

Secale cereale



COVER CROP DESCRIPTION

Best choice for poor/acid soils. Tolerates wet soil. Spring cereal rye germplasm does not require vernalization (overwintering) to flower and may be less winter-hardy than winter cereal rye if planted in the fall. Good cover crop for many purposes: excellent for biomass, N scavenging, weed control. Good forage, but low quality after heading. Best choice for roller-crimping. Height, biomass, high C:N ratio at maturity may hinder a following non-legume cash crop. Potential weed if it sets seed, especially in small grain cash crops. Mixes well with legumes.



Cereal Rye, Spring - Ackroyd [2020]



Cereal Rye, Spring - Bjorkman [2020]



Cereal Rye, Spring - Ackroyd [2020]

GOALS

	Short
Growing Window	<div><div></div></div>
Nitrogen Scavenging	<div><div></div></div>
Lasting Residue	<div><div></div></div>
Prevent Fall Soil Erosion	<div><div></div></div>
Prevent Spring Soil Erosion	<div><div></div></div>
Forage Harvest Value	<div><div></div></div>

Benefit	Percentage
Penetrates Plow Pan	33%
Reduces Surface Compaction	44%
Improve Soil Organic Matter	56%
Increase Soil Aggregation	44%
Good Grazing	44%
Pollinator Food	11%

WEEDS

Characteristic	Score (0-10)
Residue Suppresses Summer Annual Weeds	8
Outcompetes Summer Annual Weeds	8
Suppresses Winter Annual Weeds	8
Persistence	2
Volunteer Establishment	8

ENVIRONMENTAL TOLERANCES

Figure 1 is a horizontal stacked bar chart showing the proportion of species in different life history categories across six environmental conditions. The categories are Low Fertility, Drought, Heat, Shade, Flood, and Salinity. The bars are divided into four segments: dark teal (Low Fertility), medium teal (Drought), light teal (Heat), and white (Shade).

Environmental Condition	Low Fertility (Dark Teal)	Drought (Medium Teal)	Heat (Light Teal)	Shade (White)
Low Fertility	100%	0%	0%	0%
Drought	75%	25%	0%	0%
Heat	50%	50%	0%	0%
Shade	50%	50%	0%	0%
Flood	50%	50%	0%	0%
Salinity	50%	50%	0%	0%

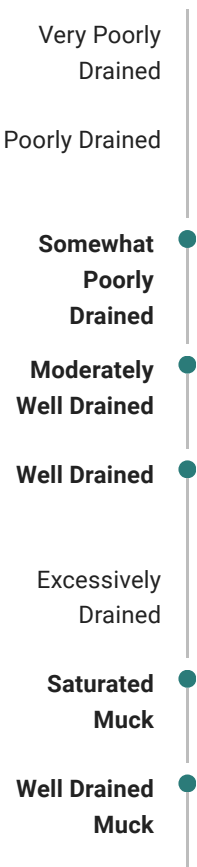


PLANT HARDINESS ZONE 6 DATASET

Growth Traits

Duration	Annual
Zone Use	Common
Shape And Orientation	Erect
Dry Matter (Lbs/A/Yr)	1000 - 4000
Soil Texture	Coarse
	Medium
Soil pH	4.5 - 8.2
Soil Moisture Use	High
Hessian Fly Free Date?	No
Ease Of Establishment	<div><div></div><div></div><div></div><div></div><div></div></div>
Establishes Quickly	<div><div></div><div></div><div></div><div></div><div></div></div>
Early Spring Growth	<div><div></div><div></div><div></div><div></div><div></div></div>
Flowering Trigger	Long Day
Root Depth	Medium

Soil Drainage



Planting

Seeds Per Lb	18200
Seed Price Per Lb	<div><div></div><div></div><div></div></div>
Base Seeding Rate (Lbs/A)	50 - 90
Drilled Depth	0.75" - 1.5"
Can Aerial Seed?	No
Can Frost Seed?	No
Min Germination Temp (°F)	34

Termination

Tillage At Vegetative	<div><div></div><div></div><div></div><div></div><div></div></div>
Tillage At Flowering	<div><div></div><div></div><div></div><div></div><div></div></div>
Freezing At Vegetative	<div><div></div><div></div><div></div><div></div><div></div></div>
Freezing At Flowering	<div><div></div><div></div><div></div><div></div><div></div></div>
Chemical At Vegetative	<div><div></div><div></div><div></div><div></div><div></div></div>
Chemical At Flowering	<div><div></div><div></div><div></div><div></div><div></div></div>
Mow At Flowering	<div><div></div><div></div><div></div><div></div><div></div></div>
Roller-Crimp At Flowering	<div><div></div><div></div><div></div><div></div><div></div></div>

Grass
Cereal Rye, Spring
Secale cereale



PLANT HARDINESS ZONE 6 DATASET

Planting and Growth Windows

Frost Seeding

Reliable Establishment

Temperature/Moisture Risk

Active Growth Period

Winter Survival

Can Interseed

N/A

03/01 - 05/15
08/15 - 10/15

N/A

Spring
Summer

Never

N/A

Jan

Feb

Mar

Apr

May

Jun

Jul

Aug

Sep

Oct

Nov

Dec

Extended Comments

Termination: Other notes free form here

Weeds: Can become a weed if tilled at wrong stage; Best if killed early; Not recommended before corn; Mow-kills after heading

References & Resources

Use of Cover Crops and Green Manures to Attract Beneficial Insects, University of Connecticut Integrated Pest Management Program

Multiple Purpose Cover Crops, Northeast Organic Farming Association of Connecticut

Fall Cover Crops, University of Delaware Cooperative Extension

Using Green Manures, Maine Organic Farmers and Gardeners Association