

Post-Patent Roundup Ready® Soybeans



The original Roundup Ready® (“Roundup Ready 1”) soybeans biotech trait patents have expired, and U.S. farmers are still seeking information about changes to the kinds of seeds they can legally plant and save. For more information, visit soybeans.com.

Below are some common questions farmers are asking about patents, new varieties and traits, saved seed and what happens next.

Is Roundup Ready seed covered by other forms of intellectual property?

Although the Roundup Ready soybean biotech trait is now off patent, most Roundup Ready seed in the United States are still likely to be covered by other forms of intellectual property, including variety patents and plant variety protection certificates that plant breeders file when they develop a new variety (“breeder’s rights”).

What’s the difference between a trait patent and a varietal patent?

A trait patent is a patent on a particular biotech trait, such as tolerance to glyphosate that can be present in many different soybean varieties. A varietal patent is a patent on a particular variety of bean.

A patented variety of soybean might contain several different patented traits, or none at all. A Roundup Ready soybean was covered by at least two separate patents in the United States — a trait patent for the trait that makes the plant glyphosate-tolerant, and a varietal patent for the variety that the breeder created, which contains the trait. Whether it is a trait patent or a variety patent, while a patent is still in place, a breeder, seed company or farmer that wants to use a seed variety that contains the inventions needs a license from the patent holder.

Are Genuity® Roundup Ready 2 Yield® Soybeans covered by different patents?

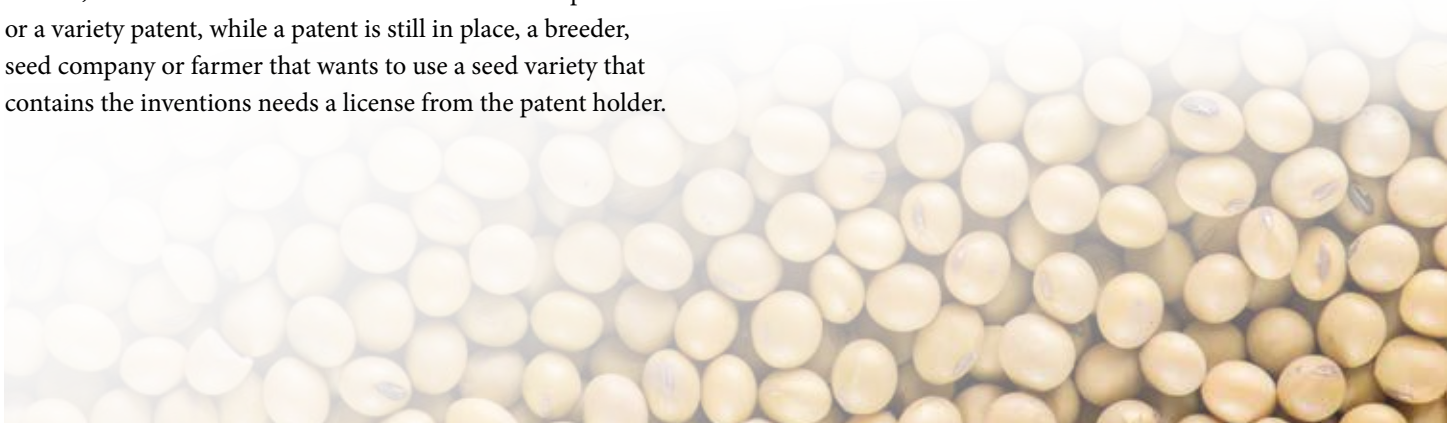
Yes. Genuity® Roundup Ready 2 Yield® Soybeans are covered by different patents than original Roundup Ready soybeans. Because Genuity Roundup Ready 2 Yield provides higher yield opportunity for growers, it will serve as the platform for future technologies as well. Roundup Ready 2 Xtend™ soybeans, for example, will allow farmers to extend their application flexibility of dicamba to before, at and after planting, while retaining the glyphosate resistance technology farmers currently have today.*

Can a farmer legally save and plant Roundup Ready soybeans?

