

The *Benefits* and *Safety* of *Glyphosate*



// Agricultural Benefits

Glyphosate-based formulations help control weeds which steal water, sunlight and nutrients from healthy plants.

- // Combining glyphosate with crops that are tolerant to this herbicide has transformed agriculture.
- // An average soybean farmer with just over 500 acres reduces labor requirements by 14.5% by adopting herbicide-tolerant soybeans. This equals 94.5 hours of labor per growing season.
- // Consistent with that observation, USDA found that adoption of glyphosate-tolerant soybeans resulted in increased off-farm household income.
- // It is also known that adoption of glyphosate-tolerant soybean has a positive influence on the adoption of conservation tillage practices.

// Pesticides

Bayer
bit.ly/2QcXjcN

// How Much Glyphosate Do Farmers Use?

Brian Scott
bit.ly/1WuX3qH

// Crop Protection

CropLife International
bit.ly/2xVxmqN



// Safety

Glyphosate is one of the most commonly-used weed killers because of its safety profile.

- // Glyphosate works by targeting an enzyme that is essential to plant growth.
- // When it comes to safety assessments, glyphosate is one of the most extensively evaluated crop protection products on the market. In evaluations spanning four decades, the overwhelming conclusion of experts worldwide, including the EPA, has been that glyphosate can be used safely according to label instructions.
- // Glyphosate exhibits low toxicity to humans and non-plant wildlife over both short- and long-term exposures.
- // In the environment, glyphosate binds tightly to soil, degrades over time and does not accumulate in the food chain.

// Crop Protection Safety Summaries

Bayer
monsanto.info/2DFPuen

// Get the Facts - Glyphosate and Roundup® Brand Herbicides

Bayer
bit.ly/2zCM743



// Land Management

Park and land managers use glyphosate-based formulations to keep weeds off of roadsides and railways, control invasive weeds, restore habitat for animals, and make recreational areas more functional.

// Farming With and Without Glyphosate

Bayer
bit.ly/2HXHdE2

// Superweeds

Bayer
bit.ly/2ObRjUz

- // Glyphosate is used in the Saguaro National Park in Arizona to control invasive Buffelgrass which is problematic to the native ecosystem. Glyphosate was chosen because of its effectiveness and its low risk to wildlife.
- // Mary's Peak Resource Area in Oregon identified glyphosate as the only acceptable herbicide for their use against noxious weeds. Glyphosate is known to degrade rapidly and not leave soil residues. These attributes have made it popular for prairie restoration.
- // Kudzu, an invasive plant, smothers other plants and also hosts a pest, kudzu bug, which causes damage to soybean crops. Glyphosate is one of the most practical methods to control kudzu because it is cost-effective and easy to use.



// Garden/Home Use

Glyphosate-based formulations control weeds in your garden and around your home.

// Are Roundup® Weed and Grass Killers Safe?

Bayer
bit.ly/2zz392l

// What is Glyphosate?

Bayer
bit.ly/2XO3cBW

- // Homeowners encounter weeds just like farmers, only on a smaller scale. Weeds can take root and grow in gardens, yards and driveway and sidewalk cracks.
- // Just like with the approved uses on a label for glyphosate for farmers, glyphosate products for use in lawns and gardens also have a recommended use rate to help consumers use the product precisely.

Homeowners use weed killers to:

- // Kill plants like poison ivy and poison oak, eliminating the need to handle these noxious weeds.
- // Kill weeds down to the root, ensuring they won't grow back.