

Do not export Genuity® Roundup Ready® Alfalfa seed or crop, including hay or hay products, to China pending import approval. In addition, due to the unique cropping practices do not plant Genuity® Roundup Ready® Alfalfa in Imperial County, California, pending import approvals and until Monsanto grants express permission for such planting.

At this time, **Vistive® Gold soybeans** have received full approval for planting in the United States but have not yet received import approval in certain export markets. While certain export approvals are pending, **Vistive® Gold soybeans** will be available in limited geographies only to growers who have signed a 2016 Vistive® Gold Soybean Grain Production Grower Agreement and agree to follow the stewardship requirements. Upon receipt of appropriate approvals, Monsanto will inform growers and determine whether the stewardship requirements will need to remain in place.

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B.t. products may not yet be registered in all states. Check with your Monsanto representative for the registration status in your state.

IMPORTANT IRM INFORMATION: Genuity® RIB Complete® corn blend products do not require the planting of a structured refuge **except** in the Cotton-Growing Area where corn earworm is a significant pest. **See the IRM/Grower Guide for additional information. Always read and follow IRM requirements.**

For more information regarding intellectual property protection for the seed products identified in this publication, please see www.asgrowanddekalb.com.

Individual results may vary, and performance may vary from location to location and from year to year. This result may not be an indicator of results you may obtain as local growing, soil and weather conditions may vary. Growers should evaluate data from multiple locations and years whenever possible.

ALWAYS READ AND FOLLOW PESTICIDE LABEL DIRECTIONS. Roundup Ready® crops contain genes that confer tolerance to glyphosate, the active ingredient in Roundup® brand glyphosate-only agricultural herbicides. Roundup® brand glyphosate-only agricultural herbicides will kill crops that are not tolerant to glyphosate. **Tank mixtures:** The applicable labeling for each product must be in the possession of the user at the time of application. Follow applicable use instructions, including application rates, precautions and restrictions of each product used in the tank mixture. Monsanto has not tested all tank mix product formulations for compatibility or performance other than specifically listed by brand name. Always predetermine the compatibility of tank mixtures by mixing small proportional quantities in advance. Acceleron and Design®, Asgrow and the A Design®, Asgrow®, Bollgard and Design®, Bollgard II and Design®, DEKALB and Design®, DEKALB®, DroughtGard®, Genuity Design®, Genuity Icons, Genuity®, Respect the Refuge and Cotton Design®, RIB Complete and Design®, RIB Complete®, Roundup Ready 2 Technology and Design®, Roundup Ready 2 Yield®, Roundup Ready PLUS®, Roundup Ready®, Roundup®, SmartStax®, Vistive®, VT Double PRO® and VT Triple PRO® are trademarks of Monsanto Technology LLC. Deltapine® is a registered trademark of Monsanto Company. Channel® and the Arrow Design® and Seedsmanship At Work® are registered trademarks of Channel Bio, LLC. LibertyLink and the Water Droplet Design® is a registered trademark of Bayer. Herculex® is a registered trademark of Dow AgroSciences LLC. Respect the Refuge and Corn Design® is a registered trademark of National Corn Growers Association. All other trademarks are the property of their respective owners. ©2015 Monsanto Company. R1

Before opening a bag of seed, be sure to read, understand and accept the stewardship requirements, including applicable refuge requirements for insect resistance management, for the biotechnology traits expressed in the seed as set forth in the Monsanto Technology/Stewardship Agreement that you sign. By opening and using a bag of seed, you are reaffirming your obligation to comply with the most recent stewardship requirements.



Overseeding cover crops

BY ANN STAUDT AND LIZ JUCHEMS

Editor's note: This is the first in a four-part series highlighting different cover crop seeding techniques. Next month: broadcast application.

AS cover crops continue to grow in popularity, there are many questions to consider when first getting started. One of the most common questions we hear at Iowa Learning Farms field days and workshops is: "How do you plant the cover crop?"

A variety of cover crop seeding techniques is out there, including overseeding, broadcast seeding, aerial seeding and drilling. ILF and the Iowa Cover Crop Working Group (ICCWG) have cover crop research projects using various seeding methods and will be highlighting four of these methods in a cover crop seeding techniques series.

First up: Overseeding

In Iowa, one of the biggest challenges cover crop users mention is timing. Our window of time for fall cover crop growth is limited, particularly if the cover crop is seeded postharvest. The overseeding technique — seeding the winter cover crop into a standing grain crop — extends that window, allowing for earlier seeding, germination and growth (provided there is adequate precipitation and soil moisture to get started).

During the last week of August, three cover crop demonstration sites were established in north-central Iowa with a high-clearance seeder. The project's



HIGH CLEARANCE: The high-clearance interseeder is prepped and ready to plant cover crops at the Iowa State University Northern Research and Demonstration Farm near Kanawha in August.

goal is to evaluate cover crop mixtures and single-species establishment using different seeding techniques, including overseeding. The work was done in partnership with Hagie Manufacturing of Clarion, using its Cover Crop Interseeder developed in 2013, which converts its high-clearance sprayer to a seeder.

With the seeder kit equipped, individual drop tubes can be attached to drop the seeds directly in the inter-rows while driving through the field, even through standing corn. The cover crop seed is loaded in a Gandy dry box to hold and move the cover crop seed through the boom system.

The boom on the high-clearance seeder can be adjusted to different heights to accommodate the height of the cash crop. The demo plots were seeded at two different heights for comparison. One set of plots was overseeded below the canopy with drop tubes, while other plots were seeded above the canopy with no drop tubes. In the fall, a third seeding technique, postharvest drilling, was completed.



VIEW FROM THE TOP: Here's a look out across the field with the cab of the interseeder and the seed hopper (loaded with cereal rye) in the immediate foreground.



TALL CORN: Cover crops are overseeded into standing corn just outside Clarion in August. Cover crop seed travels down through the drop tubes shown here and is dropped below the canopy of the standing corn.

Stay tuned, more to come

These demonstrations are part of the Natural Resources Conservation Service's Conservation Innovation Grant, titled "Evaluating Planting Techniques for the Successful Establishment of Cover Crop Mixtures and Single Species in Iowa."

This was the second year of seeding at these sites; the mixture seeding into standing corn included cereal rye, rapeseed and radish, while the single species was rye.

The first year, seeding into standing soybeans, included a mixture of oats, hairy vetch, radish and a single species of oats. Fall and spring cover crop biomass are being collected, as well as crop yields, to evaluate the different seeding techniques in a corn and soybean rotation.

Visit ILF's Cover Crop Resources page at extension.iastate.edu/ilf/content/cover-crop-resources to learn more about ICCWG, ongoing cover crop demonstration projects and cover crop information resources.

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