

Cereal rye is the workhorse small grain cover crop in the many parts of the U.S. It grows well in the Blacklands, but may not put on as much biomass within the typical growing season on alkaline clay soils as oats. In no-till systems, it is excellent for summer weed suppression.

Recommended Varieties

Variety	Reasons Why	Source
Elbon, Maton	Both are adapted to conditions east of I35 and available regionally	Farmer recommendations/ regional seed suppliers

Planting Information

Information	Comments	Source
Drilled Seed Depth (Inches)	1-1.5"	
Drilled Seeding Rate (lbs/acre)	70 (varies)	Higher rate may be needed in conservation tillage systems for sufficient biomass to suppress weeds in following cash crop
Broadcast Seeding Rate (lbs/acre)	100 (varies)	Broadcasting before cotton defoliation has also worked for many farmers.

Termination Information

Information	Source
<p>Cereal rye can be terminated by mowing, rolling & crimping, herbicides*, tillage, high density grazing and combinations of these practices.</p> <p>Termination timing depends on goals. For weed suppression, cereal rye should be terminated at milk to soft dough stage. To reduce potential nitrogen immobilization, cereal rye should be terminated before flowering (anthesis).</p> <p>When planting cash crop into cereal rye residue, wait three weeks after termination so that the residue is dry and crispy. Some farmers plant into green cereal rye. This may increase risk of cut worm damage.</p> <p>*Always follow herbicide labels for crop to be terminated and for compatibility with subsequent crop(s). Consult your local Extension and state Pest Management Handbook for herbicide recommendations.</p>	USDA Cereal Rye Plant Guide

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Cultural Traits

Traits		Comments	Source
Typical Dry Matter Range (lbs/acre)	3,000 – 8,000		Managing Cover Crops Profitably modified by research data from Coastal Plain
Typical Total N Range (lbs/acre)	25 to 50	Total N in cereal rye aboveground biomass is due to N scavenging. The entire amount is not available during following growing season. Early termination may provide a small amount of N to following cash crop. Late termination can cause N immobilization due to high C:N ratio.	Managing Cover Crops Profitably
Life Cycle	Cool season annual grain		Managing Cover Crops Profitably
Growth Habit	Upright		Managing Cover Crops Profitably
Preferred Soil pH	5.8 – 7.8	Cereal rye is more tolerant of acidic soils than oats or wheat	Managing Cover Crops Profitably; Georgia Forages:Rye
Relative Costs	\$\$		Managing Cover Crops Profitably
Min. Germination Temp	34F	Cereal rye is best choice for late planting.	Managing Cover Crops Profitably; Georgia Forages: Rye
Cautions		High biomass can cause temporary nitrogen immobilization (loss of fertilizer N). Add 20-30% of total N recommendation to overcome	

Sources:

USDA Cereal Rye Plant Guide

https://plants.usda.gov/factsheet/pdf/fs_sece.pdf

Managing Cover Crops Profitably

<https://www.sare.org/Learning-Center/Books/Managing-Cover-Crops-Profitably-3rd-Edition>

Personal Communications Interviews with Blackland Farmers and Seed Suppliers.