



STINE SEED COMPANY

STINESEED.COM

STINE® GT27™ & LIBERTYLINK® GT27™ SOYBEANS

Stine® is uniquely positioned to provide the latest innovative products on the market, giving growers new choices for weed management, including our own lineup of GT27™ and LibertyLink® GT27™ soybeans.

Stine® GT27™ brand soybeans combine ultra-high-yielding, elite soybean genetics with a new form of glyphosate tolerance for soybeans and HPPD/Group 27 herbicide tolerance that is fully approved in all markets.

Stine® LibertyLink® GT27™ brand soybeans add the additional benefit of LibertyLink® technology, making it the first soybean trait to market with tolerance to both glyphosate and glufosinate built-in.

DO YOU HAVE HPPD/GROUP 27 CARRYOVER?

Because of their overall effectiveness, HPPD herbicides have become a staple in the U.S. corn market. It is estimated that as many as three-fourths of U.S. corn acres have HPPD/Group 27-based chemistries applied to them.*

One characteristic of HPPD/Group 27 chemistries is they provide outstanding residual control, meaning that the active ingredients remain active in the soil for a period of time after application. But how long this chemistry remains active depends on several variables. Under certain conditions, HPPD/Group 27-based chemistries may remain active even into the next growing season. "HPPD carryover" — the amount of HPPD/Group 27 chemistry that remains active in the soil into the next growing season — can be a concern to soybean growers because most soybeans are susceptible to HPPD/Group 27 chemistry.

The problem is, this condition is very hard to identify. Some years may be worse than others due to variables such as weather, temperatures, soil conditions and more. Because Stine® GT27™ soybeans include built-in tolerance to HPPD/Group 27-based herbicides, soybeans containing this trait can provide soybean growers with an additional measure of protection against HPPD/Group 27 carryover.













PROVEN GENETICS

Results from Iowa State University's 2017 Soybean Yield Trials demonstrate the powerful performance of sovbeans containing the GT27™ trait. In the multi-location test conducted in lowa in 2017, GT27™ soybeans averaged 1.5 bushels per acre more than Asgrow® Roundup Ready 2 Xtend® soybeans***. That means that planting Stine® GT27™ soybeans can provide an advantage of up to \$15 per acre versus Asgrow Roundup Ready 2 Xtend soybeans.

| THE SA | AFE AND | EASY | WAY | TO |
|-------------|---------|------|-----|-----------|
| GROW | SOYBE# | NS | | |

Now more than ever, growers need soybean

| | LINES EVALUATED | PLOTS | AVERAGE YIELD |
|------------------|-----------------|---|---------------|
| NORTH DISTRICT | | | |
| GT27™ | 3 | 60 | 59.6 |
| Asgrow RR2 Xtend | 6 | 120 | 57.8 |
| CENTRAL DISTRICT | | | |
| GT27™ | 8 | 160 | 60.5 |
| Asgrow RR2 Xtend | 7 | 140 | 59.1 |
| SOUTH DISTRICT | | | |
| GT27™ | 8 | 160 | 60.6 |
| Asgrow RR2 Xtend | 6 | 120 | 59.3 |
| | | | |
| TOTALS | 38 | 760 | |
| | | GT27 [™] Overall Average Yield | 60.2 |
| | | Asgrow RR2 Xtend Overall Average Yield | 58.7 |

weed control solutions that work. Although Roundup Ready 2 Xtend soybeans include dicamba as an additional option, the risks associated with large-scale dicamba use in soybeans has many growers opting not to utilize this option. In fact, a significant number of growers that are growing Roundup Ready 2 Xtend soybeans in 2018 will not spray dicamba because of concerns around drift and/or volatility. In these cases, the Roundup Ready 2 Xtend system has no advantage, as using these soybeans in a glyphosate-based herbicide program (no dicamba) means that growers essentially pay for a trait they do not utilize.

Moreover, growers who choose to grow RR2 Xtend soybeans may be subject to higher scrutiny should dicamba-related issues arise this summer.

Stine® GT27™ soybeans provide a safe and effective alternative because they fit into a grower's operation just like other glyphosate-based programs, and can be paired with other pre- and post-herbicide products to build an effective weed control program in most geographies.

LIBERTYLINK® GT27™ — THE NEXT LEVEL IN PERFORMANCE

And now, Stine® is positioned to offer growers the next evolution of the GT27™ platform — Stine® LibertyLink® GT27™ soybeans. This triple-stacked herbicide-tolerant soybean offers exceptional yield potential coupled with tolerance to three unique sites of action — glyphosate, Liberty® and a new HPPD/Group 27 mode of action for soybeans**, pending EPA approval. The LibertyLink® GT27™ trait represents the first commercially available soybean trait package that offers both glyphosate and glufosinate tolerance, which means that growers who plant Stine® LibertyLink® GT27™ soybeans will benefit from outstanding weed control and unparalleled flexibility in weed management programs.

For 2019, Stine has 70 unique lines of Stine® GT27™ and LibertyLink® GT27™ brand soybeans to choose from. Talk to your local Stine sales rep for more information about this innovative new soybean system. Stine also has an excellent lineup of Roundup Ready 2 Xtend soybeans, offering growers options that fit the way that they want to farm.

^{*}Source: UPI market data

^{**}LibertyLink® GT27[™] is not tolerant to all HPPD/Group 27 herbicides. HPPD herbicides currently on the market are not for use with LibertyLink® GT27[™] soybeans and may result in significant crop injury.

^{***}Results are comprised from 760 total plot entries and account for every entry at every location that was entered.