

10 Things You Should Know About Glyphosate

1. Glyphosate, patented in 1971, is the most popular pesticide in the world. Almost 300 million pounds are used annually worldwide. Glyphosate, marketed by Monsanto as Roundup, was approved for use as a registered nonselective herbicide in 1974. It has been used and researched for almost 50 years.
2. Glyphosate acts as a competitive inhibitor of EPSP synthase in the shikimic acid pathway. This biochemical pathway is found in plants and some microorganisms. Glyphosate prevents the production of phenylalanine, tyrosine and tryptophan. This causes plants to starve in four to 20 days.
3. Glyphosate is quickly and tightly bound by clay and organic matter in soil. There is little glyphosate runoff in surface water, and what does occur is quickly bound by organic matter in the water.
4. Excess glyphosate in soil and water is degraded by naturally occurring microorganisms to glycine, phosphate and carbon dioxide (CO₂).
5. Exposure to pesticides can occur through inhalation, ingestion and through the skin. Glyphosate is nonvolatile, which significantly reduces the exposure potential through inhalation. Ingestion is the primary route of entry into humans. One-third of ingested glyphosate is absorbed through the digestive tract, and the rest is excreted immediately. With dermal exposure only about 2% of glyphosate is absorbed by the skin.
6. No scientific studies to date have shown a direct causation between glyphosate and any types of cancer.
7. The International Agency for Research on Cancer (IARC) gave glyphosate a 2A categorization as “probably carcinogenic to humans” in 2015. Other material and activities classified as 2A “probable carcinogens” are indoor wood-burning fireplaces, drinking hot beverages, high-temperature frying, occupations such as barbers, and working a late-night “third shift.”
8. Subsequent to the IARC’s 2015 categorization, additional research and data analysis results have resulted in no pesticide regulatory authority in the world currently considering glyphosate to be a cancer risk to humans when used and applied according to label recommendations.
9. Glyphosate residue levels detected in food are far below the tolerance levels established by the Environmental Protection Agency (EPA). The EPA levels are several orders of magnitude below the lowest level at which research has been able to show any detectable effect.
10. The EPA will no longer approve product labels claiming glyphosate is known to cause cancer. This is considered a false claim that does not meet the labeling requirements of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA). In April 2019, the EPA found — as it has before — that glyphosate is not a carcinogen, and there are no risks to public health when glyphosate is used in accordance with its current label.



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