Environmental Effects

See citations at end of document.

- Cancer: Suggestive (**1**, **2**)
- Endocrine Disruption: Not documented
- Reproductive Effects: Yes (**3**)
- Neurotoxicity: Yes (**3**)
- Kidney/Liver Damage: Yes (**4**)
- Sensitizer/ Irritant: Yes (**4**)
- Birth/Developmental: Yes (**5**)
- Detected in Groundwater: Yes (**3**)
- Potential Leacher: Yes (**6**)
- Toxic to Birds: Yes (**7**, **8**)
- Toxic to Fish/Aquatic Organisms: Yes (**3**)
- Toxic to Bees: Not documented

Residential Uses as Found in the ManageSafe™ Database

- Dandelions
- Chickweed

Additional Information

- Regulatory Status:
  - EPA's Dicamba Background and Updates

    - Beyond Pesticides Comments (September 2025)
    - Registration of Dicamba for Use on Dicamba-Tolerant Crops (July 2025)
    - EPA Announces Proposed Decision to Approve Registration for New Uses of Dicamba, Outlines New Measures to Protect Human Health, Environment (July 2025)
    - Beyond Pesticides Comments (July 2024)
    - Beyond Pesticides Comments (June 2024)
    - Registration of Dicamba for Use on GE Crops
    - Monsanto Petitions for Determinations of Nonregulated Status for Dicamba-Resistant Soybean and Cotton Varieties: Final Environmental Impact Statement (December 2014)
    - EPA Reregistration Eligibility Decision (RED) signed (6/2006)
- Supporting information:
    - Daily News Blog entries (Beyond Pesticides)
    - Asthma, Children and Pesticides (Beyond Pesticides)
    - NCAP Pesticide Factsheet (Northwest Coalition for Alternatives to Pesticides)
    - PAN Pesticides Database:Dicamba (Pesticide Action Network)
    - NPIC Dicamba Factsheet (National Pesticide Information Center)
- Studies [compiled from the Pesticide-Induced Diseases Database]
    - Dicamba drift affects non-target plants and pollinators (Penn State, 2015)
    - Comparison of pesticide levels in carpet dust and self-reported pest treatment practices in four US sites. Colt, Joanne et. al.2004. *Journal of Exposure Analysis and Environmental Epidemiology* 14, 74–83.
    - Do Pesticides Affect Learning Behavior? Porter, Warren. 2004. *Pesticides and You* (Beyond Pesticides).
    - Dicamba use and cancer incidence in the agricultural health study: an updated analysis. Lerro, C.C., Hofmann, J.N., Andreotti, G., Koutros, S., Parks, C.G., Blair, A., Albert, P.S., Lubin, J.H., Sandler, D.P. and Beane Freeman, L.E., 2020. International Journal of Epidemiology.
    - Cancer incidence among pesticide applicators exposed to dicamba in the Agricultural Health Study. Samanic, C., et al. 2006. Environ Health Perspect 114(10):1521-1526.
    - Developmental Toxicity of a Commercial Herbicide Mixture in Mice: I. Effects on Embryo Implantation and Litter Size. Cavieres, M., et al. 2002. Environ Health Perspect 110:1081-1085
    - Amine Volatilization from Herbicide Salts: Implications for Herbicide Formulations and Atmospheric Chemistry. Sharkey, S.M., Hartig, A.M., Dang, A.J., Chatterjee, A., Williams, B.J. and Parker, K.M., 2022. Environmental Science & Technology.
    - Exposure to pesticides and risk of Hodgkin lymphoma in an international consortium of agricultural cohorts (AGRICOH). Kim, J., Leon, M.E., Schinasi, L.H., Baldi, I., Lebailly, P., Freeman, L.E.B., Nordby, K.C., Ferro, G., Monnereau, A., Brouwer, M. and Kjaerheim, K., 2023. Cancer Causes & Control, pp.1-9.
    - Dicamba and 2,4-D in the Urine of Pregnant Women in the Midwest: Comparison of Two Cohorts (2010–2012 vs. 2020–2022). Daggy, J.K. et al. (2024) Dicamba and 2,4-D in the urine of pregnant women in the Midwest: Comparison of two cohorts (2010–2012 vs. 2020–2022), Agrochemicals. Available at: https://www.mdpi.com/2813-3145/3/1/5.
    - Proximity to residential and workplace pesticides application and the risk of progression of Parkinson's diseases in Central California. Li, S. et al. (2022) Proximity to residential and workplace pesticides application and the risk of progression of parkinson’s diseases in Central California, Science of The Total Environment. Available at: https://www.sciencedirect.com/science/article/pii/S0048969722079542.
    - Persistence of triclopyr, dicamba, and picloram in the environment following aerial spraying for control of dense pine invasion. Rolando, C.A. et al. (2023) Persistence of Triclopyr, dicamba, and Picloram in the environment following aerial spraying for control

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Gateway Health and Environmental Effects Citations

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Factsheet generated on May 25, 2026