Frequently Asked Questions: Glyphosate

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What is glyphosate?

Glyphosate is an herbicide found in many commercial and residential products used for weed management, the most well-known being Roundup. It controls weeds by inhibiting a biological process only found in plants.

Does glyphosate increase cancer risk in humans?

There are presently no published scientific studies that directly link glyphosate use to cancer development in humans. To that end, the United States Environmental Protection Agency (EPA) released a report in December 2017 concluding that glyphosate was not carcinogenic to humans: www.epa.gov/pesticides/epa-releases-draft-risk-assessments-glyphosate. They reaffirmed this finding in April 2019, a conclusion that is consistent with other regulatory agencies worldwide (www.epa.gov/newsreleases/epa-takes-next-step-review-process-herbicide-glyphosate-reaffirms-no-risk-public-health).

A 2015 report from the International Agency for Research on Cancer (IARC) classified glyphosate as a "probable human carcinogen." Also on that list are many other items including:

- Red meat
- Indoor emissions from burning wood
- High-temperature frying
- Late-night work shifts

In addition to these items classified as "probable human carcinogens," the IARC listed the following as "known human carcinogens:"

- Processed meat
- All alcoholic beverages
- Sunlight
- Engine exhaust
- Outdoor air pollution

A complete copy of the IARC report on "probable" and "known" human carcinogens is available at monographs.iarc.fr/list-of-classifications-volumes.

Does UT Extension recommend glyphosate?

UT Extension recommends glyphosate in accordance with federal and state regulations. The EPA and Tennessee Department of Agriculture have registered glyphosate for weed management in Tennessee. This registration is based upon a rigorous review of scientific experiments conducted to establish product safety. All pesticides, including glyphosate, are regularly reviewed by the EPA using modern methods to ensure continued safety to end-users. All UT Extension recommendations are based upon sound science and the regulatory process.

How can glyphosate be used safely?

All pesticides, including glyphosate, should be used according to label directions. Labels provide specific application directions that must be followed to ensure proper product use. Additionally, labels require users to wear appropriate personal protective equipment (PPE) such as long pants, shirts, gloves, etc.

Where can more information on glyphosate be found?

A thorough summary of all published studies exploring glyphosate safety to humans is available at plantoutofplace.com/2018/08/glyphosate-and-cancer-revisited.

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