

## Understanding Sulfonylurea Soybean Technology

- Sulfonylurea herbicides kill a wide array of broadleaf weeds and grasses. Sulfonylurea Ready (SR) soybean products have enhanced tolerance to the sulfonylurea family of ALS inhibitor herbicides through a proprietary trait.
- Soybean products stacked with SR offer flexible planting options in fields previously sprayed with sulfonylurea herbicides.
- Genuity® Roundup Ready 2 Yield® soybean products stacked with SR can provide broader weed control by applying herbicides with multiple sites of action.

### Tolerance To Sulfonylurea Herbicides

Soybeans have some natural tolerance to sulfonylurea herbicides; however, significant crop stunting and injury can occur. Sulfonylurea herbicides function by inhibiting the acetolactate synthase (ALS) enzyme in susceptible plants. This enzyme is important in producing necessary proteins for a plant's development and growth. Weeds sprayed with this family of herbicides essentially starve to death as they can no longer produce proteins required for new growth.

Soybean products with the SR (Sulfonylurea Ready) designation contain a proprietary trait enhancing the soybean plant's natural tolerance to the sulfonylurea family of ALS inhibitor herbicides. Soybean products with the SR trait can withstand application of higher rates of sulfonylureas without slowing down crop development and growth.

### Broader Weed Control Option

SR soybean products have an increased tolerance to sulfonylurea herbicides sprayed at various times, both when applied postemergence as well as to residual herbicide carryover that may remain from a previous crop. When SR is paired with another herbicide tolerance trait, such as Genuity® Roundup Ready 2 Yield®, weed control can be further enhanced by providing an additional herbicide option and multiple sites of actions.

### Flexibility For Double Crop Soybeans

Double crop situations where soybeans follow wheat can particularly benefit from use of soybean products with SR technology as residual sulfonylurea herbicides are often used to control weeds in wheat. Due to the shortened growing season for double crop soybeans, it is essential to avoid herbicide injury as plants have less time to recover. ALS herbicides remain active in the soil, where they are gradually degraded by microbial activity and uptake by plants. Unfavorable weather conditions may lengthen degradation time and lead to potential injury to the following crop. Planting a soybean crop capable of tolerating the residual effects of wheat sulfonylurea herbicides allows for a much shorter plant back time after wheat harvest.

### Product Selection

Soybean products with the SR trait are available in a range of maturity groups. The SR designation may be found in the product name or in the product description. For more information on SR products and specific sulfonylurea herbicides, please contact your local seed representative and refer to product labels. Always read and follow pesticide label directions.

### Sources

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**For additional agronomic information, please contact your local seed representative. Developed in partnership with Technology Development & Agronomy by Monsanto.**

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