

# Cover Crop Corner

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## Don't Panic. There's Still Time to get a Fall Cover Crop In

By Brent Jones, Sales and Iowa Research Farm Manager for Grassland Oregon

*Cereal rye is a good go-to late season cover crop. Here's what you need to know about getting it established*

If you're a corn or soybean producer in the Midwest, chances are you're feeling the hangover from last spring's planting conditions that have led to a significant lag in crop maturity. With rumblings about an early frost and cold snap for this area of the country and into parts of the Great Plains, there's been increasing concern from producers worried about getting a cover crop in this fall.



A combination the ability to germinate in in temperatures as low as 34 degrees Fahrenheit and rapid growth makes cereal rye a good late season cover crop.

### **Don't panic. There's still time.**

First things first, pay little regard to the date on the calendar and instead listen to the weatherman. It doesn't matter if you're a livestock or crop producer, or what the season has been like, this is generally a good practice to follow. However, in this case, you want to establish your cover crop while moisture is present in the top 1 inch of soil, or no more than 10 days before predicted precipitation.

At this stage in the game, cereal rye is a good option for producers wanting to establish a nutrient scavenging spring biomass that sequesters nitrogen and suppresses weeds. With the ability to germinate in temperatures as low as 34 degrees Fahrenheit, it is hardy, fast establishing and can grow in most soil types.

If post-harvest conditions allow, the most cost-efficient way to establish cereal rye is to drill it at a rate of 1 bushel per acre. However, for those in areas that are going to have standing cash crops for a while longer, non-traditional seeding methods can be utilized to give cereal rye a head start before harvest is finished.

One of the best ways to establish in a standing cash crop will be with a high clearance air seeder. Seeding rates need to be dialled up by 50%. Keep in mind, this method can cause damage to the existing crop and requires dry field conditions.

For more flexibility, aerial seeding with a plane or helicopter is an option. This is going to require a significant bump in seeding rates to at least 100 lbs per acre to get decent establishment, which is at risk of being spotty. Pilots need to drop seed from 50 to 60 feet above the canopy, which can cause issues with drift into neighboring fields if conditions aren't right. While there is no research showing which has more even establishment, there is speculation that the pressure from helicopter blades does a better job at pushing seed through the canopy.



Erik Fisher of Eaton, Ind., loads an aircraft from SEI Aviation with cereal rye at Muncie Airport. Aerial seeding provides producers with a flexible option to establish a cover crop in standing cash crop. (Image courtesy of Erik Fisher of Eaton, Ind.)

### Take note in seed selection

Regardless of the type of establishment method that is most suitable for your situation, it is essential that seed be selected for quality to avoid unintentionally introducing a problem to your farm. The Indiana State Seed Lab has reported an increase in locally grown cereal rye samples this year, with germination rates averaging in the low 60% range and majority being contaminated with weeds.

Variety selection is equally as important if you want to ensure your cereal rye cover crop has been bred for particular trait performance. For example, cereal rye is known to suppress weeds. In a study analyzing the allelochemical concentration of cereal rye, researchers found a 1000% difference in levels between the top and bottom performing varieties (see chart).

If this season is getting away from you or you don't have a plan to give fields a winter cover, there is still time to get a cover crop in the ground. This is essential to scavenge any available nutrients in the soil and to lock it into place until spring for the subsequent cash crop.

If you have any questions about which cover crop options will work best for your geography and unique challenges, give Grassland Oregon a call at 503-566 9900.

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DIBOA suppresses growth of plants, insects, and fungi.

With more than 1000% difference (>10X) between varieties, it's important to know what you're planting.

Rye cultivar	Cereal rye shoot biomass and allelochemical concentration	
	Field study shoot biomass g m <sup>-2</sup>	DIBOA Total allelochemical ug g <sup>-1</sup>
Aroostok	589	367
Bates	820	167
Bonel	557	1,240
Elbon	741	299
Maron	820	329
Oklon	618	132
Pastar	422	112
Wintercross	688	205
LSD (0.05)	21	115

Burton et al. 1993. Weed Sci 47: 461-469