

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

- of dense pine invasion, *Invasive Plant Science and Management*. Available at: <https://www.cambridge.org/core/journals/invasive-plant-science-and-management/article/persistence-of-triclopyr-dicamba-and-picloram-in-the-environment-following-aerial-spraying-for-control-of-dense-pine-invasion/EC888894C5B7A927AD5E5A3E0C06CD8D>.
- [Impact of Endocrine Disrupting Pesticide Use on Obesity: A Systematic Review](#). Pérez-Bermejo, M. et al. (2024) Impact of Endocrine Disrupting Pesticide Use on Obesity: A Systematic Review, *Biomedicines*. Available at: <https://www.mdpi.com/2227-9059/12/12/2677>.
 - [Beyond the field: How pesticide drift endangers biodiversity](#). Albaseer, S. et al. (2024) Beyond the field: How pesticide drift endangers biodiversity, *Environmental Pollution*. Available at: <https://www.sciencedirect.com/science/article/pii/S0269749124022437>.
 - [Response of Wine Grape Cultivars to Simulated Drift Rates of 2,4-D, Dicamba, and Glyphosate, and 2,4-D or Dicamba Plus Glyphosate](#). Mohseni-Moghadam, M. et al. (2017) Response of Wine Grape Cultivars to Simulated Drift Rates of 2,4-D, Dicamba, and Glyphosate, and 2,4-D or Dicamba Plus Glyphosate, *Weed Technology*. Available at: <https://www.cambridge.org/core/journals/weed-technology/article/response-of-wine-grape-cultivars-to-simulated-drift-rates-of-24d-dicamba-and-glyphosate-and-24d-or-dicamba-plus-glyphosate/1BAD9A48DD98F8896E56C6823A2EE4A4>.
 - [Genotoxicity evaluation of 2,4-D, dicamba and glyphosate alone or in combination with cell reporter assays for DNA damage, oxidative stress and unfolded protein response](#). Mesnage, R. et al. (2021) 'Genotoxicity evaluation of 2,4-D, dicamba and glyphosate alone or in combination with cell reporter assays for DNA damage, oxidative stress and unfolded protein response', *Food and Chemical Toxicology*, 157, p. 112601. doi:10.1016/j.fct.2021.112601.
 - [Toxic and histopathological effects induced by exposure to the pesticide dicamba in carp *Cyprinus carpio* L.](#) Korkmaz, N. Toxic and histopathological effects induced by exposure to the pesticide dicamba in carp *Cyprinus carpio* L. *Environ Sci Pollut Res* 31, 65790–65803 (2024). <https://doi.org/10.1007/s11356-024-35674-9>
 - [Exploring the Joint Association Between Agrichemical Mixtures and Pediatric Cancer](#). Taiba, J. et al. (2025) Exploring the Joint Association Between Agrichemical Mixtures and Pediatric Cancer, *GeoHealth*. Available at: <https://agupubs.onlinelibrary.wiley.com/doi/10.1029/2024GH001236>.
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 - [Investigations of the Sensitivity of Ornamental, Fruit, and Nut Plant Species to Driftable Rates of 2,4-D and Dicamba](#). Dintelmann, Brian & Warmund, Michele & Bish, Mandy & Bradley, Kevin. (2019). Investigations of the Sensitivity of Ornamental, Fruit, and Nut Plant Species to Driftable Rates of 2,4-D and Dicamba. *Weed Technology*. 34. 1-35. 10.1017/wet.2019.118.
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Gateway Health and Environmental Effects Citations

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2. Cantor, K.P. 1992. Pesticides and other agricultural risk factors for non-Hodgkin's lymphoma among men in Iowa and Minnesota. *Cancer Res.* 52:2447-2455.

<https://cancerres.aacrjournals.org/content/canres/52/9/2447.full.pdf>

3. Northwest Coalition for Alternatives to Pesticides (NCAP), Pesticide Factsheets.

<http://www.pesticide.org/pesticide-factsheets>.

4. Extension Toxicology Network (EXTOXNET) Pesticide Information Profiles.

<http://extoxnet.orst.edu/pips/ghindex.html>

5. US EPA, 2000. Table 1: Toxicity Data by Category for Chemicals Listed under EPCRA Section 313. Toxic Release Inventory (TRI) Program.

https://www.epa.gov/sites/production/files/documents/hazard_categories.pdf

6. Beyond Pesticides ChemWatch Factsheets. (Cited under factsheets on [Beyond Pesticides Gateway](#); see top of individual chemical page)

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