2015 marked the first opportunity that U.S. farmers could legally plant some varieties of Roundup Ready soybeans saved from their 2014 harvest. Ask your seed supplier if your original Roundup Ready seed variety is protected by any other patents. If a variety is still covered by a variety patent, you will not be able to save and plant the seed from those varieties without a license giving you that added right. The right to plant originally purchased seed normally does not include the right to plant seed saved from the harvest. That’s why it is critical to check with your seed supplier regarding the policy for saving seed varieties with the Roundup Ready trait that were developed by other companies.

If a farmer receives a license to legally save seed, what can they do with that harvest?

The harvest can be sold as grain, consumed on the farm, or saved and planted in fields owned or operated by that farmer. The harvest cannot be sold or transferred as planting seed to another farmer.



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How much first-generation Roundup Ready® soybeans are currently in the marketplace?

We do not have an estimate of how much first-generation Roundup Ready® soybeans are in the marketplace.

Monsanto developed Genuity® Roundup Ready 2 Yield® trait technology to deliver more yield and profit potential to farmers, and growers have overwhelmingly chosen to plant soybeans containing the Genuity Roundup Ready 2 Yield trait. Our brands and most of our licensees will not be selling any first-generation Roundup Ready varieties this year, although we expect a handful of licensees may offer savable Roundup Ready varieties. Harvest data from the 2015 season showed a greater than 4 bu/a advantage of RR2Y over first-generation RR for the fourth consecutive year.

Will a farmer be able to purchase any soybean seed in 2016 and beyond that contains the original Roundup Ready trait?

Ultimately, it is up to each seed company to determine if it will offer Roundup Ready seed. Monsanto seed brands will not have any Roundup Ready soybeans in their lineups. We expect some seed companies will offer Roundup Ready varieties in 2016. It's important to keep in mind, however, that even though the Roundup Ready patent will have expired, chances are that seeds with the Roundup Ready trait will have other patents on them.

Can a farmer take original Roundup Ready seed harvested from his farm and give it to a neighbor to plant?

A farmer that saved approved varieties of Roundup Ready seed from his 2014 harvest can only plant it on his own farm. Legally, it cannot be shared with or sold to neighbors.

Can a farmer save and plant Genuity® Roundup Ready 2 Yield® Soybeans?

No. Genuity Roundup Ready 2 Yield Soybeans are protected under a different patent and will remain so until near the end of the next decade.

Can Monsanto tell the difference between original Roundup Ready soybeans and Genuity Roundup Ready 2 Yield Soybeans?

Monsanto has always had the capability to distinguish original Roundup Ready soybeans from Genuity Roundup Ready 2 Yield through DNA analysis.

Will Monsanto pursue anyone found illegally saving Genuity Roundup Ready 2 Yield seed?

Developing new seeds requires significant investments. Laws protect patents on technological inventions, including seeds innovations in order to encourage these sorts of investments. While it is important to us to protect our investment, it is also important to the entire agricultural community that we be able to continue to reinvest in new and better seed technology. Farmers who buy and plant seeds containing biotechnology agree to a single planting of those seeds and to purchase new seeds the following season. This is an industry standard. The vast majority of our customers abide by this agreement, but a few do not, which gives them an unfair advantage over other farmers. As a matter of routine, if we do find a farmer is saving seed illegally, we make every effort to resolve the matter in a timely way that respects the confidentiality of the farmer.

Monsanto receives hundreds of calls and letters nationwide each year about potential seed compliance matters. Anyone with concerns or questions can anonymously call 1-800-768-6387, option 2.



You're buying more than just seed. You're getting value today and innovation for tomorrow.

COMMITMENT. INNOVATION. PERFORMANCE.

For more information about seed technology, visit ASTA's **Beyond the Seed Program** at beyondtheseed.org. ASTA, as a trade industry association, does not endorse products, services or technology of individual companies.

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ALWAYS READ AND FOLLOW PESTICIDE LABEL DIRECTIONS. Roundup Ready® crops contain genes that confer tolerance to glyphosate, the active ingredient in Roundup® brand agricultural herbicides. Roundup® brand agricultural herbicides will kill crops that are not tolerant to glyphosate. Genuity®, Roundup Ready 2 Yield®, Roundup Ready®, Roundup Ready 2 Xtend™ and Roundup® are registered trademarks of Monsanto Technology LLC. Monsanto and Vine Design® are registered trademarks of Monsanto Technology LLC. ©2016 Monsanto Company. [00564pgd] 5A5A163211